

Final Environmental Impact Statement

Corporate Average Fuel Economy Standards for Passenger Cars and Light Trucks, Model Years 2027 and Beyond, and Fuel Efficiency Standards for Heavy-Duty Pickup Trucks and Vans, Model Years 2030 and Beyond

Appendices

June 2024



U.S. Department of Transportation
**National Highway Traffic Safety
Administration**



APPENDIX A

Modeling Results Reported Separately by Vehicle Class

APPENDIX A MODELING RESULTS REPORTED SEPARATELY BY VEHICLE CLASS

A.1 Energy – Fuel Consumption Impacts Reported Separately for Passenger Cars and Light Trucks, and Heavy-Duty Pickup Trucks and Vans

Table A-1. Fuel Consumption and Decrease in Fuel Consumption by CAFE Standards Alternative (billion gasoline gallon equivalent total for calendar years 2022–2050)

	No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Fuel Consumption						
Cars	821	817	826	821	817	804
Light trucks	1,953	1,943	1,909	1,907	1,877	1,792
All light-duty vehicles	2,774	2,760	2,736	2,729	2,695	2,596
Decrease in Fuel Use Compared to the No-Action Alternative						
Cars	--	-4 (-1%)	+5 (+1%)	+0.2 (0%)	-4 (-1%)	-18 (-2%)
Light trucks	--	-10 (-1%)	-44 (-2%)	-46 (-2%)	-76 (-4%)	-161 (-8%)
All light-duty vehicles	--	-14 (-1%)	-39 (-1%)	-46 (-2%)	-80 (-3%)	-179 (-6%)

Notes: CAFE = Corporate Average Fuel Economy

Table A-2. Fuel Consumption and Decrease in Fuel Consumption by HDPUV FE Standards Alternative (billion gasoline gallon equivalent total for calendar years 2022–2050)

	No-Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Fuel Consumption					
HDPUVs	419	419	415	412	402
Decrease in Fuel Use Compared to the No-Action Alternative					
HDPUVs	--	-0.3 (0%)	-4 (-1%)	-7 (-2%)	-17 (-4%)

Notes: HDPUV = heavy-duty pickup trucks and vans; FE = fuel efficiency

Table A-3. Fuel Consumption and Decrease in Fuel Consumption Cumulative Impacts of CAFE Standards and HDPUV FE Standards Alternatives (billion gasoline gallon equivalent total for calendar years 2022–2050)

	No-Action	PC1LT3 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Fuel Consumption				
LD Vehicles + HDPUVs	3,193	3,178	3,174	2,955
Decrease in Fuel Use Compared to the No-Action Alternative				
LD Vehicles + HDPUVs	--	-15 (0%)	-19 (-1%)	-238 (-7%)

Notes: CAFE = Corporate Average Fuel Economy; HDPUV = heavy-duty pickup trucks and vans; FE = fuel efficiency

A.2 Air Quality – Nationwide Emissions Impacts Reported Separately for Passenger Cars and Light Trucks, and Heavy-Duty Pickup Trucks and Vans

Table A-4. Nationwide Criteria Pollutant Emissions (tons per year) in 2035 from Passenger Cars and Light Trucks by Emissions Component and Alternative, Direct and Indirect Impacts

Emissions Component	No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Carbon monoxide (CO)						
Cars tailpipe	2,118,522	2,117,993	2,128,013	2,126,902	2,129,705	2,120,680
Cars upstream	19,989	19,993	20,037	20,025	19,968	19,922
Trucks tailpipe	3,806,705	3,785,172	3,734,273	3,728,338	3,695,987	3,606,579
Trucks upstream	49,017	48,965	48,886	48,780	48,683	48,331
Total	5,994,234	5,972,123	5,931,209	5,924,044	5,894,343	5,795,512
Nitrogen oxides (NO_x)						
Cars tailpipe	42,211	42,205	42,489	42,474	42,532	42,126
Cars upstream	36,885	36,866	37,003	36,959	36,851	36,659
Trucks tailpipe	100,016	99,408	97,952	97,778	96,851	94,259
Trucks upstream	91,941	91,732	91,231	90,996	90,571	89,279
Total	271,053	270,211	268,675	268,206	266,805	262,322
Particulate matter (PM_{2.5})						
Cars tailpipe	3,207	3,196	3,224	3,217	3,216	3,168
Cars upstream	2,693	2,691	2,701	2,698	2,690	2,677
Trucks tailpipe	7,150	7,087	6,946	6,925	6,835	6,590
Trucks upstream	6,686	6,671	6,635	6,618	6,588	6,495
Total	19,735	19,646	19,507	19,458	19,329	18,929
Sulfur oxides (SO₂)						
Cars tailpipe	1,090	1,083	1,101	1,094	1,090	1,057
Cars upstream	12,706	12,745	12,689	12,714	12,688	12,824
Trucks tailpipe	3,121	3,087	2,984	2,967	2,893	2,699
Trucks upstream	28,606	28,742	29,221	29,218	29,525	30,221
Total	45,522	45,657	45,995	45,993	46,196	46,801
Volatile organic compounds (VOCs)						
Cars tailpipe	181,154	181,150	181,874	181,858	182,146	181,744
Cars upstream	71,750	71,335	72,442	72,029	71,734	69,737
Trucks tailpipe	295,735	294,220	290,606	290,199	287,933	281,661
Trucks upstream	202,842	200,743	194,464	193,380	188,870	176,968
Total	751,481	747,449	739,386	737,467	730,682	710,111

Table A-5. Nationwide Criteria Pollutant Emissions (tons per year) in 2050 from Passenger Cars and Light Trucks by Emissions Component and Alternative, Direct and Indirect Impacts

Emissions Component	No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Carbon monoxide (CO)						
Cars tailpipe	402,292	393,054	425,284	414,034	399,305	362,119
Cars upstream	19,663	19,765	19,677	19,734	19,691	19,788
Trucks tailpipe	1,442,537	1,430,183	1,374,850	1,410,424	1,350,860	1,129,488
Trucks upstream	58,313	58,136	58,344	58,040	58,233	58,653
Total	1,922,805	1,901,138	1,878,156	1,902,232	1,828,089	1,570,048
Nitrogen oxides (NO_x)						
Cars tailpipe	7,299	7,026	7,798	7,471	7,025	6,144
Cars upstream	30,539	30,632	30,677	30,691	30,500	30,472
Trucks tailpipe	29,696	29,428	28,255	29,205	27,879	22,714
Trucks upstream	94,220	93,908	93,840	93,550	93,430	92,464
Total	161,754	160,994	160,570	160,916	158,834	151,793
Particulate matter (PM_{2.5})						
Cars tailpipe	924	893	981	942	901	796
Cars upstream	2,283	2,291	2,292	2,294	2,281	2,281
Trucks tailpipe	3,581	3,547	3,406	3,504	3,349	2,776
Trucks upstream	6,980	6,957	6,956	6,933	6,928	6,872
Total	13,768	13,688	13,635	13,672	13,459	12,724
Sulfur oxides (SO₂)						
Cars tailpipe	269	258	290	278	254	223
Cars upstream	14,540	14,664	14,464	14,561	14,624	14,829
Trucks tailpipe	1,451	1,442	1,373	1,402	1,328	1,044
Trucks upstream	40,571	40,467	40,913	40,552	41,009	42,455
Total	56,830	56,832	57,040	56,793	57,215	58,551
Volatile organic compounds (VOCs)						
Cars tailpipe	48,078	47,254	49,651	48,753	47,602	44,478
Cars upstream	21,844	21,227	23,146	22,382	20,940	19,060
Trucks tailpipe	163,516	161,951	156,612	158,796	153,684	135,942
Trucks upstream	104,351	103,743	99,629	101,314	96,863	79,735
Total	337,789	334,176	329,037	331,244	319,089	279,215

Table A-6. Nationwide Toxic Air Pollutant Emissions (tons per year) in 2035 from Passenger Cars and Light Trucks by Emissions Component and Alternative, Direct and Indirect Impacts

Emissions Component	No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Acetaldehyde						
Cars tailpipe	640	640	647	646	648	637
Cars upstream	14	14	14	14	14	14
Trucks tailpipe	1,394	1,380	1,346	1,342	1,320	1,255
Trucks upstream	40	40	38	38	37	35
Total	2,087	2,074	2,045	2,041	2,019	1,940
Acrolein						
Cars tailpipe	41	41	41	41	41	40
Cars upstream	2	2	2	2	2	2
Trucks tailpipe	88	87	85	85	84	80
Trucks upstream	5	5	5	5	5	5
Total	136	135	133	133	132	127
Benzene						
Cars tailpipe	2,301	2,301	2,321	2,320	2,324	2,295
Cars upstream	257	255	259	258	256	249
Trucks tailpipe	4,629	4,589	4,490	4,479	4,414	4,229
Trucks upstream	734	726	702	698	680	635
Total	7,921	7,872	7,772	7,754	7,675	7,407
1,3-Butadiene						
Cars tailpipe	255	255	258	257	258	253
Cars upstream	1	1	1	1	1	1
Trucks tailpipe	554	549	535	533	524	497
Trucks upstream	4	4	4	4	4	3
Total	814	809	798	796	787	756
Diesel particulate matter (DPM)						
Cars tailpipe	8	8	8	8	8	8
Cars upstream	10,189	10,179	10,228	10,212	10,180	10,105
Trucks tailpipe	29	29	29	29	29	29
Trucks upstream	25,795	25,716	25,509	25,436	25,271	24,799
Total	36,021	35,932	35,775	35,684	35,488	34,941
Formaldehyde						
Cars tailpipe	406	406	410	409	410	404
Cars upstream	102	101	103	102	102	99
Trucks tailpipe	874	866	846	844	831	795
Trucks upstream	292	289	279	278	271	253
Total	1,674	1,662	1,638	1,633	1,614	1,550

Table A-7. Nationwide Toxic Air Pollutant Emissions (tons per year) in 2050 from Passenger Cars and Light Trucks by Emissions Component and Alternative, Direct and Indirect Impacts

Emissions Component	No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Acetaldehyde						
Cars tailpipe	150	145	161	156	145	128
Cars upstream	3	3	4	4	3	3
Trucks tailpipe	606	600	576	597	569	457
Trucks upstream	19	19	18	18	17	13
Total	778	767	759	774	735	602
Acrolein						
Cars tailpipe	10	9	10	10	9	8
Cars upstream	0	0	0	0	0	0
Trucks tailpipe	39	38	37	38	36	29
Trucks upstream	2	2	2	2	2	2
Total	51	50	50	51	48	39
Benzene						
Cars tailpipe	564	549	600	581	551	494
Cars upstream	64	61	69	66	60	53
Trucks tailpipe	2,160	2,140	2,056	2,118	2,027	1,673
Trucks upstream	342	340	324	331	313	246
Total	3,130	3,090	3,048	3,095	2,951	2,466
1,3-Butadiene						
Cars tailpipe	59	58	64	62	58	51
Cars upstream	0	0	0	0	0	0
Trucks tailpipe	241	238	229	237	226	181
Trucks upstream	2	2	2	2	2	1
Total	302	298	295	301	286	233
Diesel particulate matter (DPM)						
Cars tailpipe	0	0	0	0	0	0
Cars upstream	6,739	6,735	6,811	6,787	6,700	6,629
Trucks tailpipe	6	6	6	6	6	6
Trucks upstream	22,081	21,998	21,842	21,843	21,665	20,889
Total	28,826	28,740	28,660	28,637	28,371	27,524
Formaldehyde						
Cars tailpipe	95	92	102	98	92	81
Cars upstream	25	24	27	26	24	21
Trucks tailpipe	379	376	360	373	355	287
Trucks upstream	136	135	129	131	124	98
Total	635	627	618	628	596	487

Table A-8. Nationwide Criteria Pollutant Emissions (tons per year) in 2035 from U.S. Heavy-Duty Pickup Trucks and Vans by Emissions Component and Alternative, Direct and Indirect Impacts

Emissions Component	No-Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Carbon monoxide (CO)					
Heavy-duty trucks and vans tailpipe	515,663	515,412	514,436	513,203	506,585
Heavy-duty trucks and vans upstream	8,563	8,565	8,568	8,569	8,610
Total	524,226	523,977	523,003	521,772	515,195
Nitrogen oxides (NO_x)					
Heavy-duty trucks and vans tailpipe	75,649	75,637	75,609	75,560	75,271
Heavy-duty trucks and vans upstream	16,000	16,001	15,988	15,970	15,956
Total	91,650	91,639	91,597	91,530	91,227
Particulate matter (PM_{2.5})					
Heavy-duty trucks and vans tailpipe	3,364	3,361	3,354	3,345	3,291
Heavy-duty trucks and vans upstream	1,156	1,156	1,155	1,154	1,153
Total	4,519	4,517	4,509	4,498	4,444
Sulfur oxides (SO₂)					
Heavy-duty trucks and vans tailpipe	601	601	597	592	570
Heavy-duty trucks and vans upstream	5,073	5,079	5,101	5,126	5,273
Total	5,674	5,679	5,697	5,717	5,843
Volatile organic compounds (VOCs)					
Heavy-duty trucks and vans tailpipe	56,315	56,285	56,171	56,027	55,249
Heavy-duty trucks and vans upstream	32,285	32,247	31,984	31,683	30,383
Total	88,600	88,532	88,155	87,710	85,632

Table A-9. Nationwide Criteria Pollutant Emissions (tons per year) in 2050 from U.S. Heavy-Duty Pickup Trucks and Vans by Emissions Component and Alternative, Direct and Indirect Impacts

Emissions Component	No-Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Carbon monoxide (CO)					
Heavy-duty trucks and vans tailpipe	284,003	283,274	272,976	267,949	243,537
Heavy-duty trucks and vans upstream	12,701	12,709	12,835	12,874	13,183
Total	296,704	295,983	285,812	280,824	256,720
Nitrogen oxides (NO_x)					
Heavy-duty trucks and vans tailpipe	15,174	15,146	14,726	14,530	13,576
Heavy-duty trucks and vans upstream	21,422	21,428	21,479	21,461	21,648
Total	36,596	36,574	36,205	35,991	35,224
Particulate matter (PM_{2.5})					
Heavy-duty trucks and vans tailpipe	1,955	1,950	1,874	1,838	1,663
Heavy-duty trucks and vans upstream	1,578	1,579	1,584	1,583	1,600
Total	3,533	3,529	3,458	3,421	3,262

Emissions Component	No-Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Sulfur oxides (SO₂)					
Heavy-duty trucks and vans tailpipe	476	475	451	439	393
Heavy-duty trucks and vans upstream	8,342	8,354	8,539	8,606	9,017
Total	8,818	8,829	8,991	9,045	9,410
Volatile organic compounds (VOCs)					
Heavy-duty trucks and vans tailpipe	53,262	53,149	51,896	51,214	47,877
Heavy-duty trucks and vans upstream	31,399	31,326	29,943	29,231	26,517
Total	84,661	84,475	81,839	80,445	74,395

Table A-10. Nationwide Toxic Air Pollutant Emissions (tons per year) in 2035 from U.S. Heavy-Duty Pickup Trucks and Vans by Emissions Component and Alternative, Direct and Indirect Impacts

Emissions Component	No-Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Acetaldehyde					
Heavy-duty trucks and vans tailpipe	550	550	549	548	541
Heavy-duty trucks and vans upstream	8	8	8	8	8
Total	558	558	557	556	549
Acrolein					
Heavy-duty trucks and vans tailpipe	57	57	57	57	56
Heavy-duty trucks and vans upstream	1	1	1	1	1
Total	58	58	58	58	57
Benzene					
Heavy-duty trucks and vans tailpipe	1,071	1,071	1,067	1,063	1,043
Heavy-duty trucks and vans upstream	117	117	116	115	110
Total	1,189	1,188	1,183	1,178	1,152
1,3-Butadiene					
Heavy-duty trucks and vans tailpipe	121	121	121	120	118
Heavy-duty trucks and vans upstream	1	1	1	1	1
Total	122	122	121	121	118
Diesel particulate matter (DPM)					
Heavy-duty trucks and vans tailpipe	1,571	1,571	1,572	1,572	1,574
Heavy-duty trucks and vans upstream	4,479	4,479	4,473	4,465	4,447
Total	6,050	6,050	6,045	6,038	6,021
Formaldehyde					
Heavy-duty trucks and vans tailpipe	649	648	648	647	643
Heavy-duty trucks and vans upstream	60	60	59	59	57
Total	709	708	707	706	700

Table A-11. Nationwide Toxic Air Pollutant Emissions (tons per year) in 2050 from U.S. Heavy-Duty Pickup Trucks and Vans by Emissions Component and Alternative, Direct and Indirect Impacts

Emissions Component	No-Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Acetaldehyde					
Heavy-duty trucks and vans tailpipe	276	275	266	261	238
Heavy-duty trucks and vans upstream	6	6	6	6	5
Total	282	281	271	267	243
Acrolein					
Heavy-duty trucks and vans tailpipe	19	19	18	18	16
Heavy-duty trucks and vans upstream	1	1	1	1	1
Total	20	20	19	19	17
Benzene					
Heavy-duty trucks and vans tailpipe	925	923	891	875	798
Heavy-duty trucks and vans upstream	108	108	102	100	89
Total	1,033	1,031	994	975	887
1,3-Butadiene					
Heavy-duty trucks and vans tailpipe	98	97	94	92	84
Heavy-duty trucks and vans upstream	1	1	1	1	1
Total	98	98	94	93	84
Diesel particulate matter (DPM)					
Heavy-duty trucks and vans tailpipe	21	21	21	21	21
Heavy-duty trucks and vans upstream	5,279	5,278	5,242	5,216	5163
Total	5,301	5,300	5,263	5,238	5,184
Formaldehyde					
Heavy-duty trucks and vans tailpipe	202	202	195	191	174
Heavy-duty trucks and vans upstream	45	45	43	42	37
Total	247	247	237	233	211

A.3 Climate Change – Direct and Indirect Impacts – Modeling Results Reported Separately for Passenger Cars and Light Trucks

Table A-12. Carbon Dioxide Emissions and Emissions Reductions (MMTCO₂) from All Passenger Cars, 2027–2100 by Alternative, Direct and Indirect Impacts ^a

Alternative	Total Emissions	Emissions Reductions Compared to No-Action	Percent (%) Emissions Reductions Compared to No-Action Alternative Emissions
No-Action	10,200	-	0%
PC2LT002	10,000	200	2%
PC1LT3	10,500	+300	-3%
PC2LT4	10,300	+100	-1%
PC3LT5	10,000	200	2%
PC6LT8	9,500	700	7%

Notes:

^a The numbers in this table have been rounded for presentation purposes. As a result, the values do not reflect the exact differences between the values.

MMTCO₂ = million metric tons of carbon dioxide

Table A-13. Carbon Dioxide Emissions and Emissions Reductions (MMTCO₂) from All Light Trucks, 2027–2100 by Alternative, Direct and Indirect Impacts ^a

Alternative	Total Emissions	Emissions Reductions Compared to No-Action	Percent (%) Emissions Reductions Compared to No-Action Alternative Emissions
No-Action	36,300	-	0%
PC2LT002	36,100	200	1%
PC1LT3	34,900	1,400	4%
PC2LT4	35,200	1,100	3%
PC3LT5	34,000	2,300	6%
PC6LT8	30,000	6,300	17%

Notes:

^a The numbers in this table have been rounded for presentation purposes. As a result, the values do not reflect the exact differences between the values.

MMTCO₂ = million metric tons of carbon dioxide

Table A-14. Emissions of Greenhouse Gases (MMTCO₂e per year) from All Passenger Cars by Alternative, Direct and Indirect Impacts ^a

Year	No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Carbon dioxide (CO₂)						
2020	655	655	655	655	655	655
2040	184	180	188	184	182	171
2060	92	90	97	94	89	83
2080	92	90	96	94	89	82
2100	85	83	90	87	82	76
Methane (CH₄)						
2020	25	25	25	25	25	25
2040	7	7	7	7	7	7
2060	7	7	7	7	7	7
2080	4	4	4	4	4	4
2100	4	4	4	4	4	4
Nitrous oxide (N₂O)						
2020	7	7	7	7	7	7
2040	2	2	2	2	2	2
2060	1	1	1	1	1	1
2080	1	1	1	1	1	1
2100	1	1	1	1	1	1
Total (all GHGs)						
2020	687	687	687	687	687	687
2040	194	188	197	194	192	180
2060	100	98	105	102	97	90
2080	97	95	102	99	94	87
2100	90	88	95	92	87	81

Notes:

^aEmissions from 2051–2100 were scaled using the rate of change for the U.S. transportation fuel consumption from the SSP3-7.0 scenario. These assumptions project a slight decline over this period.

GHG = greenhouse gas; MMTCO₂e = million metric tons carbon dioxide equivalent

Table A-15. Emissions of Greenhouse Gases (MMTCO₂e per year) from All Light Trucks by Alternative, Direct and Indirect Impacts ^a

Year	No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Carbon dioxide (CO₂)						
2020	850	850	850	850	850	850
2040	648	643	615	612	588	522
2060	414	412	397	403	387	327
2080	411	409	394	400	385	325
2100	382	380	367	372	358	302
Methane (CH₄)						
2020	32	32	32	32	32	32
2040	25	25	24	23	23	20
2060	25	25	24	23	23	20
2080	17	17	17	17	16	14
2100	16	16	16	16	15	13
Nitrous oxide (N₂O)						
2020	10	10	10	10	10	10
2040	7	7	6	6	6	5
2060	4	4	4	4	4	3
2080	4	4	4	4	4	3
2100	4	4	3	4	3	3
Total (all GHGs)						
2020	892	892	892	892	892	892
2040	680	674	645	642	617	548
2060	443	440	425	430	414	351
2080	432	430	415	421	405	343
2100	402	400	386	392	377	319

Notes:

^aEmissions from 2051–2100 were scaled using the rate of change for the U.S. transportation fuel consumption from the SSP3-7.0 scenario. These assumptions project a slight decline over this period.

GHG = greenhouse gas; MMTCO₂e = million metric tons carbon dioxide equivalent

Table A-16. Carbon Dioxide Concentrations, Global Mean Surface Temperature Increase, Sea-Level Rise, and Ocean Acidification (SSP3-7.0) from Passenger Cars by Alternative, Direct and Indirect Impacts^{a,b}

Alternative	CO ₂ Concentration (ppm)			Global Mean Surface Temperature Increase (°C) ^c			Sea-Level Rise (cm) ^c			Ocean Acidification (pH)		
	2040	2060	2100	2040	2060	2100	2040	2060	2100	2040	2060	2100
Totals by Alternative												
No-Action	490.19	587.76	838.31	2.0080	2.7883	4.3395	20.10	36.39	83.24	8.4013	8.3328	8.1933
PC2LT002	490.19	587.75	838.30	2.0080	2.7883	4.3395	20.10	36.39	83.24	8.4013	8.3328	8.1933
PC1LT3	490.19	587.77	838.34	2.0080	2.7884	4.3396	20.10	36.39	83.25	8.4013	8.3328	8.1932
PC2LT4	490.19	587.76	838.32	2.0080	2.7883	4.3396	20.10	36.39	83.24	8.4013	8.3328	8.1933
PC3LT5	490.19	587.75	838.29	2.0080	2.7883	4.3395	20.10	36.39	83.24	8.4013	8.3328	8.1933
PC6LT8	490.18	587.73	838.24	2.0079	2.7882	4.3393	20.10	36.39	83.24	8.4013	8.3328	8.1933
Reductions Under Action Alternatives												
PC2LT002	0.00	0.01	0.02	0.0000	0.0000	0.0001	0.00	0.00	0.00	0.0000	0.0000	0.0000
PC1LT3	-0.00	-0.01	-0.03	-0.0000	-0.0000	-0.0001	-0.00	-0.00	-0.00	-0.0000	-0.0000	-0.0000
PC2LT4	-0.00	-0.00	-0.01	-0.0000	-0.0000	-0.0000	-0.00	-0.00	-0.00	-0.0000	-0.0000	-0.0000
PC3LT5	0.00	0.01	0.02	0.0000	0.0000	0.0001	0.00	0.00	0.00	0.0000	0.0000	0.0000
PC6LT8	0.01	0.03	0.07	0.0000	0.0001	0.0003	0.00	0.00	0.01	0.0000	0.0000	0.0000

Notes:

^a The numbers in this table have been rounded for presentation purposes. As a result, the values might not reflect the exact difference between the values in all cases. This analysis was simulated using the same methodology as reported in Chapter 5, Section 5.3, *Analysis Methods*; however, it includes only emissions changes for passenger cars.

^b Values reported as 0.0000 are more than zero but less than 0.0001. Values reported as -0.0000 are less than zero but more than -0.0001.

^c The values for global mean surface temperature and sea-level rise are relative to the average of the years 1986–2005.

CO₂ = carbon dioxide; °C = degrees Celsius; ppm = parts per million; cm = centimeters; SSP = Shared Socioeconomic Pathway

Table A-17. Carbon Dioxide Concentrations, Global Mean Surface Temperature Increase, Sea-Level Rise, and Ocean Acidification (SSP3-7.0) from Light Trucks by Alternative, Direct and Indirect Impacts^{a,b}

Alternative	CO ₂ Concentration (ppm)			Global Mean Surface Temperature Increase (°C) ^c			Sea-Level Rise (cm) ^c			Ocean Acidification (pH)		
	2040	2060	2100	2040	2060	2100	2040	2060	2100	2040	2060	2100
Totals by Alternative												
No-Action	490.19	587.76	838.31	2.0080	2.7883	4.3395	20.10	36.39	83.24	8.4013	8.3328	8.1933
PC2LT002	490.18	587.74	838.29	2.0079	2.7883	4.3394	20.10	36.39	83.24	8.4013	8.3328	8.1933
PC1LT3	490.16	587.69	838.18	2.0078	2.7880	4.3390	20.10	36.38	83.23	8.4014	8.3329	8.1933
PC2LT4	490.16	587.69	838.21	2.0078	2.7880	4.3391	20.10	36.38	83.23	8.4014	8.3329	8.1933
PC3LT5	490.14	587.64	838.10	2.0077	2.7878	4.3387	20.10	36.38	83.22	8.4014	8.3329	8.1934
PC6LT8	490.10	587.49	837.71	2.0075	2.7871	4.3372	20.10	36.38	83.19	8.4014	8.3330	8.1935

Alternative	CO ₂ Concentration (ppm)			Global Mean Surface Temperature Increase (°C) ^c			Sea-Level Rise (cm) ^c			Ocean Acidification (pH)		
	2040	2060	2100	2040	2060	2100	2040	2060	2100	2040	2060	2100
Reductions Under Action Alternatives												
PC2LT002	0.01	0.01	0.02	0.0000	0.0001	0.0001	0.00	0.00	0.00	0.0000	0.0000	0.0000
PC1LT3	0.03	0.07	0.13	0.0002	0.0003	0.0005	0.00	0.00	0.01	0.0000	0.0000	-0.0001
PC2LT4	0.03	0.06	0.10	0.0002	0.0003	0.0004	0.00	0.00	0.01	0.0000	0.0000	-0.0001
PC3LT5	0.05	0.11	0.21	0.0003	0.0005	0.0009	0.00	0.01	0.02	0.0000	-0.0001	-0.0001
PC6LT8	0.09	0.27	0.60	0.0005	0.0012	0.0024	0.00	0.01	0.05	-0.0001	-0.0002	-0.0003

Notes:

^a The numbers in this table have been rounded for presentation purposes. As a result, the values might not reflect the exact difference between the values in all cases. This analysis was simulated using the same methodology as reported in Chapter 5, Section 5.3, *Analysis Methods*; however, it includes only emissions changes for light trucks.

^b Values reported as 0.0000 are more than zero but less than 0.0001. Values reported as -0.0000 are less than zero but more than -0.0001. Sea-level rise changes reported as 0.00 are more than zero but less than 0.01.

^c The values for global mean surface temperature and sea-level rise are relative to the average of the years 1986–2005.

CO₂ = carbon dioxide; °C = degrees Celsius; ppm = parts per million; cm = centimeters; SSP = Shared Socioeconomic Pathway

Tables showing CO₂ emissions and GHG emissions reductions (MMTCO₂) from the separate vehicle categories (passenger cars, light trucks, and HDPUVs) for purposes of the EIS’s cumulative impacts analysis are not presented here because this information was already presented in Chapter 5, Section 5.4.1, *Direct and Indirect Impacts on Greenhouse Gas Emissions and Climate Change* (Tables 5.4.1-1 through 5.4.1-4). CO₂ emissions and emissions reductions do not change between direct and indirect and cumulative impacts because they are not affected by the modeling reference scenario.

Table A-18. Carbon Dioxide Concentrations, Global Mean Surface Temperature Increase, Sea-Level Rise, and Ocean Acidification (SSP2-4.5) from Passenger Cars and Light Trucks by Alternative, Cumulative Impacts ^{a,b}

	CO ₂ Concentration (ppm)			Global Mean Surface Temperature Increase (°C) ^c			Sea-Level Rise (cm) ^c			Ocean pH		
	2040	2060	2100	2040	2060	2100	2040	2060	2100	2040	2060	2100
Totals by Alternative												
No-Action	472.65	532.40	587.78	1.8517	2.3699	2.8264	19.17	33.85	67.12	8.4149	8.3704	8.3328
PC2LT002	472.64	532.38	587.75	1.8517	2.3699	2.8262	19.17	33.85	67.11	8.4149	8.3704	8.3328
PC1LT3	472.62	532.35	587.69	1.8517	2.3697	2.8260	19.17	33.85	67.11	8.4149	8.3704	8.3329
PC2LT4	472.62	532.35	587.70	1.8517	2.3697	2.8260	19.17	33.85	67.11	8.4149	8.3704	8.3329
PC3LT5	472.60	532.29	587.57	1.8517	2.3694	2.8254	19.17	33.85	67.10	8.4149	8.3705	8.3329
PC6LT8	472.55	532.11	587.19	1.8515	2.3687	2.8236	19.17	33.84	67.06	8.4150	8.3706	8.3332

Appendix A Modeling Results Reported Separately by Vehicle Class

	CO ₂ Concentration (ppm)			Global Mean Surface Temperature Increase (°C) ^c			Sea-Level Rise (cm) ^c			Ocean pH		
	2040	2060	2100	2040	2060	2100	2040	2060	2100	2040	2060	2100
Reductions Under Action Alternatives												
PC2LT002	0.01	0.02	0.03	0.0000	0.0001	0.0002	0.00	0.00	0.00	0.0000	0.0000	0.0000
PC1LT3	0.03	0.05	0.09	0.0001	0.0002	0.0004	0.00	0.00	0.01	0.0000	0.0000	-0.0001
PC2LT4	0.03	0.06	0.08	0.0001	0.0003	0.0004	0.00	0.00	0.01	0.0000	0.0000	-0.0001
PC3LT5	0.05	0.11	0.21	0.0001	0.0005	0.0010	0.00	0.00	0.02	0.0000	-0.0001	-0.0001
PC6LT8	0.10	0.29	0.60	0.0003	0.0012	0.0028	0.00	0.01	0.06	-0.0001	-0.0002	-0.0004

Notes:

^a The numbers in this table have been rounded for presentation purposes. As a result, the values might not reflect the exact difference between the values in all cases. This analysis was simulated using the same methodology as reported in Chapter 5, Section 5.3, *Analysis Methods*; however, it includes only emissions changes for passenger cars.

^b Values reported as 0.0000 are more than zero but less than 0.0001. Values reported as -0.0000 are less than zero but more than -0.0001. Sea-level rise changes reported as 0.00 are more than zero but less than 0.01.

^c The values for global mean surface temperature and sea-level rise are relative to the average of the years 1986–2005.

CO₂ = carbon dioxide; °C = degrees Celsius; ppm = parts per million; cm = centimeters; SSP = Shared Socioeconomic Pathway

Table A-19. Carbon Dioxide Concentrations, Global Mean Surface Temperature Increase, Sea-Level Rise, and Ocean Acidification (SSP2-4.5) from All HDPUVs by Alternative, Cumulative Impacts ^{a,b}

	CO ₂ Concentration (ppm)			Global Mean Surface Temperature Increase (°C) ^c			Sea-Level Rise (cm) ^c			Ocean pH		
	2040	2060	2100	2040	2060	2100	2040	2060	2100	2040	2060	2100
Totals by Alternative												
No-Action	472.65	532.40	587.78	1.8517	2.3699	2.8264	19.17	33.85	67.12	8.4149	8.3704	8.3328
HDPUV4	472.65	532.40	587.78	1.8517	2.3699	2.8264	19.17	33.85	67.12	8.4149	8.3704	8.3328
HDPUV108	472.65	532.39	587.75	1.8517	2.3699	2.8263	19.17	33.85	67.11	8.4149	8.3704	8.3328
HDPUV10	472.65	532.39	587.74	1.8517	2.3699	2.8262	19.17	33.85	67.11	8.4149	8.3704	8.3328
HDPUV14	472.65	532.37	587.69	1.8517	2.3698	2.8260	19.17	33.85	67.11	8.4149	8.3704	8.3329
Reductions Under Action Alternatives												
HDPUV4	0.00	0.00	0.00	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.0000	0.0000	0.0000
HDPUV108	0.00	0.01	0.03	0.0000	0.0000	0.0001	0.00	0.00	0.00	0.0000	0.0000	0.0000
HDPUV10	0.00	0.02	0.04	0.0000	0.0001	0.0002	0.00	0.00	0.00	0.0000	0.0000	0.0000
HDPUV14	0.01	0.04	0.09	0.0000	0.0001	0.0004	0.00	0.00	0.01	0.0000	0.0000	-0.0001

Notes:

^a The numbers in this table have been rounded for presentation purposes. As a result, the values might not reflect the exact difference between the values in all cases. This analysis was simulated using the same methodology as reported in Chapter 5, Section 5.3, *Analysis Methods*; however, it includes only emissions changes for light trucks.

^b Values reported as 0.0000 are more than zero but less than 0.0001. Values reported as -0.0000 are less than zero but more than -0.0001. Sea-level rise changes reported as 0.00 are more than zero but less than 0.01.

^c The values for global mean surface temperature and sea-level rise are relative to the average of the years 1986–2005.

CO₂ = carbon dioxide; °C = degrees Celsius; ppm = parts per million; cm = centimeters; HDPUV = heavy-duty pickup trucks and vans; SSP = Shared Socioeconomic Pathway

Table A-20. Global Mean Precipitation (Percent Increase) Using Increases in Global Mean Surface Temperature Simulated by MAGICC, by CAFE Standards Alternative,^a Cumulative Impacts

Scenario	2040	2060	2100
Global Mean Precipitation Change (scaling factor, % change in precipitation per °C change in temperature)	2.16%		
Global Temperature Above Average 1986–2005 Levels (°C) for the SSP2-4.5 Scenario by Alternative			
No Action	1.852	2.370	2.826
PC2LT002	1.852	2.370	2.826
PC1LT3	1.852	2.370	2.826
PC2LT4	1.852	2.370	2.826
PC3LT5	1.852	2.369	2.825
PC6LT8	1.851	2.369	2.824
Reductions in Global Temperature (°C) by Alternative (Compared to the No-Action Alternative)^b			
PC2LT002	0.000	0.000	0.000
PC1LT3	0.000	0.000	0.000
PC2LT4	0.000	0.000	0.000
PC3LT5	0.000	0.000	0.001
PC6LT8	0.000	0.001	0.003
Global Mean Precipitation Increase by Alternative (%)			
No-Action	4.00%	5.12%	6.11%
PC2LT002	4.00%	5.12%	6.10%
PC1LT3	4.00%	5.12%	6.10%
PC2LT4	4.00%	5.12%	6.10%
PC3LT5	4.00%	5.12%	6.10%
PC6LT8	4.00%	5.12%	6.10%
Reductions in Global Mean Precipitation Increase by Alternative (% Compared to the No-Action Alternative)^c			
PC2LT002	0.00%	0.00%	0.00%
PC1LT3	0.00%	0.00%	0.00%
PC2LT4	0.00%	0.00%	0.00%
PC3LT5	0.00%	0.00%	0.00%
PC6LT8	0.00%	0.00%	0.01%

Notes:

^a The numbers in this table have been rounded for presentation purposes. As a result, the values might not reflect the exact difference between the values in all cases.

^b Precipitation changes reported as 0.000 are more than zero but less than 0.001.

^c The increase in precipitation is less than 0.005%, and thus is rounded to 0.00%.

SSP = Shared Socioeconomic Pathway; MAGICC = Model for the Assessment of Greenhouse-gas Induced Climate Change;

°C = degrees Celsius

Table A-21. Global Mean Precipitation (Percent Increase) Using Increases in Global Mean Surface Temperature Simulated by MAGICC, by HDPUV FE Standards Alternative,^a Cumulative Impacts

Scenario	2040	2060	2100
Global Mean Precipitation Change (scaling factor, % change in precipitation per °C change in temperature)	2.16%		
Global Temperature Above Average 1986–2005 Levels (°C) for the SSP2-4.5 Scenario by Alternative			
No Action	1.852	2.370	2.826
HDPUV4	1.852	2.370	2.826
HDPUV108	1.852	2.370	2.826
HDPUV10	1.852	2.370	2.826
HDPUV14	1.852	2.370	2.826
Reductions in Global Temperature (°C) by Alternative (Compared to the No-Action Alternative)^b			
HDPUV4	0.000	0.000	0.000
HDPUV108	0.000	0.000	0.000
HDPUV10	0.000	0.000	0.000
HDPUV14	0.000	0.000	0.000
Global Mean Precipitation Increase by Alternative (%)			
No-Action	4.00%	5.12%	6.11%
HDPUV4	4.00%	5.12%	6.11%
HDPUV108	4.00%	5.12%	6.10%
HDPUV10	4.00%	5.12%	6.10%
HDPUV14	4.00%	5.12%	6.10%
Reductions in Global Mean Precipitation Increase by Alternative (% Compared to the No-Action Alternative)^c			
HDPUV4	0.00%	0.00%	0.00%
HDPUV108	0.00%	0.00%	0.00%
HDPUV10	0.00%	0.00%	0.00%
HDPUV14	0.00%	0.00%	0.00%

Notes:

^a The numbers in this table have been rounded for presentation purposes. As a result, the values might not reflect the exact difference between the values in all cases.

^b Precipitation changes reported as 0.000 are more than zero but less than 0.001.

^c The increase in precipitation is less than 0.005%, and thus is rounded to 0.00%.

SSP = Shared Socioeconomic Pathway; MAGICC = Model for the Assessment of Greenhouse-gas Induced Climate Change;

°C = degrees Celsius

Table A-22. Carbon Dioxide Concentrations, Global Mean Surface Temperature Increases, Sea-Level Rise, and Ocean pH for Varying Climate Sensitivities for Selected CAFE Standards Alternatives, ^a Cumulative Impacts

Alternative	Climate Sensitivity (°C for 2 × CO ₂)	CO ₂ Concentration (ppm)			Global Mean Surface Temperature Increase (°C) ^{b, c}			Sea Level Rise (cm) ^d	Ocean pH ^c
		2040	2060	2100	2040	2060	2100	2100	2100
No Action	2.4	450.29	458.64	422.33	1.4732	1.5505	1.3481	38.80	8.4563
	3.0	455.64	469.40	433.77	1.7193	1.8734	1.6846	52.21	8.4465
	3.9	461.60	481.57	454.48	1.9941	2.2416	2.1214	69.94	8.4294
PC2LT002	2.4	450.28	458.63	422.31	1.4732	1.5504	1.3480	38.79	8.4563
	3.0	455.63	469.38	433.74	1.7193	1.8733	1.6844	52.21	8.4465
	3.9	461.59	481.55	454.45	1.9940	2.2415	2.1212	69.94	8.4294
PC1LT3	2.4	450.26	458.59	422.27	1.4731	1.5503	1.3477	38.79	8.4563
	3.0	455.61	469.34	433.69	1.7192	1.8731	1.6840	52.20	8.4466
	3.9	461.58	481.52	454.40	1.9939	2.2412	2.1208	69.93	8.4294
PC2LT4	2.4	450.26	458.59	422.27	1.4731	1.5503	1.3477	38.79	8.4563
	3.0	455.61	469.34	433.70	1.7191	1.8730	1.6841	52.20	8.4466
	3.9	461.57	481.52	454.41	1.9939	2.2412	2.1208	69.93	8.4294
PC3LT5	2.4	450.24	458.54	422.18	1.4730	1.5500	1.3472	38.78	8.4564
	3.0	455.59	469.28	433.59	1.7190	1.8727	1.6833	52.19	8.4467
	3.9	461.55	481.46	454.29	1.9938	2.2408	2.1200	69.90	8.4295
PC6LT8	2.4	450.20	458.38	421.88	1.4728	1.5493	1.3457	38.75	8.4567
	3.0	455.54	469.11	433.25	1.7188	1.8718	1.6810	52.15	8.4469
	3.9	461.51	481.29	453.94	1.9935	2.2398	2.1176	69.84	8.4298
Reductions Under Alternative PC2LT002 Compared to the No-Action Alternative									
PC2LT002	2.4	0.01	0.02	0.02	0.0000	0.0001	0.0001	0.00	0.0000
	3.0	0.01	0.02	0.03	0.0001	0.0001	0.0002	0.00	0.0000
	3.9	0.01	0.02	0.03	0.0001	0.0001	0.0002	0.01	0.0000
Reductions Under Alternative PC1LT3 Compared to the No-Action Alternative									
PC1LT3	2.4	0.03	0.05	0.07	0.0001	0.0002	0.0004	0.01	-0.0001
	3.0	0.03	0.05	0.08	0.0002	0.0003	0.0006	0.01	-0.0001
	3.9	0.03	0.05	0.08	0.0002	0.0004	0.0006	0.02	-0.0001
Reductions Under Alternative PC2LT4 Compared to the No-Action Alternative									
PC2LT4	2.4	0.03	0.05	0.06	0.0002	0.0003	0.0003	0.01	-0.0001
	3.0	0.03	0.06	0.07	0.0002	0.0003	0.0005	0.01	-0.0001
	3.9	0.03	0.06	0.08	0.0002	0.0004	0.0006	0.02	-0.0001
Reductions Under Alternative PC3LT5 Compared to the No-Action Alternative									
PC3LT5	2.4	0.05	0.10	0.16	0.0003	0.0005	0.0008	0.02	-0.0001
	3.0	0.05	0.12	0.18	0.0003	0.0007	0.0013	0.03	-0.0002
	3.9	0.05	0.11	0.19	0.0003	0.0008	0.0014	0.04	-0.0002

Appendix A Modeling Results Reported Separately by Vehicle Class

Alternative	Climate Sensitivity (°C for 2 × CO ₂)	CO ₂ Concentration (ppm)			Global Mean Surface Temperature Increase (°C) ^{b, c}			Sea Level Rise (cm) ^d	Ocean pH ^c
		2040	2060	2100	2040	2060	2100	2100	2100
Reductions Under Alternative PC6LT8 Compared to the No-Action Alternative									
PC6LT8	2.4	0.10	0.26	0.46	0.0005	0.0012	0.0024	0.05	-0.0004
	3.0	0.10	0.29	0.52	0.0005	0.0016	0.0036	0.07	-0.0004
	3.9	0.10	0.28	0.55	0.0006	0.0018	0.0038	0.10	-0.0004

Notes:

^a The numbers in this table have been rounded for presentation purposes. As a result, the values do not reflect the exact difference between the values.

^b The values for global mean surface temperature and sea-level rise are relative to the average of the years 1986 through 2005.

^c Values reported as 0.0000 are more than zero but less than 0.0001. Values reported as -0.0000 are less than zero but more than -0.0001.

^d Sea-level rise changes reported as 0.00 are more than zero but less than 0.01.

ppm = parts per million; °C = degrees Celsius; CO₂ = carbon dioxide; cm = centimeters

Table A-23. Carbon Dioxide Concentrations, Global Mean Surface Temperature Increases, Sea-Level Rise, and Ocean pH for Varying Climate Sensitivities for Selected HDPUV FE Standards Alternatives,^a Cumulative Impacts

Alternative	Climate Sensitivity (°C for 2 × CO ₂)	CO ₂ Concentration (ppm)			Global Mean Surface Temperature Increase (°C) ^{b, c}			Sea Level Rise (cm) ^d	Ocean pH ^c
		2040	2060	2100	2040	2060	2100	2100	2100
No Action	2.4	450.29	458.64	422.33	1.4732	1.5505	1.3481	38.80	8.4563
	3.0	455.64	469.40	433.77	1.7193	1.8734	1.6846	52.21	8.4465
	3.9	461.60	481.57	454.48	1.9941	2.2416	2.1214	69.94	8.4294
HDPUV4	2.4	450.29	458.64	422.33	1.4732	1.5505	1.3481	38.80	8.4563
	3.0	455.64	469.40	433.77	1.7193	1.8734	1.6846	52.21	8.4465
	3.9	461.60	481.57	454.48	1.9941	2.2416	2.1214	69.94	8.4294
HDPUV108	2.4	450.29	458.63	422.31	1.4732	1.5505	1.3480	38.80	8.4563
	3.0	455.64	469.39	433.75	1.7193	1.8733	1.6844	52.21	8.4465
	3.9	461.60	481.56	454.46	1.9941	2.2415	2.1212	69.94	8.4294
HDPUV10	2.4	450.29	458.63	422.30	1.4732	1.5505	1.3479	38.79	8.4563
	3.0	455.64	469.38	433.74	1.7193	1.8733	1.6843	52.21	8.4465
	3.9	461.60	481.56	454.45	1.9941	2.2415	2.1211	69.94	8.4294
HDPUV14	2.4	450.29	458.61	422.26	1.4732	1.5504	1.3477	38.79	8.4563
	3.0	455.63	469.36	433.69	1.7193	1.8732	1.6840	52.21	8.4465
	3.9	461.60	481.54	454.40	1.9941	2.2414	2.1208	69.93	8.4294
Reductions Under Alternative HDPUV4 Compared to the No-Action Alternative									
HDPUV4	2.4	0.00	0.00	0.00	0.0000	0.0000	0.0000	0.00	0.0000
	3.0	0.00	0.00	0.00	0.0000	0.0000	0.0000	0.00	0.0000
	3.9	0.00	0.00	0.00	0.0000	0.0000	0.0000	0.00	0.0000

Appendix A Modeling Results Reported Separately by Vehicle Class

Alternative	Climate Sensitivity (°C for 2 × CO ₂)	CO ₂ Concentration (ppm)			Global Mean Surface Temperature Increase (°C) ^{b, c}			Sea Level Rise (cm) ^d	Ocean pH ^c
		2040	2060	2100	2040	2060	2100	2100	2100
Reductions Under Alternative HDPUV108 Compared to the No-Action Alternative									
HDPUV108	2.4	0.00	0.01	0.02	0.0000	0.0000	0.0001	0.00	0.0000
	3.0	0.00	0.01	0.02	0.0000	0.0001	0.0002	0.00	0.0000
	3.9	0.00	0.01	0.02	0.0000	0.0001	0.0002	0.00	0.0000
Reductions Under Alternative HDPUV10 Compared to the No-Action Alternative									
HDPUV10	2.4	0.00	0.01	0.03	0.0000	0.0001	0.0001	0.00	0.0000
	3.0	0.00	0.01	0.03	0.0000	0.0001	0.0002	0.00	0.0000
	3.9	0.00	0.01	0.04	0.0000	0.0001	0.0002	0.01	0.0000
Reductions Under Alternative HDPUV14 Compared to the No-Action Alternative									
HDPUV14	2.4	0.01	0.03	0.07	0.0000	0.0001	0.0004	0.01	-0.0001
	3.0	0.01	0.04	0.08	0.0000	0.0002	0.0005	0.01	-0.0001
	3.9	0.01	0.04	0.08	0.0000	0.0002	0.0006	0.01	-0.0001

Notes:

^a The numbers in this table have been rounded for presentation purposes. As a result, the values do not reflect the exact difference between the values.

^b The values for global mean surface temperature and sea-level rise are relative to the average of the years 1986 through 2005.

^c Values reported as 0.0000 are more than zero but less than 0.0001. Values reported as -0.0000 are less than zero but more than -0.0001.

^d Sea-level rise changes reported as 0.00 are more than zero but less than 0.01.

ppm = parts per million; °C = degrees Celsius; CO₂ = carbon dioxide; cm = centimeters

Final Environmental Impact Statement

Corporate Average Fuel Economy Standards for Passenger Cars and Light Trucks, Model Years 2027 and Beyond, and Fuel Efficiency Standards for Heavy-Duty Pickup Trucks and Vans, Model Years 2030 and Beyond

Appendices

June 2024



U.S. Department of Transportation
**National Highway Traffic Safety
Administration**



APPENDIX B

Responses to Public Comments

APPENDIX B RESPONSES TO PUBLIC COMMENTS

On July 28, 2023, the U.S. Department of Transportation (DOT) National Highway Traffic Safety Administration (NHTSA) released a proposed rule that would establish new Model Year (MY) 2027–2031 Corporate Average Fuel Economy (CAFE) standards for passenger cars and light trucks and set forth MY 2032 augural standards for those same vehicles. The rule also proposed to establish new fuel efficiency (FE) standards for MY 2030–2035 heavy-duty pickup trucks and vans (HDPUVs). With the notice of proposed rulemaking (NPRM), NHTSA issued a Draft Environmental Impact Statement (EIS) analyzing the environmental impacts of the proposed standards and reasonable alternative standards. The U.S. Environmental Protection Agency (EPA) published a Notice of Availability for NHTSA’s Draft EIS in the *Federal Register* on August 4, 2023; publication of the Notice of Availability in the *Federal Register* triggered the Draft EIS public comment period.¹ The Notice of Availability requested public input on the agency’s environmental analysis to Docket No. NHTSA-2022-0075 by October 4, 2023. On August 17, 2023, NHTSA’s NPRM was published in the *Federal Register* and it invited the public to submit comments on the NPRM on or before October 16, 2023 (via Docket No. NHTSA-2023-0022).² On September 29, 2023, NHTSA extended the comment period for the Draft EIS to October 16, 2023.³

NHTSA also held a virtual public hearing on the Draft EIS and the proposed rule on September 28, 2023. NHTSA received statements from approximately 130 individuals at the hearing. The agency received five comments in the docket for the Draft EIS and one comment in the rulemaking docket that addressed the Draft EIS.

In preparing this Final EIS, NHTSA reviewed comments received in EIS Docket No. NHTSA-2022-0075 and comments relevant to the EIS submitted to the NHTSA rulemaking docket (Docket No. NHTSA-2023-0022). NHTSA considered and evaluated all written and oral comments received during the public comment period in the preparation of this Final EIS. In this appendix to the Final EIS, NHTSA has quoted substantive excerpts from these comments and responded to the comments, as required by the National Environmental Policy Act (NEPA).⁴ The agency updated the EIS in response to comments on the rule and Draft EIS and based on updated information that became available after the agency issued the Draft EIS. The comments presented in this appendix (including all footnotes) are verbatim comment excerpts as written by the commenters.

NHTSA approached those comments submitted to the EIS and rulemaking dockets that were not substantive to specific aspects of the EIS as follows:

- NHTSA received comments directly addressing or otherwise related to the proposed rule, Technical Support Document (TSD), or Preliminary Regulatory Impact Analysis under the rulemaking docket (NHTSA-2023-0022) and the Draft EIS docket (NHTSA-2022-0075). Topics of these comments included technology cost and effectiveness, economic impacts of the rule, harmonization of the NHTSA and EPA rules, balancing the Energy Policy and Conservation Act of 1975 (EPCA) statutory criteria, and the underlying assumptions in them. NHTSA has reviewed all of the comments, and in

¹ *Environmental Impact Statements; Notice of Availability*, 88 FR 51812 (Aug. 4, 2023).

² *Corporate Average Fuel Economy Standards for Passenger Cars and Light Trucks for Model Years 2027–2032 and Fuel Efficiency Standards for Heavy-Duty Pickup Trucks and Vans for Model Years 2030–2035; Notice of Proposed Rulemaking*, 88 FR 56128 (Aug. 17, 2023).

³ *Environmental Impact Statements; Notice of Availability*, 88 FR 67277 (Sept. 29, 2023).

⁴ 40 CFR § 1503.4.

this appendix, NHTSA includes and addresses only those comments (or portions of those comments) considered substantive to the Draft EIS. NHTSA addresses substantive comments that concern the rule but that are not related to the EIS in the preamble to the final rule and its associated documents in the public docket.

- NHTSA received oral and written comments stating either general support for or general opposition to the proposed rule. NHTSA appreciates those comments, but because they do not raise specific issues or concerns pertaining to the EIS, this appendix does not respond to those comments. This appendix responds to comments specific to the EIS or to those that substantively address EIS analytical methods or approaches.

Written comments submitted to NHTSA and the virtual public hearing transcripts are part of the administrative record and are available on the Federal Docket at <http://www.regulations.gov>, Reference Docket No.: NHTSA-2022-0075 (Draft EIS) and NHTSA-2023-0022 (rulemaking).

Table B-1 lists the topics addressed in this appendix. Section B.1, *Proposed Action and Alternatives and Analysis Methods*, through Section B.7, *Other Comments*, provide relevant comments on the Draft EIS and the proposed rule and NHTSA’s responses to those comments.

Table B-1. Outline of Issues Raised in Public Comments on the Draft EIS

B.1	Proposed Action and Alternatives and Analysis Methods
B.1.1	No-Action Alternatives and Baselines
B.1.2	Reasonable Range of Alternatives
B.1.3	Suggestions for Preferred Alternative and Other Alternatives to Consider
B.1.4	Resource Areas Dismissed from Further Consideration
B.2	Energy
B.2.1	Affected Environment
B.2.1.1	Gasoline
B.2.1.2	Diesel and Biofuels
B.2.2	Environmental Consequences
B.2.2.1	Cumulative Impacts
B.3	Air Quality
B.3.1	Affected Environment
B.3.1.1	Analysis Methods
B.3.2	Environmental Consequences
B.3.2.1	Cumulative Impacts
B.4	Greenhouse Gas Emissions and Climate Change
B.4.1	Affected Environment
B.4.1.1	Social Cost of Greenhouse Gas Emissions
B.4.2	Environmental Consequences
B.4.2.1	Health, Societal, and Environmental Impacts of Climate Change
B.5	Life-Cycle Assessment (LCA) Implications of Vehicle Materials
B.5.1	Raw Materials Extraction through Vehicle Assembly
B.5.1.1	Non-Battery Components
B.5.1.2	Battery Components
B.5.2	Vehicle Disposal and Recycling

B.6	Environmental Justice
B.6.1	Vehicle Ownership
B.6.2	Communities Facing Climate Change Effects
B.7	Other Comments

B.1 Proposed Action and Alternatives and Analysis Methods

B.1.1 No-Action Alternatives and Baselines

Comment

Comment Number: NHTSA-2022-0075-0032

Organization: American Fuel & Petrochemical Manufacturers (AFPM)

A. None of the proposed alternatives for passenger cars and light-duty trucks are reasonable as they are based on an illegal baseline.

EPCA expressly bars NHTSA from considering the fuel economy of electric vehicles and dual-fueled vehicles, such as PHEVs, in setting fuel-economy standards for passenger cars.⁵ Congress included this explicit prohibition to ensure that electric vehicles remain the compliance flexibility that Congress intended them to be—and do not become a BEV mandate.

NHTSA ignores EPCA’s clear statutory prohibition by interpreting 49 USC § 32902(h) as preventing NHTSA from setting CAFE standards that require application of dedicated alternative fueled vehicles during the only the standard setting years. NHTSA admits that it modeled “the application of BEV technology in MYs outside the standard-setting years . . . to account for BEVs that manufacturers may produce for reasons other than the CAFE standards.”⁶ Despite the clear prohibition, NHTSA openly considered electric vehicles—including those currently in the fleet and EVs the agency predicted would be produced in response to California’s and other States’ Advanced Clean Car II (ACC II) mandates and EPA’s prior greenhouse-gas standards— in deciding the maximum fuel-economy level that automakers can feasibly achieve.⁷ See Appendix A - AFPM Legal Review of NHTSA’s Proposed CAFE Standards for MYs 2027-2032 Passenger Cars and Light Trucks and Fuel Efficiency Standards for MYs 2030-2035 Heavy-Duty Pickup Trucks and Vans (referred to herein as “AFPM Comments” appended here as Attachment A) at pp 15-25 and Review of the NHTSA’s CAFE Model in Analyzing The Proposed CAFÉ Standards for MYs 2027-2032 Passenger Cars and Light Trucks and Fuel Efficiency Standards (referred to as the “Trinity Report” appended as Attachment B) at pp. 2-7. NHTSA also included in its baseline for passenger cars and light-duty trucks projected ZEV penetration rates pursuant to California’s ACC II rulemaking in both the baseline and standard setting years. NHTSA cannot rely on ACC II in the development of its baseline

⁵ Footnote 4: 49 U.S.C. § 32902(h)(1) (in “carrying out” the responsibility to set fuel-economy standards, NHTSA “may not consider” the fuel economy of electric vehicles) and 32902(h)(2) (NHTSA shall consider dual-fueled vehicles, such as PHEVs “to be operated only on gasoline or diesel fuel.”).

⁶ Footnote 5: Id., DEIS at 2-14 to 2-15, and Technical Support Document for the Corporate Average Fuel Economy Standards for Passenger Cars and Light Trucks for Model Years 2027–2032 and Fuel Efficiency Standards for Heavy-Duty Pickup Trucks and Vans for Model Years 2030–2035 at 3-65 to 3-84.

⁷ Footnote 6: “NHTSA has not taken the additional step of removing BEVs from the baseline fleet, and we continue to assume that manufacturers will meet their California ZEV obligations whether or not NHTSA sets new CAFE standards. We reflect those manufacturer efforts in the baseline fleet.” 88 Fed. Reg. 56,319.

or proposed standards because (1) ACC I and ACC II are expressly preempted by the Clean Air Act (CAA), and (2) EPA has not determined whether it will grant a waiver for ACC II. See AFPM Comments (Attachment A) at pp. 63-65 and Trinity Report at 7-11 for a complete discussion regarding the impact of NHTSA’s illegally considering ACC II’s EV mandates in the CAFE baseline. Finally, NHTSA also included in the model the fuel economy of additional electric vehicles that manufacturers would introduce, irrespective of the CAFE standard, during the standard setting years MY2027-2032. See AFPM Comments (Attachment A) at pp.15-25 for a complete discussion regarding NHTSA’s illegal CAFE baseline. Certainly, alternatives that violate the law cannot be “reasonable.”

Response

NHTSA disagrees that the modeled No-Action Alternative does not comport with all relevant statutory and other authorities. For additional discussion of the factors that NHTSA considered when developing the No-Action Alternative, please see Section IV of the final rule preamble.

Comment

Comment Number: NHTSA-2022-0075-0033

Organization: California Office of the Attorney General et al. (States and Cities Joint Comment)

In projecting the baseline fleet—the step taken before NHTSA begins to analyze the “maximum feasible” factors in Section 32902(f)—NHTSA analyzes what manufacturers’ passenger car and light truck fleets would look like absent additional regulatory action by NHTSA. 88 Fed. Reg. at 56,319; see 50 Fed. Reg. 40,528, 40,533-34 (Oct. 4, 1985) (stating that, when setting fuel economy standards, NHTSA has consistently projected what the fleet would likely look like if NHTSA made no change and then “considered what, if any, additional actions the manufacturers could take to improve their fuel economy”). The “baseline should be the best assessment of the way the world would look absent regulatory action.” Off. of Mgmt. & Budget, Circular A-4 at 15 (2003). “[T]his ensures that [NHTSA’s] analysis can appropriately capture manufacturer decision making about their vehicle fleets for reasons other than CAFE standards (e.g., other regulatory programs and manufacturing decisions).” 88 Fed. Reg. at 56,156.

In the Proposal, NHTSA appropriately projects the baseline fleet as “consist[ing] of every vehicle model in MY 2022 in mostly every configuration that has a different compliance fuel economy value. . . .” 88 Fed. Reg. at 56,164; see also 49 U.S.C. § 32904(a)(2) (providing for a petroleum-equivalent fuel economy value for electric vehicles to be included in the calculation of a manufacturer’s average fuel economy). This projection thus accounts for the growing market penetration of electric vehicles, which manufacturers are already producing in response to market demand, their own strategic decisions, and other legal obligations.

Not only is NHTSA’s modeling of the No-Action alternative consistent with Section 32902(h); in fact, long-standing principles of reasoned decisionmaking would forbid NHTSA from ignoring the existence of BEVs in the nation’s light-duty fleet and their dramatic year-over-year increases in sales. E.g., NRDC v. Herrington, 768 F.2d 1355, 1408 (D.C. Cir. 1985) (stating “it would be patently unreasonable” for agency to refuse to recognize “dramatic[.]” changes in regulated industry). Indeed, the use of a national baseline fleet with no BEVs would require “a massively counterfactual assumption” of the kind courts find “[p]articularly troubling” as a basis for agency action. Sokol v. Kennedy, 210 F.3d 876, 881 n.11 (8th Cir. 2000); see also Animal Legal Def. Fund, Inc. v. Perdue, 872 F.3d 602, 619 (D.C. Cir. 2017) (“Reliance on

facts that an agency knows are false at the time it relies on them is the essence of arbitrary and capricious decisionmaking.”) (cleaned up); *Appalachian Power Co. v. EPA*, 249 F.3d 1032, 1053 (D.C. Cir. 2001) (“While courts routinely defer to agency modeling of complex phenomena, model assumptions must have a rational relationship to the real world.” (cleaned up)); cf. *Ctr. for Auto Safety v. Peck*, 751 F.2d 1336, 1365 (D.C. Cir. 1985) (upholding agency’s rejection of “the most unlikely set of extreme assumptions” that were “virtually impossible . . . to occur in the real world”). As the D.C. Circuit stated almost forty years ago, it would be “wholly futile for [courts] to require [an agency] to conform its decisionmaking procedures to the statute, but permit it to trudge through the correct procedure based on information that is now incontestably antique.” *Herrington*, 768 F.2d at 1408.

Just as NHTSA cannot ignore the growing presence of BEVs in the real world, it also cannot assume that regulated parties—here, automakers—will fail to comply with their legal obligations. Courts routinely uphold agencies’ inclusion of such compliance in their baselines for regulatory analyses.⁸ Moreover, agencies, like courts, should honor the longstanding “presumption that parties act lawfully.” See *Schwab v. Reilly*, 560 U.S. 770, 790 (2010) (citing *United States v. Budd*, 144 U.S. 154, 163 (1892)). Doing otherwise, particularly in the face of evidence indicating compliance is the norm, would be arbitrary and capricious. *Motor Vehicle Mfrs. Ass’n of U.S., Inc. v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983) (agency may not “offer[] an explanation for its decision that runs counter to the evidence”). Given the facts on the ground and principles of reasoned decisionmaking, NHTSA correctly chose to model BEV growth in its No-Action baseline both because this growth plainly exists in the real-world fleet today and because NHTSA can and should assume automakers will comply with their legal obligations regardless of any action NHTSA may take in its rulemaking.

Given NHTSA’s duty to project a No-Action baseline that accounts for sharply growing zero- emission vehicle sales, modeling compliance with California’s Advanced Clean Cars I (“ACCI”), Advanced Clean Cars II (“ACCI”), and Advanced Clean Trucks (“ACT”) regulations is a reasonable methodology to do so, at least in the event that California is granted its requested waiver for ACCI and ACCII thus becomes enforceable. There is no shortage of projections of electric vehicle sales in the regulated model years from industry analysts,⁹ and automaker commitments imply penetration well above NHTSA’s No-Action alternative.¹⁰ However, using state zero-emission vehicle standards to model the progress of electric vehicle sales offers advantages in precision, transparency, and consistency. NHTSA’s methodology is more precise and transparent than one based on industry analysis or commitments because it models progress toward definite targets codified by States in state regulations, rather than choosing between industry forecasts that offer differing estimates based on proprietary analyses. Likewise, automakers’

⁸ Footnote 193: E.g., *NRDC v. Thomas*, 838 F.2d 1224, 1238 (D.C. Cir. 1988) (holding, in part, that using “[State- Implementation-Plan]-required emissions rates as the baseline” was “a quite reasonable interpretation” of relevant provision of Clean Air Act); *Cooling Water Intake Structure Coal. v. EPA*, 905 F.3d 49, 81 (2d Cir. 2018) (quoting “environmental baseline” requirements for Endangered Species Act consultations as including “the past and present impacts of all Federal, State, or private actions” and distinguishing those from impacts resulting from agencies exercising discretion); *Am. Rivers v. FERC*, 201 F.3d 1186, 1192 (9th Cir. 1999) (upholding agency use of facility’s operations pursuant to terms and conditions of existing license as no action baseline).

⁹ Footnote 208: See, e.g., n.198 & 199, supra.

¹⁰ Footnote 209: Compare U.S. EPA, Proposed Emission Standards, MY2027-32, 88 Fed. Reg. at 29,192 (Table 1) (tabulating a total 48.6% combined light-duty market share for BEVs and PHEVs by 2030 implied by automaker announcements) with 88 Fed. Reg. at 56,278-79 (Tables IV-8, IV-10) (projecting total light- duty BEV penetration rate of 27.7% and PHEV penetration rate of 0.8% by 2030 in No-Action alternative).

historical compliance with state zero-emission vehicle standards is a superior basis for NHTSA’s projection than automakers’ non-binding and dynamic public statements. Finally, continuing to use state zero-emission vehicle standards to project electric vehicle sales is consistent with NHTSA’s methodology in the MY2024-26 amendments, promoting a straightforward comparison between the two actions.

As the California Air Resources Board explains in the attached report, NHTSA’s No-Action fleet appears to overestimate the sales of zero-emission vehicles necessary to comply with ACCI and ACCII. See Attachment 1, California Air Resources Board Technical Analysis of the National Highway Traffic Safety Administration’s Proposed 2027-2032 Model Year Light-Duty Fuel Economy Standards. Even so, NHTSA’s methodology is likely to prove a highly conservative one for estimating zero-emission vehicle adoption in the No-Action scenario. Most critically, NHTSA models ACCI/II and ACT compliance only in the States that have adopted or will likely adopt those regulations; but the data is clear that electric vehicle sales are increasing in States that have not adopted and are unlikely to adopt any of these regulations. For example, in 2022, the second and third leading States for new electric vehicle registrations were Texas and Florida (which have not adopted ACCI/II or ACT), with their combined 2022 registrations reaching almost 367,000, well over a third of California’s 2022 registrations.¹¹ Because NHTSA’s modeling does not account for significant zero-emission vehicle sales outside of the States adopting ACCI/II and ACT, its No-Action scenario likely significantly underestimates the zero-emission vehicles in the baseline fleet. Because this underestimation may result in less stringent standards than are truly the “maximum feasible” standards, 49 U.S.C. § 32902(a), NHTSA should consider modeling zero-emission vehicle adoption in States not adopting ACCI/II and ACT.¹²

Response

NHTSA agrees that the modeled No-Action Alternative comports with all relevant statutory and other authorities. For additional discussion of the factors that NHTSA considered when developing the No-Action Alternative, please see Section IV of the final rule preamble. NHTSA also considered the States and Cities Joint Comment, among other public comments on the No-Action Alternative, to modify modeling of how manufacturers have indicated their intent to deploy electric vehicles (EVs) consistent with what would be required under Advanced Clean Cars II, regardless of whether it becomes a binding legal obligation, for the final rule. Please see final rule preamble Section III.C.5 and Final TSD Chapter 2.5 for additional discussion of how NHTSA updated its modeling for the final rule.

B.1.2 Reasonable Range of Alternatives

Comment

Comment Number: NHTSA-2022-0075-0032

Organization: American Fuel & Petrochemical Manufacturers (AFPM)

I. THE DEIS FAILS TO EVALUATE REASONABLE ALTERNATIVES.

Regulations implementing NEPA require NHTSA to evaluate “reasonable alternatives” to the proposed action.¹³ “An alternative is ‘reasonable’ if it is ‘technically and economically practical or feasible and

¹¹ Footnote 210: e Fuels Data Center, Electric Vehicle Registrations by State, *supra* note 194.

¹² Footnote 211: One reasonable and available method for projecting these sales might be the most recent historical growth rate of electric vehicle sales in these States in the prior model year(s) for which data is available.

¹³ Footnote 2: 40 CFR 1502.14(s).

meet[s] the purpose and need of the proposed action.”¹⁴ First, none of the alternatives are reasonable because they violate EPCA, as amended by EISA, 49 U.S.C. §§ 32901-32919, and two of the proposed alternatives cannot be implemented. Moreover, none of the proposed alternatives analyze the maximum feasible standards that can be achieved by passenger and light-duty internal combustion engine vehicles (ICEVs).

B. Two of the proposed alternatives for CAFE cannot be implemented within the standard setting years.

The TSD and DEIS evaluate four CAFE alternatives (see Table 1-3 from the DEIS).¹⁵

[See original attachment for Table 1-3: Regulatory Alternatives Under Consideration for Mys 2027-2032 Passenger Cars and Light Trucks]

As detailed extensively in AFPM’s comments, and as expressed by original equipment manufacturers (OEMs),¹⁶ the preferred alternatives cannot be implemented during the standard setting years because:

- CAFE compliance data demonstrates that OEMs are unable to comply with less stringent existing standards, let alone more stringent increases.¹⁷
- AFPM and OEMs express grave concern that the inadequate supply of critical minerals (lithium, cobalt, nickel, copper, and rare earths) needed to produce batteries for EVs, PHEVs, and other hybrid vehicles prevent compliance with the preferred alternative during the standard setting years.¹⁸
- Current and planned battery and EV production rates are insufficient to support the EV adoption rates contemplated by the proposed standards.¹⁹
- The lack of domestic and global supplies of critical minerals and metals required to expand the electricity grid and construct national charging infrastructure within the timeline of the proposed standards renders the proposed standards technically infeasible.
- Electricity generation capacity and the electrical transmission and distribution grid cannot be expanded during the proposal’s period to support the EV penetration rates necessitated by all alternatives other than the “no action” alternative.
- Reliable, equitable, and affordable charging infrastructure needed to power EVs mandated by the preferred alternative will not be deployed nationally within the proposed rule’s time period.

¹⁴ Footnote 3: *Ctr. for Biological Diversity & Sierra Club v. Fed. Energy Regulatory Comm'n*, 67 F.4th 1176 (D.C. Cir. 2023) (citing 43 CFR § 46.420(b)).

¹⁵ Footnote 7: TSD at 1-24. See also DEIS at 2-4 to 2-10.

¹⁶ Footnote 8: See Alliance for Automotive Innovation, Comments to the Environmental Protection Agency, Multi-Pollutant Emissions Standards for Model Years 2027 and Later Light-Duty and Medium-Duty Vehicles, Proposed Rule, Docket No. EPA-HQ-OAR-2022-0829 (hereinafter AAI Comments) at 1-60, and 66-70.

¹⁷ Footnote 9: AFPM Comments at 26-43 and 72-77.

¹⁸ Footnote 10: *Id.* at 25-40; AAI Comments at 14-24.

¹⁹ Footnote 11: AFPM Comments at 37-38; AAI Comments at i-ii, and 44-46.

NHTSA’s modeled fleet-wide achieved CAFE by manufacturer (reproduced Figure 8-4 below) confirms that few manufacturers (and mostly luxury EV producers) could achieve the standards set forth in Alternative PC3LT5 and PC6LT8 —these alternatives are thus prima facie unreasonable.²⁰

[See original attachment for Figure 8-4: Modeled Fleet-wide Achieved CAFÉ by Manufacturer]

Therefore, NHTSA failed to evaluate reasonable alternatives as required by 40 CFR § 1502.14(a).

C. None of the alternatives analyze the maximum feasible standards that can be achieved by ICEVs.

Although EPCA clearly directs NHTSA not to consider the fuel economy of any electric vehicle, from any model year, for any purpose when setting fuel-economy standards, NHTSA failed to include any alternative that could be achieved by ICEVs. For example, Research Octane Number (RON) and octane sensitivity improve engine performance, reduce fuel consumption, and lower greenhouse gas emissions.²¹ While NHTSA need not consider every alternative, and given that NHTSA is currently litigating in the Court of Appeals for the D.C. Circuit the propriety of its practice of considering EVs in setting CAFE standards, the Agency must consider alternatives that can be achieved by ICEVs and does not force electrification of the fleet.

Response

NHTSA disagrees that the Proposed Action and alternatives fail to meet the purpose and need of EPCA, as amended by EISA, and NEPA and its implementing regulations. Additional discussion of the alternatives that NHTSA considered in the final rule is provided in Section IV of the final rule preamble, and NHTSA’s conclusions that the Preferred Alternative is maximum feasible are provided in Section VI of the final rule preamble.

B.1.3 Suggestions for the Preferred Alternative and Other Alternatives to Consider

Comment

Comment Number: NHTSA-2022-0075-0033

Organization: California Office of the Attorney General et al. (States and Cities Joint Comment)

NHTSA tentatively concluded that the Preferred Alternative standards are the “maximum feasible,” 88 Fed. Reg. at 56,133, and we agree that those standards are technologically feasible, economically practicable, and conserve energy compared to the No- Action Alternative. However, we urge NHTSA to consider whether more stringent standards— including the PC3LT5 Alternative and a more stringent hybrid alternative, such as PC2.5LT7²²— are ultimately the “maximum feasible.”

²⁰ Footnote 12: Preliminary Regulatory Impact Analysis (PRIA), July 2023 Figure 8-4 at 8-6.

²¹ Footnote 13: High RON gasoline and alcohol fuels have been proven to reduce fuel consumption and net CO2 emissions. R. Speth, E. Chow, R. Malina, S. Barrett, J. Heywood, and W. Green, Economic and Environmental Benefits of Higher-Octane Gasoline, Environ. Sci. Technol. 2014, 48, 12, 6561–6568.

²² Footnote 3: This is an example of a hybrid alternative rather than a specific stringency level for which we are advocating.

NHTSA is required to set “maximum feasible” fuel economy standards separately for passenger cars and light trucks, “which gives NHTSA discretion, by law, to set CAFE standards that increase at different rates for cars and trucks.” *Id.* at 56,133 n.9. The record clearly demonstrates that more stringent standards than the Preferred Alternative may be “maximum feasible” for light trucks.

Thus, we urge NHTSA to consider whether more stringent standards than the Preferred Alternative—including PC3LT5 and possible hybrid alternatives such as PC2.5LT7—are ultimately the “maximum feasible” based on the full record before the agency.

Response

NHTSA discusses alternatives proposed by commenters in Section IV of the final rule preamble. Please see that section for a discussion of comments and alternatives considered in this final rule. Please also refer to Section VI of the final rule preamble for a discussion of why NHTSA considers the Preferred Alternative to be maximum feasible.

B.1.4 Resource Areas Dismissed from Further Consideration

Comment

Comment Number: NHTSA-2022-0075-0030

Commenter: Roselie Bright

Please obtain an environmental epidemiologist to update the review of recent literature and extract important inputs into the public health effects model. Doing so might clear up some of my confusion for a few specific points:

a. The effects of noise were dismissed because in some traffic situations, electric vehicles need to make artificial noise to alert pedestrians, even though overall, combustion engine vehicles are still much louder than electric vehicles. It is clear to me that as the combustion engine vehicles are replaced by electric vehicles, the overall noise produced by the fleet of vehicles will decrease. Where epidemiology comes into play is the fact that the most alarming studies of noise pollution are recent. At real-world traffic noise levels, they document the following adverse health impacts: increased blood pressure, heart disease, raised stress hormones, brain damage, cancer, and death [1-45].

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Response

NHTSA has updated Section 2.4, *Resource Areas Dismissed from Further Consideration in this EIS and EIS Organization*, to clarify the discussion of reasons why noise was dismissed from further consideration. NHTSA is not dismissing that traffic noise generally has health impacts; rather, NHTSA believes that the analysis in EISs since 2010 through this EIS (and in accompanying rulemaking documents) show that there is no significant impact from the action of setting CAFE and FE standards; therefore, more study of the potential noise impacts of setting CAFE and FE standards is not warranted, which is the relevant standard under NEPA. Section 2.4 contains a brief assessment of the noise impacts of setting CAFE and fuel efficiency standards, in proportion to their significance, in accordance with 40 Code of Federal Regulations (CFR) 1502.2(b).

NHTSA measures one component of noise impacts of the Proposed Action and alternatives in its modeling, which is the social cost of increased noise due to additional vehicle miles traveled (VMT) from the rebound effect. The values employed in the model are discussed in Chapter 6.2.3 of the TSD and the

results of the analysis are presented in Chapter 8.2.4.3 of the Final Regulatory Impact Analysis (FRIA). However, both the underlying research and results of NHTSA’s analysis show that the resulting impacts are extremely small. There is also uncertainty, discussed further in Section 2.4, *Resource Areas Dismissed from Further Consideration in this EIS and EIS Organization*, around how manufacturers will respond to CAFE and FE standards with different vehicle technologies (e.g., hybrid and EVs), which could produce additional noise benefits. NHTSA will continue to follow research in this area and update future modeling and analysis as necessary.

B.2 Energy

B.2.1 Affected Environment

Comment

Comment Number: NHTSA-2022-0075-0033

Organization: California Office of the Attorney General et al. (States and Cities Joint Comment)

Increased fuel efficiency will reduce fuel consumption and may reduce the amount of oil that is produced and refined within the United States. Both reductions will result in reduced GHG emissions. 88 Fed. Reg. at 56,317. These anticipated GHG emissions reductions are necessary to help stave off the worst effects of a climate crisis that is primarily caused by anthropogenic GHG emissions.²³ which is already afflicting our States and Cities.

Response

NHTSA agrees that increased fuel efficiency will decrease fuel consumption by the vehicles manufactured in the model years covered by the standards and as those vehicles replace older vehicles in the fleet. NHTSA includes further discussion of the standards’ impact on fuel production and refining in Section III.G.2(b)(3) of the final rule preamble. The Final EIS also includes a discussion of each fuel types’ greenhouse gas (GHG) emissions and includes a brief discussion of the impact of predicted decreases in overall fuel consumption on GHG emissions in the future in Section 3.1, *Introduction*.

Comment

Comment Number: NHTSA-2022-0075-0033

Organization: California Office of the Attorney General et al. (States and Cities Joint Comment)

Our States and Cities also recognize that reduction in fuel use can benefit our national security. Experts have noted numerous foreign policy costs that arise from the domestic consumption of foreign oil, including: (1) disruptions in oil supply; (2) political realignment from dependence on imported oil that limits United States alliances and partnerships; (3) increasing the power of oil- exporting countries to enact policies that are contrary to United States interests; and (4) the maintenance of United States military presence in the Middle East arising from interest in protecting oil interests.²⁴ Reducing

²³ Footnote 22: See INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, CLIMATE CHANGE 2021: THE PHYSICAL SCIENCE BASIS, SUMMARY FOR POLICYMAKERS 4 (2021), https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_SPM.pdf [hereinafter “IPCC 2021 Summary for Policymakers”].

²⁴ Footnote 16: 88 Fed. Reg. at 56,318 (citing COUNCIL ON FOREIGN RELATIONS, NATIONAL SECURITY CONSEQUENCES OF U.S. OIL DEPENDENCY (Oct. 2006), https://cdn.cfr.org/sites/default/files/report_pdf/0876093659.pdf).

dependence on imported oil could “lower U.S. military and foreign policy costs of safeguarding the U.S. oil supply and reduce revenue to regimes that are considered inimical to U.S. interests.”²⁵

Second, decreasing domestic demand for petroleum could reduce consumers’ exposure to oil price shocks. 88 Fed. Reg. at 56,318. Since the 1970s, Americans have experienced five significant gas price shocks following spikes in the world oil market.²⁶ Oil price shocks have been a contributing factor to economic recessions.²⁷ And with climate change, an increased frequency of extreme weather events that disrupt foreign and domestic energy supplies can be expected, causing supply shortages and price spikes.²⁸ For example, Hurricane Ida caused a temporary disruption of nine-tenths of crude oil production in the Gulf of Mexico, resulting in Gulf Coast gasoline prices rising by 49% over the same time the previous year.²⁹

Decreasing the dependency of the United States on global oil markets helps insulate consumers from such global price shocks and supply disruptions. Even though the United States has positive net oil exports, the United States is not self-sufficient in petroleum production, and consumers still feel the effects of price shocks as the price of oil is determined by the global markets. See 88 Fed. Reg. at 56,317, 56,328. For example, average gas prices in the United States reached record highs in 2022 after Russia invaded Ukraine, which threatened global oil supply and increased crude oil prices.³⁰ Thus, “regardless of whether exports equal or even exceed imports, global supply shocks will still impose costs” on U.S. consumers, among others.³¹ Stricter fuel economy standards and lower fuel consumption can help insulate the United States from these effects. Moreover, more stringent fuel economy standards could further help stabilize oil costs by helping to mitigate climate change (discussed in more depth below), which will reduce the frequency and intensity of extreme weather events that disrupt oil production.

Accordingly, our States and Cities support improving fuel economy, as it provides multiple benefits to consumers.

Response

NHTSA agrees that improving fuel economy provides multiple benefits to consumers. Final EIS Chapter 3, *Energy*, describes the fuel use and environmental impacts of each alternative. Readers may consult Chapters 4, 5, and 7 of the FRIA and Chapter 6 of the TSD, which are incorporated in this Final EIS by reference, for a more extensive description of economic and energy security impacts of this action.

²⁵ Footnote 17: AEC Comment, supra note 6, at 11.

²⁶ Footnote 10: JAMES D. HAMILTON, HISTORICAL OIL SHOCKS 1 (Dec. 22, 2011), http://econweb.ucsd.edu/~jhamilton/oil_history.pdf.

²⁷ Footnote 11: See id. at 26.

²⁸ Footnote 12: AEC Comment, supra note 6, at 8.

²⁹ Footnote 13: Id.

³⁰ Footnote 14: Derek Saul, \$5 Milestone: Gas Prices Hit an All-Time National High, FORBES (June 9, 2022), <https://www.forbes.com/sites/dereksaul/2022/06/09/5-milestone-gas-prices-hit-an-all-time-national-high/?sh=11d5c214654b>; U.S. Energy Info. Admin., Short-Term Energy Outlook (April 2022), <https://www.eia.gov/outlooks/steo/archives/apr22.pdf>; U.S. Dep’t of Transp., Bureau of Transp. Statistics, Record Breaking Increases in Motor Fuel Prices in 2022 (Aug. 18, 2022), <https://www.bts.gov/data-spotlight/record-breaking-increases-motor-fuel-prices-2022>.

³¹ Footnote 15: AEC Comment, supra note 6, at 7-8.

B.2.1.1 Gasoline

Comment

Comment Number: NHTSA-2022-0075-0033

Organization: California Office of the Attorney General et al. (States and Cities Joint Comment)

Gasoline used to power light-duty vehicles accounted for around 41% of total petroleum consumption in the United States in 2022.³² Due to fossil fuel combustion, the transportation sector generates the largest share of total greenhouse gas (“GHG”) emissions in the United States.³³ Light-duty trucks and passenger cars account for 37.1% and 20.7% of transportation sector emissions in the United States, respectively, and approximately 16.5% of total GHG emissions in the United States.³⁴ Moreover, the extraction, transport, and refining of crude oil is a significant source of GHG emissions, constituting about 5% of total global GHG emissions.³⁵

Historically, NHTSA has considered the national balance of payments in evaluating the need to conserve energy, “because of concerns that importing large amounts of oil created a significant wealth transfer to oil-exporting countries and left the U.S. economically vulnerable.” 88 Fed. Reg. at 56,316-17 (citing 42 Fed. Reg 63,184, 63,192 (Dec. 15, 1977)).

In the Proposal, NHTSA recognizes that, even as a net exporter of petroleum products,³⁶ the U.S. continues to rely on oil imports and that reducing vulnerability to oil price shocks remains important. Id. NHTSA could strengthen its analysis by acknowledging that the U.S. consumed more petroleum than it produced in 2022, and that the U.S. remained a net crude oil importer in 2022, importing about 6.28 million barrels per day of crude oil and exporting about 3.58 million barrels per day.³⁷ NHTSA acknowledges that, “[i]n 2021, the transportation sector accounted for 78.8 percent of total U.S. petroleum consumption,” Draft Environmental Impact Statement (“DEIS”) at S-8, and that

³² Footnote 18: U.S. Energy Info. Admin., Gasoline explained (last updated Aug. 22, 2023), <https://www.eia.gov/energyexplained/gasoline/use-of-gasoline.php>.

³³ Footnote 19: U.S. Energy Info. Admin., Energy and the environment explained: Where greenhouse gases come from (last updated August 29, 2023), <https://www.eia.gov/energyexplained/energy-and-the-environment/where-greenhouse-gases-come-from.php>; see also U.S. ENV’T PROT. AGENCY, INVENTORY OF U.S. GREENHOUSE GAS EMISSIONS AND SINKS: 1990-2021, 2-28 (April 2023), <https://www.epa.gov/system/files/documents/2023-04/US-GHG-Inventory-2023-Main-Text.pdf>.

³⁴ Footnote 20: U.S. ENV’T PROT. AGENCY, INVENTORY OF U.S. GREENHOUSE GAS EMISSIONS AND SINKS: 1990-2021, *supra* note 19 at 2-35.

³⁵ Footnote 21: Christian Lowhagen, New study reveals real size of crude oil’s carbon footprint, CHALMERS (Sept. 28, 2018), <https://www.chalmers.se/en/current/news/see-new-study-reveals-real-size-of-crude-oil-s-carbon-footprint/>.

³⁶ Footnote 180: In 2022, total petroleum exports were about 9.58 million barrels per day and total petroleum imports were about 8.32 million barrels per day. U.S. Energy Information Administration, Oil and Petroleum Products Explained: Oil Imports and Exports (Oct. 2, 2023), <https://www.eia.gov/energyexplained/oil-and-petroleum-products/imports-and-exports.php>. The EIA projects that the U.S. will remain a net exporter of petroleum products through 2050. U.S. Energy Information Administration, Annual Energy Outlook AEO2023 (Mar. 2023), at 23, https://www.eia.gov/outlooks/aeo/pdf/AEO2023_Narrative.pdf; see also U.S. Energy Information Administration, Annual Energy Outlook 2022 with Projections to 2050 (Mar. 2022), at 32, https://www.eia.gov/outlooks/aeo/pdf/AEO2022_Narrative.pdf.

³⁷ Footnote 181: U.S. Energy Information Administration, Oil and Petroleum Products Explained: Oil Imports and Exports (Oct. 2, 2023), <https://www.eia.gov/energyexplained/oil-and-petroleum-products/imports-and-exports.php>.

“transportation demand is expected to continue to increase,” 88 Fed. Reg. at 56,316. The proposal “aims to improve fleet-wide fuel efficiency and to help reduce the amount of petroleum consumed in the U.S,” *id.*, which will reduce expenditures on foreign oil and protect consumers from global oil price shocks.

Response

The Final EIS includes appropriate descriptions of the greenhouse gas (GHG) emissions generated by the transportation sector during production of each light-duty (LD) and HDPUV fuel type. In particular, Section 3.2.1, *Gasoline*, describes the GHG emissions released during the crude oil extraction, transportation, and refinement of crude oil.

The Final EIS discusses the status of the United States as a net importer and the environmental implications of reducing net petroleum imports in the United States in Section 3.2.1.4, *Petroleum Imports*. Readers may consult Sections III and VI of the final rule preamble, Chapters 4, 5, and 7 of the FRIA, and Chapter 6 of the TSD, which are incorporated in this Final EIS by reference, for a more extensive description of economic and energy security impacts of this action.

B.2.1.2 Diesel and Biofuels

Comment

Comment Number: NHTSA-2022-0075-0032

Organization: American Fuel & Petrochemical Manufacturers (AFPM)

IV. THE DEIS DOES NOT ADEQUATELY ADDRESS THE CONFLICTS BETWEEN THE PROPOSED STANDARDS AND OTHER FEDERAL POLICIES.

The DEIS violates 40 CFR § 1502.16(a)(5) by ignoring how the proposed EV mandate conflicts with other federal programs. The proposed standards, and by extension, the DEIS, stands in direct contrast to other legislation, such as the Renewable Fuel Standard Program (RFS), whereby Congress mandated that “gasoline sold or introduced into commerce in the United States” must contain renewable fuels³⁸ and, in 2023 (and beyond), must include billions of gallons of renewable fuel.³⁹ Congress created the RFS, which requires increasing volumes of renewable fuel to be blended into transportation fuel. The four categories of renewable fuel must emit anywhere from 20 percent to 80 percent fewer GHGs relative to the fossil fuel it replaces. While the DEIS addresses ethanol and biodiesel, it lacks any discussion of renewable diesel, which can achieve up to 80% GHG emissions reductions, as well as higher-octane fuels. EPA's RFS data show that the U.S. market reached 3.6 billion gallons of biomass-based diesel in 2022.⁴⁰

In response to this mandate, U.S. refineries dramatically increased renewable fuel production and invested billions of dollars to expand U.S. production of liquid renewable fuels, which can now achieve

³⁸ Footnote 34: 42 U.S.C. § 7545(o)(2)(A)(i).

³⁹ Footnote 35: *Id.*, § 7545(o)(2)(B); 87 Fed. Reg. 39,600 (July 1, 2022).

⁴⁰ Footnote 36: Spreadsheet of RIN Generation and Renewable Fuel Volume Production by Fuel Type for the Renewable Fuel Standard for December 2022. Retrieved from <https://www.epa.gov/fuels-registration-reporting-and-compliance-help/spreadsheet-rin-generation-and-renewable-fuel-0>.

up to an 86 percent GHG emissions reduction compared to petroleum fuels.⁴¹ One of which is renewable diesel that is a “drop-in” fuel and can be used in the existing diesel fuel distribution system and existing diesel vehicles.

According to the Energy Information Agency’s June 2023 Short-Term Energy Outlook (STEO), biomass-based diesel (which includes biodiesel and renewable diesel) production averaged 3.1 billion gallons in 2022, and EIA expects production to average 4.0 billion gallons in 2023 and 4.8 billion gallons in 2024. EIA expects ethanol and renewable oxygenate production to increase from 18.4 billion gallons in 2022 to 19.2 billion gallons in 2023, and to 20.4 billion gallons in 2024.

[See original attachment for chart of existing and expected U.S. renewable diesel production capacity (2010-2023)]

Figure 1. Existing and Expected US Renewable diesel production capacity (2010- 2024).⁴²

In response to the RFS and other government programs encouraging the production of lower carbon renewable liquid fuels, U.S. refiners are undertaking significant capital expenditures to lower the carbon intensity of fuel such as taking advantage of Congress’ 45Q tax credit for carbon capture and sequestration (CCS). Ethanol producers are also looking to use CCS to reduce carbon intensity from the 15 billion gallons of ethanol blended into our nation’s gasoline.⁴³ Similarly, renewable diesel and sustainable aviation fuel production capacity will total 5.1 billion gallons per year if all announced expansion projects, which represent \$10.8 billion in investments, are completed.⁴⁴ Yet despite the rapid growth in renewable diesel production mandated by Congress, the DEIS fails to account for this program and the environmental benefits it brings.

Response

The Final EIS includes Section 3.2.3.4, *Renewable Diesel*, which describes LD and HDPUV renewable diesel use as well as the environmental benefits and impacts of renewable diesel. NHTSA believes this discussion appropriately reflects the Council on Environmental Quality (CEQ)’s instruction to discuss impacts in proportion to their significance. 40 CFR 1502.2(b). As described in Section 3.1, *Introduction*, the CAFE Compliance and Effects Model (CAFE Model) shows that diesel consumption constitutes an extremely small portion of LD vehicle fuel use in 2022 and is expected to be an even smaller portion of fuel use in 2050. While diesel consumption makes up a larger share of HDPUV energy consumption in 2022, not only is the HDPUV fleet a fraction of the size of the LD fleet, but the share of diesel consumption as a percentage of total energy consumption in the HDPUV fleet is also expected to decline by 2050. Additional discussion of NHTSA’s consideration of alternative fuels is discussed in Section III.B of the final rule preamble.

⁴¹ Footnote 37: Hui Xu, Longwen Ou, Yuan Li, Troy R. Hawkins, and Michael Wang, *Environmental Science & Technology* 2022, 56 (12), 7512-7521. DOI: 10.1021/acs.est.2c00289.

⁴² Footnote 38: Energy Information Agency, *US renewable diesel capacity could increase due to announced and developing projects* July 29, 2021. Retrieved from <https://www.eia.gov/todayinenergy/detail.php?id=48916>.

⁴³ Footnote 39: Erin Voegelé, *Carbon America to develop CCS project at Nebraska ethanol plant*, *Ethanol Producer Magazine*, October 4, 2022 (Carbon America announced its third CCS project at a U.S. ethanol plant).

⁴⁴ Footnote 40: EIA, *U.S. renewable diesel capacity could increase due to announced and developing projects*, *Today in Energy*, July 29, 2021. Retrieved at <https://www.eia.gov/todayinenergy/detail.php?id=48916>.

B.2.2 Environmental Consequences

Comment

Comment Number: NHTSA-2022-0075-0032

Organization: American Fuel & Petrochemical Manufacturers (AFPM)

Ignoring activities and their related environmental impacts to transition the entire transportation fleet. In the context of this rulemaking, where ICEVs emit much of their carbon from the tailpipe and EVs emit them mostly during the vehicle production and recharging phases, lifecycle analyses of each technology are critically important and the only way of ensuring an apples-to-apples comparison. While Chapter 6 details NHTSA's lifecycle assessment for building materials, the DEIS neglects to discuss environmental impacts associated activities required to build out the electricity grid and charging stations necessitated by this rulemaking, which is contrary to NEPA.

Response

NHTSA agrees that there will be environmental impacts related to meeting the increased energy demand associated with the fleet transitioning away from internal combustion engine (ICE) vehicles toward alternative methods of vehicle propulsion. NHTSA discusses the environmental impacts of increasing energy resources, including coal mining, natural gas production, and renewable energy production in Section 3.2.2, *Electricity*. NHTSA has expanded Section 3.2.2, *Electricity*, to include the environmental impacts of vehicle recharging station development. Section 3.2.1, *Gasoline*, which includes Sections 3.2.1.1, *Petroleum Extraction*, 3.2.1.2 *Petroleum Transportation*, 3.2.1.3 *Petroleum Refining*, 3.2.1.4, *Petroleum Imports*, and 3.2.1.5, *Fuel Transportation, Storage, and Distribution*, details the analogous environmental impacts related to gasoline. Similarly, Sections 3.2.3, *Diesel and Biofuels*, and 3.2.4, *Natural Gas*, detail the analogous environmental impacts of other types of ICE vehicles. NHTSA agrees that being able to look at these impacts as an apples-to-apples comparison is useful for the decision-maker and stakeholders.

Comment

Comment Number: NHTSA-2022-0075-0033

Organization: California Office of the Attorney General et al. (States and Cities Joint Comment)

All four of the alternatives proposed by NHTSA would have a long-term positive effect on consumers. NHTSA projects that under the Preferred Alternative, fuel savings will exceed the technology costs necessary to comply with the standards. 88 Fed. Reg. at 56,138. Specifically, NHTSA estimates that the Preferred Alternative could reduce the lifetime fuel costs of passenger cars by \$302 and a light truck by \$1,389, while increasing the average costs, respectively, by \$654 and \$1,064. Preliminary Regulatory Impact Analysis ("PRIA") at 8-23, Table 8-3; 88 Fed. Reg. at 56,138; see also id. at 56,139, Table I-6. And drivers will not only experience lower costs as a result of new vehicles' decreased fuel consumption, but also will benefit from "increased mobility that results from a lower cost of driving their vehicle . . . and fewer refueling events." 88 Fed. Reg. at 56,285.⁴⁵

⁴⁵ Footnote 4: See also NHTSA, Preliminary Regulatory Impact Analysis: Corporate Average Fuel Economy Standards for Passenger Cars and Light Trucks for Model Years at 2027 and Beyond and Fuel Efficiency Standards for Heavy-Duty Pickup Trucks and Vans for Model Years 2030 and Beyond at 8-40 (July 2023).

Moreover, these proposed improvements in fuel economy benefit consumer welfare beyond reduced fuel expenditures for those buying new vehicles. Gasoline consumption in the United States is expected to decrease as vehicle manufacturers produce more fuel-efficient vehicles in response to the more stringent standards. 88 Fed. Reg. at 56,253. Indeed, lower total fuel consumption is expected even if total miles driven increase slightly. See *id.* at 56,288, Table IV-22. NHTSA estimates that the Preferred Alternative would “reduce fuel consumption by 88 billion gallons through [calendar year] 2050.” *Id.* at 56,328. Decreasing the domestic consumption in the United States will in turn produce “a corresponding decrease in the Nation’s demand for crude petroleum, a commodity that is traded actively in a worldwide market.” *Id.* at 56,253. Because the United States accounts for a significant share of global oil consumption, its decreasing demand will “exert some downward pressure on worldwide prices,” thus tending to lower gas prices for all consumers. *Id.*⁴⁶ This decrease in domestic demand for oil will have some important externalities that positively affect consumers directly and our States and Cities more generally.

Response

This Final EIS describes the fuel use and environmental impacts of each alternative. Readers may also consult Chapter 6 of the TSD and Chapter 8 of the FRIA, which are incorporated in this EIS by reference, for a more extensive description of the methodology that NHTSA used to model the economic and energy security impacts of this action and for a discussion of other consumer costs and benefits.

B.2.2.1 Cumulative Impacts

Comment

Comment Number: NHTSA-2022-0075-0030

Commenter: Roselie Bright

4. The CAFE model assumed that for electricity generation, the majority of sources would continue to be fossil fuel [Section 3.2.2].

- Please include in your analysis the impact of expanding home EV battery charging from home solar panels.

Response

NHTSA has expanded Section 3.2.2.1, *Electricity*, to include information about the potential growth of residential rooftop photovoltaic panels. The United States added 6.4 gigawatts of small-scale solar or rooftop solar capacity in 2022, the most in a single year (EIA 2023w). If the increase in residential solar continues, it may lead to a decrease in upstream emissions from charging EVs.

In addition, for the analysis supporting the final rule, NHTSA mapped National Renewable Energy Laboratory (NREL) 2022 Standard Scenarios projections for electricity generation into Greenhouse Gases, Regulated Emissions, and Energy Use in Technologies (GREET) 2023 to develop the electricity emissions factors for the CAFE Model. To the extent that the NREL projections assume a decreasing share of fossil fuel for electricity generation, that is now incorporated in our analysis. Additional discussion of how NHTSA incorporated these estimates and the resulting impacts is provided in Chapter

⁴⁶ Footnote 5: See also U.S. Energy Info. Admin., Oil and petroleum products explained: Use of oil (last updated Aug. 22, 2023), <https://www.eia.gov/energyexplained/oil-and-petroleum-products/use-of-oil.php>.

3, *Energy*, of this EIS, Section III.D of the final rule preamble, Chapter 5 of the Final TSD, Chapter 8 of the FRIA, and the Clean Grid Docket Memo, which is included in the rulemaking docket (Docket No. NHTSA-2023-0022).

B.3 Air Quality

B.3.1 Affected Environment

Comment

Comment Number: NHTSA-2022-0075-0030

Commenter: Roselie Bright

b. The emission health impacts listing in Table IV-26 is extensive, but omits several adverse health impacts that have been documented recently: lung cancer mortality; asthma onset in both children and adults; poor pregnancy outcomes, poor physical growth, school absences, and reduced cognitive abilities (autism, academic performance, dementia) [46-91].

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Response

NHTSA has reviewed the references provided by the commenter and has added relevant information to the discussion of health impacts in Appendix C, *Air Quality*, of the Final EIS, as appropriate.

Comment

Comment Number: NHTSA-2022-0075-0033

Organization: California Office of the Attorney General et al. (States and Cities Joint Comment)

In addition, other forms of air pollution inherent in fossil fuel emissions pose a widespread and persistent problem in our States and Cities. Criteria pollutants (including fine particulate matter (PM_{2.5}) and ozone precursors) and air toxics negatively affect the health and welfare of people living in our

States and Cities, and some contribute to climate change.⁴⁷ In 2020, more than 30.7 million Americans breathed air with elevated levels of PM2.5 pollution for more than 100 days, and an additional 175.4 million Americans breathed air with elevated levels of PM2.5 for at least 31 days.⁴⁸ Millions also breathed air with elevated levels of ozone for more than 100 days.⁴⁹ Even air containing levels of PM2.5 and ozone below current federal air quality standards is harmful to public health.⁵⁰

Response

NHTSA agrees that poor air quality adversely affects human health. This Final EIS shows that increasing the fuel economy of the passenger car, light truck, and HDPUV fleet, such as by implementing the Preferred Alternative, would result in public health and climate benefits, which are analyzed in this Final EIS. Additional discussion of how NHTSA modeled these benefits and the results of NHTSA's modeling are provided in Chapter 5 of the TSD and Chapter 8 of the FRIA.

Comment

Comment Number: NHTSA-2022-0075-0033

Organization: California Office of the Attorney General et al. (States and Cities Joint Comment)

Various locations throughout our States and Cities have been unable to attain, or face difficulty maintaining, the NAAQS—designed to protect public health—for ozone.⁵¹ 42 U.S.C. § 7409(b). For example, multiple counties in California are registering serious, severe, or extreme nonattainment with the 8-Hour Ozone NAAQS. Similarly, several counties in the Metropolitan New York-New Jersey-Connecticut area are in severe nonattainment with the 2008 8-Hour Ozone NAAQS and are in moderate nonattainment with the 2015 8-Hour Ozone NAAQS.⁵²

A major precursor of ozone is VOCs.⁵³ The Preferred Alternative and the more stringent alternatives would result in decreases of VOC emissions as early as 2035. 88 Fed. Reg. at 56,324. While States have taken action to reduce VOC emissions from mobile and stationary sources, including power plants and

⁴⁷ Footnote 142: BRYAN HUXLEY-REICHER ET AL., TROUBLE IN THE AIR 6–14 (Fall 2021), https://publicinterestnetwork.org/wp-content/uploads/2022/07/Trouble-in-the-Air-revised-11_23_21.pdf.

⁴⁸ Footnote 143: *Id.* at 3.

⁴⁹ Footnote 144: *Id.*

⁵⁰ Footnote 145: *Id.* at 4, 6–10.

⁵¹ Footnote 164: U.S. Env't Prot. Agency, Current Nonattainment Counties for All Criteria Pollutants, <https://www3.epa.gov/airquality/greenbook/ancl.html> (last updated Sept. 30, 2023) (providing NAAQS compliance status of all counties); Cal. Air Resources Board, Criteria Pollutant Emission Reductions from California's Zero-Emission Vehicle Standards for Model Years 2017-2025, at 5, App. A to Comments of States and Cities in Support of EPA Reversing Its SAFE 1 Actions (Jul. 6, 2021) (Docket ID No. EPA-HQ-OAR-2021-0257), https://downloads.regulations.gov/EPA-HQ-OAR-2021-0257-0132/attachment_2.pdf.

⁵² Footnote 165: U.S. Env't Prot. Agency, 8-Hour Ozone (2015) Nonattainment Areas, <https://www3.epa.gov/airquality/greenbook/jnc.html> (last updated Sept. 30, 2023); U.S. Env't Prot. Agency, 8-Hour Ozone (2008) Nonattainment Areas, <https://www3.epa.gov/airquality/greenbook/hnc.html>, (last updated Sept. 30, 2023).

⁵³ Footnote 166: Cal. Air Resources Board, What Is Ozone?, <https://ww2.arb.ca.gov/resources/fact-sheets/what-ozone> (last accessed Oct. 3, 2023).

refineries, in an attempt to attain the NAAQS,⁵⁴ more stringent fuel economy standards would further help all States attain and maintain the ozone NAAQS.

Response

NHTSA agrees that increasing the fuel economy of the passenger car, light truck, and HDPUV fleet would result in public health and climate benefits, which are analyzed in this Final EIS. Additional discussion of how NHTSA modeled these benefits and the results of NHTSA's modeling are provided in Chapter 5 of the TSD and Chapter 8 of the FRIA.

In this Final EIS, NHTSA projects that the technologies that vehicle manufacturers would use to comply with the CAFE and HDPUV FE standards could reduce some emissions. However, NHTSA does not have authority to regulate emissions. EPA has authority to regulate emissions, which it exercises through setting emissions standards and other activities. On March 20, 2024, EPA announced final standards to further reduce harmful air pollutant emissions from LD and medium-duty vehicles starting with MY 2027 (EPA 2024g). This final rule builds upon EPA's GHG standards for passenger cars and light trucks for MYs 2023–2026 and leverages advances in clean car technology to unlock benefits to Americans ranging from improving public health through reducing smog- and soot-forming pollution from vehicles, to reducing climate pollution, to saving drivers money through reduced fuel and maintenance costs. These standards will phase in over MYs 2027–2032.

Comment

Comment Number: NHTSA-2022-0075-0033

Organization: California Office of the Attorney General et al. (States and Cities Joint Comment)

Wildfires pose significant public health risks due to air quality degradation.⁵⁵ Exposure to wildfire smoke may cause respiratory morbidity, especially exacerbations of asthma and chronic obstructive pulmonary disease.⁵⁶ “[W]ildfire-specific PM_{2.5} is up to 10 times more harmful on human health than PM_{2.5} from other sources.”^{57,58} This public health concern grows as the frequency and intensity of wildfires increase and is not limited to States where the wildfires are burning. The rising heat from the wildfires takes particulate matter and toxic gases in the smoke into the jet stream, which can carry those hazardous substances thousands of miles and cause harmful air pollution across the country. During the 2020 wildfire season and again in July of 2021, smoke from wildfires burning on the West Coast caused New

⁵⁴ Footnote 167: See, e.g., N.J. Dep't of Env't Prot., New Jersey SIP Revision for the Attainment and Maintenance of the Ozone NAAQS (Dec. 2017), at x, 4-14, <https://dep.nj.gov/wp-content/uploads/airplanning/8HrOzoneSIP2017-FinalSIP.pdf>.

⁵⁵ Footnote 65: IPCC Report 2022, *supra* note 34, at 1949.

⁵⁶ Footnote 66: Colleen E. Reid et al., Critical Review of Health Impacts of Wildfire Smoke Exposure, 124 ENV'T HEALTH PERSPECTIVES 1334, 1336-38 (2016), <https://doi.org/10.1289/ehp.1409277>.

⁵⁷ Footnote 67: Rosana Aguilera et al., Wildfire smoke impacts respiratory health more than fine particles from other sources: observational evidence from Southern California, 12 NATURE COMMUNICATIONS 1, 3 (2021), <https://doi.org/10.1038/s41467-021-21708-0>.

⁵⁸ Footnote 68: Smoke from wildfires has also been found to exacerbate risks associated with the COVID-19 virus, and one study found that “[t]housands of COVID-19 cases and deaths in California, Oregon, and Washington between March and December 2020 may be attributable to increases in fine particulate air pollution (PM_{2.5}) from wildfire smoke.” Karen Feldscher, Link between wildfires and COVID cases established, THE HARV. GAZETTE (Aug. 13, 2021), <https://news.harvard.edu/gazette/story/2021/08/wildfire-smoke-linked-to-increase-in-covid-19-cases-and-deaths/>.

York City to experience some of the worst air quality in the world.⁵⁹ And in June 2023, New York City was once again blanketed in smoke, resulting in the highest measurements of 2.5 micron particles since recording began in 1999.⁶⁰ The combination of fierce wildfires in Canada and airflow patterns prompted the U.S. National Weather Service to issue air quality alerts for most of the Atlantic seaboard.⁶¹

Response

NHTSA agrees that wildfires can pose significant public health risks due to air quality degradation. Section 7.2.5, *Communities Facing Climate Change Effects*, of this Final EIS notes that higher average temperatures and drought induced by climate change can increase the occurrence of wildfires and the associated health risks. Additional discussion of how climate change is exacerbating wildfires is provided in Appendix F, *Greenhouse Gas Emissions and Climate Change*.

B.3.1.1 Analysis Methods

Comment

Comment Number: NHTSA-2022-0075-0030

Commenter: Roselie Bright

For most of the pollutants, the model relies on other federal reviews, the most recent one having been published in 2021. We all know that federal reports involve extensive approval time periods before publication. Therefore, there was probably at least a year of significant publications that weren't reviewed for this DEIS. There has been a steep rise in the number of emissions epidemiology publications in recent years. Therefore, I strongly suggest an update to the DEIS and the public health effects model using recent literature.

Response

NHTSA has reviewed the references provided by the commenter and has added relevant information to the discussion of health impacts in Appendix C, *Air Quality*, of the Final EIS, as appropriate.

B.3.2 Environmental Consequences

Comment

Comment Number: NHTSA-2022-0075-0032

Organization: American Fuel & Petrochemical Manufacturers (AFPM)

The DEIS must account for the fact that new ZEVs will increase particulate matter ("PM") emissions through increased tire and road wear. EPA's National Emissions Inventory shows that roadway dust

⁵⁹ Footnote 69: See, e.g., Oliver Milman, New York air quality among worst in world as haze from western wildfires shrouds city, THE GUARDIAN (Jul. 21, 2021), <https://www.theguardian.com/us-news/2021/jul/21/new-york-air-quality-plunges-smoke-west-coast-wildfires>.

⁶⁰ Footnote 70: Aatish Bhatia et al., Just How Bad Was the Pollution in New York?, N.Y. TIMES (Jun. 9, 2023), <https://www.nytimes.com/interactive/2023/06/08/upshot/new-york-city-smoke.html>.

⁶¹ Footnote 71: Tyler Clifford, US East Coast blanketed in veil of smoke from Canadian fires, REUTERS (Jun. 8, 2023), <https://www.reuters.com/business/environment/us-states-under-air-quality-alerts-canadian-smoke-drifts-south-2023-06-07/>; see Julie Bosman, Smoky Air From Canadian Wildfires Blankets Midwestern Skies, N.Y. TIMES (Jun. 27, 2023), <https://www.nytimes.com/2023/06/27/us/midwest-chicago-smoke-air-quality.html>.

contributes more PM_{2.5} emissions than the tailpipe. Roadway dust emissions, including particles from tire wear, are correlated with vehicle weight, so increases in fleet average vehicle weight would be expected to increase roadway dust PM_{2.5} emissions.⁶² Converting ICEVs to ZEVs would significantly increase the average vehicle weight on U.S. roadways, which in turn would increase highway wear and entrained road dust emissions. Additionally, more limited carrying capacity of HDPUVs could require a greater number of ZEVs to move the same tonnage of cargo, thus increasing the number of vehicles needed to haul the same amount of cargo, vehicle miles traveled, and resulting PM emissions.⁶³

Response

NHTSA agrees that, to the extent that zero-emission vehicles (ZEVs) weigh more than ICE vehicles and that tire technologies remain constant, increases in the number of ZEVs could increase particulate matter (PM) emissions through increased tire and road wear. The CAFE Model accounts for PM emissions from tire wear when vehicles shift from one weight class to another but does not account for increases or decreases in vehicle weight within a class of vehicles when calculating the impact of brake and tire wear emissions. This is consistent with the EPA MOVES4 model that provided the emissions factors used in the CAFE Model. NHTSA will continue to examine literature and data on this topic for incorporation for future analysis. Additional discussion of how NHTSA estimates brake and tire wear is provided in Final TSD Chapter 5 and Section III of the final rule preamble.

NHTSA disagrees that battery electric vehicle (BEV) HDPUVs have a more limited carrying capacity than their ICE counterparts and that an increasing number of BEV HDPUVs would result in more VMT (and, thus, increasing PM emissions). NHTSA examined HDPUV BEV configurations in conjunction with Argonne National Laboratory prior to finalizing inputs for the CAFE Model analysis and does not believe that battery pack sizes will limit cargo capacity for HDPUVs (as opposed to what may be seen for larger medium and heavy-duty [MDHD] vehicles). This is especially true with the relatively lower ranges needed for HDPUV delivery vehicles, which generally operate in a more limited spatial area (as opposed again to the long-distance requirements for larger MDHD vehicles, which would require a larger battery pack). To reflect these considerations, NHTSA only modeled two HDPUV range configurations for HDPUV BEVs (termed “BEV1” and “BEV2”). In addition, NHTSA has limited the adoption of BEV powertrains for pickup trucks with high work factors. Additional discussion of how and why NHTSA modeled particular HDPUV BEV configurations is provided in Section III.D of the final rule preamble.

B.3.2.1 Cumulative Impacts

Comment

Comment Number: NHTSA-2022-0075-0033

Organization: California Office of the Attorney General et al. (States and Cities Joint Comment)

(1) Reducing Criteria Pollutant Emissions Will Benefit Public Health

NHTSA anticipates significant reductions of carbon monoxide emissions under all action alternatives, which could be so significant that it “could lead to changes in ambient pollution concentrations.” 88 Fed.

⁶² Footnote 30: EPA, “2020 National Emissions Inventory (NEI) Data,” available at <https://www.epa.gov/air-emissionsinventories/2020-national-emissions-inventory-nei-data>.

⁶³ Footnote 31: For further environmental impacts inadequately considered by the Agency, see AFPM’s comments on the Proposed Rule, incorporated by this reference herein.

Reg. at 56,323, 56,234. NHSTA also anticipates reductions in the emission of volatile organic compounds (“VOCs”) in the year 2035 and reduced PM2.5 and NOx emissions in the year 2050. *Id.*⁶⁴ The health benefits associated with a reduction in PM2.5 and ozone pollution are well-documented.⁶⁵ Short- and long-term PM2.5 exposures result in increased mortality risk and adverse cardiovascular and respiratory effects.⁶⁶ In California alone, over 5,000 premature deaths and hundreds of illnesses and emergency room visits for respiratory and cardiovascular disease are linked to PM2.5 pollution annually.⁶⁷ And long-term exposure to even very low PM2.5 levels (3µg/m³) may still lead to lower life expectancy for both men and women.⁶⁸ Studies have also demonstrated that particle pollution may significantly reduce lung function growth in children and that these effects are likely permanent.⁶⁹

Ozone pollution leads to similar negative health effects, especially for respiratory health.⁷⁰ Multiple epidemiological studies have shown that both short- and long-term exposures to ozone with median or average levels near or below the current 8-hour National Ambient Air Quality Standards (NAAQS) were

⁶⁴ Footnote 146: NHTSA anticipates that the reduction in VOC emissions in 2035 would occur in connection with all action alternatives. 88 Fed. Reg. at 56,323. The reduction in PM2.5 emissions in 2050 would occur in connection with all action alternatives. *Id.* The reduction of NOx emissions in 2050 would only occur in connection with the Preferred Alternative (PC2LT4) and PC1LT3. *Id.*

⁶⁵ Footnote 147: OZONE TRANSP. COMM’N OTC MODELING COMMI., ANALYSIS OF THE POTENTIAL HEALTH IMPACTS OF REDUCING OZONE LEVELS IN THE OTR USING BENMAP – 2021 EDITION (July 2021); OFFICE OF MASS. ATTORNEY GENERAL MAURA HEALEY, COVID-19’S UNEQUAL EFFECTS IN MASSACHUSETTS 6 (2020) (explaining that eliminating human-generated emissions from the City of Boston would reduce PM2.5 and ozone concentrations throughout the region, leading to a decrease in morbidity and mortality and saving the region billions of dollars); Leah Burrows, Deaths from fossil fuel emissions higher than previously thought, HARVARD (Feb. 9, 2021), <https://seas.harvard.edu/news/2021/02/deaths-fossil-fuel-emissions-higher-previously-thought> (reporting on recent study finding that more than 8 million people died in 2018 from fossil fuel pollution); Erika Garcia et al., Association of Changes in Air Quality with Incident Asthma in Children in California, 1993-2014, 312 JAMA 19:1906-1915 (2019) (decreases in PM2.5 emissions are significantly associated with lower asthma incidence); Yaron Ogen, Assessing Nitrogen Dioxide (NO2) Levels As A Contributing Factor To Coronavirus (COVID-19) Fatality 726 Sci. Total Environ. (Jul. 2020), <https://pubmed.ncbi.nlm.nih.gov/32302812/> (finding that long-term exposure to NO2 may be an important contributor to the high COVID-19 fatality rates observed in five European regions).

⁶⁶ Footnote 148: U.S. ENV’T PROT. AGENCY, POLICY ASSESSMENT FOR THE REVIEW OF THE NATIONAL AMBIENT AIR QUALITY STANDARDS FOR PARTICULATE MATTER 3-18–3-19, 3-101, 3-104 (Jan. 2020) [hereinafter “EPA Jan. 2020 Policy Assessment”] (discussing studies finding statistically significant associations between harm to health and annual exposures below 12 µg/m³, 3-113), <https://www.epa.gov/system/files/documents/2021-10/final-policy-assessment-for-the-review-of-the-pm-naaqs-01-2020.pdf>.

⁶⁷ Footnote 149: CAL. AIR RESOURCES BOARD, REVISED DRAFT 2020 MOBILE SOURCE STRATEGY 18 (Apr. 23, 2021), <https://ww2.arb.ca.gov/sites/default>.

⁶⁸ Footnote 150: U.S. ENV’T PROT. AGENCY, SUPPLEMENT TO THE 2019 INTEGRATED SCIENCE ASSESSMENT FOR PARTICULATE MATTER 3-99 (May 2022), <https://cfpub.epa.gov/ncea/isa/recordisplay.cfm?deid=354490#tab-3>; see also Bennett JE et al., Particulate Matter Air Pollution And National and County Life Expectancy Loss in the USA: A Spatiotemporal Analysis, 16 PLOS MED. (Jul. 23, 2019), <https://journals.plos.org/plosmedicine/article?id=10.1371/journal.pmed.1002856>.

⁶⁹ Footnote 151: Peters JM et al., A Study of Twelve Southern California Communities with Differing Levels And Types Of Air Pollution. II. Effects on Pulmonary Function, 159 AM. J. OF RESPIR. & CRITICAL CARE MED. (Mar. 1999); Avol EL et al., Respiratory Effects of Relocating to Areas of Differing Air Pollution Levels, 164 AM. J. OF RESPIR. & CRITICAL CARE MED (Dec. 2001); Gauderman WJ et al., Association Between Air Pollution and Lung Function Growth in Southern California Children: Results From a Second Cohort, 166 AM. J. OF RESPIR. & CRITICAL CARE MED. (Jul. 2002); Gauderman WJ et al., The Effect of Air Pollution on Lung Development From 10 to 18 Years of Age, New England J. of Med. (Sep. 9, 2004).

⁷⁰ Footnote 152: U.S. ENV’T PROT. AGENCY, INTEGRATED SCIENCE ASSESSMENT FOR OZONE AND RELATED PHOTOCHEMICAL OXIDANTS, EXECUTIVE SUMMARY ES-6–ES-8, ES-17 (Apr. 2020).

associated with adverse health outcomes, including lung function decline, increases in childhood asthma onset, preterm births, increased emergency room visits, and premature mortality.⁷¹

Additionally, elevated pollution levels have been linked to increased vulnerability to illnesses. In California, research has demonstrated a link between chronic exposure to elevated PM2.5 levels and increases cases of premature death and illness from COVID-19.⁷² At least one study determined that if all areas of California had PM2.5 below current federal air quality standards, a total of 4,250 COVID-19 deaths might have been prevented during the time period of the study.⁷³

The transportation sector is a major contributor to these health impacts because it is one of the largest emitters of PM2.5 and ozone precursors in the United States.⁷⁴ Moreover, it has long been acknowledged that people living, working, and attending school near major roadways face greater air pollution exposure.⁷⁵ See, e.g., 77 Fed. Reg. 62,624, 62,907 (Oct. 15, 2012); 75 Fed. Reg. 25,324, 25,504 (May 7, 2010). In some urban areas, gasoline-powered highway vehicles, diesel-powered highway vehicles, and other fossil-fuel-engine-driven sources (e.g., ships, aircraft, construction, and agricultural equipment), account for 13% to 30% of the total primary PM2.5 emissions.⁷⁶ In California, more than half of the PM2.5 pollution is produced by these mobile sources.⁷⁷ As described above, these emissions contribute to and exacerbate asthma, impair lung function, and increase cardiovascular mortality.⁷⁸ In Philadelphia, for example, some of the most polluted areas are along major highways or zones with heavy traffic, and the most polluted zip codes also have the largest number of lung cancer patients.⁷⁹ Traffic-related air pollution is especially harmful because it not only exacerbates asthma but may also

⁷¹ Footnote 153: *Id.*

⁷² Footnote 154: English PB et al, Association Between Long-Term Exposure to Particulate Air Pollution With SARS- Cov-2 Infections and COVID-19 Deaths in California, U.S.A. 9 ENV'T ADVANCES (Oct. 2022), <https://www.sciencedirect.com/science/article/pii/S2666765722001053>; Jerrett M et al., Air Pollution And Meteorology as Risk Factors for COVID-19 Death In A Cohort From Southern California., 171 ENV'T INT'L 107,675 (Jan. 2023), <https://www.sciencedirect.com/science/article/pii/S016041202200602X>.

⁷³ Footnote 155: English PB et al, *supra* note 154.

⁷⁴ Footnote 156: Calvin A. Arter et al., Mortality-based damages per ton due to the on-road mobile sector in the Northeastern and Mid-Atlantic U.S. by region, vehicle class and precursor, 16 ENVIRON RES. LETT. 2–3 (2021), <https://doi.org/10.1088/1748-9326/abf60b>. Fossil-fueled vehicles emit primary particulate matter and particulate matter precursors that contribute to secondary formation of particulate matter in the atmosphere. EPA Jan. 2020 Policy Assessment, *supra* note 148, at 2-3; U.S. ENV'T PROT.AGENCY, POLICY ASSESSMENT FOR THE REVIEW OF THE OZONE NATIONAL AMBIENT AIR QUALITY STANDARDS 2-5 (May 2020), https://www.epa.gov/sites/default/files/2020-05/documents/o3-final_pa-05-29-20compressed.pdf.

⁷⁵ Footnote 157: NHTSA, Draft Supplemental Environmental Impact Statement for Model Year 2024-2026 Corporate Average Fuel Economy Standards 4-34 (2021).

⁷⁶ Footnote 158: EPA Jan. 2020 Policy Assessment, *supra* note 148 at 2-5.

⁷⁷ Footnote 159: CAL. AIR RESOURCES BOARD, REVISED MOBILE DRAFT SOURCE STRATEGY, *supra* note 149, at 18.

⁷⁸ Footnote 160: *Id.* at 24–26 (citing multiple studies); CAL. ENV'T PROT. AGENCY, OFFICE OF ENV'T HEALTH HAZARD ASSESSMENT, CALENVIROSCREEN 4.0 99 (Oct. 2021) (“[C]hildren who live or attend schools near busy roads are more likely to suffer from asthma and bronchitis than children in areas with lower traffic density.”).

⁷⁹ Footnote 161: Thomas P. McKeon et al., Environmental exposomics and lung cancer risk assessment in the Philadelphia metropolitan area using ZIP code–level hazard indices, ENVIRON. SCI. POLLUT. RES. 28:31758–31769, 31764 (2021); Stephanie Stahl, Earth Week: New Research Links Lung Cancer to Air Pollution in Philadelphia, CBS PHILLY (Apr. 20, 2021), <https://philadelphia.cbslocal.com/2021/04/20/earth-new-research-links-lung-cancer-to-air-pollution-in-philadelphia/>.

cause more people to become asthmatic.⁸⁰ Mobile sources are also the number one contributor to high ozone levels in the Ozone Transport Region.⁸¹

Response

NHTSA agrees that poor air quality adversely affects human health. This Final EIS shows that increasing the fuel economy of the passenger car, light truck, and HDPUV fleet, such as by implementing the Preferred Alternative, would result in public health and climate benefits, which are analyzed in this Final EIS. Additional discussion of how NHTSA estimated these benefits and additional results are provided in Chapters 5 and 6 of the TSD, and Chapter 8 of the FRIA.

Comment

Comment Number: NHTSA-2022-0075-0033

Organization: California Office of the Attorney General et al. (States and Cities Joint Comment)

Each action alternative considered in NHTSA’s proposal would result in reductions of air toxics emissions. 88 Fed. Reg. at 56,324. Reductions in air toxics emissions will benefit public health and welfare, in part because these emissions are known to cause cancer and other serious health effects.⁸²

New Jersey, for example, will benefit from the reduction of air toxics emissions anticipated by NHTSA because mobile sources are the largest contributors of air toxics emissions in the state.⁸³ In Allegheny County in Pennsylvania, mobile sources account for over 9% of the estimated cancer risk from air toxics emissions, mostly due to gasoline-powered cars.⁸⁴ The City of Richmond in California, with five petroleum refineries nearby and residents facing disproportionately high rates of cancer and other health impacts from air pollution, serves as another example of an area that will benefit from a reduction in air toxics emissions.⁸⁵

Response

NHTSA recognizes that air pollutants contribute to human health effects and agrees that increasing the fuel economy of the passenger car, light truck, and HDPUV fleet will result in public health benefits,

⁸⁰ Footnote 162: BRYAN HUXLEY-REICHER ET AL., *supra* note 142, at 6.

⁸¹ Footnote 163: OZONE TRANSPORT COMM’N, MOBILE SOURCES COMM., ANNUAL REPORT 2020 2 (2020). The Ozone Transport Region includes Connecticut, Delaware, the District of Columbia, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, and Virginia.

⁸² Footnote 168: U.S. Env’t Prot. Agency, Air Toxics Emissions, Report on the Environment, <https://cfpub.epa.gov/roe/indicator.cfm?i=2>; Centers for Disease Control and Prevention, Indicators and Data, Indicator: Air Toxics, National Environmental Public Health Tracking (updated May 21, 2023), <https://ephtracking.cdc.gov/indicatorPages?selectedContentAreaAbbreviation=11&selectedIndicatorId=%2081&selectedMeasureId=>.

⁸³ Footnote 169: NEW JERSEY DEP’T OF ENV’T PROT., 2022 NEW JERSEY AIR QUALITY REPORT 10-1 (August 2023).

⁸⁴ Footnote 170: Cancer & Env’t Network of Southwestern Pennsylvania, National Air Toxics Assessment and Cancer Risk in Allegheny County Pennsylvania (updated May 2021), <https://cdn.catf.us/wp-content/uploads/2021/07/21092216/NATA-Factsheet-Final-May-2021.pdf>.

⁸⁵ Footnote 171: Cal. Air Resources Board, Analysis in Support of Comments of the California Air Resources Board on Corporate Average Fuel Standards for Model Years 2024-2026 Passenger Cars and Light Trucks, at 23- 24 (Oct. 26, 2021) (Docket ID No. NHTSA-2021-0053), https://downloads.regulations.gov/NHTSA-2021-0053-1521/attachment_2.pdf.

which are analyzed in this Final EIS (Section 4.2.1.1, *Health Impacts*, for the CAFE standards, and Section 4.2.1.2, *Health Impacts*, for the HDPUV FE standards) and the rulemaking documents.

B.4 Greenhouse Gas Emissions and Climate Change

B.4.1 Affected Environment

B.4.1.1 Social Cost of Greenhouse Gas Emissions

Comment

Comment Number: NHTSA-2023-0022-25908

Commenter: Robert Tomiak

Organization: United States Environmental Protection Agency

The EPA's primary concern is that the draft EIS contains no estimates of the social cost of greenhouse gases (SC-GHG) for the baseline no-action and alternatives evaluated. EPA recommends that calculation and monetization estimates of SC-GHG, as well as a discussion on those estimates be included in the Final EIS. Current CEQ guidance is clear that these estimates should appear in the EIS.⁸⁶ The current EIS only makes a brief reference to the SC-GHG on page 5-7, where the accompanying RIA SC-GHG results are cited. Although the emissions estimates appear in the EIS, their corresponding monetization using the SC-GHG should also be presented and discussed to provide additional impact disclosure context for the emissions estimates.

Response

While NEPA does not require agencies to incorporate monetized values in environmental analyses, a monetized analysis like the social cost of carbon (SC-CO₂) offers a potential opportunity to contextualize environmental effects of an action to enhance the understanding of the public and decision-makers. As such, NHTSA has integrated an SC-CO₂ analysis in all recent CAFE EISs, either explicitly or through incorporation by reference to other rulemaking documents. Council on Environmental Quality regulations encourage agencies to incorporate by reference material to cut down on bulk and to combine documents to reduce duplication. As discussed in Section 5.3.2, *Social Cost of Greenhouse Gas Emissions*, the SC-CO₂ analysis in Section III.G.2.(b)(1) of the preamble to the final rule and Chapters 8.2.4 and 8.3.4 of the FRIA are incorporated in this EIS by reference. This information is available to the decision-maker and the public contemporaneously with the availability of this Final EIS, and the decision-maker had the opportunity to consider this information as part of the official record. Because one of the primary purposes of NHTSA's FRIA is to monetize and compare the potential costs and benefits of the Proposed Action and alternatives for the benefit of the decision-maker and the public, NHTSA believes that is the appropriate place for this analysis.

⁸⁶ Footnote 1: For information on current CEQ guidance, see https://ceq.doe.gov/guidance/ceq_guidance_nepa-ghg.html. Additional guidance also appears in <https://www.whitehouse.gov/briefing-room/statements-releases/2023/09/21/fact-sheet-biden-harris-administration-announces-new-actions-to-reduce-greenhouse-gas-emissions-and-combat-the-climate-crisis/>.

B.4.2 Environmental Consequences

B.4.2.1 Health, Societal, and Environmental Impacts of Climate Change

Comment

Comment Number: NHTSA-2022-0075-0033

Organization: California Office of the Attorney General et al. (States and Cities Joint Comment)

Globally, “[t]he past nine years have been the warmest years since modern recordkeeping began in 1880;”⁸⁷ and nine of the warmest eleven years on record in the United States have occurred since 2012.⁸⁸ There is a “virtually certain” chance that 2023 will rank among the ten warmest years on record, with a 93% chance it will rank among the top five.⁸⁹ The IPCC has determined that GHG emissions from human activities are already responsible for about 1.1°C of warming since 1850-1900⁹⁰ and that “[h]uman influence has warmed the climate at a rate that is unprecedented in at least the last 2000 years.”⁹¹

As temperatures rise, threats to public health and the environment in our States and Cities continue to mount. For example, extreme heat events are happening more frequently, with more intensity,⁹² and for longer duration.⁹³ In June 2021, a four-day heat wave across the Pacific Northwest set heat records all over the region, including heat so intense that roads buckled.⁹⁴ The region experienced 600 excess deaths during the heat wave.⁹⁵ In September 2022, a historic heat wave punished California, breaking high-temperature records in Northern California; it was considered “extraordinary” in part because of its

⁸⁷ Footnote 29: Roxana Bardan, NASA Says 2022 Fifth Warmest Year on Record, Warming Trend Continues, NASA (Jan. 12, 2023), <https://www.nasa.gov/press-release/nasa-says-2022-fifth-warmest-year-on-record-warming-trend-continues>; see Henry Fountain and Mira Rojanasakul, The Last 8 Years Were the Hottest on Record, N.Y. TIMES (Jan. 10, 2023), <https://www.nytimes.com/interactive/2023/climate/earth-hottest-years.html> (“The eight warmest years on record [globally] have now occurred since 2014.”).

⁸⁸ Footnote 30: Nat’l Weather Service, Average Annual Temperature by Year, <https://www.weather.gov/media/slc/ClimateBook/Annual%20Average%20Temperature%20By%20Year.pdf>.

⁸⁹ Footnote 31: Nat’l Oceanic and Atmospheric Admin., April 2023 was Earth’s fourth warmest on record (May 12, 2023), <https://www.noaa.gov/news/april-2023-was-earths-fourth-warmest-on-record>.

⁹⁰ Footnote 32: See IPCC 2021 Summary for Policymakers, *supra* note 22, at 5.

⁹¹ Footnote 33: *Id.* at 6.

⁹² Footnote 34: INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, CLIMATE CHANGE 2022: IMPACTS, ADAPTATION AND VULNERABILITY 1963 (2022), https://report.ipcc.ch/ar6/wg2/IPCC_AR6_WGII_FullReport.pdf [hereinafter “IPCC Report 2022”].

⁹³ Footnote 35: *Id.* at 1937.

⁹⁴ Footnote 36: Tom Di Liberto, Nat’l Oceanic and Atmospheric Admin, Astounding heat obliterates all-time records across the Pacific Northwest and Western Canada in June 2021, (Jun. 30, 2021), <https://www.climate.gov/news-features/event-tracker/astounding-heat-obliterates-all-time-records-across-pacific-northwest>.

⁹⁵ Footnote 37: Nadja Popovich & Winston Choi-Schagrin, Hidden Toll of the Northwest Heat Wave: Hundreds of Extra Deaths, N.Y. TIMES (Aug. 11, 2021), <https://www.nytimes.com/interactive/2021/08/11/climate/deaths-pacific-northwest-heat-wave.html>. Although Washington only reported 95 heat-caused deaths at the time of reporting and Oregon reported 96, these figures do not include all impacts of extreme heat.

“mind-blowing duration.”⁹⁶ Extreme heat events like these are “likely to become the new normal.”⁹⁷ By 2053, the number of U.S. counties experiencing at least one day with a heat index above 125 degrees Fahrenheit is projected to increase from 50 to over 1,000.⁹⁸

Extreme heat events threaten not only our quality of life, but our lives themselves.⁹⁹ As temperatures rise, heat-related mortality is expected to increase, particularly in urban areas.¹⁰⁰ One study found that by 2100, annual heat-related deaths in the United States are projected to increase from 12,000 to 36,000 in a moderate-warming scenario or 97,000 in a high-warming scenario.¹⁰¹ Another study predicted that by 2080 to 2099, hospital admissions for heat-related respiratory diseases in New York state will be 2 to 6 times higher than in 1991 to 2004.¹⁰² A third study concluded that extreme heat days were associated with higher all-cause mortality rates in the contiguous United States, and disproportionately affected some subgroups, including older adults and Black adults.¹⁰³ On a global scale, new research indicates that for every 0.1 degree Celsius above present levels, about 140 million additional people will be exposed to dangerous levels of heat.¹⁰⁴

Response

Final EIS Chapter 5, *Greenhouse Gas Emissions and Climate Change*, and Appendix F, *Greenhouse Gas Emissions and Climate Change*, discuss observed and projected trends in several climate change attributes, including the increase in average and extreme temperatures in the United States and across various regions of the globe. To highlight these trends, the Final EIS incorporates information from the latest Sixth Assessment Reports of the Intergovernmental Panel on Climate Change (IPCC) as well as the Fifth National Climate Assessment (NCA5) of the United States Global Change Research Program

⁹⁶ Footnote 38: Jill Cowan, *Historic Heat Pushes California to the Brink*, N.Y. TIMES (Sep. 7, 2022), <https://www.nytimes.com/2022/09/07/us/historic-heat-california-power.html>.

⁹⁷ Footnote 39: Rebecca Hersher, *Climate change makes heat waves, storms and droughts worse, climate report confirms*, NPR (Jan. 9, 2023), <https://www.npr.org/2023/01/09/1147805696/climate-change-makes-heat-waves-storms-and-droughts-worse-climate-report-confirm>.

⁹⁸ Footnote 40: John Muyskens et al., *More dangerous heat waves are on the way: See the impact by Zip code*, THE WASH. POST (Aug. 15, 2022), <https://www.washingtonpost.com/climate-environment/interactive/2022/extreme-heat-risk-map-us/>.

⁹⁹ Footnote 41: See Peter Dizikes, *Study: Extreme heat is changing habits of daily life*, MIT NEWS (Jan. 12, 2023), <https://news.mit.edu/2023/study-extreme-heat-less-outside-activity-0112> (finding that extreme temperatures make people less likely to pursue outdoor activities); GALLUP, *CLIMATE CHANGE AND WELLBEING AROUND THE WORLD 3* (2022), <https://www.gallup.com/analytics/397940/climate-change-and-wellbeing.aspx> (describing August 2022 study that found that high-temperature days could decrease global well-being by 17% by 2030).

¹⁰⁰ Footnote 42: IPCC Report 2022, *supra* note 34, at 1968.

¹⁰¹ Footnote 43: Meredith Bailey, *A warming climate may lead to dramatic increase in US deaths due to heat exposure, study shows*, UNIV. OF WASH. SCHOOL OF PUB. HEALTH (Jul. 29, 2020), <https://sph.washington.edu/news-events/news/warming-climate-may-lead-dramatic-increase-us-deaths-due-heat-exposure-study-shows>.

¹⁰² Footnote 44: Shao Lin et al., *Excessive Heat and Respiratory Hospitalizations in New York State: Estimating Current and Future Public Health Burden Related to Climate Change*, 120 ENV'L HEALTH PERSPECTIVES 1571, 1576 (2012), <https://doi.org/10.1289/ehp.1104728>.

¹⁰³ Footnote 45: Sameed Ahmed M. Khatana et al., *Association of Extreme Heat With All-Cause Mortality in the Contiguous US, 2008–2017*, JAMA NETWORK OPEN (May 19, 2022), <https://doi.org/10.1001/jamanetworkopen.2022.12957>; see Muyskens, *supra* note 40 (indicating that by 2053, 80% of Black Americans and 60% of white Americans will be affected by dangerous heat).

¹⁰⁴ Footnote 46: Alex Morrison, *Limiting global warming to 1.5 °C would save billions from dangerously hot climate*, UNIV. OF EXETER (May 22, 2023), <https://news.exeter.ac.uk/research/limiting-global-warming-to-1-5c-would-save-billions-from-dangerously-hot-climate/>.

(USGCRP) which was released after the development of the Draft EIS. NHTSA agrees that the frequency of heat wave events in the United States has increased in the last few decades and that extreme heat events can adversely affect human health, food systems, and urban infrastructure. For a discussion on observed and projected trends in extreme temperature, readers can refer to Appendix F, Section F.3.1.1, *Temperature*, and Section F.5.2, *Sectoral Impacts of Climate Change*, of the Final EIS for more details on impacts of extreme heat on sectors including human health, food systems, and urban areas.

Comment

Comment Number: NHTSA-2022-0075-0033

Organization: California Office of the Attorney General et al. (States and Cities Joint Comment)

(2) Wildfires

Global warming is likely responsible for 70% to 88% of the atmospheric conditions fueling wildfires.¹⁰⁵ It engenders warm and dry conditions,¹⁰⁶ which have contributed to more extreme wildfires.¹⁰⁷ Since the 1970s, the wildfire season in the western United States has extended from 5 months to over 7 months long.¹⁰⁸ In the coming decades, climate change is projected to further increase fire activity across North America.¹⁰⁹

The annual numbers of large wildland fires and area burned in the western United States have risen in the past several decades,¹¹⁰ and the last few years have seen numerous record-setting wildfires. For example, in August 2023, Maui, Hawaii experienced one of the deadliest wildfires in United States history.¹¹¹ Multiple large wildfires also burned hundreds of thousands of acres in Colorado in July and

¹⁰⁵ Footnote 47: Alex Wigglesworth, Climate change is now the main driver of increasing wildfire weather, study finds, L.A. TIMES (Nov. 1, 2021), <https://www.latimes.com/california/story/2021-11-01/climate-change-is-now-main-driver-of-wildfire-weather>.

¹⁰⁶ Footnote 48: IPCC Report 2022, *supra* note 34, at 1948.

¹⁰⁷ Footnote 49: *Id.* at 1939.

¹⁰⁸ Footnote 50: U.S. Dep't of Agric., Wildfire, <https://www.climatehubs.usda.gov/taxonomy/term/398> (last accessed May 26, 2023).

¹⁰⁹ Footnote 51: IPCC Report 2022, *supra* note 34, at 1948; see also N.J. DEP'T OF ENV'T PROT., 2020 NEW JERSEY SCIENTIFIC REPORT ON CLIMATE CHANGE 93 (Jun. 30, 2020), <https://dep.nj.gov/wp-content/uploads/climatechange/nj-scientific-report-2020.pdf>.

¹¹⁰ Footnote 52: IPCC Report 2022, *supra* note 34, at 1948.

¹¹¹ Footnote 53: Stephen Culp, Maui Wildfires: What are the deadliest wildfires in US history?, REUTERS (Aug. 21, 2023), <https://www.reuters.com/world/us/maui-inferno-what-are-deadliest-wildfires-us-history-2023-08-13/>. Of the four wildfires on this list that occurred in the 21st century, and thus show the exacerbating effects of acute climate change, the Maui fires are the deadliest, with the other three all in California.

August 2020, including the second-largest fire in state history.¹¹² The largest wildfire in New Mexico history burned in 2022,¹¹³ destroying hundreds of homes.¹¹⁴

The increase in the number of wildfires is no longer limited to the western United States.¹¹⁵ For example, the year 2023 has been New Jersey's busiest fire season in more than a decade.¹¹⁶ New Jersey's Forest Fire Service has responded to 1,034 wildfires to-date in 2023, which have burned 17,979 total acres; fourteen of these wildfires burned in excess of 100 acres each and were considered to be major wildfires.¹¹⁷

California is uniquely vulnerable to wildfires,¹¹⁸ and the projected impacts on California from an increase in wildfire risk are severe. In 2018, the Camp Fire burned 155,366 acres of land, destroying 18,804 structures—roughly 90% of the homes in the town of Paradise—and killing 85 people;¹¹⁹ it was then the deadliest and most destructive wildfire in California history. In 2021, a record number of acres burned in the Sierra Nevada, breaking the previous record set in 2020.¹²⁰ The Dixie Fire, now the largest single wildfire in California history, also burned in 2021.¹²¹ As a result of climate change, the average annual area burned across California is projected to increase by around 77% by 2099, and the worst wildfire years could see burned area increases of more than 178% by the end of this century.¹²²

¹¹² Footnote 54: Tom Di Liberto, Nat'l Oceanic and Atmospheric Admin., A Colorado summer: Drought, wildfires, and smoke in 2020 (Aug. 20, 2020), <https://www.climate.gov/news-features/event-tracker/colorado-summer-drought-wildfires-and-smoke-2020>.

¹¹³ Footnote 55: Nat'l Oceanic and Atmospheric Admin., Assessing the U.S. Climate in 2022 (Jan. 10, 2023), <https://www.ncei.noaa.gov/news/national-climate-202212>.

¹¹⁴ Footnote 56: Anna Phillips & Jason Samenow, Forest Service finds its planned burns sparked N.M.'s largest wildfire, THE WASH. POST (May 27, 2022), <https://www.washingtonpost.com/climate-environment/2022/05/27/new-mexico-wildfire-service-controlled-burn/>.

¹¹⁵ Footnote 57: See Kylie Mohr, Wildfires are coming . . . for New Jersey?, VOX (Sept. 12, 2023), <https://www.vox.com/climate/23868557/wildfire-risk-states-climate-change-extreme-weather-events>.

¹¹⁶ Footnote 58: N.J. Dep't of Env't Prot., Murphy Administration Announces \$3 Million Budget Boost to DEP's Forest Fire Service as State Faces Increasing Wildfire Risks from Climate Change, (Sept. 21, 2023), https://nj.gov/dep/newsrel/2023/23_0050.htm.

¹¹⁷ Footnote 59: Id.

¹¹⁸ Footnote 60: Scott L. Stephens et al., Prehistoric Fire Area and Emissions from California's Forests, Woodlands, Shrublands and Grasslands, 251 FOREST ECOLOGY AND MGMT. 205, 205-06 (2007); Jon Keeley, Fire in Mediterranean Climate Ecosystems—A Comparative Overview, 58 ISR. J. OF ECOLOGY & EVOLUTION 123, 124 (2012).

¹¹⁹ Footnote 61: Cal. Dep't of Forestry & Fire Prot., Top 20 Most Destructive California Wildfires, https://34c031f8-c9fd-4018-8c5a-4159cdf6b0d-cdn-endpoint.azureedge.net/-/media/calfire-website/our-impact/fire-statistics/featured-items/top20_destruction.pdf?rev=ee6ea855632a4b56a46adea1d3c8022f&hash=5B8B3A1A35CBB52CB0ED7A010F0B52E0https://www.fire.ca.gov/our-impact/statistics; Kurtis Alexander, Reclaiming Paradise, S.F. CHRON. (May 3, 2019), <https://projects.sfchronicle.com/2019/rebuilding-paradise/>.

¹²⁰ Footnote 62: Sierra Nevada Conservancy, 2021: Another historic Sierra Nevada fire season (Jan. 24, 2022), <https://sierranevada.ca.gov/2021-another-historic-sierra-nevada-fire-season/>.

¹²¹ Footnote 63: Id.

¹²² Footnote 64: ANTHONY WESTERLING, CAL. ENERGY COMMISSION, WILDFIRE SIMULATIONS FOR CALIFORNIA'S FOURTH CLIMATE CHANGE ASSESSMENT: PROJECTING CHANGES IN EXTREME WILDFIRE EVENTS WITH A WARMING CLIMATE 19 (2018).

Response

Final EIS Appendix F, *Greenhouse Gas Emissions and Climate Change*, discusses observed and projected trends in extreme weather events, including the increasing frequency and severity of wildfire events in the United States, particularly the western United States. To highlight these trends, the Final EIS incorporates information from the latest Sixth Assessment Reports of the IPCC as well as NCA5 of the USGCRP, which was released after the development of the Draft EIS. NHTSA agrees that higher average temperatures and drought induced by climate change may increase the occurrence of wildfires, and this poses significant risks to human health and safety. Acknowledging the adverse impacts from some of the recent wildfire events captured in this comment, NHTSA has updated Final EIS Appendix F, *Greenhouse Gas Emissions and Climate Change*, with information on more recent events, including the August 2023 wildfires in Hawaii. For a discussion on observed and projected trends in wildfires, readers can refer to Final EIS Appendix F, Section F.3.2, *Increased Incidence of Severe Weather Events*, and Section F.5.2, *Sectoral Impacts of Climate Change*, for impacts of wildfire events on air quality degradation and human health.

B.5 Life-Cycle Assessment (LCA) Implications of Vehicle Materials

B.5.1 Raw Material Extraction through Vehicle Assembly

B.5.1.1 Non-Battery Components

Comment

Comment Number: NHTSA-2022-0075-0032

Organization: American Fuel & Petrochemical Manufacturers (AFPM)

Other areas where the DEIS fails to fully account for environmental impacts include:

Underestimating the need for aluminum, which involves a highly energy intensive production process, that is needed to light-weight substantially heavier EVs.¹²³ Using flawed cost and performance assumptions that overestimate EV adoption and fleet turnover, NHTSA's analysis overstates its calculated emissions benefits.¹²⁴

Response

NHTSA agrees that the demand for and production of aluminum will likely increase as part of manufacturing more energy-efficient vehicles for MYs 2027 and beyond. NHTSA has expanded on the projected aluminum demand for LD vehicles and HDPUVs in the discussion in Final EIS Section 6.2.1.3, *Aluminum*. The additional language includes information on the projected gross demand for aluminum until 2030 and the continued trend in American consumer preference towards larger cars.

Section 6.2.1.3, *Aluminum*, summarizes the available literature on the life cycle and environmental impacts of substituting aluminum for conventional steel components in vehicles. NHTSA finds there are

¹²³ Footnote 26: DEIS at 6-17 to 6-21.

¹²⁴ Footnote 27: See AFPM Comments at 67; and Trinity Report (Attachment B) at 12-15.

net energy and GHG reductions over the vehicle life cycle when substituting conventional steel with lighter-weight aluminum.

B.5.1.2 Battery Components

Comment

Comment Number: NHTSA-2022-0075-0032

Organization: American Fuel & Petrochemical Manufacturers (AFPM)

Finally, citing a 2013 EPA study, the DEIS provides a scant discussion of resource depletion associated with the vast amount of mining that will be required to produce EVs that meet these stringent standards, and neglects to even mention that vast amount of resources needed to provide reliable and affordable electricity generation, transmission, and distribution, as well as charging infrastructure needed to support this EV mandate.¹²⁵ NHTSA must evaluate the “irreversible or irretrievable commitments of resources that would be involved in the proposal should it be adopted.”¹²⁶

Response

As stated several times throughout the Final EIS and the associated rulemaking documents, NHTSA’s standards are performance-based and do not mandate the adoption of any particular technology. As an example, Chapter 4.1 of the FRIA states that “each manufacturer is free to identify a compliance strategy that makes the most sense given its unique combination of vehicle models, consumers, and competitive position in the various market segments.” The CAFE Model estimates a cost-effective pathway that manufacturers could take to meet the standards. However, that pathway is an estimate and does not represent an irreversible or irretrievable commitment of resources that manufacturers and suppliers will expend to meet the final standards.

NHTSA discusses the resources that will likely be needed to meet the energy and electricity demand of the mandate in Chapter 3, *Energy*. The chapter also includes discussion of various environmental impacts (e.g., land clearing, habitat loss, bird mortality) associated with the physical infrastructure of regional grids. Section 3.2.2, *Electricity*, summarizes the necessary expansion to the grid to accommodate the increase in EVs and BEVs. This section also notes that while the transportation sector is projected to have the highest growth in electricity demand driven by the increasing share of EVs, in the Energy Information Administration’s (EIA’s) Annual Energy Outlook Reference case, this growth is estimated at less than 1 percent annually until 2050 (EIA 2023a).

Chapter 6, *Life-Cycle Assessment Implications of Vehicle Materials*, notes that for BEVs, the use of low-carbon electricity for charging reduces the life-cycle GHG emissions below those of ICE vehicles (Pathak et al. 2022). Chapter 6 also clarifies that the reliance of lithium-ion batteries on critical mineral supplies presents other environmental concerns, such as those related to resource availability and mining, and increases the importance placed on recycling (Pathak et al. 2022). NHTSA has expanded on the discussion in Chapter 6 noting U.S. efforts to secure a stable critical mineral supply chain and invest in battery innovation and material recycling to reduce critical mineral extraction and included a reference to the recent report, *Securing Critical Materials for the U.S. Electric Vehicle Industry* (ANL 2024). The report outlines the availability of resources and supportive policies to secure the resources for battery

¹²⁵ Footnote 32: DEIS at 6-31.

¹²⁶ Footnote 33: 40 CFR §1502.16(a)(4) and 1502.16(a)(7).

manufacturing and also suggests the existence of sufficient global supply of battery minerals to meet U.S. demand through 2035.

B.5.2 Vehicle Disposal and Recycling

Comment

Comment Number: NHTSA-2022-0075-0032

Organization: American Fuel & Petrochemical Manufacturers (AFPM)

Other areas where the DEIS fails to fully account for environmental impacts include:

- Vehicle disposal and recycling. As discussed above, recycling and scrappage rates must reflect the useful life of batteries and the quantities that will be disposed of. While the DEIS goes to great lengths to detail ideas for battery recycling, at the end of the day, the DEIS must account for realistic disposal rates and the waste classification of EV batteries, as the Environmental Protection Agency's Office of Resource Conservation and Recovery issued guidance that under the Resource Conservation and Recovery Act (RCRA), lithium-ion batteries generally qualify as a "hazardous waste" at their end of life.
- While the DEIS goes to great lengths to discuss the potential for recycling EV batteries, NHTSA acknowledges recycling is limited due to cost and varying battery chemistries. Recent studies confirm that disposed batteries could contribute 250,000 metric tons of waste to landfills for every one million retired ZEVs, yet less than five percent of Li-ion batteries, the most common batteries used in ZEVs, are currently being recycled "due in part to the complex technology of the batteries and cost of such recycling."¹²⁷ The DEIS must address in more detail for the environmental impacts of waste batteries.
- Benchmark Mineral Intelligence forecasts that near-term recyclers are likely to use scrap material from the increasing number of gigafactories coming online versus used electric vehicle batteries. Scrap is anticipated to account for 78 percent of recyclable materials in 2025. Recycling ZEV batteries to recover high-value metals is still moving towards commercial scale. The majority of analysts are aligned that recycling will not become an integral supplier of raw materials until the 2030s, and at that point, only will provide approximately 20 percent of demand.¹²⁸

Response

NHTSA has updated its statement in Chapter 6, *Life-Cycle Assessment Implications of Vehicle Materials*, about the hazardous waste classification of lithium-ion batteries under the Resource Conservation and Recovery Act in accordance with a memorandum released by EPA on May 24, 2023. The memorandum states that "most lithium-ion batteries are likely hazardous waste at end of life." The memo

¹²⁷ Footnote 28: Kelleher Environmental, "Research Study on Reuse and Recycling of Batteries Employed in Electric Vehicles: The Technical, Environmental, Economic, Energy and Cost Implications of Reusing and Recycling EV Batteries", (September 2019) available at <https://www.api.org/oil-and-natural-gas/wellstoconsumer/fuels-and-refining/fuels/vehicle-technology-studies>; Gavin Harper, Roberto Sommerville, et al., NATURE, "Recycling lithium-ion batteries from electric vehicles" (Jan. 21, 2020) available at <https://www.nature.com/articles/s41586-019-1682-5>.

¹²⁸ Footnote 29: Benchmark Minerals Intelligence, "Battery production scrap to be main source of recyclable material this decade" (Sept. 5, 2022) available at <https://source.benchmarkminerals.com/article/battery-productionscrap-to-be-main-source-of-recyclable-material-this-decade>.

recommends that lithium-ion batteries be managed under the “streamlined hazardous waste management standards for universal waste” (EPA 2023i).

NHTSA revised Section 6.3.2, *Battery Disposal and Recycling*, to include additional information and references on the environmental impact of battery landfilling, including the potential spread of toxins from landfill leachate and emissions to air, soil, and water (Mrozik et al. 2021). The section already includes language on the use of scrap material as a feedstock for recycling and acknowledges the current low rates of lithium-ion battery recycling.

The Final EIS continues to include language on the benefits of battery recycling and the impacts of different recycling pathways along with the difficulties that the industry must overcome, including cost efficiency and other potential uses for batteries at end of life. Given the long lifespans of EV batteries and the anticipated influx of end-of-life batteries, various efforts by U.S. agencies are underway to improve battery recycling. NHTSA has expanded on the discussion in Chapter 6, noting that the Federal Government is prioritizing investment in research and development of EV battery recycling and secondary application of end-of-life EV batteries, projects that reduce battery recycling costs, advancements in innovation in battery recycling, and solutions to increase the circularity of the EV battery supply chain (DOE 2022g, 2023i, 2024b; Advanced Research Projects Agency—Energy 2024). EPA is also developing a report on battery collection best practices and voluntary labeling guidelines (EPA 2024e). Because more information on battery recycling will become available as more vehicles with batteries reach their ends of life, NHTSA will continue to follow this issue and incorporate any additional information in future analyses.

B.6 Environmental Justice

Comment

Comment Number: NHTSA-2022-0075-0033

Organization: California Office of the Attorney General et al. (States and Cities Joint Comment)

First, decreasing domestic demand for petroleum would decrease domestic income inequality by reducing oil prices. Changes in oil prices have important distributional effects between consumers of refined petroleum products and producers of oil. Higher gasoline prices result in significant costs for families in the United States, especially lower-income families, who spend a disproportionately large percentage of their household income on gasoline.¹²⁹ And while corporate profits in the U.S. petroleum industry would rise with higher prices, potentially resulting in net zero GDP impacts, this transfer of wealth would have detrimental effects on U.S. consumer well-being and would impose disproportionate economic burdens across income groups.¹³⁰ Importantly to our States and Cities,¹³¹

¹²⁹ Footnote 6: Applied Economics Clinic, An Analysis of NHTSA’s Preliminary Regulatory Impact Analysis of 2021 Proposed Rulemaking for Model Years 2024-2026 Light-Duty Vehicle CAFE Standards 10-11 (Oct. 26, 2021), https://downloads.regulations.gov/NHTSA-2021-0053-1531/attachment_1.pdf [hereinafter “AEC Comment”]; Shruti Vaidyanathan, Analysis: Gasoline Costs Consume Nearly 20% of Some Household Budgets, AMERICAN COUNCIL FOR AN ENERGY-EFFICIENT ECONOMY (ACEE) (May 20, 2021), <https://www.acee.org/blog-post/2021/05/analysis-gasoline-costs-consume-nearly-20-some-household-budgets>.

¹³⁰ Footnote 7: AEC Comment, supra note 6 at 10-11.

¹³¹ Footnote 8: For example, the Governor of New Jersey recently signed Executive Order 262, establishing the Wealth Disparity Task Force, the purpose of which is to combat long-standing wealth gaps based on race and ethnicity. Governor Philip D. Murphy, New Jersey, Exec. Order No. 262 (Sept. 14, 2021).

“the transfer of revenue from U.S. oil producers to U.S. oil consumers could have substantial benefits for the most economically disadvantaged, reducing income inequality”¹³²

Response

Final EIS Section 7.2.3, *Vehicle Ownership*, discusses the concept that lower-income families spend a disproportionately large percentage of their household income on gasoline. Readers may consult Chapters 4, 5, and 7 of the FRIA and Chapter 6 of the TSD, which are incorporated in this Final EIS by reference, for a more extensive description of economic and energy security impacts of this action.

B.6.1 Vehicle Ownership

Comment

Comment Number: NHTSA-2022-0075-0031

Commenter: Anonymous

The Biden administration has already implemented the elimination of incandescent light bulbs which has had the effect of lessening the lighting choices offered to American consumers. Notice: these new CAFE standards will similarly negatively affect the motor vehicle industry mirroring what the Biden administration has imposed on the lighting portion of the manufacturing sector. When my mother was learning to drive (1950's), a car was easily afforded by teenagers. When I learned to drive in the late eighties, most teens had to borrow cars from family members. Now, many cars are fifty thousand dollars or more. Only a small fraction of the American population can easily afford this amount of money to buy a vehicle. Now that the administration thru the Federal Reserve has started raising interest rates, even fewer Americans will be able to afford vehicles. Given the less than effective public transportation sector, denigrating the ability of Americans to afford vehicles seems short sighted.

Response

As part of its decision that the final standards are maximum feasible, NHTSA has considered the additional costs to consumers of manufacturers adding additional fuel economy technology to vehicles. For the final standards, the costs of additional technology are outweighed by the fuel savings to the consumer. However, as the commenter mentioned, there are multiple factors that determine the price of a vehicle. Additional discussion of vehicle affordability is provided in Section VI of the final rule preamble, and NHTSA's estimates of the costs and benefits of the standards are provided in Chapter 8 of the FRIA.

Final EIS Section 7.2.3, *Vehicle Ownership*, states that the standards are projected to make both new and used cars more affordable due to the value of added fuel savings realized over the lifetime of the vehicle, with particular savings for low-income households (NRC 2015). Research by Greene and Welch (2018) estimates \$8,000 in savings for the lowest-income group due to fuel economy advancements. Again, the projected increases in vehicle costs are projected to be outweighed by fuel savings, resulting in an overall benefit to low-income households.

¹³² Footnote 9: AEC Comment, supra note 6, at 11.

B.6.2 Communities Facing Climate Change Effects

Comment

Comment Number: NHTSA-2022-0075-0033

Organization: California Office of the Attorney General et al. (States and Cities Joint Comment)

Climate change's impacts will continue to disproportionately fall on environmental justice communities.¹³³ Environmental justice communities experience more severe climate impacts and are more vulnerable as the climate crisis worsens.

Severe climate harms are already a reality for many environmental justice communities. Globally, the last nine years have been the nine hottest on record, and that trend is expected to continue.¹³⁴ Members of environmental justice communities tend to work in occupations with increased exposure to extreme heat, such as the agricultural, construction, and delivery industries.¹³⁵ Farmworkers die of heat-related causes at 20 times the rate of the rest of the U.S. civilian workforce.¹³⁶ Since 2005, the first year California began tracking the number of heat-related fatalities, 36% of California's heat-related worker deaths have been of farmworkers.¹³⁷ Similarly, although construction workers comprise only 6% of the national workforce, they account for 36% of heat-related deaths.¹³⁸

In California, environmental justice communities suffer disproportionate impacts from extreme heat because they are more likely to lack air conditioning, tree canopy, and greenspace. Environmental justice communities have less access to air conditioning, and are less able to pay the utility bills required

¹³³ Footnote 115: "Environmental justice" is defined by EPA as the "fair treatment and meaningful involvement of all people regardless of race, color, national origin or income with respect to development, implementation, and enforcement of environmental laws, regulations and policies." U.S. ENV'T PROT. AGENCY, EJ 2020 ACTION AGENDA: THE U.S. EPA'S ENVIRONMENTAL JUSTICE STRATEGIC PLAN FOR 2016-2020, EPA-300-B-1-6004, at 1 (Oct. 2016). For the purpose of this comment, the term "environmental justice community" refers to a community of color or community experiencing high rates of poverty that, due to past and/or current unfair and inequitable treatment, is overburdened by environmental pollution, and the accompanying harms and risks from exposure to that pollution because of past or current unfair treatment.

¹³⁴ Footnote 116: NASA Says 2022 Fifth Warmest Year on Record, Warming Trend Continues, *supra* note 29; IPCC 2021 Summary for Policymakers, *supra* note 22, at 5-8, 14.

¹³⁵ Footnote 117: See, e.g., Juley Fulcher, Boiling Point: OSHA Must Act Immediately to Protect Workers From Deadly Temperatures, *Public Citizen* (Jun. 28, 2022), <https://www.citizen.org/article/boiling-point/>; UNION OF CONCERNED SCIENTISTS, TOO HOT TO WORK: ASSESSING THE THREATS CLIMATE CHANGE POSES TO OUTDOOR WORKERS 3 (2021), https://www.ucsusa.org/sites/default/files/2021-09/Too-Hot-to-Work_9-7.pdf; Ariel Wittenberg, OSHA Targets Heat Threats Heightened by Climate Change, *E&E NEWS* (Oct. 26, 2021), <https://www.eenews.net/articles/osha-targets-heatthreats-heightened-by-climate-change/>.

¹³⁶ Footnote 118: See UNION OF CONCERNED SCIENTISTS, FARMWORKERS AT RISK: THE GROWING DANGERS OF PESTICIDES AND HEAT 4 (2019), <https://www.ucsusa.org/sites/default/files/2019-12/farmworkers-at-risk-report-2019-web.pdf> (citing Centers for Disease Control and Prevention, Heat-Related Deaths Among Crop Workers—United States, 1992–2006, <https://www.cdc.gov/mmwr/preview/mmwrhtml/mm5724a1.htm> (last updated June 19, 2008)).

¹³⁷ Footnote 119: TENIOPE ADEWUMI-GUNN & JUANITA CONSTIBLE, NATURAL RESOURCES DEFENSE COUNCIL, FEELING THE HEAT: HOW CALIFORNIA'S WORKPLACE HEAT STANDARDS CAN INFORM STRONGER PROTECTIONS NATIONWIDE (2022), <https://www.nrdc.org/sites/default/files/feeling-heat-ca-workplace-heat-standards-report.pdf>.

¹³⁸ Footnote 120: Xiuwen Sue Dong et al., Heat-Related Deaths Among Construction Workers in the United States, 62 *AM. J. INDUS. MED.* 1047-57 (2019).

to run air conditioning units or fans.¹³⁹ In urbanized environments, pavement, cement, and other non-vegetated areas contribute to the heat island effect, in which built environments retain heat, causing daytime temperatures to be from 1°F to 7°F hotter than suburban and rural areas and nighttime temperatures to be 2°F to 5°F hotter.¹⁴⁰ The heat island effect is inequitably distributed—it is most extreme in lower-income communities and communities of color.¹⁴¹ Contributing to this effect is the lack of tree canopy and greenspace in environmental justice communities, often due to lower historical and ongoing investment. Indeed, tree canopy and greenspace is highly correlated with historical redlining practices, in which federal housing policy directed investment away from lower-income communities, and especially communities of color, characterized as “risky” for loan servicing.¹⁴² Moreover, an EPA report found that individuals with lower incomes and individuals of color are respectively 11% to 16% and 8% to 14% more likely to live in areas with the highest projected increases in premature mortality from extreme heat.¹⁴³

In addition, flooding and drought from extreme weather events disproportionately affect environmental justice communities, and the inequity will grow as climate impacts worsen. Due to disinvestment, environmental justice communities often lack sufficient infrastructure to control flooding or ensure steady water supplies.¹⁴⁴ They also suffer from more severe impacts, such as contaminated water from pollutant flows during floods and increased concentration of contaminants during droughts.¹⁴⁵ EPA has also determined that individuals with lower incomes are more likely to live in areas with the highest projected land losses from sea level rise inundation and are more likely to face substantial traffic delays due to climate-driven changes in high-tide flooding.¹⁴⁶ Similarly, census tracts with predominantly tribal

¹³⁹ Footnote 121: MICHELLE ROOS ET AL., CAL. ENERGY COMM’N, CALIFORNIA’S FOURTH CLIMATE CHANGE ASSESSMENT: CLIMATE JUSTICE REPORT 39-40, 45 (2018), <https://resourceslegacyfund.org/wp-content/uploads/2018/09/Climate-Justice-Report-4CCCA-v.4-00455673xA1C15.pdf> [hereinafter “California Climate Justice Report”]; ALLISON CRIMMINS ET AL., U.S. GLOBAL CHANGE RESEARCH PROGRAM, THE IMPACTS OF CLIMATE CHANGE ON HUMAN HEALTH IN THE UNITED STATES: A SCIENTIFIC ASSESSMENT 252 (2016) https://health2016.globalchange.gov/low/ClimateHealth2016_FullReport_small.pdf [hereinafter “USGCRP Climate Change Impacts Assessment”].

¹⁴⁰ Footnote 122: See U.S. Env’t Prot. Agency, Heat Island Effect, <https://www.epa.gov/heatislands> (last updated Aug. 16, 2023).

¹⁴¹ Footnote 123: U.S. Env’t Prot. Agency, Heat Islands and Equity, <https://www.epa.gov/heatislands/heat-islands-and-equity> (last updated Aug. 3, 2023); USGCRP Climate Change Impacts Assessment, *supra* note 121, at 252.

¹⁴² Footnote 124: Dexter Locke et al., Residential Housing Segregation and Urban Tree Canopy in 37 US Cities, 1 NPJ URBAN SUSTAINABILITY 15 (2020), at 3-4; Ian Leahy & Yaryna Serkez, *Since When Have Trees Existed Only for Rich Americans?*, N.Y. TIMES (Jul. 4, 2021), <https://www.nytimes.com/interactive/2021/06/30/opinion/environmental-inequity-trees-critical-infrastructure.html>.

¹⁴³ Footnote 125: U.S. ENV’T PROT. AGENCY, CLIMATE CHANGE AND SOCIAL VULNERABILITY IN THE UNITED STATES: A FOCUS ON SIX IMPACTS, *supra* note 113, at 36.

¹⁴⁴ Footnote 126: Lily Katz, *A Racist Past, a Flooded Future: Formerly Redlined Areas Have \$107 Billion Worth of Homes Facing High Flood Risk—25% More Than Non-Redlined Areas*, REDFIN (2021), <https://www.redfin.com/news/redlining-flood-risk/>; California Climate Justice Report, *supra* note 121, at 41-42, 66-67; USGCRP Climate Change Impacts Assessment, *supra* note 121, at 253-54.

¹⁴⁵ Footnote 127: USGCRP Climate Change Impacts Assessment, *supra* note 121, at 158-74.

¹⁴⁶ Footnote 128: U.S. ENV’T PROT. AGENCY, CLIMATE CHANGE AND SOCIAL VULNERABILITY IN THE UNITED STATES: A FOCUS ON SIX IMPACTS, *supra* note 113, at 49, 59.

communities, older adults, and low-income populations in California have been found to be more likely to be highly impacted by wildfires.¹⁴⁷

The above impacts especially apply to tribal communities. Due to land dispossession and forced migration, tribal communities are more exposed to extreme heat and more likely to rely on local water sources that are less resilient to drought and more contaminated.¹⁴⁸ Beyond those impacts, tribal communities also suffer cultural harms from the decimation or harm to local ecosystems and species of particular meaning to cultural practices.¹⁴⁹ These cultural resources have intrinsic value, and they are also critical to tribal community identity and group cohesion, which translates into direct health benefits.¹⁵⁰ Moreover, degradation of these cultural resources threatens traditional ecological knowledge, such as particularized understanding of local ecosystems, agriculture, and sustainable practices, that can help limit the impacts of climate change.¹⁵¹ Tribal communities with sovereign land holdings are also more vulnerable to climate impacts because they are unable to relocate.¹⁵²

Furthermore, environmental justice communities, including tribal communities, are environmentally overburdened due to greater existing pollution exposure.¹⁵³ This disadvantage manifests in higher rates of chronic disease, premature death, and other adverse public health outcomes.¹⁵⁴ Compounding these disparities, residents of environmental justice communities also have less access to health care—they are less likely to have health insurance and less likely to be able to afford necessary tests and procedures, and health care facilities are poorly staffed and equipped.¹⁵⁵ Consequently, residents of environmental justice communities are less able to withstand climate impacts that further damage their health, such as increased local smog conditions.¹⁵⁶

In addition to being more vulnerable to the impacts of climate change, environmental justice communities endure structural disadvantages that blunt their ability to adapt to a changing climate. Environmental justice communities have less access to financial resources, such as income and wealth, which are critical to climate resilience.¹⁵⁷ More financial resources equate to more mobility, more ability

¹⁴⁷ Footnote 129: Masri S, Scaduto E, Jin Y, Wu J., Disproportionate Impacts of Wildfires Among Elderly and Low- Income Communities in California from 2000-2020, 18 INT’L J. ENV’T RSCH & PUB. HEALTH (Apr. 8, 2021).

¹⁴⁸ Footnote 130: Justin Farnell et al., Effects of land dispossession and forced migration on Indigenous peoples in North America, SCIENCE (Oct. 2021); USGCRP Climate Change Impacts Assessment, supra note 121, at 254.

¹⁴⁹ Footnote 131: RON GOODE ET AL., CAL. ENERGY COMM’N, CALIFORNIA’S FOURTH CLIMATE CHANGE ASSESSMENT: SUMMARY REPORT FROM TRIBAL AND INDIGENOUS COMMUNITIES WITHIN CALIFORNIA 19 (2018) https://www.energy.ca.gov/sites/default/files/2019-11/Statewide_Reports-SUM-CCCA4-2018-010_TribalCommunitySummary_ADA.pdf.

¹⁵⁰ Footnote 132: Id.

¹⁵¹ Footnote 133: Id. at 13-16;

¹⁵² Footnote 134: Farnell et al., supra note 130.

¹⁵³ Footnote 135: California Climate Justice Report, supra note 121, at 40-41.

¹⁵⁴ Footnote 136: Id.; USGCRP Climate Change Impacts Assessment, supra note 121, at 253.

¹⁵⁵ Footnote 137: SAMANTHA ARTIGA ET AL., KAISER FAMILY FOUND., HEALTH COVERAGE BY RACE AND ETHNICITY, 2010-2021 (Dec. 20, 2022) <https://www.kff.org/racial-equity-and-health-policy/issue-brief/health-coverage-by-race-and-ethnicity/>; Benjamin Sommers et al., Beyond Health Insurance: Remaining Disparities in US Health Care in the Post-ACA Era, 95 THE MILBANK QUARTERLY 1 (2017).

¹⁵⁶ Footnote 138: California Climate Justice Report, supra note 121, at 40-43.

¹⁵⁷ Footnote 139: Id. at 39.

to spend (on utilities, health care, home adaptation, etc.) to reduce climate harms, and more safeguards (such as insurance) in the event of extreme climate events.¹⁵⁸ Environmental justice communities have higher rates of limited English proficiency, which can reduce access to climate resilience programs and increase vulnerability in extreme climate events due to an inability to understand public health information.¹⁵⁹ Social capital in the political process is critical to ensure environmental justice communities receive resources to increase climate resilience and to prevent further entrenching existing inequities.

Response

As described in Section 7.2.5, *Communities Facing Climate Change Effects*, NHTSA acknowledges that minority and low-income populations are disproportionately affected by climate change. Appendix F, *Greenhouse Gas Emissions and Climate Change*, provides additional discussion of health and societal impacts of climate change on vulnerable populations. Section 7.3.1.5, *Communities Facing Climate Change Effects*, and Chapter 5, *Greenhouse Gas Emissions and Climate Change*, describe the projected decrease in carbon dioxide emissions from passenger cars and light trucks as a result of the Proposed Action and alternatives.

Comment

Comment Number: NHTSA-2022-0075-0033

Organization: California Office of the Attorney General et al. (States and Cities Joint Comment)

The projected positive impacts of NHTSA’s proposed standards are likely to be magnified in communities with higher percentages of Black, Asian American, and Latinx residents because refineries and major roadways are disproportionately located in those communities.¹⁶⁰ 88 Fed. Reg. at 56,317. For instance, nearly 700,000 people live within three miles of the seventeen refineries that reported actual annual benzene fence-line concentrations in 2020 above the level set by EPA that requires the refinery to take action to reduce emissions.¹⁶¹ Of these 700,000 people, 62% are African-American, Hispanic, Asian/Pacific Islander, or American Indian residents, and nearly 45% have incomes below the poverty level.¹⁶² As another example, the communities of Wilmington, Carson, and West Long Beach in Los Angeles, California are affected by pollution from major freeway junctions, as well as freight, port, and rail operations, oil and gas production, and five petroleum refineries.¹⁶³ A majority of those communities are considered disadvantaged under California law, scoring higher than the state average on key indicators of vulnerability, including criteria pollutant exposure, health status, and socio-economic criteria.¹⁶⁴ In the Northeast and Mid-Atlantic Region, average concentrations of exposures to PM2.5 are

¹⁵⁸ Footnote 140: Id.

¹⁵⁹ Footnote 141: Id. at 43; USGCRP Climate Change Impacts Assessment, *supra* note 121, at 106.

¹⁶⁰ Footnote 172: Cal. Air Resources Board, Benefits of California’s Zero-Emission Vehicle Standards on Community-Scale Emission, App. B to Comments of States and Cities in Support of EPA Reversing Its SAFE 1 Actions (Jul. 6, 2021) (Docket ID No. EPA-HQ-OAR-2021-0257), https://downloads.regulations.gov/EPA-HQ-OAR-2021-0257-0132/attachment_3.pdf.

¹⁶¹ Footnote 173: ENV’T INTEGRITY PROJECT, ENVIRONMENTAL JUSTICE AND REFINERY POLLUTION: BENZENE MONITORING AROUND OIL REFINERIES SHOWED MORE COMMUNITIES AT RISK IN 2020 7, n.6 (Apr. 28, 2021), <https://environmentalintegrity.org/wp-content/uploads/2021/04/Benzene-report-4.28.21.pdf>.

¹⁶² Footnote 174: Id.

¹⁶³ Footnote 175: Cal. Air Resources Board, Analysis in Support of Comments, *supra* note 171, at 18-19.

¹⁶⁴ Footnote 176: Id. at 18-24.

75%, 73%, and 61% higher for Latinx residents, Asian American residents, and Black residents, respectively, than they are for white residents.¹⁶⁵ PM2.5 and NO2 concentrations are also highest for Black and Latinx communities in Massachusetts, in part because of their proximity to industrial facilities and highways, and these concentrations have increased even though overall exposure to those pollutants has decreased in Massachusetts.¹⁶⁶ Improvements in air quality anticipated by the Proposal will serve our States and Cities' environmental justice goals, by improving air quality in communities historically impacted by greater pollution.

Response

NHTSA agrees that improvements in air quality anticipated by the final rule will have a positive impact on environmental justice communities. Peer-reviewed sources the commenter cited are included in the Final EIS, including in the following sections:

- Section 7.2.1.1, *Proximity to Oil Production and Refining*, references data from the Environmental Integrity Project (2021) that found minority and low-income populations are more likely to experience refinery emissions exceeding EPA standards, particularly benzene concentrations.
- Section 7.2.2, *Proximity to High-Traffic Roadways*, includes updated text from a study (Rosofsky et al. 2018) that showed increased PM2.5 and nitrogen dioxide concentrations for Black and Latinx communities in Massachusetts.

In addition to the studies the commenter referenced, Section 7.2, *Affected Environment*, provides information on public health and vulnerable populations and references studies that were included in the 2021 EPA report on Climate Change and Social Vulnerability in the United States (EPA 2021c; Kiomourtzoglou et al. 2016; Di et al. 2017a; Tessum et al. 2021). From these studies, NHTSA included findings about the relationship between higher air pollution exposure and vulnerable populations (low-income individuals and people of color). NHTSA also included a finding from the 2019 EPA Integrated Science Assessment, which found that Black individuals are particularly exposed to health effects caused by PM2.5 (EPA 2019b). Section 7.2.5, *Communities Facing Climate Change Effects*, also incorporates a discussion on the increasing levels of PM2.5 and ozone concentrations due to climate change and the disproportionate exposure Black individuals have to PM2.5 (EPA 2021c).

¹⁶⁵ Footnote 177: UNION OF CONCERNED SCIENTISTS, INEQUITABLE EXPOSURE TO AIR POLLUTION FROM VEHICLES IN THE NORTHEAST AND MID-ATLANTIC (June 21, 2019), <https://www.ucsusa.org/resources/inequitable-exposure-air-pollution-vehicles>.

¹⁶⁶ Footnote 178: See Rosofsky, Levy et al., The Impact Of Air Exchange Rate On Ambient Air Pollution Exposure And Inequalities Across All Residential Parcels In Massachusetts, *J Exp Sci Environ Epidemiol* 29: 520-530 (2019); Rosofsky, Anna, Jonathan I. Levy et al., Temporal Trends In Air Pollution Exposure Inequality In Massachusetts, *Environ Res.* 2018 February; 161: 76–86; see also OFFICE OF MASS. ATTORNEY GENERAL MAURA HEALEY, *supra* note 147, at 5.

B.7 Other Comments

Comment

Comment Number: NHTSA-2022-0075-0030

Commenter: Roselie Bright

2. To do this properly, the reviewer teams need to include scientists trained in environmental epidemiology. Appendix G lists people with environmental masters degrees, none with a public health emphasis. Evaluation of environmental epidemiology requires at least masters level training specifically in public health science. Please obtain an environmental epidemiologist to update the review of recent literature and extract important inputs into the public health effects model. Doing so might clear up some of my confusion for a few specific points:

Response

The team that developed both the Draft EIS and Final EIS has multiple members who are trained in and have decades of experience reviewing environmental epidemiology studies and related reports. NHTSA disagrees that a public health degree is necessary to evaluate epidemiology studies for environmental impacts relevant to the EIS. NHTSA has reviewed all literature that was cited by public commenters and has updated the EIS with discussions of and references to recent peer-reviewed and/or government reports, as appropriate.

APPENDIX C

Air Quality

APPENDIX C AIR QUALITY

C.1 Introduction

This appendix summarizes the criteria pollutants, toxics, vehicle standards, and conformity regulations that inform the affected environment for Chapter 4, *Air Quality*. Section C.2, *Health Effects of Criteria Pollutants*, Section C.3, *Health Effects of Mobile Source Air Toxics*, and Section C.4, *Vehicle Emissions Standards*, describe the environment and resource areas, including human health impacts, that are affected by NHTSA's CAFE standards for MY 2027 and beyond passenger cars and light trucks and fuel efficiency (FE) standards for MY 2030 and beyond heavy-duty pickup trucks and vans (HDPUVs). Section C.5, *Methods*, describes the methodology used for assessing air quality impacts. Chapter 2, *Proposed Action and Alternatives and Analysis Methods*, describes the Proposed Action and alternatives used in this analysis for the CAFE and HDPUV FE standards.

C.2 Health Effects of Criteria Pollutants

The following sections describe the health effects of the five criteria pollutants addressed in this EIS analysis. This information is adapted from EPA (2024e) unless otherwise noted by a citation to an individual study. The most recent EPA technical reports and *Federal Register* notices for National Ambient Air Quality Standards (NAAQS) reviews provide more information on the health effects of criteria pollutants (EPA 2020b, 2020c).

C.2.1 Ozone

Ozone is a photochemical oxidant and the major component of smog. Ozone is not emitted directly into the air but is formed through complex chemical reactions among precursor emissions of volatile organic compounds (VOCs) and nitrogen oxides (NO_x) in the presence of the ultraviolet component of sunlight. For short-term ozone exposures, a causal relationship exists with respiratory effects—including decreases in lung function, pulmonary inflammation, exacerbation of asthma, respiratory-related hospital admissions (e.g., for chronic obstructive pulmonary disease [COPD] and pneumonia; Medina-Ramón et al. 2006)—and respiratory-related mortality. A causal relationship likely exists with metabolic effects and complications due to diabetes, while evidence is suggestive of a causal relationship with impacts on the cardiovascular and central nervous systems and total mortality. For long-term ozone exposure, a causal relationship likely exists with respiratory effects (e.g., new onset asthma, pulmonary inflammation, and injury), and evidence is suggestive of a causal relationship with total mortality, as well as effects on the cardiovascular, metabolic, reproductive, developmental, and central nervous systems.

In addition to its human health impacts, ozone has the potential to affect the health of vegetation and ecosystems. Ozone in the atmosphere is absorbed by plants and disturbs the plant's carbon sequestration process, thereby limiting its available energy supply. Consequently, exposed plants can lose their vigor, become more susceptible to disease and other environmental stressors, and demonstrate reduced growth, visual abnormalities, or accelerated aging. Ozone can produce both acute and chronic injury in sensitive species, depending on the concentration level, the duration of the exposure, and the plant species under exposure. Because of the differing sensitivities among plants to ozone, ozone pollution can also exert a selective pressure that leads to changes in plant community composition.

VOCs, a chemical precursor to ozone, also can play a role in vegetation damage (National Park Service 2019). For some sensitive plants under exposure, VOCs have been demonstrated to affect seed production, photosynthetic efficiency, leaf water content, seed germination, flowering, and fruit ripening (Pinto et al. 2010). NO_x, the other chemical precursor to ozone, has also been demonstrated to affect vegetation health (Hu et al. 2015; Viskari 2000; Ugrekheldze et al. 1997; Kammerbauer et al. 1987; see comprehensive discussion in Appendix 3.3 of EPA 2020d). Most of the studies of the impacts of VOCs and NO_x on vegetation have focused on short-term exposure; few studies have focused on long-term impacts and the potential for the metabolites¹ of these compounds to affect herbivores or insects.

C.2.2 Particulate Matter

Particulate matter (PM) is a generic term for a broad class of chemically and physically diverse substances that exist as discrete particles. PM includes dust, dirt, soot, smoke, and liquid droplets directly emitted into the air, as well as particles formed in the atmosphere by condensation or by the transformation of emitted gases such as NO_x, sulfur oxides (SO_x), and VOCs. Fine particles are produced primarily by combustion processes and by these atmospheric transformations of emitted gases. The definition of PM also includes particles composed of elemental carbon (black carbon).² Gasoline-fueled and diesel-fueled vehicles emit PM.

In general, smaller PM penetrates deeper into the respiratory system. Exposure to PM with a diameter equal to or less than 2.5 microns (PM_{2.5}) has been associated with risk for several respiratory conditions, including COVID-19 (Poizzer et al. 2020; Wu et al. 2020; Zhou et al. 2021), and with increased mortality rates both in the population at large (Luo et al. 2022; Kheirbek et al. 2016) and in adult at-risk populations such as Medicaid-eligible individuals, women, and elderly individuals (Di et al. 2017a). In addition, Volk et al. have demonstrated associations between PM with a diameter equal to or less than 10 microns (PM₁₀), PM_{2.5}, and autism in children (Volk et al. 2013). For short-term PM_{2.5} exposures, there is a causal relationship with mortality, premature mortality, and cardiovascular effects (e.g., ischemic heart disease, heart failure, cardiovascular-related hospital admissions and emergency department visits), while there is likely to be a causal relationship with respiratory effects (e.g., asthma exacerbation in children, COPD exacerbation in adults, respiratory mortality), and the evidence is suggestive of (but not sufficient to infer) a causal relationship with metabolic effects and nervous system effects. For long-term PM_{2.5} exposures, there is a causal relationship with mortality, premature mortality, and cardiovascular effects (e.g., coronary heart disease, stroke, atherosclerosis, cardiovascular mortality), while there is likely to be a causal relationship with respiratory effects (e.g., development of COPD, increased asthma incidence and prevalence, wheeze in children, acceleration of lung function decline in adults, respiratory mortality), nervous system effects (e.g., reduced cognitive functions, reductions in brain volume in adults), and cancer (e.g., lung cancer), and the evidence is suggestive of (but not sufficient to infer) a causal relationship with reproductive effects, developmental effects, and metabolic effects. There is strong evidence of disparities in PM_{2.5} exposure and health

¹ Metabolites are formed as the initial compounds break down and are transformed through metabolism.

² Elemental carbon and black carbon are similar forms of fine PM and are considered synonymous for purposes of this analysis. The term *elemental carbon* describes carbonaceous particles based on chemical composition rather than light-absorbing characteristics. The term *black carbon* describes particles of mostly pure carbon that absorb solar radiation at all wavelengths (EPA 2012c). The carbon content of a sample of PM can be described by either term depending on the test method used: typically, the result for a sample tested by thermal or wet chemical methods is termed *elemental carbon* while the result for a sample tested by optical methods is termed *black carbon* (Long et al. 2013).

effects by race/ethnicity, particularly within Hispanic and non-Hispanic Black populations, and potentially for people of low socioeconomic status.

For PM with diameter between 2.5 and 10 microns, evidence for particular health effects is either suggestive of (but not sufficient to infer) a causal relationship or inadequate to determine the presence or absence of a causal relationship. Exposure to PM₁₀ has been associated with hospital admissions for chronic obstructive pulmonary disease and pneumonia (Medina-Ramón et al. 2006) and infant mortality rates (Knittel et al. 2016).

PM also can contribute to poor visibility by scattering and absorbing light, making the terrain appear hazy. To address visibility concerns, EPA developed the regional haze program,³ which was put in place in July 1999 to protect visibility in Mandatory Class I Federal Areas (national parks and wilderness areas). EPA has also set secondary NAAQS to regulate non-Class I areas outside the regional haze program. Deposition of PM (especially secondary PM formed from NO_x and SO_x) can damage materials, adding to the effects of natural weathering processes by potentially promoting or accelerating the corrosion of metals, degrading paints, and deteriorating building materials (especially concrete and limestone).

EPA classifies diesel particulate matter (DPM) as a mobile source air toxic (MSAT), so it is addressed in Section C.3.5, *Diesel Particulate Matter*.

C.2.3 Carbon Monoxide

Carbon monoxide (CO) is a colorless, odorless, poisonous gas produced by incomplete combustion of carbon in fuels. Motor vehicles are the single largest source of CO emissions nationally,⁴ though vehicle emissions of CO are reduced through newer engine technologies operating at higher temperatures. When CO enters the bloodstream, it acts as an asphyxiant by reducing the delivery of oxygen to the body's organs and tissues. It can affect the central nervous system and impair the brain's ability to function properly. For short-term CO exposures, there likely is a causal relationship with cardiovascular morbidity, while the evidence is suggestive of a causal relationship with central nervous system effects, respiratory morbidity, and mortality. For long-term CO exposures, the evidence is suggestive of a causal relationship with central nervous system effects and with developmental effects and birth outcomes, while there likely is not a causal relationship with mortality. High levels of postnatal exposure to CO have been shown to have an effect on infant mortality (Currie and Neidell 2005; Currie et al. 2009).

C.2.4 Sulfur Dioxide

Sulfur dioxide (SO₂), one of various oxides of sulfur, is a gas formed from combustion of fuels containing sulfur. Most SO₂ emissions are produced by stationary sources such as power plants. SO₂ is also formed when gasoline is extracted from crude oil in petroleum refineries and in other industrial processes. The EPA 2001 Highway Diesel Fuel Sulfur Control Requirements mandated that all highway diesel fuel be Ultra-Low Sulfur Diesel with sulfur content limited to 15 parts per million (ppm) after 2010, and the EPA

³ Final Rule: Regional Haze Regulations, 64 FR 35714 (July 1, 1999).

⁴ Highway motor vehicles overall accounted for approximately 30 percent of national CO emissions in 2021 (EPA 2022h). In 2023, passenger cars and passenger trucks are estimated to account for approximately 86 percent of the CO emissions from highway motor vehicles while HD pickup trucks and vans account for another 11 percent ("onroad_2016fh 2016fj 2023fh 2023fj 2026fj.xlsx" file from EPA 2022e).

Tier 3 Motor Vehicle Emission and Fuel Standards lowered the sulfur content of gasoline to 10 ppm starting in 2017. These standards have achieved large reductions in tailpipe SO₂ emissions (EPA 2024c).

For short-term exposure to SO₂, there is a causal relationship with respiratory health effects, including bronchoconstriction, decreases in lung function, and admissions to hospitals and emergency room visits (particularly in asthmatics), and there is evidence suggestive of a causal relationship with mortality. For long-term SO₂ exposures, it is challenging to separate impacts from SO₂ exposure and impacts from other co-emitted pollutants, but there is evidence suggestive of a causal relationship with respiratory effects, particularly childhood asthma. SO₂ also is a primary contributor to acidic deposition, or acid rain, which causes acidification of lakes and streams and can damage trees, crops, historic buildings, and statues.

C.2.5 Nitrogen Dioxide

Nitrogen dioxide (NO₂), a reddish-brown, highly reactive gas, is one of the oxides of nitrogen formed by high-temperature combustion (as in vehicle engines) of nitrogen and oxygen. Most NO_x created in the combustion reaction consists of nitric oxide (NO), which oxidizes to NO₂ in the atmosphere. While there is some evidence of other health effects due to exposure to NO₂, it is challenging to separate impacts from NO₂ exposure and impacts from other roadway pollutants. For short-term exposures to NO₂, there is sufficient evidence to infer a causal relationship with respiratory effects, particularly for asthma exacerbation, while the evidence is suggestive of (but insufficient to infer) a causal relationship with cardiovascular effects and mortality. For long-term NO₂ exposure, there likely is a causal relationship with respiratory effects (including asthma development in children), while the evidence is suggestive of (but insufficient to infer) a causal relationship with cardiovascular effects, diabetes, birth outcomes, and cancer. NO₂ from vehicle traffic has been associated with risk for several respiratory conditions, including COVID-19 (Lipsitt et al. 2021) and autism in children (Volk et al. 2013). Oxides of nitrogen are an important precursor to ozone and acid rain and can affect terrestrial and aquatic ecosystems.

C.3 Health Effects of Mobile Source Air Toxics

The following sections briefly describe the health effects of the six priority MSATs analyzed in this EIS. This information is adapted from EPA (2024e) unless otherwise stated. EPA has not established NAAQS for MSATs.

Motor vehicle emissions contribute to ambient levels of air toxics known or suspected to be carcinogens or known to have noncancer health effects. These compounds include, but are not limited to, acetaldehyde, acrolein, benzene, 1,3-butadiene, and formaldehyde. These five air toxics, plus DPM, are the six priority MSATs analyzed in this EIS. Most of these, except for DPM, were identified as national or regional risk drivers or contributors in the EPA 2018 and/or 2019 AirToxScreens and have significant inventory contributions from mobile sources (EPA 2023m). This EIS does not analyze polycyclic organic matter separately, but this matter can occur as a component of DPM and is discussed in Section C.3.5, *Diesel Particulate Matter*. Naphthalene also is not analyzed separately in this EIS, but it is a member of the polycyclic organic matter class of compounds discussed in Section C.3.5, *Diesel Particulate Matter*.

C.3.1 Acetaldehyde

Acetaldehyde is classified in the EPA Integrated Risk Information System (IRIS) database as a probable human carcinogen, based on nasal tumors in rats, and is considered toxic by the inhalation, oral, and intravenous routes (EPA 1998). In its Fifteenth Report on Carcinogens (National Toxicology Program

[NTP] 2021a), the U.S. Department of Health and Human Services “reasonably anticipates” acetaldehyde to be a human carcinogen, and the World Health Organization’s International Agency for Research on Cancer (IARC) classifies acetaldehyde as possibly carcinogenic to humans (Group 2B) (IARC 1999).

The primary noncancer effects of exposure to acetaldehyde vapors include eye, skin, and respiratory-tract irritation (EPA 1998, 2000b). In short-term (4-week) rat studies, degeneration of olfactory epithelium was observed at various concentration levels of acetaldehyde exposure (National Research Council Committee on Emergency and Continuous Exposure Guidance Levels for Selected Submarine Contaminants 2009). EPA used data from these studies to develop an inhalation reference concentration. Some asthmatics have been shown to be a sensitive subpopulation to decreases in functional expiratory volume and bronchoconstriction upon inhaling acetaldehyde (California Office of Environmental Health Hazard Assessment [OEHHA] 2014).

C.3.2 Acrolein

Acrolein is extremely acrid and is irritating to humans when inhaled, with acute exposure resulting in upper respiratory tract irritation, mucus hypersecretion, and congestion. The intense irritancy of this carbonyl compound has been demonstrated during controlled tests in human subjects, who suffer intolerable eye and nasal mucosal sensory reactions within minutes of exposure (EPA 2003a). The EPA 2003 IRIS human health risk assessment for acrolein (EPA 2003a) could not determine the potential carcinogenicity because at the time, the existing data were inadequate for an assessment of human carcinogenic potential for either the oral or inhalation route of exposure, but it summarizes studies regarding acute effects of human exposure to acrolein. Evidence from studies in humans indicate that levels as low as 0.09 parts per million (ppm) (0.21 milligram per cubic meter) for 5 minutes can elicit subjective complaints of eye irritation, with increasing concentrations leading to more extensive eye, nose, and respiratory symptoms (OEHHA 2014). Lesions to the lungs and upper respiratory tracts of rats, rabbits, and hamsters have been observed after subchronic exposure to acrolein (OEHHA 2014). Animal studies report acute exposure effects such as bronchial hyper-responsiveness (OEHHA 2014). In a 2017 study, the acute respiratory irritant effects of exposure to 4 ppm acrolein were more pronounced in mice with allergic airway disease compared to non-diseased mice, which also showed decreases in respiratory rate (Snow et al. 2017). Based on these animal data and demonstration of similar effects in humans (e.g., reduction in respiratory rate), individuals with compromised respiratory function (e.g., emphysema and asthma) are expected to be at increased risk of developing adverse responses to strong respiratory irritants such as acrolein.

IARC determined that acrolein was classifiable as “probably carcinogenic” with respect to its carcinogenicity in humans (IARC 2020; Lancet 2021).

C.3.3 Benzene

EPA’s IRIS database lists benzene as a known human carcinogen (causing leukemia) by all routes of exposure and concludes that exposure is associated with additional health impacts, including genetic changes in both humans and animals and increased proliferation of bone marrow cells in mice (EPA 2002a; IARC 2018). Data indicate a causal relationship between benzene exposure and acute lymphocytic leukemia and suggest a relationship between benzene exposure and chronic nonlymphocytic leukemia and chronic lymphocytic leukemia. IARC and the U.S. Department of Health and Human Services have characterized benzene as a human carcinogen (IARC 2018; NTP 2021b).

Several adverse noncancer health effects, including blood disorders such as preleukemia and aplastic anemia, have also been associated with long-term exposure to benzene (OEHHA 2014). The most sensitive noncancer effect observed in humans, based on current data, is depression of the absolute lymphocyte count in blood (OEHHA 2014; EPA 2003b). In addition, recent work, including studies sponsored by the Health Effects Institute (HEI), provides evidence that biochemical responses are occurring at lower levels of benzene exposure than previously known (OEHHA 2014).

C.3.4 1,3-Butadiene

EPA has characterized 1,3-butadiene as carcinogenic to humans through inhalation (EPA 2002b, 2002c). IARC has determined that 1,3-butadiene is a probable human carcinogen, and the U.S. Department of Health and Human Services has characterized 1,3-butadiene as a known human carcinogen (IARC 2012; NTP 2021c). Numerous experiments have demonstrated that animals and humans metabolize 1,3-butadiene into compounds that are genotoxic (capable of causing damage to a cell's genetic material such as deoxyribonucleic acid [DNA]). The specific mechanisms of 1,3-butadiene-induced carcinogenesis are not known; however, scientific evidence strongly suggests that the carcinogenic effects are mediated by genotoxic metabolites. Animal data suggest that females could be more sensitive than males to cancer effects associated with 1,3-butadiene exposure. There are insufficient data on humans from which to draw conclusions about sensitive subpopulations. 1,3-butadiene also causes a variety of reproductive and developmental effects in mice; there are no available human data on these effects. The most sensitive effect was ovarian atrophy observed in a lifetime bioassay of female mice (EPA 2002c).

C.3.5 Diesel Particulate Matter

Diesel exhaust consists of a complex mixture of carbon dioxide (CO₂), oxygen, nitrogen, water vapor, CO, nitrogen compounds, sulfur compounds, and numerous low-molecular-weight hydrocarbons. A number of these gaseous hydrocarbon components are individually known to be toxic, including aldehydes, benzene, and 1,3-butadiene. The DPM present in diesel exhaust consists mostly of fine particles (smaller than 2.5 microns), of which a significant fraction is ultrafine particles (smaller than 0.1 micron). These particles have a large surface area, which makes them an excellent medium for adsorbing organics, and their small size makes them highly respirable. Many of the organic compounds present in the gases and on the particles, such as polycyclic organic matter, are individually known to have mutagenic and carcinogenic properties (EPA 2002d).

DPM also includes elemental carbon (black carbon) particles emitted from diesel engines. EPA has not provided a special status, such as a NAAQS or other health-protective measure, for black carbon, but addresses black carbon in terms of PM_{2.5} and DPM emissions.

Diesel exhaust varies significantly in chemical composition and particle sizes between different engine types (HD, light-duty [LD]), engine operating conditions (idle, acceleration, deceleration), and fuel formulations (high-/low-sulfur fuel). Also, there are emissions differences between on-road and nonroad engines because the nonroad engines are generally older technology. After being emitted from the engine exhaust, diesel exhaust undergoes dilution, as well as chemical and physical changes in the atmosphere. The lifetime for some of the compounds present in diesel exhaust ranges from hours to days.

In EPA's 2002 *Diesel Health Assessment Document* (Diesel HAD) (EPA 2002d), exposure to diesel exhaust was classified as likely to be carcinogenic to humans by inhalation from environmental exposures, in

accordance with the revised draft 1996 to 1999 EPA cancer guidelines (EPA 1999). EPA published a review of diesel exhaust health effects in 2007 (Ris 2007). The assessment concluded that long-term inhalation exposure is likely to pose a lung cancer hazard to humans as inferred from epidemiologic and certain animal studies. A number of other agencies (National Institute for Occupational Safety and Health, IARC, World Health Organization, California EPA, and U.S. Department of Health and Human Services) have made similar hazard classifications.

Noncancer health effects of acute and chronic exposure to diesel exhaust emissions are also of concern. For example, Beatty and Shimshack (2011) found that diesel emissions from school buses exacerbate or cause asthma or bronchitis in children and adults, and they also linked diesel emissions to childhood pneumonia. EPA derived a diesel exhaust reference concentration from consideration of four well-conducted chronic rat inhalation studies showing adverse pulmonary effects. The reference concentration is 5 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) for diesel exhaust measured as DPM. This reference concentration does not consider allergenic effects such as those associated with asthma or immunologic effects or the potential for cardiac effects. There was emerging evidence in 2002, discussed in the Diesel HAD, that exposure to diesel exhaust can exacerbate these effects, but the exposure-response data were lacking at that time to derive a reference concentration based on these then-emerging considerations. The EPA Diesel HAD states, “With [DPM] being a ubiquitous component of ambient PM, there is an uncertainty about the adequacy of the existing [diesel exhaust] non-cancer database to identify all of the pertinent [diesel exhaust]-caused non-cancer health hazards.” The Diesel HAD also notes “that acute exposure to [diesel exhaust] has been associated with irritation of the eye, nose, and throat, respiratory symptoms (cough and phlegm), and neurophysiological symptoms such as headache, lightheadedness, nausea, vomiting, and numbness or tingling of the extremities.” The Diesel HAD notes that the cancer and noncancer hazard conclusions applied to the general use of diesel engines then on the market and, as cleaner engines replace a substantial number of existing ones, the applicability of the conclusions would need to be reevaluated.

The Diesel HAD also briefly summarizes health effects associated with ambient PM and discusses EPA’s then-annual PM_{2.5} NAAQS of $15 \mu\text{g}/\text{m}^3$. EPA revised the annual PM_{2.5} NAAQS to $12 \mu\text{g}/\text{m}^3$ in 2012, and to $9.0 \mu\text{g}/\text{m}^3$ in 2024. There is a large and extensive body of human data showing a wide spectrum of adverse health impacts associated with exposure to ambient PM, of which diesel exhaust is an important component. The PM_{2.5} NAAQS is designed to provide protection from the noncancer health effects and premature mortality attributed to exposure to PM_{2.5}. The contribution of diesel PM to total ambient PM varies in different regions of the country, within a region, and from one area to another. The contribution can be high in near-roadway environments, for example, or in other locations where diesel engine use is concentrated.

Since 2002, several new studies have continued to report increased lung cancer risk with occupational exposure to diesel exhaust from older engines. Of particular note since 2011, three new epidemiology studies have examined lung cancer in occupational populations; for example, in truck drivers, underground nonmetal miners, and other diesel-engine-related occupations (HEI 2015; Olsson et al. 2011). These studies reported increased risk of lung cancer with exposure to diesel exhaust with evidence of positive exposure-response relationships to varying degrees. These newer studies—along with others that have appeared in the scientific literature (e.g., Kim et al. 2018; Ilar et al. 2017)—add to the evidence EPA evaluated in the 2002 Diesel HAD and further reinforce the concern that diesel exhaust exposure likely poses a lung cancer hazard. The findings from these newer studies do not necessarily apply to newer technology diesel engines because the newer engines have large reductions in the emissions constituents compared to older-technology diesel engines.

In light of the growing body of scientific literature evaluating the health effects of exposure to diesel exhaust, in June 2012, IARC, a recognized international authority on the carcinogenic potential of chemicals and other agents, evaluated the full range of cancer-related health effects data for diesel-engine exhaust. IARC concluded that diesel exhaust should be regarded as “carcinogenic to humans” (IARC 2014; Silverman 2018). This designation was an update from its 1988 evaluation, which considered the evidence indicative of a “probable human carcinogen.”

C.3.6 Formaldehyde

In 1991, EPA concluded that formaldehyde is a carcinogen based on nasal tumors in animal bioassays (EPA 1991). EPA developed an inhalation unit risk for cancer and a reference dose for oral noncancer effects and posted them in the IRIS database. Since that time, NTP and IARC have concluded that formaldehyde is a known human carcinogen (NTP 2021d; IARC 2012).

The conclusions by IARC and NTP reflect the results of epidemiologic research published since 1991, in combination with previous animal, human, and mechanistic evidence. Research by the National Cancer Institute reported an increased risk of nasopharyngeal (nose and throat) cancer and specific lymphohematopoietic (lymph and blood) malignancies among workers exposed to formaldehyde (National Cancer Institute 2011). A National Institute of Occupational Safety and Health study of garment workers also reported increased risk of death due to leukemia among workers exposed to formaldehyde. Extended follow-up of a cohort of British chemical workers did not report evidence of an increase in nasopharyngeal or lymphohematopoietic cancers, but a continuing statistically significant excess in lung cancers was reported (Checkoway et al. 2015). Workers exposed to formaldehyde in pathology laboratories have been observed to experience increased genetic damage and alterations to various lymphocytes (Costa et al. 2019). Finally, a study of embalmers reported formaldehyde exposures to be associated with an increased risk of myeloid (bone marrow cell) leukemia but not brain cancer (Hauptmann et al. 2009).

Other health effects of formaldehyde were reviewed by the Agency for Toxic Substances and Disease Registry (ATSDR) in 1999 (ATSDR 1999) and supplemented in 2010 (ATSDR 2010), by the NTP (NIH 2011), and by the World Health Organization (World Health Organization 2002). These organizations reviewed the literature concerning effects on the eyes and respiratory system, the primary point of contact for inhaled formaldehyde, including sensory irritation of eyes, and respiratory tract, pulmonary function, nasal histopathology, and immune system effects. In addition, research on reproductive and developmental effects and neurological effects were discussed along with several studies that suggest formaldehyde may increase the risk of asthma, particularly in young people. EPA released a draft Toxicological Review of Formaldehyde Inhalation Assessment through the IRIS program for peer review by the National Research Council (NRC) and public comment in June 2010 (EPA 2010e). The draft assessment reviewed more recent research from animal and human studies on cancer and other health effects. The NRC released their review report in April 2011 (NRC 2011a). EPA’s draft assessment, which addresses NRC recommendations, was suspended in 2018. The draft assessment was resumed in March 2021 (EPA 2021e), and EPA currently is revising the assessment based on the results of external peer review.

C.4 Vehicle Emissions Standards

EPA and the California Air Resources Board (CARB) have established criteria pollutant emissions standards for vehicles under the Federal Clean Air Act (CAA). EPA and CARB have tightened these

emissions standards over time as more effective emissions-control technologies have become available.⁵ These stricter standards for LD vehicles (i.e., passenger cars and light trucks) and for HD vehicles are responsible for the declines in total criteria pollutant emissions from motor vehicles, as discussed in Chapter 4, Section 4.1.1, *Relevant Pollutants and Standards*. The EPA Tier 2 Vehicle & Gasoline Sulfur Program, which went into effect in 2004, established the CAA emissions standards that applied to MY 2004–2016 passenger cars and light trucks (EPA 2000c). Under the Tier 2 standards, manufacturers of passenger cars and light trucks were required to meet stricter vehicle emissions limits than under the previous Tier 1 standards. By 2006, U.S. refiners and importers of gasoline were required under the Tier 2 standards to manufacture gasoline with an average sulfur level of 30 ppm, a 90 percent reduction from earlier sulfur levels. These fuels enable post-MY 2006 vehicles to use emissions-control technologies that reduce tailpipe emissions of NO_x by 77 percent for passenger cars and by as much as 95 percent for pickup trucks, vans, and sport utility vehicles compared to 2003 levels. On April 28, 2014, EPA issued a Final Rule establishing Tier 3 motor vehicle emissions and fuel standards.⁶ The Tier 3 vehicle standards reduce both tailpipe and evaporative emissions from passenger cars, LD trucks, medium-duty passenger vehicles, and HDPUVs. Starting in 2017, Tier 3 sets new vehicle emissions standards and lowers the sulfur content of gasoline to 10 ppm, considering the vehicle and its fuel as an integrated system. The Tier 3 program phases out the Tier 2 vehicle emissions standards and replaces them with Tier 3 standards, which are being phased in over MYs 2017–2025 and will remain constant thereafter at the MY 2025 levels. The Tier 3 program requires emissions reductions from new passenger cars and light trucks of approximately 80 percent for NO_x and VOCs, 70 percent for PM, and 67 percent for SO₂. The Tier 3 gasoline sulfur standard makes emissions-control systems more effective for both existing and new vehicles and enables more stringent vehicle emissions standards (EPA 2014d). In 2024, EPA issued Tier 4 criteria pollutant standards for MY 2027–2032 LD vehicles and medium-duty vehicles (which NHTSA refers to as HDPUVs) in its recently published final rule.⁷

Figure C.4-1 illustrates current trends in travel and emissions from highway vehicles, not accounting for the impacts of the Proposed Action and alternatives (Chapter 4, Section 4.2, *Environmental Consequences*). Since 1970, aggregate emissions traditionally associated with vehicles have decreased substantially even as vehicle miles traveled (VMT) increased by approximately 194 percent from 1970 to 2022, as shown in Figure C.4-1. For example, NO_x emissions, due mainly to light trucks and HD vehicles, decreased by 83 percent between 1970 and 2022, despite increases in VMT. More recent trends show that changes in VMT are having a smaller and smaller impact on emissions because of stricter EPA standards for vehicle emissions and the chemical composition of fuels, even with additional growth in VMT (Smith 2002). This general trend will continue, to a certain extent, under any of the action alternatives. MSAT emissions will likely decrease in the future because of a 2007 EPA rule (EPA 2007). This rule limited the benzene content of gasoline beginning in 2011. It also limited exhaust emissions of hydrocarbons (many VOCs and MSATs are hydrocarbons) from passenger cars and light trucks when they are operated at cold temperatures. The cold-temperature standard was phased in from 2010

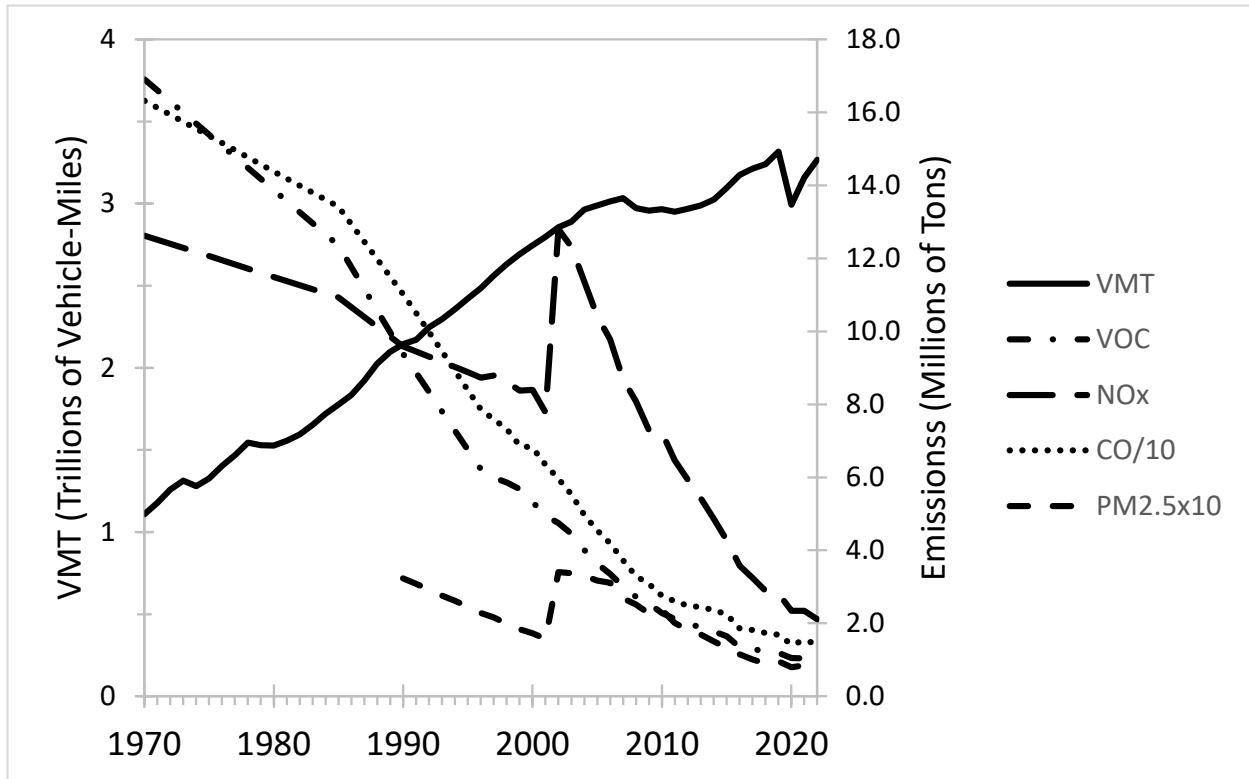
⁵ CAA Section 177 (42 U.S.C. 7507) gives states the option to adopt California's emissions standards provided that specified criteria in Section 177 are met. States that have done so sometimes are referred to as Section 177 states. In addition to California and Section 177 states' GHG emissions standards, discussed in Chapter 4, Section 4.1.3.3, *Vehicle Emissions Standards*, California and Section 177 states have enacted criteria pollutant emissions standards for vehicles under the CAA.

⁶ Control of Air Pollution from Motor Vehicles: Tier 3 Motor Vehicle Emission and Fuel Standards; Final Rule, 79 FR 23414 (April 28, 2014).

⁷ Multi-Pollutant Emissions Standards for Model Years 2027 and Later Light-Duty and Medium-Duty Vehicles; Final Rule, 40 CFR Parts 85, 86, 600, 1036, 1037, 1066, and 1068. Available at: <https://www.epa.gov/regulations-emissions-vehicles-and-engines/final-rule-multi-pollutant-emissions-standards-model>. (March 20, 2024).

through 2015. EPA projected that these controls will substantially reduce emissions of acetaldehyde, acrolein, benzene, 1,3-butadiene, and formaldehyde.

Figure C.4-1. Vehicle Miles Traveled Compared to Vehicle Emissions^{a,b,c}



Notes:

^a Because CO emissions are about 10 times higher than emissions of NO_x, SO_x, and VOCs and emissions of PM2.5 are about 10 times lower than emissions of NO_x, SO_x, and VOCs, the scales for CO and PM2.5 are proportionally adjusted to enable comparison of trends among pollutants.

^b Apparent increases in NO_x and PM2.5 emissions in 2002 are due to a change in methods made by EPA in 2012 from the MOBILE6.2 model to the MOVES model to calculate emissions for years 2002 and later (EPA 2013d).

^c The decrease in VMT in 2020 reflects the decreased amount of driving during the COVID-19 pandemic.

Sources: Davis and Boundy 2022; EPA 2023g; EIA 2023a.

VMT = vehicle miles traveled; VOC = volatile organic compound; NO_x = nitrogen oxides; CO = carbon monoxide;

PM2.5 = particulate matter 2.5 microns or less in diameter; SO_x = sulfur oxides

C.5 Methods

This section describes the approaches and methods used to estimate the impacts of the Proposed Action and alternatives in the EIS.

C.5.1 Overview

NHTSA uses the CAFE Compliance and Effects Modeling System (the CAFE Model) to estimate manufacturers' potential responses to new CAFE, CO₂, and HDPUV FE standards and to estimate various impacts of those responses. DOT's Volpe National Transportation Systems Center develops, maintains, and applies the model for NHTSA. The basic design of the CAFE Model is as follows: the system first estimates how vehicle manufacturers might respond to a given regulatory scenario, and from that potential compliance solution, the system estimates what impact that response will have on fuel

consumption, emissions, and economic externalities. NHTSA also uses EPA’s Motor Vehicle Emissions Simulator (MOVES) model to estimate “downstream” (tailpipe exhaust) emission factors, and uses Argonne National Laboratory’s Greenhouse gases, Regulated Emissions, and Energy use in Transportation (GREET) model to estimate emissions rates from fuel production and distribution processes (“upstream emissions”).

To analyze air quality and human health impacts, NHTSA used the CAFE Model to calculate the emissions of criteria pollutants and MSATs from passenger cars and light trucks that would occur under each CAFE standard alternative. Similarly, NHTSA calculated the emissions of criteria pollutants and MSATs from HDPUVs that would occur under each FE standard alternative. NHTSA then estimated the resulting changes in emissions under each action alternative by comparing emissions under that alternative to those under the relevant No-Action Alternative. The resulting changes in air quality and impacts on human health were assumed to be proportional to the changes in emissions projected to occur under each CAFE standard and HDPUV FE standard action alternative.

The air quality analysis accounted for manufacturers’ projected responses to CAFE, HDPUV FE, and CO₂ standards (including agreements some manufacturers have reached with California for MYs 2021–2026), zero-emission vehicle sales mandates in place in California and most Section 177 states,⁸ and NHTSA’s estimates of future fuel prices, market demand for fuel economy, and the cost and efficacy of fuel-saving technologies.⁹ The analysis also accounted for market responses, including demand for new LD vehicles and HDPUVs, scrappage of used LD vehicles and HDPUVs, and demand for travel (i.e., VMT), accounting for the rebound effect. The resultant change in emissions under each CAFE and HDPUV alternative would be the sum of the following components.

- Decreases in upstream emissions that result from decreases in gasoline consumption and, therefore, lower volumes of fuel production and distribution.
- Increases in upstream emissions that result from increases in electricity generation to power plug-in hybrid electric vehicles (PHEVs) and battery electric vehicles (BEVs).
- Increases in per-vehicle tailpipe emissions resulting from slight shifts in passenger car sales toward light trucks (because improving fuel economy produces larger fuel savings for light trucks than for passenger cars, and criteria pollutant and air toxic per-mile emission rates for light trucks are projected to remain higher than for passenger cars) and slightly greater reliance on older vehicles (which have higher per-mile emission rates than newer vehicles).
- Increases in emissions resulting from increased VMT due to the rebound effect.
- Decreases in tailpipe emissions resulting from increases in sales and use of PHEVs and BEVs.

As discussed in Chapter 2, *Proposed Action and Alternatives and Analysis Methods*, the air quality results presented in Chapter 4, *Air Quality*, including impacts on human health, are based on assumptions about the type and rate of emissions from the combustion of fossil fuels. In addition to tailpipe estimates from the Motor Vehicle Emission Simulator (MOVES4) (EPA 2023b),¹⁰ this analysis accounts for upstream emissions from the extraction, production, and distribution of fuels, including contributions from the

⁸ *Section 177 states* refers to the states that have adopted California’s criteria pollutant and GHG emissions regulations under Section 177 of the CAA (42 U.S.C. 7507).

⁹ For further information on the analysis of zero-emissions vehicles, see NHTSA 2023, 2024.

¹⁰ EPA’s MOVES model, described in Chapter 2, Section 2.5.1, *Downstream Emissions*, estimates emissions based on a variety of inputs, including vehicle type and age, fuel type and quality, operating conditions, and vehicle characteristics.

power plants that generate the electricity used to recharge electric vehicles (EVs) and from the production of the fuel burned in those power plants. Emissions and other environmental impacts from electricity production depend on the efficiency of the power plant and the mix of fuel sources used, sometimes referred to as the *grid mix*. In the United States, the current (2022) grid mix is composed of natural gas, coal, nuclear, hydroelectric, wind, other renewable energy sources, and oil. The largest sources of electricity are from natural gas (39 percent), followed by renewables (21 percent), coal (20 percent), and nuclear (18 percent) (EIA 2023w).

To estimate upstream emissions changes resulting from changes in downstream fuel consumption, the analysis uses emissions factors from the Greenhouse Gases, Regulated Emissions, and Energy Use in Transportation (GREET) model (version 2023 developed by the U.S. Department of Energy, Argonne National Laboratory) (ANL 2023). Upstream emission factors for gasoline, diesel, flex fuel (E85), and electricity in grams per million British thermal units (MMBtu) were taken from the GREET model for 2022 and then 2025–2050 in 5-year increments. NHTSA developed upstream emissions factors for air toxics that are consistent with EPA’s National Emission Inventory and tailpipe emissions factors from the MOVES4 model. A spreadsheet model was developed to adjust upstream emissions factors to account for the imported share of petroleum.

The analysis presented throughout this EIS assumes that the future EV fleet would charge from a grid whose mix is uniform across the country. As with gasoline, diesel, and E85, emissions factors for electricity were calculated for 2022 and then 2025–2050 in 5-year increments in GREET to account for projected changes in the national grid mix. The GREET model contains information on the intensities (amount of pollutant emitted per unit of electrical energy generated) that extend to 2050. To project the U.S. average electricity-generating fuel mix, this rulemaking uses a grid mix from the Electrification Futures Study, specifically the 2022 Standard Scenarios forecast (Mid-case, nascent technologies, current policies scenario), developed by the National Renewable Energy Laboratory (Murphy et al. 2021). The Mid-case scenario assumes central or median values for core inputs such as technology costs and fuel prices, moderately paced demand growth averaging 1.3 percent per year, and electricity sector policies as they existed in September 2022 (including the Inflation Reduction Act). Retrofits of natural gas and coal plants with carbon capture and storage technologies (nascent technologies) are assumed to become common (Gagnon et al. 2022).

C.5.2 Regional Analysis

Over the course of the development of recent CAFE EISs (NHTSA 2010, 2012, 2020, 2022) and the medium- and heavy-duty FE standards Phase 1 and 2 EISs (NHTSA 2011, 2016b), NHTSA received comments requesting that the agency consider the regional air quality impacts of these programs. NHTSA has included the following information about regional air quality impacts of the Proposed Action and alternatives in response to such comments and because the agency believes that such an analysis provides valuable information for the decision-maker, state and local authorities, and the public. Performing this analysis does not affect the agency’s conclusion that a general conformity determination is not required. While a truly local analysis (i.e., at the individual roadway level) is impractical for a nationwide EIS, NHTSA believes a regional emissions analysis still provides valuable information and is feasible for the scope of this analysis.

To assess regional differences in the impacts of the alternatives, NHTSA estimated net emissions changes for individual nonattainment and maintenance areas. The distribution of emissions is not uniform nationwide, and either increases or decreases in emissions can occur within individual nonattainment and maintenance areas. NHTSA focused on nonattainment and maintenance areas

because air quality problems have been the greatest in these areas. NHTSA's assessment emphasized areas that are in nonattainment or maintenance for ozone or PM_{2.5} because these are the criteria pollutants that are of greatest concern to human health. At present, there are no CO or NO₂ nonattainment areas. There are many areas designated as being in nonattainment for SO₂ or PM₁₀. There are also maintenance areas for CO, NO₂, PM₁₀, and SO₂. NHTSA did not quantify PM₁₀ emissions separately from PM_{2.5} because almost all the PM in the exhaust from LD vehicles and HDPUVs is PM_{2.5}. Appendix D, *Air Quality Modelling and Health Impacts Assessment*, provides emissions estimates for all nonattainment and maintenance areas for all criteria pollutants (except lead, as explained in Chapter 4, Section 4.1.1, *Relevant Pollutants and Standards*). On-road motor vehicles are a minor contributor to SO₂ emissions (less than 0.5 percent of national emissions, as noted above) (EPA 2020e) and are unlikely to affect the attainment status of SO₂ nonattainment and maintenance areas.

NHTSA's emissions analysis is national and regional but does not attempt to address the specific geographic locations of changes in emissions within nonattainment and maintenance areas. For example, there is limited evidence that EV use is disproportionately greater in areas with the worst traffic congestion (Section 8.3.3.3 of NHTSA 2020). Because hybrid EVs and PHEVs have lower tailpipe emissions compared to conventionally fueled vehicles, and BEVs have no tailpipe emissions, greater EV use in these areas could suggest that tailpipe emissions in urban nonattainment areas would be less than the analysis estimates. However, because of the complication and uncertainties associated with these local variations, NHTSA's emissions analysis does not assume any variation by vehicle type or fuel in the geographic distribution of VMT. In addition, EV charging location and time affects emissions from power plants by changing the demand for electricity in the region where charging occurs, for the duration of charging (Section 3.2.2.2, *Region-Specific Electricity Grid Impacts*). NHTSA's emissions analysis does not assume any variation in EV charging by location or time.

Emissions changes due to the rebound effect would occur from LD vehicles and HDPUVs operating on entire regional roadway networks; any emissions changes due to the rebound effect would be distributed throughout a region's entire road network and at any specific location would be uniformly proportional to VMT changes at that location. At any one location within a regional network, the resulting change in emissions would be small compared to total emissions from all sources surrounding that location (including existing emissions from traffic already using the road), so the localized impacts of the Proposed Action and alternatives on ambient concentrations and health impacts should also be small. The nationwide aggregated consequences of such small near-source impacts on ambient pollutant concentrations and health might be larger but are not feasible to quantify.

C.5.3 Analysis Periods

The longest averaging period for measuring whether ambient concentrations of a pollutant comply with the NAAQS is 1 year.¹¹ This air quality analysis considers emissions that would occur over annual periods, consistent with the NAAQS. To evaluate impacts on air quality, specific years must be selected for which emissions are estimated and impacts on air quality are calculated.

¹¹ Compliance with the ozone NAAQS is based on the average of the fourth highest daily maximum 8-hour concentration over a 3-year period; compliance with the 24-hour PM_{2.5} NAAQS is based on the average of the daily 98th-percentile concentrations averaged over a 3-year period; compliance with the annual PM_{2.5} NAAQS is based on the 3-year average of the weighted annual mean concentrations.

NHTSA selected calendar years that are meaningful for the timing of likely effects of the alternatives, as follows.

- **2035:** A near-term forecast year for passenger cars, light trucks, and HDPUVs; by 2035 manufacturers could be 4 years beyond a full response (MY 2031) to new CAFE standards and in the process of responding to the new FE standards for HDPUVs, with vehicles produced in MYs 2027 and beyond accounting for much of the on-road fleet's VMT.
- **2050:** A long-term forecast year; by 2050, vehicles produced in MYs 2027 and beyond will account for almost all of the on-road fleet's VMT, such that changes in year-over-year impacts would be determined primarily by VMT growth.

C.5.4 Incomplete or Unavailable Information

Where information in this analysis is incomplete or unavailable, NHTSA relies on CEQ regulations regarding incomplete or unavailable information.¹² As noted throughout this methods section, the estimates of emissions rely on models and forecasts that contain numerous assumptions and data that are uncertain. Examples of areas in which information is uncertain (and therefore may be incomplete or unavailable) include future emissions rates, vehicle manufacturers' decisions about vehicle technology and design, the mix of vehicle types and model years in the LD and HDPUV fleets, VMT projections, emissions from fuel refining and distribution, the future composition of the grid mix, and economic factors. The degree of uncertainty increases as projections extend farther into the future.

To support the information in this EIS, NHTSA used the best available models and supporting data. The models used for the EIS were subjected to scientific review and were approved by the agencies that sponsored their development. Nonetheless, there are limitations to current modeling capabilities. For example, uncertainties can derive from model formulation (including numerical approximations and the definition of physical and chemical processes) and inaccuracies in the input data (e.g., emissions inventory estimates).

Additional limitations are associated with the estimates of health impacts. To approximate the health impacts associated with each alternative, NHTSA used screening-level estimates of health impacts in the form of cases per ton of criteria pollutant emissions change. Changes in emissions of toxic air pollutants should also result in health impacts, but scientific data that would support quantification and monetization of these impacts are not available.

C.5.5 Allocation of Exhaust Emissions to Nonattainment Areas¹³

For each CAFE standard and HDPUV FE standard alternative, the CAFE Model provided national emissions estimates for each criteria air pollutant (or its chemical precursors) and MSAT. National emissions were allocated to the county level using VMT data for each county. EPA provided estimated passenger car, light truck, and HDPUV VMT data for all counties in the United States, consistent with EPA's National Emissions Inventory (NEI).¹⁴ VMT data used in the NEI were estimated from traffic counts taken by counties and states on major roadways, and therefore are subject to some uncertainty. These

¹² 40 CFR 1502.21(b).

¹³ In Section C.5.5, *Allocation of Exhaust Emissions to Nonattainment Areas*, and Section C.5.6, *Allocation of Upstream Emissions to Nonattainment Areas*, the term *nonattainment* refers to both nonattainment areas and maintenance areas.

¹⁴ The VMT data provided by EPA are based on data generated by the Federal Highway Administration.

EPA data were projected for 2032, the most representative year available in the EPA dataset. NHTSA used the estimates of county-level VMT from the NEI only to allocate nationwide total emissions to counties and not to calculate the county-level emissions directly. The estimates of nationwide total emissions are based on the national VMT data used in the CAFE Model.

NHTSA used the county-level VMT allocations, expressed as the fractions of national VMT that take place within each county, to derive the county-level emissions from the estimates of nationwide total emissions. Emissions for each nonattainment area were then derived by summing the emissions for the counties included in each nonattainment area. Many nonattainment areas comprise one or more counties, and because county-level emissions are aggregated for each nonattainment area, uncertainties in the county-level emissions estimates carry over to estimates of emissions within each nonattainment area. Over time, some counties will grow faster than others, and VMT growth rates will vary. EPA's estimate of county-level VMT allocation is constant over time, which introduces some uncertainty into the nonattainment-area-level VMT estimates for future years. Additional uncertainties that affect county-level exhaust emissions estimates arise from differences among counties or nonattainment areas in factors other than VMT, such as ambient temperatures, vehicle age distributions, vehicle speed distributions, vehicle inspection and maintenance programs, and fuel composition requirements. Because of these uncertainties, emissions in a particular nonattainment area may be overestimated or underestimated. The overall uncertainty increases as the projection period lengthens, such as for analysis year 2050 compared with analysis year 2035.

The geographic definitions of nonattainment and maintenance areas that NHTSA uses in this document came from the current *Green Book Nonattainment Areas for Criteria Pollutants* (EPA 2024d). For nonattainment areas that include portions of counties, NHTSA calculated the proportion of county population that falls within the nonattainment area boundary as a proxy for the proportion of county VMT within the nonattainment area boundary. Partial county boundaries were taken from geographic information system (GIS) files based on 2024 nonattainment area definitions. The population estimates utilized projections to the 2035 and 2050 analysis years at 1-kilometer resolution across the country (Gao 2020). This method assumes that per-capita VMT is constant in each county so that the proportion of countywide VMT in the partial county area reflects the proportion of total county population residing in that same area. This technique for allocating VMT to partial counties involves some additional uncertainty because actual VMT per capita can vary according to the characteristics of land use and urban development. For example, VMT per capita can be lower than average in urban centers with mass transit, and higher than average in suburban and rural areas where people tend to drive more (Cook et al. 2006; Eno Center for Transportation 2019).

The method for allocation of emissions to nonattainment areas is the same for all geographic areas and pollutants. Table C.5.5-1 lists the current nonattainment and maintenance areas for ozone and PM_{2.5} and their status and general conformity threshold. Areas for ozone and PM_{2.5} are listed because these are the pollutants for which nonattainment areas encompass the largest human populations. For the complete list of nonattainment and maintenance areas for all pollutants and standards, see Appendix D, *Air Quality Modelling and Health Impacts Assessment*.

Table C.5.5-1. Nonattainment and Maintenance Areas for Ozone and PM2.5

Nonattainment/Maintenance Area	Pollutant	Status ^a	General Conformity Threshold ^b
Allegan County, MI	Ozone	Moderate	100
Allentown-Bethlehem-Easton, PA	Ozone	Marginal	50
Amador County, CA	Ozone	Marginal	100
Atlanta, GA	Ozone	Maintenance	100
Baltimore, MD	Ozone	Moderate	50
Baton Rouge, LA	Ozone	Maintenance	100
Berrien County, MI	Ozone	Moderate	100
Butte County, CA	Ozone	Marginal	100
Calaveras County, CA	Ozone	Marginal	100
Charlotte-Rock Hill, NC-SC	Ozone	Maintenance	100
Chicago, IL-IN-WI	Ozone	Moderate	100
Chico (Butte County), CA	Ozone	Marginal	100
Cincinnati, OH-KY (KY Portion)	Ozone	Maintenance	100
Cincinnati, OH-KY (OH Portion)	Ozone	Maintenance	100
Cleveland, OH	Ozone	Moderate	100
Columbus, OH	Ozone	Maintenance	100
Dallas-Fort Worth, TX	Ozone	Severe 15	25
Denver-Boulder-Greeley-Ft. Collins-Loveland, CO	Ozone	Severe 15	25
Detroit, MI	Ozone	Maintenance	100
Door County, WI	Ozone	Maintenance	100
Dukes County, MA	Ozone	Marginal	50
El Paso-Las Cruces, TX-NM	Ozone	Marginal	100
Greater Connecticut, CT	Ozone	Serious	50
Houston-Galveston-Brazoria, TX	Ozone	Severe 15	25
Imperial County, CA	Ozone	Moderate	100
Jamestown, NY	Ozone	Marginal	50
Kern County (Eastern Kern), CA	Ozone	Severe 15	25
Knoxville, TN	Ozone	Maintenance	100
Lancaster, PA	Ozone	Marginal	50
Las Vegas, NV	Ozone	Moderate	100
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone	Severe 15	25
Los Angeles-South Coast Air Basin, CA	Ozone	Extreme	10
Louisville, KY-IN (IN Portion)	Ozone	Maintenance	100
Louisville, KY-IN (KY Portion)	Ozone	Moderate	100
Manitowoc County, WI	Ozone	Maintenance	100
Mariposa County, CA	Ozone	Moderate	100
Memphis, TN-MS-AR	Ozone	Maintenance	100
Milwaukee, WI	Ozone	Moderate	100

Nonattainment/Maintenance Area	Pollutant	Status ^a	General Conformity Threshold ^b
Morongo Band of Mission Indians, CA	Ozone	Severe 15	25
Muskegon County, MI	Ozone	Moderate	100
Nevada County (Western part), CA	Ozone	Serious	50
New York-N. New Jersey-Long Island, NY-NJ-CT	Ozone	Severe 15	25
Northern Wasatch Front, UT	Ozone	Moderate	100
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone	Moderate	100
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone	Moderate	50
Phoenix-Mesa, AZ	Ozone	Moderate	100
Pittsburgh-Beaver Valley, PA	Ozone	Marginal	50
Reading, PA	Ozone	Marginal	50
Riverside County (Coachella Valley), CA	Ozone	Extreme	10
Sacramento Metro, CA	Ozone	Severe 15	25
San Antonio, TX	Ozone	Moderate	100
San Diego County, CA	Ozone	Severe 15	25
San Francisco Bay Area, CA	Ozone	Marginal	100
San Joaquin Valley, CA	Ozone	Extreme	10
San Luis Obispo (Eastern San Luis Obispo), CA	Ozone	Marginal	100
Seaford, DE	Ozone	Marginal	50
Sheboygan County, WI	Ozone	Moderate	100
Southern Wasatch Front, UT	Ozone	Marginal	100
St. Louis, MO-IL	Ozone	Moderate	100
Sutter Buttes, CA	Ozone	Marginal	100
Tuolumne County, CA	Ozone	Marginal	100
Tuscan Buttes, CA	Ozone	Marginal (Rural Transport)	100
Uinta Basin, UT	Ozone	Marginal	100
Upper Green River Basin Area, WY	Ozone	Marginal	100
Ventura County, CA	Ozone	Serious	50
Washington, DC-MD-VA	Ozone	Moderate	50
Yuma, AZ	Ozone	Marginal	100
Allegheny County, PA	PM2.5	Moderate	100
Allentown, PA	PM2.5	Maintenance	100
Birmingham, AL	PM2.5	Maintenance	100
Canton-Massillon, OH	PM2.5	Maintenance	100
Charleston, WV	PM2.5	Maintenance	100
Chico, CA	PM2.5	Maintenance	100
Cleveland, OH	PM2.5	Maintenance	100
Delaware County, PA	PM2.5	Maintenance	100
Detroit-Ann Arbor, MI	PM2.5	Maintenance	100
Fairbanks, AK	PM2.5	Serious	70

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Nonattainment/Maintenance Area	Pollutant	Status ^a	General Conformity Threshold ^b
Harrisburg-Lebanon-Carlisle-York, PA	PM2.5	Maintenance	100
Imperial County, CA	PM2.5	Moderate	100
Johnstown, PA	PM2.5	Maintenance	100
Klamath Falls, OR	PM2.5	Moderate	100
Knoxville-Sevierville-La Follette, TN	PM2.5	Maintenance	100
Lancaster, PA	PM2.5	Maintenance	100
Lebanon County, PA	PM2.5	Maintenance	100
Liberty-Clairton, PA	PM2.5	Moderate	100
Logan, UT-ID	PM2.5	Maintenance	100
Los Angeles-South Coast Air Basin, CA	PM2.5	Serious	70
Milwaukee-Racine, WI	PM2.5	Maintenance	100
New York-N. New Jersey-Long Island, NY-NJ-CT	PM2.5	Maintenance	100
Nogales, AZ	PM2.5	Maintenance	100
Oakridge, OR	PM2.5	Maintenance	100
Philadelphia-Wilmington, PA-NJ-DE (NJ Portion)	PM2.5	Maintenance	100
Philadelphia-Wilmington, PA-NJ-DE (PA-DE Portion)	PM2.5	Maintenance	100
Pittsburgh-Beaver Valley, PA	PM2.5	Maintenance	100
Plumas County, CA	PM2.5	Serious	70
Provo, UT	PM2.5	Serious	70
Sacramento, CA	PM2.5	Moderate	100
Salt Lake City, UT	PM2.5	Serious	70
San Francisco Bay Area, CA	PM2.5	Moderate	100
San Joaquin Valley, CA	PM2.5	Serious	70
Steubenville-Weirton, OH-WV	PM2.5	Maintenance	100
Tacoma, WA	PM2.5	Maintenance	100
West Central Pinal, AZ	PM2.5	Moderate	100
West Silver Valley, ID	PM2.5	Maintenance	100
Yuba City-Marysville, CA	PM2.5	Maintenance	100

Notes:

^a Pollutants for which the area is designated in nonattainment or maintenance as of January 2024. For nonattainment areas, the status given is the severity classification as defined in 40 CFR 51.1303. Classifications in order of increasing ozone concentration are Marginal, Moderate, Serious, Severe 15, Severe 17, and Extreme. Where an area is nonattainment for more than one standard for the same pollutant, the more restrictive severity classification is shown.

^b Emissions thresholds in tons per year. In ozone nonattainment areas, the thresholds given are for the precursor pollutants VOC or NO_x; in PM2.5 nonattainment areas the thresholds represent primary PM2.5. Where an area is nonattainment for more than one standard for the same pollutant, the lowest applicable threshold is shown. Source: 40 CFR 93.153. These thresholds are provided for information only; a general conformity determination is not required for NHTSA's Proposed Action.

Source: EPA 2024d

NO_x = nitrogen oxides; PM2.5 = particulate matter 2.5 microns or less in diameter; VOC = volatile organic compounds

C.5.6 Allocation of Upstream Emissions to Nonattainment Areas

For liquid and gaseous fuels, upstream emissions are generated when fuels used by motor vehicles are produced, processed, and transported. Upstream emissions are typically divided into four categories: feedstock recovery; feedstock transportation; fuel refining; and fuel transportation, storage, and distribution (TS&D). Feedstock recovery refers to the extraction or production of fuel feedstocks—the materials (e.g., crude oil) that are the main inputs to the refining process. In the case of petroleum, this is the stage of crude-oil extraction. During the next stage, feedstock transportation, crude oil or other feedstocks are shipped to fuel refineries. Fuel refining refers to the processing of crude oil into gasoline and diesel fuel. Fuel refining is the largest source of upstream emissions of criteria pollutants. Depending on the specific fuel and pollutant, fuel refining accounts for between 48 and 87 percent of all upstream emissions per unit of fuel produced and distributed (based on GREET version 2023). Commonly, TS&D refers to the movement of gasoline and diesel from refineries to bulk terminals, storage at bulk terminals, and transportation of fuel from bulk terminals to retail outlets.¹⁵ Emissions of pollutants at each stage are associated with expenditure of energy and with leakage or spillage and evaporation of fuel products. NHTSA has allocated upstream emissions to individual nonattainment areas to provide additional information in its regional air quality analysis to the decision-maker and the public, consistent with previous CAFE EISs (NHTSA 2010, 2012, 2020, 2022) and the heavy-duty fuel efficiency standards EISs (NHTSA 2011, 2016b). NHTSA made a number of assumptions for this analysis because of uncertainty over the accuracy of the allocation of upstream emissions. A similar analysis was performed for upstream emissions from electricity for transportation use, accounting for feedstock production and then electricity generation and transmission using a nationally representative grid mix (see Chapter 3, Section 3.2.2, *Electricity*, for a discussion on the environmental impacts).

To analyze the impacts of the alternatives on individual nonattainment areas, NHTSA allocated projected emissions data from the EPA 2016-based air quality modeling platform (EPA 2022e). These EPA data were projected for 2032, the most representative year available in the EPA dataset. NHTSA allocated changes in nationwide total emissions, for each of the four source categories separately, to individual nonattainment areas. The EPA modeling platform includes estimates of emissions of criteria and toxic pollutants by county and by source category. Because each of the four upstream emissions source categories represents a separate source category in the EPA modeling platform, it is possible to estimate the share of nationwide emissions from each category that occurs within each nonattainment area. This analysis assumes that the share of emissions from feedstock extraction and fuel refining allocated to each nonattainment area does not change over time, which means that emissions for these two source categories are assumed to change uniformly (in percentage terms) across that category nationwide as a result of each alternative.¹⁶ This analysis also assumes that the share of emissions from feedstock and fuel TS&D allocated to each nonattainment area can change over time based on the population forecast for each area.

¹⁵ Emissions that occur while vehicles are being refueled at retail stations are included in estimates of emissions from vehicle operation.

¹⁶ NHTSA incorporated the feedstock recovery and feedstock transportation stages in this EIS. Emissions from the feedstock recovery and feedstock transportation stages are small relative to total upstream and tailpipe emissions and do not have a substantial effect on the EIS results.

C.5.7 Health Impacts

This section describes NHTSA’s approach to providing quantitative estimates of adverse health impacts of conventional air pollutants associated with each CAFE standard and HDPUV FE standard alternative. In this analysis, NHTSA quantified the impacts on human health anticipated to result from the changes in pollutant emissions and related changes in human exposure to air pollutants under each alternative. NHTSA evaluated the changes to several health outcomes associated with criteria pollutant emissions. Table C.5.7-1 lists the health outcomes NHTSA quantified. This method estimates the health impacts of each alternative for each analysis year, expressed as the number of additional or avoided adverse health outcomes per year. Health outcomes are calculated for each primary pollutant (NO_x, directly emitted PM2.5, and SO₂) and expressed as adverse health outcomes increased per ton of increased emissions or as adverse health outcomes avoided per ton of reduced emissions. Each primary pollutant has a specific factor related to its quantifiable health impacts expressed as incidence of impacts per ton of emissions. The general approach to calculating the health outcomes associated with each alternative is to multiply these factors by the estimated annual change in emissions of that pollutant and to sum the results of these calculations for all pollutants. This calculation provides the total health impacts that would result under each CAFE standard and HDPUV FE standard alternative.

Table C.5.7-1. Human Health and Welfare Impacts of PM2.5

Impacts Quantified	Impacts Excluded from Quantification ^a
Adult premature mortality	Chronic bronchitis (age >26)
Infant mortality	Emergency room visits for cardiovascular effects
Acute bronchitis (age 8–12)	Strokes and cerebrovascular disease (age 50–79)
Hospital admissions: respiratory (all ages) and cardiovascular (age >26)	Other respiratory effects (e.g., pulmonary function, non-asthma emergency room visits, nonbronchitis chronic diseases, other ages and populations)
Emergency room visits for asthma	Cardiovascular effects other than those listed
Nonfatal heart attacks (age >18)	Reproductive and developmental effects (e.g., low birth weight, preterm births)
Lower (age 7–14) and upper (age 9–11) respiratory symptoms	Cancer, mutagenicity, and genotoxicity effects
Minor restricted-activity days (age 18–65)	--
Lost work days (age 18–65)	--
Asthma exacerbations (asthmatics age 6–18)	--

Notes:

^a EPA excluded these effects because of insufficient confidence in available data or methods, or because current evidence is only suggestive of causality or there are other significant concerns over the strength of the association.

Source: EPA 2018c.¹⁷ See this source for more information related to the affected ages included in the analysis. For related information see also EPA 2019b and EPA 2022i.

PM2.5 = particulate matter 2.5 microns or less in diameter; EPA = U.S. Environmental Protection Agency

¹⁷ EPA updated this document in 2023. However, the 2023 document does not include mobile source sectors, which are an important part of NHTSA’s analysis. EPA recommended that NHTSA continue to use the older document for consistency until EPA publishes updated information for mobile sources.

In calculating the health impacts of emissions increases, NHTSA estimated only the PM_{2.5}-related human health impacts expected to result from population exposure to atmospheric concentrations of PM_{2.5}. Directly emitted PM_{2.5} is included in the analysis, as are NO_x and SO₂ as precursor emissions that contribute to secondary formation of PM_{2.5} (PM_{2.5} that is not directly emitted but rather is formed by chemical reactions in the atmosphere). NO_x and VOC emissions would also increase ozone formation and the health effects associated with ozone exposure, but there are no incidence-per-ton estimates for NO_x and VOCs because of the complexity of the atmospheric air chemistry and nonlinearities associated with ozone formation. This analysis does not include any health impacts resulting from greater population exposure to other criteria air pollutants and air toxics because there are not enough data available to quantify these impacts.

C.5.7.1 Quantified Health Impacts

The incidence-per-ton factors represent the total human health benefits due to a suite of PM-related health impacts for each ton of emissions reduced. The factors are specific to an individual pollutant and source. The PM_{2.5} incidence-per-ton estimates apply to directly emitted PM_{2.5} or its precursors (NO_x and SO₂). NHTSA followed the incidence-per-ton technique used in EPA's PM_{2.5} NAAQS Regulatory Impact Analysis (RIA) (EPA 2013a), Ozone NAAQS RIA (EPA 2010b), Portland Cement National Emission Standards for Hazardous Air Pollutants RIA (EPA 2010c), NO₂ NAAQS RIA (EPA 2010d), and *Estimating the Benefit per Ton of Reducing PM_{2.5} Precursors from 17 Sectors* (EPA 2018c).^{18,19} NHTSA included additional updates given in Wolfe et al. (2019).

Table C.5.7-1 lists the quantified PM_{2.5}-related benefits captured in those benefit-per-ton estimates, and potential PM_{2.5}-related benefits that were not quantified in this analysis. The benefits estimates use the concentration-response functions²⁰ as reported in the epidemiology literature.²¹

EPA developed national per-ton estimates for selected pollutants emitted through stationary and mobile activity (EPA 2018c;²² Wolfe et al. 2019). Because the per-ton values vary between emissions source and pollutant, the total health impacts were derived by multiplying the stationary per-ton estimates by total upstream emissions and the mobile per-ton estimates by total mobile emissions. NHTSA's estimate of PM_{2.5} benefits is, therefore, based on the total direct PM_{2.5} and PM_{2.5}-related precursor emissions controlled by sector and multiplied by this per-ton value.

¹⁸ EPA refers to this technique as the "benefit per ton" method for estimating the health benefits of reduced emissions, and NHTSA follows this terminology in this appendix. However, this technique applies equally to estimating the additional health outcomes from increased emissions.

¹⁹ EPA updated this document in 2023 for 21 stationary EPA source sectors: https://www.epa.gov/system/files/documents/2021-10/source-apportionment-tsd-oct-2021_0.pdf.

²⁰ Concentration-response functions measure the relationship between exposure to pollution as a cause and specific outcomes as an effect (e.g., the incremental number of hospitalizations that would result from exposure of a population to a specified concentration of an air pollutant over a specified period).

²¹ The complete method for creating the benefit-per-ton estimates used in this analysis is provided in *Estimating the Benefit per Ton of Reducing PM_{2.5} Precursors from 17 Sectors* (EPA 2018c) and Fann et al. (2009). Since the publication of Fann et al. (2009), EPA no longer assumes that there is a threshold in PM-related models of health impacts.

²² EPA updated this document in 2023. However, the 2023 document does not include mobile source sectors, which are an important part of NHTSA's analysis. EPA recommended that NHTSA continue to use the older document for consistency until EPA publishes updated information for mobile sources.

PM-related mortality reductions provide most of the benefit in each benefit-per-ton estimate. EPA's methodology has been updated, see recent *Multi-Pollutant Emissions Standards for Model Years 2027 and Later Light-Duty and Medium-Duty Vehicles* (LMDV rule), but due to time constraints NHTSA was unable to update this analysis for the Final EIS to be consistent with EPA's LMDV rule. The following description of NHTSA's approach is based on EPA's earlier methodology from the *Revised 2023 and Later Model Year Light-Duty Vehicle Greenhouse Gas Emissions Standards* (EPA 2021f). EPA bases its benefits analyses on peer-reviewed studies of air quality and health effects. EPA calculated the premature mortality-related effect coefficients that underlie the benefits-per-ton estimates from an epidemiology study that examined a large population cohort—the American Cancer Society (ACS) cohort (Krewski et al. 2009). EPA estimated the benefits of changes in PM_{2.5} and ozone based on information drawn from EPA's 2019 PM_{2.5} and 2020 Ozone ISAs, which were reviewed by the Clean Air Science Advisory Committee and the public (EPA 2019b, 2020a). These benefit-per-ton estimates are based on the review of the EPA 2009 PM ISA and 2012 PM ISA Provisional Assessment and include a mortality risk estimate derived from the Krewski et al. (2009) analysis of the ACS cohort and nonfatal illnesses consistent with benefits analyses performed for the analysis of the final EPA Tier 3 Vehicle Rule, the final EPA 2012 PM NAAQS Revision, and the final EPA 2017–2025 LD Vehicle GHG Rule.

The benefits of mortality reductions do not occur in the year of analysis. Instead, EPA's method assumes that there is a cessation lag—that is, the benefits are distributed across 20 years following the year of exposure (the emissions analysis year). The benefits-per-ton estimates used in this analysis are based on the mortality health outcome factors given in Table C.5.7-1. The benefit-per-ton estimates are subject to several assumptions and uncertainties:

- The benefit-per-ton estimates incorporate projections of key variables, including atmospheric conditions, source level emissions, population, health baselines, and incomes. These projections introduce some uncertainties to the benefit-per-ton estimates.
- The benefit-per-ton estimates do not reflect local variability in population density, meteorology, exposure, baseline health incidence rates, or other local factors that might lead to an overestimate or underestimate of the actual benefits of controlling fine particulates (PM_{2.5}). Emissions changes and benefit-per-ton estimates alone are not a precise indication of local or regional air quality and health impacts because there could be localized impacts associated with the Proposed Action and alternatives. Because the atmospheric chemistry related to ambient concentrations of PM_{2.5}, ozone, and air toxics is very complex, full-scale photochemical air quality modeling is necessary to control for local variability. Full-scale photochemical modeling provides the needed spatial and temporal detail to estimate changes in ambient levels of these pollutants and their associated impacts on human health and welfare. This modeling provides insight into the uncertainties associated with the use of benefit-per-ton estimates. NHTSA conducted a photochemical modeling analysis for the Final EIS using the same methods as in the CAFE Final EISs (NHTSA 2010, 2012, 2020, 2022) and the HD FE Standards Phases 1 and 2 Final EISs (NHTSA 2011, 2016b). Using the same approach the agency used for the *Final Supplemental Environmental Impact Statement for Model Year 2024–2026 Corporate Average Fuel Economy Standards* (NHTSA 2022) photochemical analysis, NHTSA conducted the photochemical modeling analysis for this EIS using a 12-kilometer (7.5-mile) by 12-kilometer grid cell size in accordance with EPA guidance (EPA 2018f), making use of the most recent EPA emissions information that is based on a 12-kilometer by 12-kilometer grid cell size. Appendix E, *Air Quality Modeling and Health Impacts Assessment*, discusses the photochemical modeling analysis and results.
- NHTSA assumed that all fine particles, regardless of their chemical composition, are equally potent in causing premature mortality. This is an important assumption, because PM_{2.5} produced via

transported precursors emitted from stationary sources might differ significantly from direct PM_{2.5} released from diesel engines and other industrial sources. However, there are no clear scientific grounds to support estimating differential effects by particle type.

- NHTSA assumed that the health impact (concentration-response) function for fine particles is linear within the range of ambient concentrations under consideration. Therefore, the estimates include health benefits from reducing fine particles in areas with varied concentrations of PM_{2.5}, including regions that are in attainment for the fine-particle standard and those that do not meet the standard, down to the lowest modeled concentrations.
- The following uncertainties, among others, are associated with the health impact functions. These uncertainties could underestimate or overestimate benefits.
 - Within-study variability (the precision with which a given study estimates the relationship between air quality changes and health impacts)
 - Across-study variation (different published studies of the same pollutant/health effect relationship typically do not report identical findings, and in some cases the differences are substantial)
 - Application of concentration-response functions nationwide (does not account for any relationship between region and health impact to the extent that there is such a relationship)
 - Extrapolation of impact functions across population (NHTSA assumed that certain health impact functions applied to age ranges broader than those considered in the original epidemiological study)
- NHTSA was unable to quantify several health-benefits categories because of limitations associated with using benefit-per-ton estimates, several of which could be substantial. Because NO_x and VOCs are also precursors to ozone, reductions in NO_x and VOC emissions would also reduce ozone formation and the health effects associated with ozone exposure. Unfortunately, there are no benefit-per-ton estimates because of the complexity of the atmospheric air chemistry and nonlinearities associated with ozone formation. The PM-related benefit-per-ton estimates also do not include any human welfare or ecological benefits because of limitations on the availability of data to quantify these impacts of pollutant emissions.

Because of these uncertainties, it is not possible to draw conclusions about whether the benefit-per-ton values are underestimated or overestimated. For further information about the uncertainties associated with the benefit-per-ton values see Appendix E, Section E.4.3.3, *Attributes, Limitations, and Uncertainties*. The RIA for the 2012 PM_{2.5} NAAQS (EPA 2013a) provides more information about the overall uncertainty in the estimates of the benefits of reducing PM_{2.5} emissions.

Tables C.5.7-2a–e list the incidence-per-short-ton estimates for PM-related health impacts (derived by the process described in this section). For the analysis of direct and indirect impacts (Chapter 4, Section 4.2, *Environmental Consequences*) NHTSA used the values shown here for 2030 (Section C.5.3, *Analysis Periods*) to estimate impacts in 2035 and 2050.

Table C.5.7-2a. Health Impact per Ton of Emissions (incidence per short ton)

Calendar Year	Upstream Emissions (Refineries Sector)			Upstream Emissions (Petroleum Extraction Sector)		
	NO _x	SO _x	PM2.5	NO _x	SO _x	PM2.5
2020						
Premature deaths (Krewski)	0.00082	0.0082	0.039	0.00029	0.0025	0.015
Respiratory emergency room visits	0.00044	0.0045	0.022	0.00014	0.0012	0.0077
Acute bronchitis	0.0012	0.012	0.059	0.00036	0.0032	0.020
Lower respiratory symptoms	0.016	0.16	0.75	0.0046	0.040	0.26
Upper respiratory symptoms	0.023	0.22	1.1	0.0065	0.057	0.36
Minor restricted activity days	0.66	6.7	31	0.18	1.6	10.2
Work loss days	0.11	1.1	5.3	0.031	0.28	1.7
Asthma exacerbation	0.026	0.26	1.2	0.0075	0.065	0.42
Cardiovascular hospital admissions	0.00019	0.0021	0.0095	0.000068	0.00062	0.0036
Respiratory hospital admissions	0.00019	0.0020	0.0089	0.000047	0.00044	0.0025
Non-fatal heart attacks (Peters)	0.00080	0.0082	0.038	0.00028	0.0025	0.014
Non-fatal heart attacks (All other studies)	0.000087	0.00089	0.0041	0.000030	0.00027	0.0016
2025						
Premature deaths (Krewski)	0.00087	0.0088	0.041	0.00029	0.0025	0.015
Respiratory emergency room visits	0.00045	0.0047	0.023	0.00014	0.0012	0.0077
Acute bronchitis	0.0013	0.013	0.061	0.00036	0.0032	0.020
Lower respiratory symptoms	0.016	0.16	0.78	0.0046	0.040	0.26
Upper respiratory symptoms	0.023	0.23	1.1	0.0065	0.057	0.36
Minor restricted activity days	0.67	6.8	32	0.18	1.6	10.2
Work loss days	0.11	1.2	5.4	0.031	0.28	1.7
Asthma exacerbation	0.027	0.28	1.3	0.0075	0.065	0.42
Cardiovascular hospital admissions	0.00022	0.0023	0.010	0.000068	0.00062	0.0036
Respiratory hospital admissions	0.00021	0.0022	0.010	0.000047	0.00044	0.0025
Non-fatal heart attacks (Peters)	0.00088	0.0091	0.041	0.00028	0.0025	0.014
Non-fatal heart attacks (All other studies)	0.000095	0.00099	0.0045	0.000030	0.00027	0.0016
2030						
Premature deaths (Krewski)	0.00094	0.0095	0.044	0.00029	0.0025	0.015
Respiratory emergency room visits	0.00047	0.0049	0.024	0.00014	0.0012	0.0077
Acute bronchitis	0.0014	0.014	0.066	0.00036	0.0032	0.020
Lower respiratory symptoms	0.018	0.18	0.84	0.0046	0.040	0.26
Upper respiratory symptoms	0.025	0.25	1.2	0.0065	0.057	0.36
Minor restricted activity days	0.68	7.0	33	0.18	1.6	10.2
Work loss days	0.12	1.2	5.6	0.031	0.28	1.7
Asthma exacerbation	0.029	0.29	1.4	0.0075	0.065	0.42
Cardiovascular hospital admissions	0.00024	0.0026	0.012	0.000068	0.00062	0.0036
Respiratory hospital admissions	0.00024	0.0025	0.011	0.000047	0.00044	0.0025
Non-fatal heart attacks (Peters)	0.00097	0.010	0.045	0.00028	0.0025	0.014
Non-fatal heart attacks (All other studies)	0.00010	0.0011	0.0049	0.000030	0.00027	0.0016

Notes:

NO_x = nitrogen oxides; PM2.5 = particulate matter 2.5 microns or less in diameter; SO_x = sulfur oxides

Table C.5.7-2b. Health Impact per Ton of Emissions (incidence per short ton)

Calendar Year	Upstream Emissions (Petroleum Transportation Sector)			Upstream Emissions (Fuel TS&D Sector)		
	NO _x	SO _x	PM2.5	NO _x	SO _x	PM2.5
2020						
Premature deaths (Krewski)	0.00037	0.0083	0.028	0.00035	0.0079	0.022
Respiratory emergency room visits	0.00020	0.0045	0.017	0.00018	0.0042	0.014
Acute bronchitis	0.00051	0.0110	0.038	0.00048	0.010	0.031
Lower respiratory symptoms	0.0065	0.141	0.49	0.0060	0.13	0.39
Upper respiratory symptoms	0.009	0.20	0.69	0.009	0.19	0.56
Minor restricted activity days	0.27	6.1	21	0.25	5.6	17
Work loss days	0.046	1.04	3.6	0.042	1.0	3.0
Asthma exacerbation	0.011	0.23	0.81	0.010	0.22	0.66
Cardiovascular hospital admissions	0.00010	0.0022	0.0074	0.00009	0.0021	0.0060
Respiratory hospital admissions	0.00009	0.0021	0.0071	0.00009	0.0020	0.0057
Non-fatal heart attacks (Peters)	0.00038	0.0085	0.029	0.00035	0.0082	0.023
Non-fatal heart attacks (All other studies)	0.000041	0.00092	0.0031	0.000038	0.00089	0.0025
2025						
Premature deaths (Krewski)	0.00036	0.0083	0.028	0.00034	0.0080	0.022
Respiratory emergency room visits	0.00019	0.0045	0.017	0.00018	0.0043	0.014
Acute bronchitis	0.00050	0.0110	0.038	0.00046	0.011	0.031
Lower respiratory symptoms	0.0063	0.14	0.48	0.0059	0.14	0.39
Upper respiratory symptoms	0.009	0.20	0.69	0.008	0.19	0.56
Minor restricted activity days	0.26	6.0	21	0.24	5.7	18
Work loss days	0.04	1.03	3.6	0.041	1.0	3.0
Asthma exacerbation	0.011	0.23	0.81	0.010	0.22	0.66
Cardiovascular hospital admissions	0.00009	0.0022	0.0074	0.00009	0.0021	0.0060
Respiratory hospital admissions	0.00009	0.0021	0.0070	0.00008	0.0020	0.0057
Non-fatal heart attacks (Peters)	0.00036	0.0084	0.029	0.00034	0.0083	0.023
Non-fatal heart attacks (All other studies)	0.000039	0.00091	0.0031	0.000037	0.00091	0.0025
2030						
Premature deaths (Krewski)	0.00033	0.0097	0.031	0.00033	0.0095	0.023
Respiratory emergency room visits	0.00018	0.0053	0.018	0.00017	0.0052	0.015
Acute bronchitis	0.00046	0.0130	0.041	0.00045	0.013	0.031
Lower respiratory symptoms	0.0059	0.17	0.53	0.0057	0.16	0.40
Upper respiratory symptoms	0.0084	0.23	0.75	0.008	0.23	0.57
Minor restricted activity days	0.25	7.2	23	0.24	7.0	18
Work loss days	0.042	1.23	3.9	0.040	1.2	3.0
Asthma exacerbation	0.010	0.28	0.88	0.010	0.27	0.67
Cardiovascular hospital admissions	0.00009	0.0025	0.0080	0.00008	0.0025	0.0061
Respiratory hospital admissions	0.000083	0.0024	0.0077	0.00008	0.0024	0.0058
Non-fatal heart attacks (Peters)	0.00034	0.0098	0.031	0.00033	0.0099	0.024
Non-fatal heart attacks (All other studies)	0.000036	0.00106	0.0033	0.000036	0.0011	0.0025

Notes:

NO_x = nitrogen oxides; PM2.5 = particulate matter 2.5 microns or less in diameter; SO_x = sulfur oxides; TS&D = transportation, storage, and distribution

Table C.5.7-2c. Health Impact per Ton of Emissions (incidence per short ton)

Calendar Year	Upstream Emissions (Electricity Generation Sector)			Vehicle Emissions (On-Road Light-Duty Gas Cars & Motorcycles Sector)		
	NO _x	SO _x	PM2.5	NO _x	SO _x	PM2.5
2020						
Premature deaths (Krewski)	0.00066	0.0045	0.016	0.00075	0.013	0.073
Respiratory emergency room visits	0.00032	0.0022	0.0091	0.00039	0.0076	0.041
Acute bronchitis	0.00085	0.0055	0.021	0.0010	0.020	0.11
Lower respiratory symptoms	0.011	0.070	0.27	0.013	0.25	1.4
Upper respiratory symptoms	0.016	0.10	0.39	0.018	0.35	2.0
Minor restricted activity days	0.46	3.0	12	0.53	11	60
Work loss days	0.077	0.51	2.0	0.090	1.8	10
Asthma exacerbation	0.018	0.12	0.46	0.022	0.42	2.3
Cardiovascular hospital admissions	0.00016	0.0011	0.0040	0.00019	0.0036	0.020
Respiratory hospital admissions	0.00015	0.0011	0.0038	0.00018	0.0034	0.018
Non-fatal heart attacks (Peters)	0.00063	0.0045	0.016	0.00075	0.014	0.076
Non-fatal heart attacks (All other studies)	0.000068	0.00049	0.0017	0.000080	0.0015	0.0082
2025						
Premature deaths (Krewski)	0.00070	0.0048	0.017	0.00075	0.013	0.073
Respiratory emergency room visits	0.00033	0.0023	0.0094	0.00039	0.0076	0.041
Acute bronchitis	0.00089	0.0057	0.022	0.0010	0.020	0.11
Lower respiratory symptoms	0.011	0.073	0.29	0.013	0.25	1.4
Upper respiratory symptoms	0.016	0.10	0.41	0.018	0.35	2.0
Minor restricted activity days	0.46	3.0	12	0.53	11	60
Work loss days	0.077	0.52	2.0	0.090	1.8	10
Asthma exacerbation	0.019	0.12	0.48	0.022	0.42	2.3
Cardiovascular hospital admissions	0.00017	0.0012	0.0044	0.00019	0.0036	0.020
Respiratory hospital admissions	0.00017	0.0012	0.0043	0.00018	0.0034	0.018
Non-fatal heart attacks (Peters)	0.00068	0.0049	0.018	0.00075	0.014	0.076
Non-fatal heart attacks (All other studies)	0.000074	0.00054	0.0019	0.000080	0.0015	0.0082
2030						
Premature deaths (Krewski)	0.00074	0.0051	0.018	0.00075	0.013	0.073
Respiratory emergency room visits	0.00034	0.0024	0.0098	0.00039	0.0076	0.041
Acute bronchitis	0.00096	0.0062	0.024	0.0010	0.020	0.11
Lower respiratory symptoms	0.012	0.079	0.31	0.013	0.25	1.4
Upper respiratory symptoms	0.017	0.11	0.44	0.018	0.35	2.0
Minor restricted activity days	0.46	3.1	12	0.53	11	60
Work loss days	0.078	0.53	2.1	0.090	1.8	10
Asthma exacerbation	0.020	0.13	0.51	0.022	0.42	2.3
Cardiovascular hospital admissions	0.00018	0.0014	0.0048	0.00019	0.0036	0.020
Respiratory hospital admissions	0.00018	0.0013	0.0047	0.00018	0.0034	0.018
Non-fatal heart attacks (Peters)	0.00074	0.0053	0.019	0.00075	0.014	0.076
Non-fatal heart attacks (All other studies)	0.000079	0.00058	0.0021	0.000080	0.0015	0.0082

Notes:

NO_x = nitrogen oxides; PM2.5 = particulate matter 2.5 microns or less in diameter; SO_x = sulfur oxides

Table C.5.7-2d. Health Impact per Ton of Emissions (incidence per short ton)

Calendar Year	Vehicle Emissions (On-Road Light-Duty Gas Trucks Sector)			Vehicle Emissions (On-Road Light-Duty Diesel Sector)		
	NO _x	SO _x	PM2.5	NO _x	SO _x	PM2.5
2020						
Premature deaths (Krewski)	0.00068	0.011	0.061	0.00060	0.031	0.050
Respiratory emergency room visits	0.00035	0.0061	0.035	0.00032	0.019	0.029
Acute bronchitis	0.00096	0.016	0.091	0.00085	0.047	0.075
Lower respiratory symptoms	0.012	0.20	1.2	0.011	0.59	0.95
Upper respiratory symptoms	0.017	0.28	1.7	0.015	0.84	1.35
Minor restricted activity days	0.49	8.5	49	0.44	25	40
Work loss days	0.084	1.4	8.4	0.075	4.3	6.9
Asthma exacerbation	0.020	0.33	1.9	0.018	1.0	1.6
Cardiovascular hospital admissions	0.00017	0.0028	0.016	0.00015	0.0085	0.013
Respiratory hospital admissions	0.00016	0.0027	0.015	0.00015	0.0081	0.013
Non-fatal heart attacks (Peters)	0.00068	0.011	0.064	0.00060	0.033	0.053
Non-fatal heart attacks (All other studies)	0.000073	0.0012	0.0069	0.000065	0.0035	0.0057
2025						
Premature deaths (Krewski)	0.00068	0.011	0.061	0.00060	0.031	0.050
Respiratory emergency room visits	0.00035	0.0061	0.035	0.00032	0.019	0.029
Acute bronchitis	0.00096	0.016	0.091	0.00085	0.047	0.075
Lower respiratory symptoms	0.012	0.20	1.2	0.011	0.59	0.95
Upper respiratory symptoms	0.017	0.28	1.7	0.015	0.84	1.35
Minor restricted activity days	0.49	8.5	49	0.44	25	40
Work loss days	0.084	1.4	8.4	0.075	4.3	6.9
Asthma exacerbation	0.020	0.33	1.9	0.018	1.0	1.6
Cardiovascular hospital admissions	0.00017	0.0028	0.016	0.00015	0.0085	0.013
Respiratory hospital admissions	0.00016	0.0027	0.015	0.00015	0.0081	0.013
Non-fatal heart attacks (Peters)	0.00068	0.011	0.064	0.00060	0.033	0.053
Non-fatal heart attacks (All other studies)	0.000073	0.0012	0.0069	0.000065	0.0035	0.0057
2030						
Premature deaths (Krewski)	0.00068	0.011	0.061	0.00060	0.031	0.050
Respiratory emergency room visits	0.00035	0.0061	0.035	0.00032	0.019	0.029
Acute bronchitis	0.00096	0.016	0.091	0.00085	0.047	0.075
Lower respiratory symptoms	0.012	0.20	1.2	0.011	0.59	0.95
Upper respiratory symptoms	0.017	0.28	1.7	0.015	0.84	1.35
Minor restricted activity days	0.49	8.5	49	0.44	25	40
Work loss days	0.084	1.4	8.4	0.075	4.3	6.9
Asthma exacerbation	0.020	0.33	1.9	0.018	1.0	1.6
Cardiovascular hospital admissions	0.00017	0.0028	0.016	0.00015	0.0085	0.013
Respiratory hospital admissions	0.00016	0.0027	0.015	0.00015	0.0081	0.013
Non-fatal heart attacks (Peters)	0.00068	0.011	0.064	0.00060	0.033	0.053
Non-fatal heart attacks (All other studies)	0.000073	0.0012	0.0069	0.000065	0.0035	0.0057

Sources: EPA 2018c; Fann 2020

NO_x = nitrogen oxides; PM2.5 = particulate matter 2.5 microns or less in diameter; SO_x = sulfur oxides

Table C.5.7-2e. Health Impact per Ton of Emissions (incidence per short ton)

Calendar Year	Vehicle Emissions (HDPUV Gas Sector)			Vehicle Emissions (HDPUV Diesel Sector)		
	NO _x	SO _x	PM2.5	NO _x	SO _x	PM2.5
2020						
Premature deaths (Krewski)	0.00067	0.011	0.060	0.00061	0.031	0.049
Respiratory emergency room visits	0.00035	0.007	0.034	0.00032	0.018	0.028
Acute bronchitis	0.00094	0.017	0.089	0.00086	0.045	0.072
Lower respiratory symptoms	0.012	0.21	1.13	0.011	0.58	0.92
Upper respiratory symptoms	0.017	0.30	1.61	0.015	0.82	1.30
Minor restricted activity days	0.49	8	49	0.44	25	40
Work loss days	0.082	1.5	8.2	0.075	4.2	6.6
Asthma exacerbation	0.020	0.4	1.9	0.018	1.0	1.5
Cardiovascular hospital admissions	0.00017	0.0030	0.016	0.00015	0.0083	0.013
Respiratory hospital admissions	0.00016	0.0029	0.015	0.00015	0.0079	0.012
Non-fatal heart attacks (Peters)	0.00067	0.012	0.063	0.00061	0.032	0.051
Non-fatal heart attacks (All other studies)	0.000072	0.0013	0.0068	0.000066	0.0035	0.0055
2025						
Premature deaths (Krewski)	0.00067	0.011	0.060	0.00061	0.031	0.049
Respiratory emergency room visits	0.00035	0.007	0.034	0.00032	0.018	0.028
Acute bronchitis	0.00094	0.017	0.089	0.00086	0.045	0.072
Lower respiratory symptoms	0.012	0.21	1.13	0.011	0.58	0.92
Upper respiratory symptoms	0.017	0.30	1.61	0.015	0.82	1.30
Minor restricted activity days	0.49	8	49	0.44	25	40
Work loss days	0.082	1.5	8.2	0.075	4.2	6.6
Asthma exacerbation	0.020	0.4	1.9	0.018	1.0	1.5
Cardiovascular hospital admissions	0.00017	0.0030	0.016	0.00015	0.0083	0.013
Respiratory hospital admissions	0.00016	0.0029	0.015	0.00015	0.0079	0.012
Non-fatal heart attacks (Peters)	0.00067	0.012	0.063	0.00061	0.032	0.051
Non-fatal heart attacks (All other studies)	0.000072	0.0013	0.0068	0.000066	0.0035	0.0055
2030						
Premature deaths (Krewski)	0.00067	0.011	0.060	0.00061	0.031	0.049
Respiratory emergency room visits	0.00035	0.007	0.034	0.00032	0.018	0.028
Acute bronchitis	0.00094	0.017	0.089	0.00086	0.045	0.072
Lower respiratory symptoms	0.012	0.21	1.13	0.011	0.58	0.92
Upper respiratory symptoms	0.017	0.30	1.61	0.015	0.82	1.30
Minor restricted activity days	0.49	8	49	0.44	25	40
Work loss days	0.082	1.5	8.2	0.075	4.2	6.6
Asthma exacerbation	0.020	0.4	1.9	0.018	1.0	1.5
Cardiovascular hospital admissions	0.00017	0.0030	0.016	0.00015	0.0083	0.013
Respiratory hospital admissions	0.00016	0.0029	0.015	0.00015	0.0079	0.012
Non-fatal heart attacks (Peters)	0.00067	0.012	0.063	0.00061	0.032	0.051
Non-fatal heart attacks (All other studies)	0.000072	0.0013	0.0068	0.000066	0.0035	0.0055

Sources: EPA 2018c; Fann 2020

NO_x = nitrogen oxides; PM2.5 = particulate matter 2.5 microns or less in diameter; SO_x = sulfur oxides; HDPUV = heavy-duty pickup trucks and vans

The EPA incidence-per-ton estimates shown in Tables C.5.7-2a–e are national averages and account for effects of upstream and downstream emissions separately. However, they do not reflect localized variations in emissions, population characteristics, or exposure to pollutants. Most upstream emissions are released from elevated points (e.g., tall stacks at refineries and power plants) and disperse widely before reaching ground level. The population in a large geographic region could be affected, but pollutant concentrations generally would be relatively low at any one location. On the other hand, concentrations very close to an upstream source that releases emissions at a relatively low elevation could be greater. The actual health impacts from human exposure at any particular location would vary with emissions, local meteorology and topography, and population characteristics.

Unlike most upstream emissions, downstream emissions occur across the roadway system and are released at or near ground level. Populations located near roadways could experience relatively greater pollutant levels because the short distance from the roadway allows less pollutant dispersion to occur. Near-road pollutant levels could be less in areas with greater EV adoption because EVs do not contribute tailpipe emissions. As with upstream emissions, the actual health effects from human exposure at any particular location would vary with emissions, local meteorology and topography, and population characteristics. Because of these variations, the actual change in health impacts per ton of emissions change could be larger or smaller at any particular location than the values in Tables C.5.7-2a–e.

APPENDIX D

Air Quality Nonattainment Area Results

APPENDIX D AIR QUALITY NONATTAINMENT AREA RESULTS

Table D-1. Changes in Emissions from U.S. Passenger Cars and Light Trucks by Nonattainment or Maintenance Area and Alternative, Direct and Indirect Impacts--Particulate Matter (PM_{2.5}), 2035

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Ada County; Boise, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.08	-0.21	-0.25	-0.35	-0.69
Adams, Denver, and Boulder Counties; Denver Metropolitan area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.47	-1.19	-1.46	-2.15	-4.27
Ajo (Pima County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Albuquerque, NM	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.18	-0.47	-0.54	-0.77	-1.51
Allegan County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.02	-0.04	-0.05	-0.07	-0.14
Allegheny County Air Basin: Hazelwood monitor, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.02	-0.04	-0.05	-0.07	-0.13
Allegheny County, PA	PM _{2.5} (2012 Annual)	Nonattainment, Moderate	100	0	-0.22	-0.55	-0.65	-0.95	-1.87
Allegheny County; Liberty, Lincoln, Port Vue, Glassport, Clairton, PA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.02	-0.04
Allegheny, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.04	-0.10	-0.13	-0.20	-0.40
Allentown, PA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	-0.12	-0.31	-0.37	-0.53	-1.04
Allentown-Bethlehem-Easton, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.14	-0.36	-0.42	-0.60	-1.19
Alton Township, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.14	-0.37	-0.55	-0.89	-1.83
Amador County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.02	-0.03	-0.04	-0.07
Anchorage, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.03	-0.08	-0.09	-0.13	-0.26
Anchorage; Eagle River, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.02	-0.03	-0.06
Anne Arundel County and Baltimore County, MD	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.23	-0.58	-0.67	-0.95	-1.87
Archuleta County; Pagosa Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.04	-0.09	-0.13	-0.21	-0.43
Armstrong County; Madison, Mahoning, Boggs, Washington, Pine, PA	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	-0.01	-0.03	-0.04	-0.07	-0.13
Aroostock County; City of Presque Isle, ME	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.01
Atlanta, GA	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-1.21	-3.05	-3.52	-5.02	-9.84
Atlanta, GA	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.92	-2.32	-2.68	-3.81	-7.47
Atlantic City, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.02	-0.03	-0.04	-0.07
Bakersfield, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.14	-0.36	-0.45	-0.67	-1.34
Baltimore, MD	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	-0.60	-1.53	-1.78	-2.56	-5.03
Baltimore, MD	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.61	-1.54	-1.79	-2.57	-5.05

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Baltimore, MD	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.01	-0.01	-0.02
Baton Rouge, LA	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.80	-2.05	-2.89	-4.57	-9.34
Beaver, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	-0.01	-0.01	-0.03
Benton County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.01	-0.01	-0.02	-0.02	-0.04
Berrien County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.05	-0.12	-0.14	-0.20	-0.40
Billings, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.18	-0.46	-0.67	-1.07	-2.21
Billings, MT	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.16	-0.42	-0.63	-1.01	-2.08
Birmingham, AL	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.32	-0.81	-0.97	-1.40	-2.78
Boise-Northern Ada County, ID	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.08	-0.21	-0.25	-0.35	-0.69
Bonner County; The Sandpoint Area, ID	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.01
Boston, MA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.15	-0.39	-0.45	-0.64	-1.25
Boyd County (part), KY	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.21	-0.54	-0.80	-1.29	-2.66
Brooke; Follansbee area, WV	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Brown County: Green Bay, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.01	-0.01	-0.02
Burlington, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01	-0.01
Butte County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.04	-0.10	-0.11	-0.16	-0.32
Calaveras County, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.02	-0.03	-0.04	-0.08
Calaveras County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.02	-0.03	-0.04	-0.08
Campbell-Clermont Counties, KY-OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.02	-0.02	-0.03	-0.05
Canton-Massillon, OH	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.21	-0.54	-0.74	-1.15	-2.34
Central New Hampshire, NH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.04	-0.10	-0.12	-0.17	-0.32
Central Steptoe Valley, NV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	-0.01
Charleston, WV	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.07	-0.18	-0.21	-0.31	-0.61
Charlotte, NC	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.32	-0.80	-0.93	-1.32	-2.59
Charlotte-Rock Hill, NC-SC	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.59	-1.49	-1.72	-2.45	-4.80
Chicago, IL-IN-WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-3.16	-8.09	-10.75	-16.52	-33.42
Chicago-Naperville, IL-IN-WI	Ozone (2008 8-hour)	Maintenance, Serious	100	0	-2.36	-6.02	-7.66	-11.53	-23.13
Chico (Butte County), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.04	-0.10	-0.11	-0.16	-0.32
Chico, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.04	-0.04	-0.06	-0.12

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Chico, CA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.04	-0.09	-0.11	-0.15	-0.30
Cincinnati, OH-KY (OH Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.36	-0.90	-1.04	-1.48	-2.91
Cincinnati, OH-KY (KY Portion)	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	-0.12	-0.30	-0.36	-0.54	-1.07
Cincinnati, OH-KY-IN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.49	-1.24	-1.45	-2.09	-4.11
Clark County; Las Vegas planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.50	-1.27	-1.50	-2.16	-4.25
Cleveland, OH	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.60	-1.52	-1.83	-2.67	-5.29
Cleveland, OH	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.19	-0.47	-0.55	-0.78	-1.53
Cleveland, OH	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-0.25	-0.62	-0.72	-1.02	-2.01
Cleveland-Akron-Lorain, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.62	-1.58	-1.90	-2.77	-5.49
Cleveland-Akron-Lorain, OH	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.58	-1.47	-1.78	-2.59	-5.14
Cochise County; Paul Spur/Douglas planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.01	-0.01	-0.02
Colorado Springs, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.13	-0.34	-0.40	-0.57	-1.12
Columbus, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.40	-1.02	-1.18	-1.69	-3.31
Columbus, OH	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.37	-0.95	-1.10	-1.57	-3.08
Cook County; Lyons Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.04	-0.04	-0.06	-0.12
Cook County; Southeast Chicago, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.46	-1.20	-1.76	-2.83	-5.82
Coshocton County; Franklin Township, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	-0.01
Coso Junction, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.03	-0.08	-0.11	-0.18	-0.38
Cuyahoga County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.19	-0.48	-0.55	-0.78	-1.53
Cuyahoga County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.15	-0.39	-0.45	-0.64	-1.25
Dallas-Fort Worth, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-1.72	-4.36	-5.08	-7.27	-14.29
Dallas-Fort Worth, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-1.69	-4.29	-5.00	-7.15	-14.06
Dane County; Madison sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.11	-0.27	-0.31	-0.44	-0.86
Delaware County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-0.93	-2.39	-3.47	-5.55	-11.41
Denver Metro/North Front Range, CO	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-1.14	-2.91	-3.61	-5.36	-10.70
Denver-Boulder, CO	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.75	-1.90	-2.27	-3.31	-6.55
Denver-Boulder-Greeley-Ft. Collins-Loveland, CO	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-1.00	-2.53	-3.05	-4.45	-8.82
Detroit, MI	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	-1.29	-3.27	-4.02	-5.94	-11.82
Detroit, MI	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.41	-1.05	-1.25	-1.81	-3.58

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Detroit, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.09	-0.22	-0.29	-0.45	-0.91
Detroit-Ann Arbor, MI	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-1.29	-3.28	-4.03	-5.95	-11.84
Doña Ana County; Anthony, NM	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	-0.09	-0.24	-0.35	-0.57	-1.16
Door County, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	0.00	0.00
Door County-Revised, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	-0.01	-0.01	-0.02	-0.02	-0.05
Douglas (Cochise County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.01	-0.01	-0.02
Dukes County, MA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	-0.01	-0.01	-0.01	-0.02
Duluth, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.06	-0.07	-0.11	-0.22
East Chicago, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.45	-1.16	-1.72	-2.76	-5.69
East Helena Area, MT	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	0.00
East Kern County, CA	PM ₁₀ (1987 24-hour)	Nonattainment, Serious	70	0	-0.03	-0.09	-0.13	-0.20	-0.42
El Paso County, TX	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	-0.22	-0.57	-0.73	-1.11	-2.23
El Paso, TX	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.10	-0.26	-0.38	-0.60	-1.24
El Paso-Las Cruces, TX-NM	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.36	-0.91	-1.20	-1.84	-3.73
Eugene-Springfield, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.04	-0.11	-0.13	-0.18	-0.35
Evangeline Parish (Partial), LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Fairbanks, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.01	-0.03	-0.04	-0.06	-0.12
Fairbanks, AK	PM _{2.5} (2006 24-hour)	Nonattainment, Serious	70	0	-0.02	-0.05	-0.06	-0.09	-0.17
Flathead County; Columbia Falls and vicinity, MT	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Flathead County; Kalispell and vicinity, MT	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.02	-0.03	-0.06
Flathead County; Whitefish and vicinity, MT	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Fort Collins, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.04	-0.10	-0.11	-0.16	-0.32
Freehold, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.01	-0.01	-0.02
Freestone and Anderson Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.01	-0.02	-0.03	-0.06
Fremont County; Canon City Area, CO	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.03	-0.03	-0.04	-0.09
Fresno, CA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.14	-0.37	-0.43	-0.63	-1.23
Gila County (part): Payson, AZ	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.01	-0.02

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Giles County, VA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Grant County, NM	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.02	-0.02	-0.03	-0.07
Grants Pass, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.02	-0.02	-0.03	-0.05
Great Falls, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.05	-0.08	-0.13	-0.26
Greater Connecticut, CT	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-0.31	-0.79	-0.91	-1.30	-2.54
Greater Connecticut, CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.31	-0.79	-0.91	-1.30	-2.55
Greeley, CO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.38	-0.99	-1.39	-2.19	-4.47
Hancock County (part): Weirton, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.01	-0.03	-0.04	-0.06	-0.12
Hancock and Brooke Counties (Part); The city of Weirton, WV	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.03	-0.04	-0.06	-0.12
Harrisburg-Lebanon-Carlisle-York, PA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	-0.23	-0.57	-0.66	-0.94	-1.84
Hartford-New Britain-Middletown, CT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.22	-0.55	-0.63	-0.90	-1.77
Hayden (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	-0.01	-0.01	-0.01	-0.02
Hayden, AZ	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.01	-0.02	-0.03
Hayden, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	-0.01	-0.01	-0.02
Henderson-Webster Counties, KY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	-0.01	-0.01	-0.03
Hillsborough County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.01	-0.02	-0.03	-0.05
Hillsborough-Polk County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.01	-0.01	-0.01	-0.03
Houston-Galveston-Brazoria, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-3.64	-9.31	-12.46	-19.21	-38.90
Houston-Galveston-Brazoria, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-3.59	-9.20	-12.32	-19.01	-38.51
Howard County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.09	-0.23	-0.33	-0.54	-1.11
Humphreys County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.01	-0.02	-0.02	-0.03	-0.06
Huntington, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.02	-0.02	-0.03	-0.06
Hutchinson County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.12	-0.31	-0.45	-0.73	-1.51
Imperial County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-0.05	-0.12	-0.14	-0.20	-0.39
Imperial County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.05	-0.12	-0.14	-0.20	-0.39
Imperial County, CA	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	-0.04	-0.10	-0.11	-0.16	-0.31
Imperial County, CA	PM _{2.5} (2012 Annual)	Nonattainment, Moderate	100	0	-0.04	-0.10	-0.11	-0.16	-0.31
Imperial Valley, CA	PM ₁₀ (1987 24-hour)	Maintenance, Serious	100	0	-0.05	-0.12	-0.13	-0.19	-0.37

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Indian Wells, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.04	-0.10	-0.14	-0.22	-0.46
Indiana, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.05	-0.12	-0.16	-0.25	-0.52
Indianapolis, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Indianapolis, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.12	-0.30	-0.34	-0.49	-0.96
Inland Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-0.01	-0.03	-0.04	-0.05	-0.10
Inyo County; Owens Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	-0.01	-0.01	-0.02	-0.04
Jackson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.04	-0.04	-0.06	-0.12
Jackson County; Medford-Ashland (including White City), OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.03	-0.08	-0.10	-0.14	-0.27
Jamestown, NY	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.11	-0.29	-0.40	-0.64	-1.30
Jefferson County, KY	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	-0.01
Jefferson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.04	-0.04	-0.06	-0.12
Jefferson County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.01
Jefferson County; (part) Steubenville & Mingo Junction, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.02	-0.04	-0.06	-0.09	-0.18
Johnstown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.04	-0.11	-0.14	-0.21	-0.43
Josephine County; Grants Pass, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.02	-0.03	-0.05
Juneau; Mendenhall Valley area, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.01
Kern County (Eastern Kern), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.71	-1.83	-2.69	-4.33	-8.92
Kern County (Eastern Kern), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.71	-1.83	-2.69	-4.33	-8.92
King County; Kent, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.02	-0.03
King County; Seattle, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.01	-0.02
Klamath Falls, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.02	-0.03	-0.04	-0.07
Klamath Falls, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.03	-0.04	-0.07
Klamath Falls, OR	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.03	-0.03	-0.04	-0.09
Knoxville, TN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.17	-0.42	-0.49	-0.70	-1.36
Knoxville-Sevierville-La Follette, TN	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.21	-0.52	-0.60	-0.86	-1.68
La Porte County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.03	-0.04	-0.06	-0.11
LaSalle County; Oglesby, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.02	-0.03	-0.06
Lake County (part); Lakeview, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Lake County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.54	-1.38	-1.98	-3.14	-6.42

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Lake County, OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.05	-0.12	-0.14	-0.20	-0.39
Lake County; (part) Eastlake, Timberlake, Lakeline, Willoughby, Mentor, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.02	-0.02	-0.03	-0.07
Lake County; Cities of East Chicago, Hammond, Whiting, and Gary, IN	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.51	-1.30	-1.88	-3.00	-6.16
Lake County; Polson, MT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Lake County; Ronan, MT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Lake Tahoe North Shore, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.01	-0.01	-0.02
Lake Tahoe South Shore, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.02	-0.02	-0.03	-0.07
Lake Tahoe, NV	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.01	-0.02	-0.04
Lancaster, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.10	-0.26	-0.30	-0.42	-0.83
Lancaster, PA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	-0.10	-0.26	-0.30	-0.42	-0.83
Lane County (part); Oakridge, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Lane County; Eugene/Springfield, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.04	-0.11	-0.13	-0.18	-0.35
Las Vegas, NV	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.50	-1.27	-1.50	-2.16	-4.25
Las Vegas, NV	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.50	-1.27	-1.50	-2.16	-4.26
Laurel Area (Yellowstone County), MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	-0.16	-0.42	-0.63	-1.01	-2.08
Lebanon County, PA	PM _{2.5} (2012 Annual)	Maintenance, Moderate	100	0	-0.03	-0.07	-0.08	-0.11	-0.22
Lemont, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.42	-1.09	-1.59	-2.55	-5.23
Liberty-Clairton, PA	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.01	-0.02	-0.04
Lincoln County; Libby and vicinity, MT	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Logan, UT-ID	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	-0.03	-0.07	-0.08	-0.11	-0.22
Longmont, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.05	-0.12	-0.17	-0.26	-0.53
Lorain County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.03	-0.03	-0.05	-0.09
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.86	-2.21	-3.13	-4.95	-10.13
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-0.86	-2.21	-3.13	-4.95	-10.13
Los Angeles-South Coast Air Basin, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-4.12	-10.46	-12.67	-18.55	-36.81
Los Angeles-South Coast Air Basin, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-4.12	-10.45	-12.66	-18.54	-36.80
Los Angeles-South Coast Air Basin, CA	CO (1971 8-hour)	Maintenance, Serious	100	0	-4.12	-10.46	-12.67	-18.55	-36.81
Los Angeles-South Coast Air Basin, CA	NO ₂ (1971 Annual)	Maintenance, Primary	100	0	-4.12	-10.46	-12.67	-18.55	-36.81

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Los Angeles-South Coast Air Basin, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-4.12	-10.46	-12.67	-18.55	-36.81
Los Angeles-South Coast Air Basin, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-4.12	-10.46	-12.67	-18.55	-36.81
Louisville, KY-IN (IN Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.05	-0.12	-0.14	-0.21	-0.40
Louisville, KY-IN (KY Portion)	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.20	-0.52	-0.60	-0.85	-1.67
Lowell, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.05	-0.06	-0.08	-0.16
Lucas County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.31	-0.79	-1.11	-1.76	-3.60
Madison County; Granite City Township and Nameoki Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.16	-0.40	-0.58	-0.94	-1.92
Manchester, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.05	-0.06	-0.09	-0.18
Manitowoc County, WI	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.01	-0.03	-0.04	-0.05	-0.10
Marathon County: Rothschild Sub-city area, Rib Mountain, Weston, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.03	-0.09	-0.10	-0.14	-0.28
Maricopa and Pinal Counties; Phoenix planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.93	-2.35	-2.72	-3.87	-7.58
Marion County: Lawrence, Washington, and Warrant Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.10	-0.25	-0.29	-0.41	-0.80
Mariposa County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.01	-0.02	-0.03
Mariposa County, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.01	-0.02	-0.03
Marshall, WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.02	-0.03	-0.05	-0.11
Medford, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.05	-0.06	-0.08	-0.16
Memphis, TN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.32	-0.80	-0.99	-1.46	-2.90
Memphis, TN-MS-AR	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.38	-0.97	-1.18	-1.74	-3.45
Miami (Gila County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.01	-0.01	-0.03
Miami, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.01	-0.01	-0.02
Miami, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	-0.01	-0.01	-0.02
Millinocket AQCR 109, ME	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.04	-0.10	-0.11	-0.16	-0.31
Milwaukee, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.29	-0.73	-0.84	-1.20	-2.35
Milwaukee, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.13	-0.33	-0.39	-0.55	-1.08
Milwaukee-Racine, WI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.26	-0.65	-0.75	-1.06	-2.08
Minneapolis-St. Paul, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.85	-2.15	-2.61	-3.84	-7.62
Minneapolis-St. Paul, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.83	-2.10	-2.55	-3.75	-7.45

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Missoula, MT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.04	-0.05	-0.06	-0.13
Missoula, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.04	-0.05	-0.07	-0.13
Modesto, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.07	-0.18	-0.22	-0.32	-0.63
Mohave County (part); Bullhead City, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.03	-0.04	-0.06	-0.11
Mono Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.01
Mono County; Mammoth Lake planning area, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.01	-0.03
Morenci (Greenlee County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Morgan County, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.02	-0.02	-0.03	-0.05
Morongo Band of Mission Indians, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	0.00	-0.01	-0.01
Morongo Band of Mission Indians, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	-0.01	-0.01
Morristown, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.01	-0.02	-0.03
Muscatine County, IA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.01	-0.01	-0.03
Muscatine, IA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.02	-0.02	-0.03	-0.05
Muskegon County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.03	-0.08	-0.09	-0.13	-0.26
Muskingum River, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	-0.01	-0.02	-0.04
Nashua, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.05	-0.05	-0.08	-0.15
Nassau County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.01	-0.01	-0.01
Navarro County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	-0.02	-0.03	-0.06
Nevada County (Western part), CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-0.02	-0.05	-0.05	-0.08	-0.15
Nevada County (Western part), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.02	-0.05	-0.05	-0.08	-0.15
New Haven County, CT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.02	-0.04
New Haven-Meriden-Waterbury, CT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.17	-0.43	-0.49	-0.70	-1.37
New Madrid County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
New Manchester-Grant magisterial district in Hancock County, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.03	-0.04	-0.06	-0.13
New York County, NY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.07	-0.17	-0.20	-0.28	-0.54
New York-N. New Jersey-Long Island, NY-NJ-CT	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-2.79	-7.07	-8.28	-11.89	-23.40
New York-N. New Jersey-Long Island, NY-NJ-CT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-1.59	-4.04	-4.77	-6.88	-13.57
New York-N. New Jersey-Long Island, NY-NJ-CT	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-2.85	-7.21	-8.44	-12.12	-23.85

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
New York-Northern New Jersey-Long Island, NY-NJ-CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-2.79	-7.07	-8.28	-11.90	-23.41
Nogales, AZ	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.02	-0.04
Northern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.45	-1.13	-1.37	-2.01	-3.99
Oakridge, OR	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Ogden, UT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.04	-0.05	-0.07	-0.13
Ogden, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.04	-0.05	-0.07	-0.13
Olmsted County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.02	-0.03	-0.05
Olmsted County; City of Rochester, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.02	-0.06	-0.07	-0.10	-0.20
Oneida County: Rhinelander Sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.01	-0.03	-0.03	-0.04	-0.08
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Pekin, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.02	-0.03	-0.04	-0.08
Penns Grove, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Peoria County: Hollis twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	0.00
Peoria, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.02	-0.06	-0.07	-0.10	-0.19
Perth Amboy, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.03	-0.03	-0.05	-0.09
Philadelphia-Camden County, PA-NJ	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.87	-2.23	-3.13	-4.93	-10.07
Philadelphia-Wilmington, PA-NJ-DE (NJ Portion)	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.36	-0.93	-1.18	-1.78	-3.57
Philadelphia-Wilmington, PA-NJ-DE (PA-DE Portion)	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-1.43	-3.67	-4.85	-7.44	-15.04
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-2.13	-5.45	-7.02	-10.63	-21.36
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-3.24	-8.30	-11.24	-17.43	-35.38
Phoenix, AZ	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.91	-2.30	-2.65	-3.77	-7.40
Phoenix-Mesa, AZ	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-0.93	-2.36	-2.72	-3.88	-7.60
Phoenix-Mesa, AZ	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.94	-2.39	-2.76	-3.93	-7.70
Pierce County; Tacoma, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.02	-0.04	-0.08
Pima County; Ajo planning area, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Pima County; Rillito planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.02	-0.02	-0.03	-0.06

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Pinal County (part); West Pinal, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.05	-0.12	-0.14	-0.19	-0.38
Pitkin County; Aspen, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.04	-0.05	-0.07	-0.15
Pittsburgh, PA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.05	-0.13	-0.15	-0.22	-0.43
Pittsburgh-Beaver Valley, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.49	-1.25	-1.51	-2.21	-4.39
Pittsburgh-Beaver Valley, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.45	-1.15	-1.38	-2.02	-4.01
Plumas County, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00	0.00
Polk County, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	-0.01	-0.01	-0.02	-0.04
Portland, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.28	-0.72	-0.84	-1.20	-2.37
Power-Bannock Counties; Fort Hall Indian Reservation, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Power-Bannock Counties; Portneuf Valley Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.04	-0.04	-0.06	-0.12
Provo, UT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.03	-0.09	-0.10	-0.14	-0.28
Provo, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.16	-0.41	-0.51	-0.76	-1.51
Prowers County; Lamar, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01	-0.01	-0.02
Raleigh-Durham, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.38	-0.97	-1.12	-1.59	-3.12
Ramsey County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.15	-0.40	-0.59	-0.95	-1.95
Reading, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.08	-0.20	-0.23	-0.32	-0.63
Reno, NV	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.05	-0.13	-0.15	-0.21	-0.42
Rhineland, WI	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.01	-0.01	-0.02	-0.04
Riverside County (Coachella Valley), CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-0.11	-0.29	-0.33	-0.47	-0.93
Riverside County (Coachella Valley), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-0.11	-0.29	-0.33	-0.47	-0.93
Riverside County; Coachella Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.13	-0.33	-0.38	-0.55	-1.07
Riverside, Los Angeles, Orange, & San Bernardino Counties; South Coast Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-4.10	-10.42	-12.62	-18.49	-36.68
Rosebud County; Lame Deer, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Routt County (part); Steamboat Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.11	-0.29	-0.42	-0.68	-1.39
Rusk and Panola Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.02	-0.04	-0.06	-0.12
Sacramento County, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.24	-3.19	-4.50	-7.11	-14.53
Sacramento Metro, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-1.45	-3.72	-5.13	-8.01	-16.31

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Sacramento Metro, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-1.45	-3.72	-5.13	-8.01	-16.31
Sacramento, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.39	-0.98	-1.20	-1.76	-3.50
Sacramento, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-1.44	-3.69	-5.09	-7.96	-16.20
Salem, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.05	-0.13	-0.15	-0.21	-0.41
Salt Lake City, UT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.13	-0.33	-0.44	-0.69	-1.40
Salt Lake City, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.46	-1.18	-1.43	-2.09	-4.14
Salt Lake County, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.31	-0.79	-0.98	-1.46	-2.91
Salt Lake County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	-0.31	-0.79	-0.98	-1.46	-2.91
San Antonio, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.44	-1.11	-1.29	-1.85	-3.64
San Bernardino County, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.81	-2.08	-2.99	-4.75	-9.74
San Diego County, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.74	-1.87	-2.16	-3.08	-6.04
San Diego County, CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-0.74	-1.87	-2.16	-3.08	-6.03
San Diego, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.74	-1.87	-2.16	-3.07	-6.03
San Francisco Bay Area, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-2.49	-6.36	-8.18	-12.37	-24.87
San Francisco Bay Area, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-2.49	-6.36	-8.18	-12.37	-24.86
San Francisco Bay Area, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-2.49	-6.37	-8.19	-12.38	-24.89
San Francisco-Oakland-San Jose, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-2.41	-6.16	-7.95	-12.05	-24.25
San Joaquin Valley Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-2.55	-6.55	-8.98	-14.01	-28.49
San Joaquin Valley, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-2.55	-6.55	-8.98	-14.01	-28.49
San Joaquin Valley, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-2.55	-6.55	-8.98	-14.01	-28.49
San Joaquin Valley, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-2.55	-6.55	-8.98	-14.01	-28.49
San Joaquin Valley, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-2.55	-6.55	-8.98	-14.01	-28.49
San Luis Obispo (Eastern San Luis Obispo), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.05	-0.12	-0.18	-0.28	-0.58
San Luis Obispo (Eastern part), CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.05	-0.12	-0.18	-0.28	-0.58
San Manuel (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.01	-0.02	-0.04
San Miguel County; Telluride, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.02	-0.03	-0.07
Sanders County (part); Thompson Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Santa Cruz County; Nogales planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.01	-0.02	-0.04

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Seaford, DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.06	-0.15	-0.18	-0.25	-0.49
Seattle-Tacoma, WA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.64	-1.63	-1.88	-2.68	-5.26
Sheboygan County, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.04	-0.04	-0.06	-0.12
Sheridan County; City of Sheridan, WY	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.02	-0.04
Shoreline Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-0.01	-0.03	-0.04	-0.06	-0.11
Shoshone County; City of Pinehurst, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Shoshone County; Pinehurst Expansion Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.02	-0.04
Silver Bow County; Butte, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.02	-0.03	-0.05
Somerville, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.01	-0.01	-0.02
Southern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.16	-0.41	-0.51	-0.76	-1.51
Southwest Indiana, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.01	-0.01	-0.01	-0.02
Spokane County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.07	-0.18	-0.21	-0.30	-0.58
Spokane, WA	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.07	-0.18	-0.21	-0.29	-0.58
Springfield, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.03	-0.07	-0.08	-0.11	-0.21
St. Bernard Parish, LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.26	-0.66	-0.97	-1.57	-3.23
St. Clair, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.03	-0.04	-0.05	-0.10
St. Lawrence County, NY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.01	-0.01	-0.01
St. Louis, MO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.31	-0.80	-1.04	-1.60	-3.22
St. Louis, MO-IL	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.85	-2.16	-2.75	-4.12	-8.26
St. Louis-St. Charles-Farmington, MO-IL	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.73	-1.86	-2.27	-3.34	-6.65
Steubenville, OH-WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.03	-0.08	-0.12	-0.18	-0.37
Steubenville-Weirton, OH-WV	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.04	-0.10	-0.13	-0.20	-0.41
Stockton, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.08	-0.21	-0.25	-0.36	-0.70
Sullivan County, TN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.02	-0.02	-0.03	-0.05
Sutter Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00
Syracuse, NY	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.10	-0.26	-0.30	-0.43	-0.84
Tacoma, WA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.12	-0.30	-0.35	-0.50	-0.98
Tazewell County: Groveland twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.01	-0.02	-0.03
Terre Haute, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.04	-0.04	-0.06	-0.12

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Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Thurston County; Cities of Olympia, Tumwater, and Lacey, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.06	-0.06	-0.09	-0.18
Titus County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Toms River, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	-0.01
Tooele County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	-0.04	-0.10	-0.15	-0.25	-0.51
Trenton, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.04	-0.05	-0.07	-0.14
Trona, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.03	-0.08	-0.11	-0.18	-0.37
Tucson, AZ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.16	-0.40	-0.46	-0.66	-1.29
Tuolumne County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.03	-0.03	-0.05	-0.10
Tuscan Buttes, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00
Tuscan Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	0.00	0.00
Uinta Basin, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.04	-0.10	-0.14	-0.23	-0.46
Union County; LaGrande, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.01
Upper Green River Basin Area, WY	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.06	-0.15	-0.21	-0.34	-0.69
Utah County, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.18	-0.45	-0.56	-0.84	-1.68
Vancouver, WA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.07	-0.17	-0.20	-0.28	-0.55
Ventura County, CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-0.86	-2.21	-3.13	-4.96	-10.14
Ventura County, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.86	-2.21	-3.13	-4.96	-10.14
Vermillion County; Part of Clinton Township, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.01	-0.03
Vigo County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.03	-0.07	-0.09	-0.12	-0.25
Walla Walla County; Wallula, WA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00	-0.01
Waltham, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.03	-0.03	-0.05	-0.09
Warren County, NJ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.01	-0.02	-0.02	-0.03	-0.05
Warren County: Conewago Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.08	-0.21	-0.32	-0.51	-1.05
Warren County: Warren Boro, Pleasant Twp, Glade Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.09	-0.23	-0.33	-0.54	-1.11
Warren, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.09	-0.23	-0.34	-0.55	-1.13
Washington, DC-MD-VA	Ozone (2008 8-hour)	Nonattainment (DC) Maintenance (MD, VA), Marginal	50	0	-1.14	-2.89	-3.33	-4.74	-9.30
Washington, DC-MD-VA	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-1.14	-2.89	-3.33	-4.74	-9.30

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Washington, DC-MD-VA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.14	-0.37	-0.42	-0.60	-1.18
Washoe County; Reno planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.05	-0.13	-0.15	-0.22	-0.42
Wayne County, MI	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.05	-0.14	-0.20	-0.31	-0.64
Wayne County: Boston, Center, Franklin, Wayne & Webster Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.04	-0.04	-0.06	-0.11
West Central Pinal, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.01	-0.02	-0.03
West Silver Valley, ID	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	0.00	-0.01	-0.01	-0.01
Whatcom County, WA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.09	-0.23	-0.33	-0.54	-1.11
Winston-Salem, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.11	-0.27	-0.31	-0.44	-0.86
Worcester, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.04	-0.11	-0.13	-0.19	-0.37
Yakima County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.05	-0.06	-0.08	-0.16
Yakima, WA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.02	-0.02	-0.03	-0.06
Yuba City-Marysville, CA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.04	-0.09	-0.11	-0.15	-0.30
Yuma, AZ	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.02	-0.06	-0.07	-0.10	-0.19
Yuma, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.04	-0.09	-0.11	-0.15	-0.30

Notes:

^a Nonattainment or maintenance status as of 2/1/2024. Source: EPA, The Green Book Nonattainment Areas for Criteria Pollutants; <http://www.epa.gov/airquality/greenbook/>. "--" indicates that no severity classification has been established for the NAAQS pollutant.

^b Emissions thresholds in tons per year. Where the threshold differs by precursor pollutant, the smallest of the precursor thresholds is shown. These thresholds are provided for information only; a general conformity determination is not required for the Proposed Action. Source: 40 CFR 93.853.

^c Positive values are emissions increases; negative values are emissions decreases.

EPA = U.S. Environmental Protection Agency; NAAQS = National Ambient Air Quality Standard; CO = carbon monoxide; NO₂ = nitrogen dioxide; PM2.5 = particulate matter less than 2.5 microns in size; PM10 = particulate matter less than 10 microns in size; SO₂ = sulfur dioxide.

Table D-2. Changes in Emissions from U.S. Passenger Cars and Light Trucks by Nonattainment or Maintenance Area and Alternative, Direct and Indirect Impacts--Particulate Matter (PM_{2.5}), 2050

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Ada County; Boise, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.07	-0.13	-0.07	-0.29	-1.05
Adams, Denver, and Boulder Counties; Denver Metropolitan area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.42	-0.68	-0.52	-1.61	-5.36
Ajo (Pima County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	-0.01
Albuquerque, NM	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.16	-0.29	-0.15	-0.64	-2.34
Allegan County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.03	-0.01	-0.06	-0.21
Allegheny County Air Basin: Hazelwood monitor, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.02	-0.01	-0.05	-0.19
Allegheny County, PA	PM _{2.5} (2012 Annual)	Nonattainment, Moderate	100	0	-0.19	-0.33	-0.21	-0.74	-2.58
Allegheny County; Liberty, Lincoln, Port Vue, Glassport, Clairton, PA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.02	-0.05
Allegheny, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.04	-0.05	-0.06	-0.13	-0.39
Allentown, PA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	-0.11	-0.19	-0.11	-0.43	-1.54
Allentown-Bethlehem-Easton, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.12	-0.22	-0.12	-0.49	-1.76
Alton Township, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.13	-0.13	-0.32	-0.48	-0.98
Amador County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.01	-0.01	-0.03	-0.12
Anchorage, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.03	-0.05	-0.03	-0.11	-0.37
Anchorage; Eagle River, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.02	-0.04
Anne Arundel County and Baltimore County, MD	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.20	-0.37	-0.18	-0.80	-2.92
Archuleta County; Pagosa Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.03	-0.04	-0.07	-0.12	-0.26
Armstrong County; Madison, Mahoning, Boggs, Washington, Pine, PA	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	-0.01	-0.01	-0.02	-0.04	-0.08
Aroostock County; City of Presque Isle, ME	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.02
Atlanta, GA	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-1.06	-1.92	-0.97	-4.17	-15.28
Atlanta, GA	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.80	-1.46	-0.74	-3.17	-11.60
Atlantic City, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.01	-0.01	-0.03	-0.11
Bakersfield, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.13	-0.21	-0.17	-0.50	-1.63
Baltimore, MD	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	-0.53	-0.95	-0.52	-2.09	-7.54
Baltimore, MD	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.53	-0.96	-0.52	-2.10	-7.58
Baltimore, MD	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	-0.01	-0.03
Baton Rouge, LA	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.74	-0.86	-1.54	-2.69	-6.50

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Beaver, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	-0.01	-0.04
Benton County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	-0.01	0.00	-0.02	-0.07
Berrien County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.04	-0.08	-0.04	-0.17	-0.61
Billings, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.17	-0.18	-0.38	-0.60	-1.33
Billings, MT	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.15	-0.15	-0.37	-0.55	-1.12
Birmingham, AL	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.28	-0.49	-0.31	-1.10	-3.84
Boise-Northern Ada County, ID	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.07	-0.13	-0.07	-0.29	-1.05
Bonner County; The Sandpoint Area, ID	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.02
Boston, MA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.13	-0.24	-0.12	-0.53	-1.94
Boyd County (part), KY	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.20	-0.19	-0.47	-0.70	-1.43
Brooke; Follansbee area, WV	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Brown County: Green Bay, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01	-0.02
Burlington, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01	-0.02
Butte County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.03	-0.06	-0.03	-0.13	-0.49
Calaveras County, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.01	-0.01	-0.03	-0.12
Calaveras County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.01	-0.01	-0.03	-0.12
Campbell-Clermont Counties, KY-OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.01	0.00	-0.02	-0.08
Canton-Massillon, OH	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.19	-0.24	-0.37	-0.71	-1.83
Central New Hampshire, NH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.04	-0.06	-0.03	-0.14	-0.51
Central Steptoe Valley, NV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01	-0.03
Charleston, WV	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.06	-0.10	-0.07	-0.24	-0.82
Charlotte, NC	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.28	-0.51	-0.26	-1.10	-4.03
Charlotte-Rock Hill, NC-SC	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.52	-0.95	-0.48	-2.05	-7.51
Chicago, IL-IN-WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-2.88	-3.91	-4.96	-10.73	-30.28
Chicago-Naperville, IL-IN-WI	Ozone (2008 8-hour)	Maintenance, Serious	100	0	-2.12	-3.19	-3.13	-8.06	-24.94
Chico (Butte County), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.03	-0.06	-0.03	-0.13	-0.49
Chico, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.03	-0.01	-0.05	-0.20
Chico, CA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	-0.03	-0.06	-0.03	-0.13	-0.47
Cincinnati, OH-KY (OH Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.31	-0.57	-0.29	-1.23	-4.51

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Cincinnati, OH-KY (KY Portion)	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	-0.10	-0.17	-0.13	-0.40	-1.32
Cincinnati, OH-KY-IN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.43	-0.76	-0.43	-1.69	-6.04
Clark County; Las Vegas planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.45	-0.78	-0.46	-1.75	-6.21
Cleveland, OH	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.53	-0.90	-0.61	-2.06	-7.09
Cleveland, OH	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.16	-0.30	-0.15	-0.65	-2.38
Cleveland, OH	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-0.22	-0.39	-0.20	-0.85	-3.12
Cleveland-Akron-Lorain, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.55	-0.94	-0.63	-2.14	-7.38
Cleveland-Akron-Lorain, OH	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.51	-0.87	-0.59	-2.00	-6.85
Cochise County; Paul Spur/Douglas planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	0.00	-0.01	-0.04
Colorado Springs, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.12	-0.21	-0.12	-0.46	-1.65
Columbus, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.35	-0.64	-0.33	-1.39	-5.06
Columbus, OH	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.33	-0.59	-0.31	-1.29	-4.70
Cook County; Lyons Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.01	-0.05	-0.19
Cook County; Southeast Chicago, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.43	-0.44	-1.02	-1.55	-3.28
Coshocton County; Franklin Township, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	-0.01
Coso Junction, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.03	-0.03	-0.07	-0.10	-0.20
Cuyahoga County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.16	-0.30	-0.15	-0.65	-2.38
Cuyahoga County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.13	-0.24	-0.12	-0.53	-1.94
Dallas-Fort Worth, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-1.51	-2.72	-1.46	-5.95	-21.55
Dallas-Fort Worth, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-1.49	-2.67	-1.44	-5.85	-21.18
Dane County; Madison sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.09	-0.17	-0.08	-0.37	-1.34
Delaware County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-0.86	-0.90	-1.97	-3.10	-6.78
Denver Metro/North Front Range, CO	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-1.02	-1.63	-1.35	-3.93	-12.78
Denver-Boulder, CO	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.66	-1.13	-0.75	-2.58	-8.92
Denver-Boulder-Greeley-Ft. Collins-Loveland, CO	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.89	-1.49	-1.03	-3.44	-11.78
Detroit, MI	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	-1.15	-1.86	-1.45	-4.41	-14.62
Detroit, MI	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.37	-0.63	-0.40	-1.43	-5.00
Detroit, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.08	-0.11	-0.13	-0.30	-0.85
Detroit-Ann Arbor, MI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-1.15	-1.86	-1.46	-4.42	-14.65

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Doña Ana County; Anthony, NM	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.09	-0.09	-0.20	-0.31	-0.64
Door County, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	0.00	0.00
Door County-Revised, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	-0.01	-0.01	0.00	-0.02	-0.07
Douglas (Cochise County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01	-0.04
Dukes County, MA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	-0.01	-0.03
Duluth, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.04	-0.03	-0.09	-0.31
East Chicago, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.42	-0.42	-1.00	-1.50	-3.09
East Helena Area, MT	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	0.00
East Kern County, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.03	-0.03	-0.07	-0.11	-0.25
El Paso County, TX	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.20	-0.29	-0.31	-0.76	-2.29
El Paso, TX	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.09	-0.10	-0.21	-0.34	-0.75
El Paso-Las Cruces, TX-NM	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.32	-0.45	-0.55	-1.21	-3.45
Eugene-Springfield, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.04	-0.07	-0.04	-0.16	-0.58
Evangeline Parish (Partial), LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Fairbanks, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.01	-0.02	-0.02	-0.05	-0.18
Fairbanks, AK	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.02	-0.04	-0.03	-0.09	-0.29
Flathead County; Columbia Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.02
Flathead County; Kalispell and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.01	-0.03	-0.11
Flathead County; Whitefish and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.02
Fort Collins, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.04	-0.06	-0.03	-0.14	-0.50
Freehold, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01	-0.03
Freestone and Anderson Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.01	-0.01	-0.02	-0.05
Fremont County; Canon City Area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.01	-0.04	-0.14
Fresno, CA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.13	-0.23	-0.14	-0.51	-1.80
Gila County (part): Payson, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.04
Giles County, VA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Grant County, NM	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.01	-0.01	-0.03	-0.11

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Grants Pass, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.01	-0.01	-0.02	-0.09
Great Falls, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.02	-0.05	-0.07	-0.14
Greater Connecticut, CT	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-0.27	-0.50	-0.25	-1.08	-3.96
Greater Connecticut, CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.27	-0.50	-0.25	-1.08	-3.96
Greeley, CO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.36	-0.41	-0.73	-1.29	-3.15
Hancock County (part): Weirton, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.01	-0.01	-0.02	-0.04	-0.09
Hancock and Brooke Counties (Part); The city of Weirton, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.02	-0.04	-0.09
Harrisburg-Lebanon-Carlisle-York, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.20	-0.36	-0.18	-0.78	-2.86
Hartford-New Britain-Middletown, CT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.19	-0.35	-0.18	-0.75	-2.75
Hayden (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	0.00	-0.01	-0.03
Hayden, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	0.00	-0.01	-0.05
Hayden, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	-0.01	-0.03
Henderson-Webster Counties, KY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	-0.01	-0.02
Hillsborough County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.01	-0.01	-0.02	-0.06
Hillsborough-Polk County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	-0.01	-0.02
Houston-Galveston-Brazoria, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-3.31	-4.44	-5.85	-12.33	-34.27
Houston-Galveston-Brazoria, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-3.27	-4.36	-5.81	-12.18	-33.70
Howard County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.08	-0.08	-0.20	-0.29	-0.60
Humphreys County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.01	-0.01	-0.01	-0.02	-0.09
Huntington, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.01	-0.01	-0.03	-0.10
Hutchinson County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.11	-0.11	-0.27	-0.40	-0.83
Imperial County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-0.04	-0.08	-0.04	-0.17	-0.61
Imperial County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.04	-0.08	-0.04	-0.17	-0.61
Imperial County, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.03	-0.06	-0.03	-0.14	-0.50
Imperial County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	-0.03	-0.06	-0.03	-0.14	-0.50
Imperial Valley, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.04	-0.07	-0.04	-0.16	-0.59
Indian Wells, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.04	-0.04	-0.07	-0.13	-0.32
Indiana, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.04	-0.05	-0.08	-0.16	-0.42

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Indianapolis, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	-0.01
Indianapolis, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.10	-0.19	-0.10	-0.41	-1.50
Inland Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.01	-0.04	-0.16
Inyo County; Owens Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	-0.01	-0.01	-0.02
Jackson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.02	-0.01	-0.05	-0.18
Jackson County; Medford-Ashland (including White City), OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.03	-0.05	-0.03	-0.12	-0.43
Jamestown, NY	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.10	-0.12	-0.21	-0.38	-0.94
Jefferson County, KY	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	-0.01
Jefferson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.02	-0.01	-0.05	-0.18
Jefferson County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Jefferson County; (part) Steubenville & Mingo Junction, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.02	-0.02	-0.03	-0.06	-0.17
Johnstown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.04	-0.05	-0.06	-0.14	-0.43
Josephine County; Grants Pass, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.01	-0.02	-0.09
Juneau; Mendenhall Valley area, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.03
Kern County (Eastern Kern), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.66	-0.66	-1.56	-2.36	-4.92
Kern County (Eastern Kern), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.66	-0.66	-1.56	-2.36	-4.92
King County; Kent, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	0.00	-0.01	-0.05
King County; Seattle, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.03
Klamath Falls, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.02	-0.01	-0.04	-0.14
Klamath Falls, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.01	-0.04	-0.14
Klamath Falls, OR	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.02	-0.01	-0.04	-0.16
Knoxville, TN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.15	-0.27	-0.13	-0.58	-2.12
Knoxville-Sevierville-La Follette, TN	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.18	-0.33	-0.17	-0.71	-2.62
La Porte County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.02	-0.01	-0.05	-0.18
LaSalle County; Oglesby, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.01	-0.03	-0.09
Lake County (part); Lakeview, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Lake County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.50	-0.56	-1.08	-1.81	-4.21
Lake County, OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.04	-0.08	-0.04	-0.16	-0.60
Lake County; (part) Eastlake, Timberlake, Lakeline, Willoughby, Mentor, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.01	-0.01	-0.03	-0.10

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Lake County; Cities of East Chicago, Hammond, Whiting, and Gary, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.47	-0.50	-1.05	-1.70	-3.80
Lake County; Polson, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Lake County; Ronan, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Lake Tahoe North Shore, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01	-0.04
Lake Tahoe South Shore, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.01	-0.01	-0.03	-0.11
Lake Tahoe, NV	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	0.00	-0.02	-0.06
Lancaster, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.09	-0.16	-0.08	-0.35	-1.29
Lancaster, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.09	-0.16	-0.08	-0.35	-1.29
Lane County (part); Oakridge, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Lane County; Eugene/Springfield, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.04	-0.07	-0.04	-0.16	-0.58
Las Vegas, NV	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.45	-0.78	-0.46	-1.75	-6.21
Las Vegas, NV	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.45	-0.79	-0.46	-1.75	-6.22
Laurel Area (Yellowstone County), MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	-0.15	-0.15	-0.37	-0.55	-1.13
Lebanon County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-0.02	-0.04	-0.02	-0.09	-0.34
Lemont, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.40	-0.41	-0.90	-1.42	-3.08
Liberty-Clairton, PA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.01	-0.02	-0.05
Lincoln County; Libby and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Logan, UT-ID	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.04	-0.02	-0.10	-0.35
Longmont, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.04	-0.06	-0.08	-0.16	-0.43
Lorain County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.02	-0.01	-0.04	-0.14
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.79	-0.89	-1.68	-2.86	-6.75
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-0.79	-0.89	-1.68	-2.86	-6.75
Los Angeles-South Coast Air Basin, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-3.66	-6.12	-4.35	-14.21	-48.28
Los Angeles-South Coast Air Basin, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-3.66	-6.12	-4.34	-14.20	-48.25
Los Angeles-South Coast Air Basin, CA	CO (1971 8-hour)	Maintenance, Serious	100	0	-3.66	-6.12	-4.35	-14.21	-48.28
Los Angeles-South Coast Air Basin, CA	NO ₂ (1971 Annual)	Maintenance, Primary	100	0	-3.66	-6.12	-4.35	-14.21	-48.28
Los Angeles-South Coast Air Basin, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-3.66	-6.12	-4.35	-14.21	-48.28
Los Angeles-South Coast Air Basin, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-3.66	-6.12	-4.35	-14.21	-48.28

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Louisville, KY-IN (IN Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.04	-0.08	-0.04	-0.17	-0.62
Louisville, KY-IN (KY Portion)	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.18	-0.33	-0.16	-0.71	-2.59
Lowell, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.03	-0.02	-0.07	-0.25
Lucas County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.28	-0.32	-0.60	-1.03	-2.46
Madison County; Granite City Township and Nameoki Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.15	-0.15	-0.33	-0.52	-1.13
Manchester, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.04	-0.02	-0.08	-0.28
Manitowoc County, WI	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.01	-0.02	-0.01	-0.04	-0.16
Marathon County: Rothschild Sub-city area, Rib Mountain, Weston, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.03	-0.06	-0.03	-0.12	-0.44
Maricopa and Pinal Counties; Phoenix planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.82	-1.49	-0.75	-3.23	-11.87
Marion County: Lawrence, Washington, and Warrant Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.09	-0.16	-0.08	-0.34	-1.24
Mariposa County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	0.00	-0.01	-0.05
Mariposa County, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	0.00	-0.01	-0.05
Marshall, WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.01	-0.02	-0.03	-0.08
Medford, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.03	-0.02	-0.07	-0.26
Memphis, TN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.28	-0.45	-0.36	-1.08	-3.58
Memphis, TN-MS-AR	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.34	-0.56	-0.41	-1.32	-4.44
Miami (Gila County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	0.00	-0.01	-0.05
Miami, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	0.00	-0.01	-0.04
Miami, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	0.00	-0.01	-0.05
Millinocket AQCR 109, ME	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.03	-0.06	-0.03	-0.13	-0.49
Milwaukee, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.25	-0.46	-0.23	-1.00	-3.66
Milwaukee, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.12	-0.21	-0.11	-0.46	-1.68
Milwaukee-Racine, WI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.22	-0.41	-0.21	-0.88	-3.24
Minneapolis-St. Paul, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.75	-1.25	-0.91	-2.92	-9.85
Minneapolis-St. Paul, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.73	-1.21	-0.89	-2.84	-9.57
Missoula, MT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.03	-0.01	-0.06	-0.22
Missoula, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.03	-0.01	-0.06	-0.22

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Modesto, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.06	-0.11	-0.07	-0.25	-0.85
Mohave County (part); Bullhead City, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.03	-0.01	-0.06	-0.20
Mono Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Mono County; Mammoth Lake planning area, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	0.00	-0.02	-0.06
Morenci (Greenlee County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	-0.01
Morgan County, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.01	-0.01	-0.02	-0.09
Morongo Band of Mission Indians, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	0.00	0.00	-0.02
Morongo Band of Mission Indians, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00	-0.02
Morristown, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	0.00	-0.01	-0.05
Muscatine County, IA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	0.00	-0.01	-0.05
Muscatine, IA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.01	-0.01	-0.02	-0.08
Muskegon County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.03	-0.05	-0.03	-0.11	-0.40
Muskingum River, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.01	-0.01	-0.03
Nashua, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.03	-0.02	-0.07	-0.24
Nassau County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	-0.01	-0.02
Navarro County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	-0.01	-0.02	-0.04
Nevada County (Western part), CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-0.02	-0.03	-0.01	-0.06	-0.23
Nevada County (Western part), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.02	-0.03	-0.01	-0.06	-0.23
New Haven County, CT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	0.00	-0.02	-0.06
New Haven-Meriden-Waterbury, CT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.15	-0.27	-0.14	-0.58	-2.14
New Madrid County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
New Manchester-Grant magisterial district in Hancock County, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.01	-0.02	-0.03	-0.08
New York County, NY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.06	-0.11	-0.05	-0.23	-0.85
New York-N. New Jersey-Long Island, NY-NJ-CT	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-2.45	-4.36	-2.45	-9.63	-34.58
New York-N. New Jersey-Long Island, NY-NJ-CT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-1.40	-2.46	-1.47	-5.49	-19.45
New York-N. New Jersey-Long Island, NY-NJ-CT	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-2.50	-4.45	-2.49	-9.83	-35.30
New York-Northern New Jersey-Long Island, NY-NJ-CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-2.45	-4.37	-2.45	-9.64	-34.60
Nogales, AZ	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	0.00	-0.02	-0.07
Northern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.40	-0.66	-0.48	-1.54	-5.24

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Oakridge, OR	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Ogden, UT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.03	-0.01	-0.06	-0.21
Ogden, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.03	-0.01	-0.06	-0.21
Olmsted County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.01	-0.02	-0.09
Olmsted County; City of Rochester, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.02	-0.04	-0.02	-0.09	-0.32
Oneida County: Rhinelander Sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.01	-0.02	-0.01	-0.04	-0.13
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Pekin, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.02	-0.01	-0.03	-0.12
Penns Grove, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Peoria County: Hollis twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	-0.01
Peoria, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.02	-0.04	-0.02	-0.08	-0.28
Perth Amboy, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.02	-0.01	-0.04	-0.14
Philadelphia-Camden County, PA-NJ	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.80	-0.94	-1.65	-2.92	-7.14
Philadelphia-Wilmington, PA-NJ-DE (NJ Portion)	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.33	-0.49	-0.48	-1.24	-3.83
Philadelphia-Wilmington, PA-NJ-DE (PA-DE Portion)	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-1.30	-1.79	-2.21	-4.87	-13.89
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-1.92	-2.82	-2.97	-7.28	-22.00
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-2.96	-3.83	-5.45	-10.96	-29.52
Phoenix, AZ	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.80	-1.46	-0.73	-3.15	-11.57
Phoenix-Mesa, AZ	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-0.82	-1.50	-0.75	-3.24	-11.89
Phoenix-Mesa, AZ	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.83	-1.52	-0.76	-3.28	-12.04
Pierce County; Tacoma, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.01	-0.02	-0.05
Pima County; Ajo planning area, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Pima County; Rillito planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.01	-0.01	-0.03	-0.10
Pinal County (part); West Pinal, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.04	-0.08	-0.04	-0.17	-0.61
Pitkin County; Aspen, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.02	-0.05	-0.13
Pittsburgh, PA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.05	-0.08	-0.05	-0.18	-0.65
Pittsburgh-Beaver Valley, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.44	-0.73	-0.51	-1.70	-5.80

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Pittsburgh-Beaver Valley, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.40	-0.67	-0.47	-1.55	-5.29
Plumas County, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00	0.00
Polk County, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	-0.01	0.00	-0.02	-0.06
Portland, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.25	-0.45	-0.25	-0.98	-3.53
Power-Bannock Counties; Fort Hall Indian Reservation, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Power-Bannock Counties; Portneuf Valley Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.01	-0.05	-0.19
Provo, UT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.03	-0.06	-0.03	-0.12	-0.44
Provo, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.15	-0.23	-0.19	-0.56	-1.84
Prowers County; Lamar, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.03
Raleigh-Durham, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.33	-0.61	-0.31	-1.32	-4.85
Ramsey County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.14	-0.14	-0.34	-0.51	-1.05
Reading, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.07	-0.12	-0.06	-0.27	-0.98
Reno, NV	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.05	-0.09	-0.04	-0.18	-0.68
Rhineland, WI	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.01	0.00	-0.02	-0.07
Riverside County (Coachella Valley), CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-0.10	-0.18	-0.09	-0.39	-1.44
Riverside County (Coachella Valley), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-0.10	-0.18	-0.09	-0.39	-1.44
Riverside County; Coachella Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.11	-0.21	-0.10	-0.45	-1.66
Riverside, Los Angeles, Orange, & San Bernardino Counties; South Coast Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-3.65	-6.10	-4.33	-14.15	-48.08
Rosebud County; Lame Deer, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Routt County (part); Steamboat Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.10	-0.11	-0.24	-0.38	-0.82
Rusk and Panola Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.01	-0.02	-0.03	-0.07
Sacramento County, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.15	-1.33	-2.39	-4.18	-10.07
Sacramento Metro, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-1.33	-1.65	-2.58	-4.90	-12.65
Sacramento Metro, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-1.33	-1.65	-2.58	-4.90	-12.65
Sacramento, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.35	-0.57	-0.42	-1.34	-4.50
Sacramento, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-1.32	-1.63	-2.57	-4.86	-12.51

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Salem, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.05	-0.08	-0.04	-0.18	-0.65
Salt Lake City, UT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.12	-0.15	-0.22	-0.43	-1.16
Salt Lake City, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.42	-0.70	-0.49	-1.62	-5.53
Salt Lake County, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.28	-0.45	-0.37	-1.07	-3.50
Salt Lake County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	-0.28	-0.45	-0.37	-1.07	-3.50
San Antonio, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.38	-0.69	-0.38	-1.51	-5.45
San Bernardino County, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.74	-0.81	-1.64	-2.68	-6.08
San Diego County, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.65	-1.18	-0.60	-2.56	-9.38
San Diego County, CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-0.65	-1.18	-0.60	-2.56	-9.37
San Diego, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.65	-1.18	-0.60	-2.56	-9.37
San Francisco Bay Area, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-2.25	-3.31	-3.44	-8.50	-25.79
San Francisco Bay Area, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-2.25	-3.30	-3.44	-8.50	-25.76
San Francisco Bay Area, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-2.25	-3.31	-3.45	-8.51	-25.82
San Francisco-Oakland-San Jose, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-2.18	-3.18	-3.39	-8.24	-24.77
San Joaquin Valley Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-2.35	-2.94	-4.48	-8.64	-22.59
San Joaquin Valley, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-2.35	-2.94	-4.48	-8.64	-22.59
San Joaquin Valley, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-2.35	-2.94	-4.48	-8.64	-22.59
San Joaquin Valley, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-2.35	-2.94	-4.48	-8.64	-22.59
San Joaquin Valley, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-2.35	-2.94	-4.48	-8.64	-22.59
San Luis Obispo (Eastern San Luis Obispo), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.04	-0.04	-0.10	-0.15	-0.33
San Luis Obispo (Eastern part), CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.04	-0.04	-0.10	-0.15	-0.33
San Manuel (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	0.00	-0.01	-0.05
San Miguel County; Telluride, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.01	-0.02	-0.06
Sanders County (part); Thompson Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Santa Cruz County; Nogales planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	0.00	-0.02	-0.07
Seaford, DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.05	-0.10	-0.05	-0.21	-0.76
Seattle-Tacoma, WA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.57	-1.03	-0.53	-2.24	-8.18
Sheboygan County, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.02	-0.01	-0.05	-0.19

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Sheridan County; City of Sheridan, WY	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.02	-0.06
Shoreline Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.01	-0.05	-0.17
Shoshone County; City of Pinehurst, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Shoshone County; Pinehurst Expansion Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	0.00	-0.02	-0.06
Silver Bow County; Butte, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.01	-0.02	-0.09
Somerville, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01	-0.03
Southern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.15	-0.23	-0.19	-0.56	-1.84
Southwest Indiana, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	-0.01	-0.03
Spokane County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.06	-0.12	-0.06	-0.25	-0.92
Spokane, WA	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.06	-0.11	-0.06	-0.25	-0.91
Springfield, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.04	-0.02	-0.09	-0.33
St. Bernard Parish, LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.24	-0.24	-0.57	-0.86	-1.79
St. Clair, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.02	-0.01	-0.04	-0.15
St. Lawrence County, NY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	-0.01	-0.03
St. Louis, MO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.28	-0.40	-0.46	-1.06	-3.09
St. Louis, MO-IL	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.76	-1.16	-1.11	-2.90	-9.04
St. Louis-St. Charles-Farmington, MO-IL	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.65	-1.06	-0.81	-2.51	-8.37
Steubenville, OH-WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.03	-0.04	-0.06	-0.11	-0.29
Steubenville-Weirton, OH-WV	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.04	-0.05	-0.06	-0.14	-0.39
Stockton, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.07	-0.13	-0.07	-0.29	-1.06
Sullivan County, TN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.01	-0.01	-0.02	-0.08
Sutter Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00
Syracuse, NY	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.09	-0.17	-0.08	-0.36	-1.31
Tacoma, WA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.10	-0.19	-0.10	-0.41	-1.47
Tazewell County: Groveland twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	0.00	-0.01	-0.05
Terre Haute, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.02	-0.01	-0.05	-0.18
Thurston County; Cities of Olympia, Tumwater, and Lacey, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.04	-0.02	-0.08	-0.29
Titus County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Toms River, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	-0.01

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Tooele County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	-0.04	-0.04	-0.09	-0.13	-0.28
Trenton, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.03	-0.01	-0.06	-0.22
Trona, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.03	-0.03	-0.07	-0.10	-0.20
Tucson, AZ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.14	-0.26	-0.13	-0.56	-2.06
Tuolumne County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.02	-0.01	-0.04	-0.15
Tuscan Buttes, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00
Tuscan Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	0.00	0.00
Uinta Basin, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.04	-0.04	-0.08	-0.14	-0.34
Union County; LaGrande, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.02
Upper Green River Basin Area, WY	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.05	-0.05	-0.12	-0.19	-0.41
Utah County, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.16	-0.25	-0.22	-0.61	-1.94
Vancouver, WA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.06	-0.11	-0.06	-0.24	-0.87
Ventura County, CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-0.80	-0.90	-1.68	-2.88	-6.85
Ventura County, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.80	-0.90	-1.68	-2.88	-6.85
Vermillion County; Part of Clinton Township, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	0.00	-0.01	-0.04
Vigo County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.03	-0.05	-0.03	-0.10	-0.37
Walla Walla County; Wallula, WA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00	-0.01
Waltham, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.02	-0.01	-0.04	-0.15
Warren County, NJ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.01	-0.01	0.00	-0.02	-0.08
Warren County: Conewago Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.08	-0.08	-0.19	-0.28	-0.57
Warren County: Warren Boro, Pleasant Twp, Glade Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.08	-0.08	-0.20	-0.30	-0.62
Warren, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.08	-0.09	-0.20	-0.30	-0.64
Washington, DC-MD-VA	Ozone (2008 8-hour)	Nonattainment (DC) Maintenance (MD, VA), Marginal	50	0	-1.00	-1.82	-0.92	-3.95	-14.47
Washington, DC-MD-VA	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-1.00	-1.82	-0.92	-3.95	-14.48
Washington, DC-MD-VA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.13	-0.23	-0.12	-0.50	-1.84
Washoe County; Reno planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.05	-0.09	-0.04	-0.19	-0.68
Wayne County, MI	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.05	-0.06	-0.11	-0.18	-0.44

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Wayne County: Boston, Center, Franklin, Wayne & Webster Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.02	-0.01	-0.05	-0.18
West Central Pinal, AZ	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	0.00	-0.01	-0.04
West Silver Valley, ID	PM _{2.5} (2012 Annual)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.03
Whatcom County, WA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.08	-0.08	-0.20	-0.29	-0.60
Winston-Salem, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.09	-0.17	-0.08	-0.36	-1.33
Worcester, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.04	-0.07	-0.04	-0.16	-0.59
Yakima County, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.03	-0.02	-0.07	-0.27
Yakima, WA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.01	-0.01	-0.03	-0.09
Yuba City-Marysville, CA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	-0.03	-0.06	-0.03	-0.13	-0.47
Yuma, AZ	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.02	-0.04	-0.02	-0.09	-0.31
Yuma, AZ	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	-0.03	-0.06	-0.03	-0.13	-0.49

Notes:
^a Nonattainment or maintenance status as of 2/1/2024. Source: EPA, The Green Book Nonattainment Areas for Criteria Pollutants; <http://www.epa.gov/airquality/greenbook/>. "--" indicates that no severity classification has been established for the NAAQS pollutant.
^b Emissions thresholds in tons per year. Where the threshold differs by precursor pollutant, the smallest of the precursor thresholds is shown. These thresholds are provided for information only; a general conformity determination is not required for the Proposed Action. Source: 40 CFR 93.853.
^c Positive values are emissions increases; negative values are emissions decreases.
EPA = U.S. Environmental Protection Agency; NAAQS = National Ambient Air Quality Standard; CO = carbon monoxide; NO₂ = nitrogen dioxide; PM_{2.5} = particulate matter less than 2.5 microns in size; PM₁₀ = particulate matter less than 10 microns in size; SO₂ = sulfur dioxide.

Table D-3. Changes in Emissions from U.S. Passenger Cars and Light Trucks by Nonattainment or Maintenance Area and Alternative, Direct and Indirect Impacts--Sulfur Oxides (SO₂), 2035

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Ada County; Boise, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.04	-0.14	-0.16	-0.25	-0.50
Adams, Denver, and Boulder Counties; Denver Metropolitan area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.40	1.42	1.37	1.94	3.65
Ajo (Pima County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Albuquerque, NM	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.10	-0.32	-0.38	-0.57	-1.14
Allegan County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.02	-0.02	-0.04	-0.08
Allegheny County Air Basin: Hazelwood monitor, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.01	0.04	0.03	0.05	0.09
Allegheny County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.11	0.40	0.37	0.51	0.93
Allegheny County; Liberty, Lincoln, Port Vue, Glassport, Clairton, PA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.06	0.06	0.08	0.16
Allegheny, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.17	0.57	0.59	0.85	1.63
Allentown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.06	-0.18	-0.22	-0.33	-0.67
Allentown-Bethlehem-Easton, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.07	-0.21	-0.26	-0.39	-0.78
Alton Township, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	5.93	20.20	20.94	30.43	58.50
Amador County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.02	-0.02	-0.03	-0.06
Anchorage, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	-0.01	-0.02	-0.03	-0.06
Anchorage; Eagle River, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.02	0.02	0.02	0.04
Anne Arundel County and Baltimore County, MD	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.13	-0.39	-0.47	-0.71	-1.42
Archuleta County; Pagosa Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.05	0.18	0.18	0.27	0.51
Armstrong County; Madison, Mahoning, Boggs, Washington, Pine, PA	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.04	0.14	0.14	0.20	0.39
Aroostock County; City of Presque Isle, ME	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Atlanta, GA	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-0.67	-2.06	-2.45	-3.74	-7.44
Atlanta, GA	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.51	-1.56	-1.86	-2.83	-5.65
Atlantic City, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.02	-0.03	-0.05
Bakersfield, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.05	0.19	0.17	0.24	0.43
Baltimore, MD	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	1.02	3.60	3.58	5.12	9.71
Baltimore, MD	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	1.02	3.58	3.56	5.08	9.65
Baltimore, MD	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.04	0.12	0.13	0.18	0.35
Baton Rouge, LA	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	2.88	9.85	10.16	14.74	28.29

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Beaver, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.01	0.01	0.02	0.04
Benton County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	-0.01	-0.01	-0.02	-0.03
Berrien County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.03	-0.08	-0.10	-0.15	-0.29
Billings, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	3.38	11.52	11.94	17.35	33.34
Billings, MT	SO ₂ (2010 1-hour)	Maintenance, --	100	0	3.39	11.54	11.97	17.39	33.43
Birmingham, AL	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.10	0.41	0.35	0.47	0.84
Boise-Northern Ada County, ID	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.04	-0.14	-0.16	-0.25	-0.50
Bonner County; The Sandpoint Area, ID	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Boston, MA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.08	-0.24	-0.29	-0.45	-0.90
Boyd County (part), KY	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.75	2.54	2.63	3.82	7.35
Brooke; Follansbee area, WV	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.04	0.14	0.15	0.22	0.42
Brown County: Green Bay, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01	-0.01
Burlington, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01	-0.01
Butte County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.02	-0.07	-0.08	-0.12	-0.24
Calaveras County, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.02	-0.02	-0.03	-0.06
Calaveras County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.02	-0.02	-0.03	-0.06
Campbell-Clermont Counties, KY-OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.01	-0.01	-0.02	-0.04
Canton-Massillon, OH	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.50	1.72	1.76	2.55	4.88
Central New Hampshire, NH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.02	-0.07	-0.08	-0.12	-0.25
Central Steptoe Valley, NV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Charleston, WV	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.03	-0.09	-0.11	-0.17	-0.34
Charlotte, NC	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.18	-0.55	-0.65	-0.99	-1.97
Charlotte-Rock Hill, NC-SC	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.33	-1.01	-1.20	-1.83	-3.65
Chicago, IL-IN-WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	7.08	24.40	24.90	35.98	68.83
Chicago-Naperville, IL-IN-WI	Ozone (2008 8-hour)	Maintenance, Serious	100	0	3.13	10.96	10.96	15.72	29.89
Chico (Butte County), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.02	-0.07	-0.08	-0.12	-0.24
Chico, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.03	-0.03	-0.05	-0.09
Chico, CA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.06	-0.08	-0.11	-0.23
Cincinnati, OH-KY (OH Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.20	-0.61	-0.72	-1.10	-2.19

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Cincinnati, OH-KY (KY Portion)	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	0.96	3.30	3.40	4.92	9.44
Cincinnati, OH-KY-IN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.76	2.68	2.66	3.80	7.20
Clark County; Las Vegas planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.26	-0.79	-0.94	-1.43	-2.85
Cleveland, OH	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.21	0.82	0.72	0.97	1.75
Cleveland, OH	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.07	-0.22	-0.28	-0.43	-0.87
Cleveland, OH	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-0.10	-0.31	-0.38	-0.59	-1.19
Cleveland-Akron-Lorain, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.22	0.86	0.75	1.01	1.82
Cleveland-Akron-Lorain, OH	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.22	0.85	0.75	1.02	1.86
Cochise County; Paul Spur/Douglas planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01	-0.01	-0.02
Colorado Springs, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.07	-0.21	-0.25	-0.38	-0.77
Columbus, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.18	-0.55	-0.67	-1.03	-2.06
Columbus, OH	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.18	-0.54	-0.65	-1.00	-2.00
Cook County; Lyons Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.03	-0.04	-0.08
Cook County; Southeast Chicago, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	1.57	5.34	5.53	8.04	15.44
Coshocton County; Franklin Township, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.01	0.01	0.02	0.04
Coso Junction, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.10	0.35	0.36	0.52	1.00
Cuyahoga County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.08	-0.22	-0.28	-0.43	-0.87
Cuyahoga County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.07	-0.21	-0.26	-0.40	-0.81
Dallas-Fort Worth, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.75	-2.24	-2.77	-4.26	-8.54
Dallas-Fort Worth, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.74	-2.19	-2.71	-4.17	-8.37
Dane County; Madison sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.06	-0.18	-0.22	-0.33	-0.65
Delaware County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	3.00	10.23	10.59	15.37	29.53
Denver Metro/North Front Range, CO	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	1.40	4.93	4.88	6.98	13.23
Denver-Boulder, CO	CO (1971 8-hour)	Maintenance, Serious	100	0	0.24	0.94	0.81	1.08	1.94
Denver-Boulder-Greeley-Ft. Collins-Loveland, CO	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.26	1.05	0.87	1.14	2.01
Detroit, MI	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	4.14	14.28	14.54	21.00	40.14
Detroit, MI	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.58	2.06	2.04	2.91	5.51
Detroit, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.76	2.60	2.69	3.90	7.48
Detroit-Ann Arbor, MI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	4.14	14.28	14.54	20.99	40.12

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Doña Ana County; Anthony, NM	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.32	1.10	1.14	1.65	3.17
Door County, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	0.00	0.00
Door County-Revised, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	-0.01	-0.01	-0.02	-0.04
Douglas (Cochise County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01	-0.01
Dukes County, MA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	-0.01	-0.01
Duluth, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.08	0.26	0.26	0.38	0.73
East Chicago, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	1.58	5.37	5.56	8.08	15.53
East Helena Area, MT	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	0.00
East Kern County, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.10	0.34	0.35	0.51	0.98
El Paso County, TX	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.26	0.90	0.89	1.28	2.43
El Paso, TX	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.32	1.08	1.12	1.63	3.12
El Paso-Las Cruces, TX-NM	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.55	1.90	1.92	2.77	5.29
Eugene-Springfield, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.07	-0.09	-0.14	-0.27
Evangeline Parish (Partial), LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.01	0.01	0.02	0.03
Fairbanks, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.03	0.10	0.11	0.15	0.29
Fairbanks, AK	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	0.03	0.09	0.09	0.13	0.25
Flathead County; Columbia Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Flathead County; Kalispell and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.02	-0.05
Flathead County; Whitefish and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Fort Collins, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.03	-0.04	-0.06	-0.12
Freehold, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01	-0.01
Freestone and Anderson Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.04	0.13	0.13	0.20	0.37
Fremont County; Canon City Area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.02	-0.03	-0.07
Fresno, CA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.06	-0.19	-0.23	-0.35	-0.71
Gila County (part): Payson, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01	-0.01	-0.02
Giles County, VA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Grant County, NM	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.02	-0.03	-0.05

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Grants Pass, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.01	-0.02	-0.04
Great Falls, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.06	0.21	0.22	0.32	0.61
Greater Connecticut, CT	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-0.17	-0.53	-0.64	-0.97	-1.93
Greater Connecticut, CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.17	-0.53	-0.64	-0.97	-1.93
Greeley, CO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	1.80	6.13	6.34	9.20	17.65
Hancock County (part): Weirton, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.09	0.32	0.33	0.48	0.93
Hancock and Brooke Counties (Part); The city of Weirton, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.09	0.32	0.33	0.48	0.93
Harrisburg-Lebanon-Carlisle-York, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.12	-0.38	-0.46	-0.69	-1.38
Hartford-New Britain-Middletown, CT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.12	-0.37	-0.44	-0.67	-1.33
Hayden (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	0.00	-0.01	-0.01
Hayden, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.01	-0.01	-0.02
Hayden, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	-0.01	-0.01
Henderson-Webster Counties, KY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.01	0.01	0.02	0.03
Hillsborough County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.01	0.02	0.02	0.03	0.05
Hillsborough-Polk County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.01	0.02	0.02	0.04	0.07
Houston-Galveston-Brazoria, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	23.01	78.65	81.12	117.66	225.80
Houston-Galveston-Brazoria, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	23.02	78.68	81.16	117.73	225.94
Howard County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	3.10	10.57	10.96	15.92	30.61
Humphreys County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	-0.01	-0.01	-0.02	-0.04
Huntington, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	-0.01	-0.02	-0.05
Hutchinson County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.76	2.58	2.68	3.89	7.48
Imperial County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-0.03	-0.08	-0.10	-0.15	-0.30
Imperial County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.03	-0.08	-0.10	-0.15	-0.30
Imperial County, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.02	-0.06	-0.08	-0.12	-0.23
Imperial County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	-0.02	-0.06	-0.08	-0.12	-0.23
Imperial Valley, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.03	-0.08	-0.09	-0.14	-0.28
Indian Wells, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.10	0.33	0.34	0.50	0.95
Indiana, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.08	0.28	0.29	0.42	0.80

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Indianapolis, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Indianapolis, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.07	-0.20	-0.24	-0.37	-0.73
Inland Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.03	-0.04	-0.08
Inyo County; Owens Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00	0.00
Jackson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.02	-0.03	-0.04	-0.09
Jackson County; Medford-Ashland (including White City), OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.06	-0.07	-0.10	-0.20
Jamestown, NY	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	1.24	4.23	4.37	6.35	12.20
Jefferson County, KY	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00
Jefferson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.02	-0.03	-0.04	-0.09
Jefferson County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.04	0.14	0.15	0.22	0.42
Jefferson County; (part) Steubenville & Mingo Junction, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.09	0.31	0.32	0.46	0.89
Johnstown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.04	0.15	0.15	0.21	0.41
Josephine County; Grants Pass, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.02	-0.04
Juneau; Mendenhall Valley area, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Kern County (Eastern Kern), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	7.23	24.62	25.52	37.08	71.27
Kern County (Eastern Kern), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	7.23	24.62	25.52	37.08	71.27
King County; Kent, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.01	-0.02
King County; Seattle, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01	-0.01	-0.02
Klamath Falls, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.01	-0.02	-0.04
Klamath Falls, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.02	-0.04
Klamath Falls, OR	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.02	-0.03	-0.05
Knoxville, TN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.09	-0.29	-0.34	-0.52	-1.04
Knoxville-Sevierville-La Follette, TN	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.11	-0.34	-0.40	-0.61	-1.23
La Porte County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.02	-0.03	-0.04	-0.08
LaSalle County; Oglesby, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.02	-0.04
Lake County (part); Lakeview, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Lake County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	1.54	5.25	5.41	7.86	15.08
Lake County, OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.04	-0.05	-0.08	-0.17
Lake County; (part) Eastlake, Timberlake, Lakeline, Willoughby, Mentor, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.02	-0.03	-0.05

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Lake County; Cities of East Chicago, Hammond, Whiting, and Gary, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	1.55	5.29	5.47	7.94	15.25
Lake County; Polson, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Lake County; Ronan, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Lake Tahoe North Shore, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.01	-0.01	-0.02
Lake Tahoe South Shore, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.02	-0.03	-0.05
Lake Tahoe, NV	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.01	-0.02	-0.03
Lancaster, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.06	-0.17	-0.20	-0.31	-0.62
Lancaster, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.06	-0.17	-0.20	-0.31	-0.62
Lane County (part); Oakridge, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Lane County; Eugene/Springfield, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.07	-0.09	-0.14	-0.27
Las Vegas, NV	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.26	-0.79	-0.94	-1.43	-2.85
Las Vegas, NV	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.26	-0.79	-0.94	-1.43	-2.85
Laurel Area (Yellowstone County), MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	3.39	11.54	11.97	17.39	33.43
Lebanon County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-0.01	-0.05	-0.05	-0.08	-0.16
Lemont, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	2.35	8.01	8.30	12.05	23.16
Liberty-Clairton, PA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.02	0.06	0.06	0.08	0.16
Lincoln County; Libby and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Logan, UT-ID	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.05	-0.05	-0.08	-0.17
Longmont, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.04	0.14	0.14	0.20	0.38
Lorain County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.01	-0.02	-0.05
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	7.15	24.37	25.23	36.64	70.38
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	7.15	24.37	25.23	36.64	70.38
Los Angeles-South Coast Air Basin, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	5.47	19.28	19.08	27.26	51.65
Los Angeles-South Coast Air Basin, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	5.47	19.28	19.09	27.26	51.66
Los Angeles-South Coast Air Basin, CA	CO (1971 8-hour)	Maintenance, Serious	100	0	5.47	19.27	19.07	27.24	51.62
Los Angeles-South Coast Air Basin, CA	NO ₂ (1971 Annual)	Maintenance, Primary	100	0	5.47	19.27	19.07	27.24	51.62
Los Angeles-South Coast Air Basin, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	5.47	19.28	19.08	27.25	51.64
Los Angeles-South Coast Air Basin, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	5.47	19.28	19.08	27.25	51.64

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Louisville, KY-IN (IN Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.03	-0.08	-0.10	-0.15	-0.30
Louisville, KY-IN (KY Portion)	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.11	-0.35	-0.42	-0.64	-1.27
Lowell, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.03	-0.04	-0.06	-0.12
Lucas County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	3.17	10.81	11.19	16.26	31.24
Madison County; Granite City Township and Nameoki Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	5.93	20.18	20.92	30.40	58.43
Manchester, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.04	-0.04	-0.07	-0.13
Manitowoc County, WI	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.01	-0.02	-0.02	-0.04	-0.07
Marathon County: Rothschild Sub-city area, Rib Mountain, Weston, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.02	-0.06	-0.07	-0.11	-0.21
Maricopa and Pinal Counties; Phoenix planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.52	-1.59	-1.90	-2.89	-5.76
Marion County: Lawrence, Washington, and Warrant Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.05	-0.17	-0.20	-0.30	-0.60
Mariposa County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.01	-0.01	-0.02
Mariposa County, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.01	-0.01	-0.02
Marshall, WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.16	0.53	0.55	0.80	1.54
Medford, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.03	-0.04	-0.06	-0.12
Memphis, TN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.09	0.34	0.29	0.39	0.70
Memphis, TN-MS-AR	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.05	0.23	0.16	0.18	0.28
Miami (Gila County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.01	-0.01	-0.02
Miami, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01	-0.01	-0.02
Miami, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	-0.01	-0.01	-0.02
Millinocket AQCR 109, ME	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.02	-0.07	-0.08	-0.12	-0.24
Milwaukee, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.16	-0.49	-0.59	-0.89	-1.78
Milwaukee, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.07	-0.23	-0.27	-0.41	-0.82
Milwaukee-Racine, WI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.14	-0.44	-0.52	-0.79	-1.58
Minneapolis-St. Paul, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	2.58	8.92	9.07	13.08	25.00
Minneapolis-St. Paul, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	2.59	8.96	9.11	13.15	25.13
Missoula, MT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.03	-0.03	-0.05	-0.10
Missoula, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.03	-0.03	-0.05	-0.10

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Modesto, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.07	-0.09	-0.14	-0.29
Mohave County (part); Bullhead City, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.02	-0.03	-0.05
Mono Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Mono County; Mammoth Lake planning area, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.01	-0.02
Morenci (Greenlee County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Morgan County, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.01	-0.01	-0.02	-0.04
Morongo Band of Mission Indians, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	0.00	0.00	-0.01
Morongo Band of Mission Indians, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00	-0.01
Morristown, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.01	-0.01	-0.02
Muscatine County, IA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.01	-0.01	-0.02
Muscatine, IA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	-0.01	-0.02	-0.04
Muskegon County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.02	-0.05	-0.06	-0.09	-0.18
Muskingum River, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.03	0.09	0.09	0.13	0.26
Nashua, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.03	-0.04	-0.06	-0.11
Nassau County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	-0.01	-0.01
Navarro County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.04	0.12	0.13	0.18	0.35
Nevada County (Western part), CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-0.01	-0.03	-0.04	-0.06	-0.11
Nevada County (Western part), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.01	-0.03	-0.04	-0.06	-0.11
New Haven County, CT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.01	-0.03
New Haven-Meriden-Waterbury, CT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.09	-0.29	-0.34	-0.52	-1.04
New Madrid County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
New Manchester-Grant magisterial district in Hancock County, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.10	0.34	0.36	0.52	0.99
New York County, NY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.04	-0.11	-0.14	-0.21	-0.41
New York-N. New Jersey-Long Island, NY-NJ-CT	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-1.08	-3.18	-4.00	-6.18	-12.45
New York-N. New Jersey-Long Island, NY-NJ-CT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.43	-1.18	-1.61	-2.55	-5.21
New York-N. New Jersey-Long Island, NY-NJ-CT	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-1.12	-3.29	-4.12	-6.37	-12.84
New York-Northern New Jersey-Long Island, NY-NJ-CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-1.08	-3.18	-4.00	-6.19	-12.46
Nogales, AZ	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.01	-0.03
Northern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	2.40	8.24	8.44	12.22	23.40

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Oakridge, OR	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Ogden, UT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.03	-0.03	-0.05	-0.10
Ogden, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.03	-0.03	-0.05	-0.10
Olmsted County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.02	-0.04
Olmsted County; City of Rochester, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.04	-0.05	-0.08	-0.15
Oneida County: Rhinelander Sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.01	-0.02	-0.02	-0.03	-0.06
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Pekin, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.01	-0.02	-0.03	-0.05
Penns Grove, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Peoria County: Hollis twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	0.00
Peoria, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.02	0.07	0.07	0.10	0.19
Perth Amboy, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.02	-0.02	-0.03	-0.06
Philadelphia-Camden County, PA-NJ	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.97	3.34	3.41	4.93	9.43
Philadelphia-Wilmington, PA-NJ-DE (NJ Portion)	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.05	0.20	0.15	0.18	0.30
Philadelphia-Wilmington, PA-NJ-DE (PA-DE Portion)	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	2.49	8.61	8.74	12.60	24.07
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	2.35	8.23	8.19	11.73	22.27
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	9.01	30.90	31.70	45.90	87.94
Phoenix, AZ	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.51	-1.56	-1.85	-2.82	-5.62
Phoenix-Mesa, AZ	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-0.52	-1.60	-1.91	-2.90	-5.78
Phoenix-Mesa, AZ	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.53	-1.62	-1.93	-2.93	-5.85
Pierce County; Tacoma, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.07	0.07	0.11	0.20
Pima County; Ajo planning area, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Pima County; Rillito planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.02	-0.02	-0.05
Pinal County (part); West Pinal, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.03	-0.08	-0.09	-0.14	-0.29
Pitkin County; Aspen, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.01	0.01	0.01	0.02
Pittsburgh, PA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.02	-0.04	-0.06	-0.12
Pittsburgh-Beaver Valley, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.22	0.84	0.76	1.05	1.92

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Pittsburgh-Beaver Valley, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.22	0.84	0.77	1.06	1.96
Plumas County, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00	0.00
Polk County, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	-0.01	-0.01	-0.01	-0.03
Portland, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.09	-0.27	-0.35	-0.54	-1.10
Power-Bannock Counties; Fort Hall Indian Reservation, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Power-Bannock Counties; Portneuf Valley Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.03	-0.04	-0.09
Provo, UT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.02	-0.06	-0.07	-0.11	-0.21
Provo, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	1.98	6.77	6.98	10.13	19.44
Prowers County; Lamar, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.01
Raleigh-Durham, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.21	-0.66	-0.78	-1.19	-2.37
Ramsey County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	2.96	10.08	10.45	15.19	29.20
Reading, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.04	-0.12	-0.14	-0.22	-0.44
Reno, NV	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.03	-0.09	-0.10	-0.16	-0.32
Rhineland, WI	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.01	-0.01	-0.02	-0.03
Riverside County (Coachella Valley), CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-0.06	-0.20	-0.23	-0.35	-0.71
Riverside County (Coachella Valley), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-0.06	-0.20	-0.23	-0.35	-0.71
Riverside County; Coachella Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.07	-0.22	-0.27	-0.41	-0.81
Riverside, Los Angeles, Orange, & San Bernardino Counties; South Coast Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	5.48	19.30	19.11	27.30	51.74
Rosebud County; Lame Deer, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Routt County (part); Steamboat Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.63	2.14	2.21	3.22	6.18
Rusk and Panola Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.04	0.04	0.06	0.12
Sacramento County, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	10.70	36.48	37.74	54.81	105.30
Sacramento Metro, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	10.59	36.14	37.34	54.20	104.08
Sacramento Metro, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	10.59	36.14	37.34	54.20	104.08
Sacramento, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.23	0.85	0.80	1.11	2.07
Sacramento, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	10.60	36.16	37.37	54.25	104.16

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Salem, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.03	-0.09	-0.10	-0.16	-0.31
Salt Lake City, UT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	2.58	8.78	9.09	13.20	25.36
Salt Lake City, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	2.39	8.20	8.40	12.16	23.29
Salt Lake County, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	2.47	8.46	8.71	12.63	24.22
Salt Lake County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	2.47	8.46	8.71	12.63	24.22
San Antonio, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.24	0.91	0.83	1.15	2.13
San Bernardino County, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	7.17	24.45	25.31	36.77	70.65
San Diego County, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.41	-1.26	-1.50	-2.29	-4.56
San Diego County, CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-0.41	-1.26	-1.50	-2.29	-4.56
San Diego, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.41	-1.26	-1.50	-2.28	-4.55
San Francisco Bay Area, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	10.02	34.42	35.29	51.07	97.84
San Francisco Bay Area, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	10.03	34.42	35.29	51.08	97.85
San Francisco Bay Area, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	10.02	34.41	35.28	51.06	97.82
San Francisco-Oakland-San Jose, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	10.07	34.56	35.46	51.34	98.37
San Joaquin Valley Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	17.97	61.35	63.37	91.98	176.60
San Joaquin Valley, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	17.97	61.35	63.37	91.98	176.60
San Joaquin Valley, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	17.97	61.35	63.37	91.98	176.60
San Joaquin Valley, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	17.97	61.35	63.37	91.98	176.60
San Joaquin Valley, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	17.97	61.35	63.37	91.98	176.60
San Luis Obispo (Eastern San Luis Obispo), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.82	2.81	2.91	4.23	8.12
San Luis Obispo (Eastern part), CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.82	2.81	2.91	4.23	8.12
San Manuel (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.01	-0.01	-0.03
San Miguel County; Telluride, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.19	0.66	0.68	0.99	1.90
Sanders County (part); Thompson Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Santa Cruz County; Nogales planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.01	-0.01	-0.03
Seaford, DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.03	-0.10	-0.12	-0.19	-0.37
Seattle-Tacoma, WA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.34	-1.02	-1.23	-1.87	-3.74
Sheboygan County, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.03	-0.03	-0.05	-0.09

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Sheridan County; City of Sheridan, WY	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01	-0.01	-0.02
Shoreline Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.03	-0.04	-0.08
Shoshone County; City of Pinehurst, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Shoshone County; Pinehurst Expansion Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.01	-0.03
Silver Bow County; Butte, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.02	-0.04
Somerville, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.01	-0.01	-0.02
Southern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	1.98	6.77	6.98	10.13	19.44
Southwest Indiana, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.01	0.01	0.01	0.02
Spokane County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.04	-0.12	-0.14	-0.22	-0.43
Spokane, WA	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.04	-0.12	-0.14	-0.21	-0.43
Springfield, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.04	-0.05	-0.08	-0.16
St. Bernard Parish, LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	2.74	9.32	9.66	14.04	26.99
St. Clair, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.02	-0.02	-0.04	-0.07
St. Lawrence County, NY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	-0.01	-0.01
St. Louis, MO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	5.84	19.93	20.62	29.94	57.51
St. Louis, MO-IL	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	11.83	40.39	41.72	60.56	116.28
St. Louis-St. Charles-Farmington, MO-IL	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	5.75	19.69	20.26	29.36	56.31
Steubenville, OH-WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.32	1.08	1.12	1.63	3.12
Steubenville-Weirton, OH-WV	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.33	1.14	1.18	1.71	3.28
Stockton, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.04	-0.12	-0.14	-0.22	-0.44
Sullivan County, TN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	-0.01	-0.02	-0.04
Sutter Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00
Syracuse, NY	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.06	-0.18	-0.21	-0.32	-0.64
Tacoma, WA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.04	-0.12	-0.15	-0.24	-0.48
Tazewell County: Groveland twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.01	-0.01	-0.03
Terre Haute, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.02	-0.03	-0.04	-0.08
Thurston County; Cities of Olympia, Tumwater, and Lacey, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.04	-0.04	-0.07	-0.14
Titus County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.01
Toms River, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	-0.01

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Tooele County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	2.05	6.98	7.23	10.51	20.20
Trenton, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.03	-0.03	-0.05	-0.10
Trona, CA	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.10	0.35	0.36	0.52	1.00
Tucson, AZ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.09	-0.27	-0.32	-0.49	-0.98
Tuolumne County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.02	-0.02	-0.04	-0.07
Tuscan Buttes, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00
Tuscan Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	0.00	0.00
Uinta Basin, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.12	0.40	0.41	0.59	1.14
Union County; LaGrande, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Upper Green River Basin Area, WY	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	1.70	5.79	6.00	8.72	16.75
Utah County, UT	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	1.98	6.78	7.00	10.15	19.48
Vancouver, WA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.04	-0.11	-0.14	-0.21	-0.41
Ventura County, CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	7.17	24.46	25.32	36.77	70.63
Ventura County, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	7.17	24.46	25.32	36.77	70.63
Vermillion County; Part of Clinton Township, IN	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.01
Vigo County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.03	-0.04	-0.07	-0.13
Walla Walla County; Wallula, WA	PM ₁₀ (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00	0.00
Waltham, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.02	-0.02	-0.04	-0.07
Warren County, NJ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	-0.01	-0.01	-0.02	-0.04
Warren County: Conewago Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	1.22	4.16	4.32	6.27	12.06
Warren County: Warren Boro, Pleasant Twp, Glade Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	1.22	4.16	4.31	6.27	12.05
Warren, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	1.22	4.16	4.31	6.27	12.05
Washington, DC-MD-VA	Ozone (2008 8-hour)	Nonattainment (DC) Maintenance (MD, VA), Marginal	50	0	-0.64	-1.95	-2.33	-3.54	-7.06
Washington, DC-MD-VA	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.64	-1.95	-2.33	-3.54	-7.06
Washington, DC-MD-VA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.08	-0.25	-0.30	-0.45	-0.90
Washoe County; Reno planning area, NV	PM ₁₀ (1987 24-hour)	Maintenance, Serious	100	0	-0.03	-0.09	-0.11	-0.16	-0.32
Wayne County, MI	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.78	2.66	2.75	4.00	7.68

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Wayne County: Boston, Center, Franklin, Wayne & Webster Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.02	-0.03	-0.04	-0.09
West Central Pinal, AZ	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.01	-0.01	-0.02
West Silver Valley, ID	PM _{2.5} (2012 Annual)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.01
Whatcom County, WA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	2.89	9.85	10.21	14.84	28.53
Winston-Salem, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.06	-0.18	-0.21	-0.33	-0.65
Worcester, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.03	-0.08	-0.09	-0.14	-0.28
Yakima County, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.03	-0.04	-0.06	-0.12
Yakima, WA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.01	-0.02	-0.04
Yuba City-Marysville, CA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.06	-0.08	-0.11	-0.23
Yuma, AZ	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.04	-0.05	-0.07	-0.15
Yuma, AZ	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	-0.02	-0.06	-0.08	-0.12	-0.23

Notes:
^a Nonattainment or maintenance status as of 2/1/2024. Source: EPA, The Green Book Nonattainment Areas for Criteria Pollutants; <http://www.epa.gov/airquality/greenbook/>. "--" indicates that no severity classification has been established for the NAAQS pollutant.
^b Emissions thresholds in tons per year. Where the threshold differs by precursor pollutant, the smallest of the precursor thresholds is shown. These thresholds are provided for information only; a general conformity determination is not required for the Proposed Action. Source: 40 CFR 93.853.
^c Positive values are emissions increases; negative values are emissions decreases.
 EPA = U.S. Environmental Protection Agency; NAAQS = National Ambient Air Quality Standard; CO = carbon monoxide; NO₂ = nitrogen dioxide; PM_{2.5} = particulate matter less than 2.5 microns in size; PM₁₀ = particulate matter less than 10 microns in size; SO₂ = sulfur dioxide.

Table D-4. Changes in Emissions from U.S. Passenger Cars and Light Trucks by Nonattainment or Maintenance Area and Alternative, Direct and Indirect Impacts--Sulfur Oxides (SO₂), 2050

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Ada County; Boise, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.06	-0.04	-0.15	-0.50
Adams, Denver, and Boulder Counties; Denver Metropolitan area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.03	0.63	-0.19	1.10	5.17
Ajo (Pima County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Albuquerque, NM	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.05	-0.14	-0.10	-0.35	-1.13
Allegan County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.01	-0.02	-0.07
Allegheny County Air Basin: Hazelwood monitor, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.02	-0.01	0.03	0.14
Allegheny County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	-0.03	0.18	-0.10	0.28	1.47
Allegheny County; Liberty, Lincoln, Port Vue, Glassport, Clairton, PA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.02	0.00	0.05	0.20
Allegheny, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.02	0.26	-0.01	0.49	2.08
Allentown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.03	-0.08	-0.06	-0.20	-0.65
Allentown-Bethlehem-Easton, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.04	-0.10	-0.07	-0.24	-0.76
Alton Township, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.72	8.99	0.11	17.63	73.36
Amador County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.01	0.00	-0.02	-0.06
Anchorage, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.01	-0.01	-0.01	-0.02	-0.04
Anchorage; Eagle River, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.01	0.00	0.01	0.05
Anne Arundel County and Baltimore County, MD	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.06	-0.18	-0.13	-0.43	-1.42
Archuleta County; Pagosa Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.08	0.00	0.15	0.65
Armstrong County; Madison, Mahoning, Boggs, Washington, Pine, PA	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.06	0.00	0.12	0.49
Aroostock County; City of Presque Isle, ME	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Atlanta, GA	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-0.32	-0.92	-0.66	-2.26	-7.41
Atlanta, GA	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.25	-0.70	-0.50	-1.71	-5.62
Atlantic City, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	0.00	-0.02	-0.05
Bakersfield, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	0.08	-0.06	0.12	0.69
Baltimore, MD	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	0.01	1.60	-0.29	2.92	13.11
Baltimore, MD	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	0.00	1.59	-0.30	2.90	13.03
Baltimore, MD	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.05	0.00	0.10	0.44
Baton Rouge, LA	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.31	4.38	-0.04	8.52	35.77

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Beaver, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.01	0.00	0.01	0.05
Benton County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	-0.01	-0.03
Berrien County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.04	-0.03	-0.09	-0.29
Billings, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.40	5.12	0.05	10.04	41.83
Billings, MT	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.41	5.14	0.06	10.08	41.93
Birmingham, AL	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.04	0.18	-0.15	0.25	1.51
Boise-Northern Ada County, ID	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.06	-0.04	-0.15	-0.50
Bonner County; The Sandpoint Area, ID	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Boston, MA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.04	-0.11	-0.08	-0.27	-0.88
Boyd County (part), KY	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.09	1.13	0.01	2.21	9.22
Brooke; Follansbee area, WV	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.06	0.00	0.13	0.53
Brown County: Green Bay, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	-0.01
Burlington, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	-0.01
Butte County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.03	-0.02	-0.07	-0.24
Calaveras County, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.01	-0.01	-0.02	-0.06
Calaveras County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.01	-0.01	-0.02	-0.06
Campbell-Clermont Counties, KY-OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	-0.01	-0.04
Canton-Massillon, OH	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.05	0.76	-0.03	1.47	6.23
Central New Hampshire, NH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.03	-0.02	-0.08	-0.25
Central Steptoe Valley, NV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	-0.02
Charleston, WV	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.02	-0.04	-0.03	-0.10	-0.33
Charlotte, NC	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.09	-0.24	-0.17	-0.60	-1.96
Charlotte-Rock Hill, NC-SC	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.16	-0.46	-0.32	-1.11	-3.65
Chicago, IL-IN-WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.55	10.84	-0.67	20.72	88.68
Chicago-Naperville, IL-IN-WI	Ozone (2008 8-hour)	Maintenance, Serious	100	0	0.07	4.87	-0.75	8.99	39.89
Chico (Butte County), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.03	-0.02	-0.07	-0.24
Chico, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.01	-0.03	-0.10
Chico, CA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.03	-0.02	-0.07	-0.23
Cincinnati, OH-KY (OH Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.10	-0.27	-0.19	-0.66	-2.18

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Cincinnati, OH-KY (KY Portion)	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	0.10	1.47	-0.03	2.84	11.98
Cincinnati, OH-KY-IN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	1.19	-0.23	2.16	9.76
Clark County; Las Vegas planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.13	-0.36	-0.26	-0.87	-2.86
Cleveland, OH	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.08	0.36	-0.27	0.52	3.01
Cleveland, OH	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.05	-0.10	-0.10	-0.26	-0.79
Cleveland, OH	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-0.06	-0.14	-0.13	-0.36	-1.10
Cleveland-Akron-Lorain, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.08	0.38	-0.28	0.54	3.14
Cleveland-Akron-Lorain, OH	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.07	0.38	-0.26	0.55	3.12
Cochise County; Paul Spur/Douglas planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.02
Colorado Springs, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.03	-0.10	-0.07	-0.24	-0.77
Columbus, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.10	-0.25	-0.22	-0.63	-1.96
Columbus, OH	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.10	-0.24	-0.20	-0.61	-1.92
Cook County; Lyons Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.03	-0.08
Cook County; Southeast Chicago, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.19	2.38	0.02	4.65	19.40
Coshocton County; Franklin Township, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.01	0.00	0.01	0.05
Coso Junction, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.15	0.00	0.30	1.26
Cuyahoga County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.05	-0.10	-0.10	-0.26	-0.79
Cuyahoga County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.04	-0.10	-0.08	-0.25	-0.77
Dallas-Fort Worth, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.43	-1.01	-0.91	-2.59	-8.05
Dallas-Fort Worth, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.42	-0.99	-0.89	-2.54	-7.87
Dane County; Madison sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.03	-0.08	-0.06	-0.20	-0.65
Delaware County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.35	4.55	0.01	8.90	37.16
Denver Metro/North Front Range, CO	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	2.19	-0.43	3.98	17.94
Denver-Boulder, CO	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.10	0.41	-0.34	0.57	3.45
Denver-Boulder-Greeley-Ft. Collins-Loveland, CO	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.14	0.46	-0.45	0.60	3.88
Detroit, MI	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	0.30	6.35	-0.46	12.09	51.93
Detroit, MI	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.91	-0.19	1.65	7.49
Detroit, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.08	1.16	-0.01	2.26	9.46
Detroit-Ann Arbor, MI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.30	6.35	-0.46	12.08	51.91

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Doña Ana County; Anthony, NM	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.04	0.49	0.01	0.96	3.98
Door County, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	0.00	0.00
Door County-Revised, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	-0.01	-0.04
Douglas (Cochise County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01	-0.02
Dukes County, MA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	0.00	-0.01
Duluth, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.11	-0.01	0.22	0.93
East Chicago, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.19	2.39	0.03	4.68	19.49
East Helena Area, MT	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	0.00
East Kern County, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.01	0.15	0.00	0.30	1.24
El Paso County, TX	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.40	-0.07	0.73	3.26
El Paso, TX	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.04	0.48	0.00	0.94	3.93
El Paso-Las Cruces, TX-NM	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.03	0.84	-0.08	1.59	6.91
Eugene-Springfield, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.04	-0.03	-0.09	-0.28
Evangeline Parish (Partial), LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.01	0.04
Fairbanks, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.04	-0.01	0.08	0.36
Fairbanks, AK	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	0.00	0.04	-0.01	0.06	0.30
Flathead County; Columbia Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Flathead County; Kalispell and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	0.00	-0.02	-0.05
Flathead County; Whitefish and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Fort Collins, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.01	-0.02	-0.04	-0.10
Freehold, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	-0.01
Freestone and Anderson Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.06	0.00	0.11	0.47
Fremont County; Canon City Area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.02	-0.07
Fresno, CA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.03	-0.09	-0.07	-0.22	-0.70
Gila County (part): Payson, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.02
Giles County, VA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Grant County, NM	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	0.00	-0.02	-0.05

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Grants Pass, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	0.00	-0.01	-0.04
Great Falls, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.01	0.09	0.00	0.18	0.77
Greater Connecticut, CT	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-0.08	-0.24	-0.17	-0.58	-1.92
Greater Connecticut, CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.08	-0.24	-0.17	-0.59	-1.92
Greeley, CO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.20	2.73	-0.02	5.32	22.28
Hancock County (part): Weirton, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.01	0.14	0.00	0.28	1.17
Hancock and Brooke Counties (Part); The city of Weirton, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.14	0.00	0.28	1.17
Harrisburg-Lebanon-Carlisle-York, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.06	-0.17	-0.12	-0.42	-1.37
Hartford-New Britain-Middletown, CT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.06	-0.17	-0.12	-0.41	-1.33
Hayden (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	0.00	0.00	-0.01
Hayden, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.02
Hayden, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	-0.01
Henderson-Webster Counties, KY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.01	0.00	0.01	0.04
Hillsborough County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.01	0.00	0.02	0.07
Hillsborough-Polk County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.01	0.00	0.02	0.09
Houston-Galveston-Brazoria, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	2.45	34.99	-0.44	68.03	285.75
Houston-Galveston-Brazoria, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	2.46	35.00	-0.42	68.08	285.86
Howard County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.37	4.70	0.06	9.22	38.38
Humphreys County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	-0.01	0.00	-0.01	-0.04
Huntington, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	0.00	-0.01	-0.05
Hutchinson County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.09	1.15	0.01	2.25	9.38
Imperial County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.04	-0.03	-0.09	-0.30
Imperial County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.04	-0.03	-0.09	-0.30
Imperial County, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.03	-0.02	-0.07	-0.24
Imperial County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	-0.01	-0.03	-0.02	-0.07	-0.24
Imperial Valley, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.01	-0.04	-0.03	-0.09	-0.28
Indian Wells, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.15	0.00	0.29	1.21
Indiana, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.13	-0.01	0.24	1.03

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Indianapolis, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Indianapolis, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.03	-0.09	-0.06	-0.22	-0.72
Inland Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.02	-0.08
Inyo County; Owens Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00	0.01
Jackson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.01	-0.01	-0.03	-0.09
Jackson County; Medford-Ashland (including White City), OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.03	-0.02	-0.06	-0.21
Jamestown, NY	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.14	1.88	0.01	3.68	15.35
Jefferson County, KY	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00
Jefferson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.01	-0.01	-0.03	-0.09
Jefferson County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.06	0.00	0.13	0.52
Jefferson County; (part) Steubenville & Mingo Junction, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.01	0.14	0.00	0.27	1.12
Johnstown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.07	-0.01	0.12	0.55
Josephine County; Grants Pass, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	0.00	-0.01	-0.04
Juneau; Mendenhall Valley area, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Kern County (Eastern Kern), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.87	10.96	0.12	21.48	89.42
Kern County (Eastern Kern), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.87	10.96	0.12	21.48	89.42
King County; Kent, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.02
King County; Seattle, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.02
Klamath Falls, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.01	-0.02	-0.05
Klamath Falls, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.02	-0.05
Klamath Falls, OR	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.01	-0.02	-0.06
Knoxville, TN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.05	-0.13	-0.09	-0.31	-1.03
Knoxville-Sevierville-La Follette, TN	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.05	-0.15	-0.11	-0.37	-1.21
La Porte County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.01	-0.03	-0.09
LaSalle County; Oglesby, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	0.00	-0.01	-0.04
Lake County (part); Lakeview, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Lake County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.17	2.33	-0.02	4.54	19.06
Lake County, OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.02	-0.03	-0.05	-0.14
Lake County; (part) Eastlake, Timberlake, Lakeline, Willoughby, Mentor, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	0.00	-0.01	-0.05

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Lake County; Cities of East Chicago, Hammond, Whiting, and Gary, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.18	2.35	0.00	4.59	19.21
Lake County; Polson, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Lake County; Ronan, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Lake Tahoe North Shore, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01	-0.02
Lake Tahoe South Shore, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	0.00	-0.02	-0.05
Lake Tahoe, NV	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01	-0.03
Lancaster, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.03	-0.08	-0.06	-0.19	-0.62
Lancaster, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.03	-0.08	-0.06	-0.19	-0.61
Lane County (part); Oakridge, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Lane County; Eugene/Springfield, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.04	-0.03	-0.09	-0.28
Las Vegas, NV	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.13	-0.36	-0.26	-0.87	-2.86
Las Vegas, NV	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.13	-0.36	-0.26	-0.87	-2.87
Laurel Area (Yellowstone County), MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.41	5.14	0.06	10.07	41.92
Lebanon County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.01	-0.05	-0.16
Lemont, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.28	3.56	0.03	6.98	29.10
Liberty-Clairton, PA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.02	0.00	0.05	0.20
Lincoln County; Libby and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Logan, UT-ID	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.02	-0.05	-0.17
Longmont, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.06	-0.01	0.11	0.50
Lorain County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.01	-0.01	-0.04
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.83	10.85	0.05	21.22	88.57
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	0.83	10.85	0.05	21.22	88.57
Los Angeles-South Coast Air Basin, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-0.03	8.54	-1.74	15.50	70.13
Los Angeles-South Coast Air Basin, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-0.03	8.55	-1.74	15.50	70.14
Los Angeles-South Coast Air Basin, CA	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.03	8.54	-1.74	15.49	70.09
Los Angeles-South Coast Air Basin, CA	NO ₂ (1971 Annual)	Maintenance, Primary	100	0	-0.03	8.54	-1.74	15.49	70.09
Los Angeles-South Coast Air Basin, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.03	8.54	-1.74	15.50	70.12
Los Angeles-South Coast Air Basin, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-0.03	8.54	-1.74	15.50	70.12

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Louisville, KY-IN (IN Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.01	-0.04	-0.03	-0.09	-0.30
Louisville, KY-IN (KY Portion)	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.06	-0.16	-0.11	-0.38	-1.26
Lowell, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.02	-0.01	-0.04	-0.12
Lucas County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.37	4.81	0.02	9.41	39.27
Madison County; Granite City Township and Nameoki Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.71	8.98	0.10	17.61	73.29
Manchester, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.02	-0.01	-0.04	-0.14
Manitowoc County, WI	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	-0.01	-0.01	-0.02	-0.08
Marathon County: Rothschild Sub-city area, Rib Mountain, Weston, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.01	-0.03	-0.02	-0.06	-0.21
Maricopa and Pinal Counties; Phoenix planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.25	-0.72	-0.51	-1.76	-5.77
Marion County: Lawrence, Washington, and Warrant Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.03	-0.07	-0.05	-0.18	-0.60
Mariposa County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.02
Mariposa County, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.02
Marshall, WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.02	0.24	0.00	0.47	1.94
Medford, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.02	-0.01	-0.04	-0.13
Memphis, TN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.04	0.15	-0.13	0.21	1.26
Memphis, TN-MS-AR	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.06	0.10	-0.17	0.08	0.85
Miami (Gila County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01	-0.02
Miami, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.02
Miami, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	-0.01	-0.02
Millinocket AQCR 109, ME	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.03	-0.02	-0.07	-0.24
Milwaukee, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.08	-0.22	-0.16	-0.54	-1.78
Milwaukee, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.04	-0.10	-0.07	-0.25	-0.81
Milwaukee-Racine, WI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.07	-0.20	-0.14	-0.48	-1.58
Minneapolis-St. Paul, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.17	3.97	-0.32	7.52	32.45
Minneapolis-St. Paul, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.18	3.98	-0.31	7.57	32.59
Missoula, MT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.01	-0.03	-0.10
Missoula, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.03	-0.11

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Modesto, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.03	-0.03	-0.09	-0.27
Mohave County (part); Bullhead City, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.02	-0.06
Mono Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Mono County; Mammoth Lake planning area, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.03
Morenci (Greenlee County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Morgan County, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.01	0.00	-0.01	-0.04
Morongo Band of Mission Indians, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	0.00	0.00	-0.01
Morongo Band of Mission Indians, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00	-0.01
Morristown, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01	-0.02
Muscatine County, IA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01	-0.02
Muscatine, IA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	-0.01	-0.04
Muskegon County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.02	-0.02	-0.06	-0.18
Muskingum River, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.04	0.00	0.08	0.32
Nashua, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.01	-0.01	-0.04	-0.12
Nassau County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	-0.01
Navarro County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.05	0.00	0.11	0.45
Nevada County (Western part), CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.00	-0.01	-0.01	-0.03	-0.11
Nevada County (Western part), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	-0.01	-0.01	-0.03	-0.11
New Haven County, CT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.03
New Haven-Meriden-Waterbury, CT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.05	-0.13	-0.09	-0.32	-1.04
New Madrid County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
New Manchester-Grant magisterial district in Hancock County, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.01	0.15	0.00	0.30	1.25
New York County, NY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.02	-0.05	-0.04	-0.13	-0.41
New York-N. New Jersey-Long Island, NY-NJ-CT	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.67	-1.43	-1.44	-3.78	-11.38
New York-N. New Jersey-Long Island, NY-NJ-CT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.35	-0.53	-0.79	-1.59	-4.20
New York-N. New Jersey-Long Island, NY-NJ-CT	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.68	-1.48	-1.47	-3.90	-11.77
New York-Northern New Jersey-Long Island, NY-NJ-CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.67	-1.43	-1.44	-3.79	-11.40
Nogales, AZ	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.03
Northern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.21	3.66	-0.15	7.04	29.91

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Oakridge, OR	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Ogden, UT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.01	-0.03	-0.10
Ogden, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.03	-0.10
Olmsted County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	0.00	-0.01	-0.04
Olmsted County; City of Rochester, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.02	-0.01	-0.05	-0.15
Oneida County: Rhinelander Sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	-0.01	-0.01	-0.02	-0.06
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Pekin, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.01	-0.01	-0.02	-0.05
Penns Grove, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Peoria County: Hollis twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	0.00
Peoria, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.03	-0.01	0.06	0.28
Perth Amboy, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.01	-0.02	-0.06
Philadelphia-Camden County, PA-NJ	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.07	1.49	-0.09	2.84	12.16
Philadelphia-Wilmington, PA-NJ-DE (NJ Portion)	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.04	0.09	-0.12	0.09	0.74
Philadelphia-Wilmington, PA-NJ-DE (PA-DE Portion)	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.16	3.83	-0.33	7.24	31.30
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.03	3.65	-0.64	6.70	29.96
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	0.83	13.74	-0.51	26.49	112.31
Phoenix, AZ	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.25	-0.70	-0.50	-1.71	-5.62
Phoenix-Mesa, AZ	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-0.25	-0.72	-0.51	-1.76	-5.78
Phoenix-Mesa, AZ	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.26	-0.73	-0.52	-1.78	-5.85
Pierce County; Tacoma, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.03	0.00	0.06	0.26
Pima County; Ajo planning area, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Pima County; Rillito planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	0.00	-0.01	-0.05
Pinal County (part); West Pinal, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.01	-0.04	-0.03	-0.09	-0.29
Pitkin County; Aspen, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.01	0.03
Pittsburgh, PA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.01	-0.03	-0.04	-0.08
Pittsburgh-Beaver Valley, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.06	0.37	-0.22	0.57	3.07

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Pittsburgh-Beaver Valley, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.05	0.37	-0.20	0.59	3.06
Plumas County, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00	0.00
Polk County, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	-0.01	-0.03
Portland, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.07	-0.12	-0.15	-0.34	-0.96
Power-Bannock Counties; Fort Hall Indian Reservation, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Power-Bannock Counties; Portneuf Valley Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.03	-0.09
Provo, UT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.01	-0.03	-0.02	-0.07	-0.21
Provo, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	0.21	3.01	-0.03	5.86	24.58
Prowers County; Lamar, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.02
Raleigh-Durham, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.10	-0.29	-0.21	-0.72	-2.36
Ramsey County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.36	4.49	0.05	8.80	36.61
Reading, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.02	-0.05	-0.04	-0.13	-0.43
Reno, NV	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.04	-0.03	-0.10	-0.33
Rhineland, WI	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	-0.01	-0.03
Riverside County (Coachella Valley), CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-0.03	-0.09	-0.06	-0.21	-0.70
Riverside County (Coachella Valley), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-0.03	-0.09	-0.06	-0.21	-0.70
Riverside County; Coachella Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.04	-0.10	-0.07	-0.25	-0.80
Riverside, Los Angeles, Orange, & San Bernardino Counties; South Coast Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.03	8.56	-1.73	15.53	70.22
Rosebud County; Lame Deer, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Routt County (part); Steamboat Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.07	0.95	0.01	1.86	7.76
Rusk and Panola Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.02	0.00	0.03	0.15
Sacramento County, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	1.24	16.23	0.05	31.73	132.49
Sacramento Metro, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	1.18	16.08	-0.06	31.36	131.28
Sacramento Metro, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	1.18	16.08	-0.06	31.36	131.28
Sacramento, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.04	0.37	-0.16	0.62	3.09
Sacramento, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	1.19	16.09	-0.05	31.38	131.35

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Salem, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.04	-0.03	-0.10	-0.32
Salt Lake City, UT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.30	3.91	0.02	7.64	31.89
Salt Lake City, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	0.21	3.64	-0.17	7.00	29.77
Salt Lake County, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.25	3.76	-0.08	7.30	30.75
Salt Lake County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	0.25	3.76	-0.08	7.30	30.75
San Antonio, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.06	0.40	-0.22	0.64	3.34
San Bernardino County, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.84	10.89	0.07	21.31	88.86
San Diego County, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.20	-0.57	-0.40	-1.38	-4.54
San Diego County, CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-0.20	-0.57	-0.40	-1.38	-4.53
San Diego, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.20	-0.57	-0.40	-1.38	-4.53
San Francisco Bay Area, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.91	15.30	-0.62	29.47	125.08
San Francisco Bay Area, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.91	15.30	-0.62	29.47	125.09
San Francisco Bay Area, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.91	15.30	-0.62	29.46	125.06
San Francisco-Oakland-San Jose, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.93	15.37	-0.57	29.62	125.58
San Joaquin Valley Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	1.99	27.29	-0.14	53.21	222.86
San Joaquin Valley, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	1.99	27.29	-0.14	53.21	222.86
San Joaquin Valley, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	1.99	27.29	-0.14	53.21	222.86
San Joaquin Valley, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	1.99	27.29	-0.14	53.21	222.86
San Joaquin Valley, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	1.99	27.29	-0.14	53.21	222.86
San Luis Obispo (Eastern San Luis Obispo), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.10	1.25	0.01	2.45	10.20
San Luis Obispo (Eastern part), CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.10	1.25	0.01	2.45	10.20
San Manuel (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01	-0.02
San Miguel County; Telluride, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.29	0.00	0.57	2.39
Sanders County (part); Thompson Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Santa Cruz County; Nogales planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.03
Seaford, DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.02	-0.05	-0.03	-0.11	-0.37
Seattle-Tacoma, WA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.17	-0.46	-0.35	-1.14	-3.70
Sheboygan County, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.01	-0.03	-0.09

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Sheridan County; City of Sheridan, WY	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.02
Shoreline Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.03	-0.08
Shoshone County; City of Pinehurst, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Shoshone County; Pinehurst Expansion Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.03
Silver Bow County; Butte, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	0.00	-0.01	-0.04
Somerville, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	-0.02
Southern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.21	3.01	-0.03	5.86	24.58
Southwest Indiana, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.01	0.03
Spokane County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.05	-0.04	-0.13	-0.43
Spokane, WA	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.02	-0.05	-0.04	-0.13	-0.43
Springfield, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.02	-0.01	-0.05	-0.16
St. Bernard Parish, LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.33	4.15	0.05	8.14	33.87
St. Clair, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	-0.01	-0.02	-0.07
St. Lawrence County, NY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	-0.01
St. Louis, MO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.67	8.87	0.02	17.33	72.38
St. Louis, MO-IL	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	1.32	17.97	-0.08	35.04	146.70
St. Louis-St. Charles-Farmington, MO-IL	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.58	8.76	-0.20	16.96	71.54
Steubenville, OH-WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.04	0.48	0.00	0.94	3.93
Steubenville-Weirton, OH-WV	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.04	0.51	-0.01	0.99	4.14
Stockton, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.05	-0.04	-0.14	-0.43
Sullivan County, TN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	-0.01	-0.04
Sutter Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00
Syracuse, NY	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.03	-0.08	-0.06	-0.19	-0.63
Tacoma, WA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.03	-0.06	-0.06	-0.15	-0.44
Tazewell County: Groveland twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01	-0.03
Terre Haute, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.01	-0.01	-0.02	-0.08
Thurston County; Cities of Olympia, Tumwater, and Lacey, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.01	-0.04	-0.14
Titus County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.01
Toms River, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	-0.01

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Tooele County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	0.25	3.10	0.04	6.09	25.33
Trenton, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.01	-0.03	-0.10
Trona, CA	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.15	0.00	0.30	1.26
Tucson, AZ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.04	-0.13	-0.09	-0.31	-1.00
Tuolumne County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.01	-0.01	-0.02	-0.07
Tuscan Buttes, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00
Tuscan Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	0.00	0.00
Uinta Basin, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.01	0.18	0.00	0.34	1.44
Union County; LaGrande, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Upper Green River Basin Area, WY	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.20	2.58	0.03	5.05	21.02
Utah County, UT	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.21	3.02	-0.03	5.87	24.63
Vancouver, WA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.05	-0.04	-0.13	-0.41
Ventura County, CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.83	10.88	0.04	21.28	88.85
Ventura County, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.83	10.88	0.04	21.29	88.85
Vermillion County; Part of Clinton Township, IN	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Vigo County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.02	-0.02	-0.04	-0.12
Walla Walla County; Wallula, WA	PM ₁₀ (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00	0.00
Waltham, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.01	-0.02	-0.07
Warren County, NJ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	-0.01	-0.04
Warren County: Conewago Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.15	1.85	0.02	3.63	15.12
Warren County: Warren Boro, Pleasant Twp, Glade Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.15	1.85	0.02	3.63	15.11
Warren, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.15	1.85	0.02	3.63	15.11
Washington, DC-MD-VA	Ozone (2008 8-hour)	Nonattainment (DC) Maintenance (MD, VA), Marginal	50	0	-0.31	-0.88	-0.62	-2.14	-7.03
Washington, DC-MD-VA	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.31	-0.88	-0.62	-2.14	-7.03
Washington, DC-MD-VA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.04	-0.11	-0.08	-0.27	-0.89
Washoe County; Reno planning area, NV	PM ₁₀ (1987 24-hour)	Maintenance, Serious	100	0	-0.01	-0.04	-0.03	-0.10	-0.33
Wayne County, MI	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.09	1.18	0.01	2.31	9.65

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Wayne County: Boston, Center, Franklin, Wayne & Webster Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.01	-0.03	-0.09
West Central Pinal, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.02
West Silver Valley, ID	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.02
Whatcom County, WA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.35	4.38	0.05	8.60	35.77
Winston-Salem, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.03	-0.08	-0.06	-0.20	-0.65
Worcester, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.04	-0.03	-0.09	-0.28
Yakima County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.01	-0.04	-0.13
Yakima, WA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	0.00	-0.01	-0.05
Yuba City-Marysville, CA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.03	-0.02	-0.07	-0.23
Yuma, AZ	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.02	-0.01	-0.05	-0.15
Yuma, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.03	-0.02	-0.07	-0.24

Notes:
^a Nonattainment or maintenance status as of 2/1/2024. Source: EPA, The Green Book Nonattainment Areas for Criteria Pollutants; <http://www.epa.gov/airquality/greenbook/>. "--" indicates that no severity classification has been established for the NAAQS pollutant.
^b Emissions thresholds in tons per year. Where the threshold differs by precursor pollutant, the smallest of the precursor thresholds is shown. These thresholds are provided for information only; a general conformity determination is not required for the Proposed Action. Source: 40 CFR 93.853.
^c Positive values are emissions increases; negative values are emissions decreases.
EPA = U.S. Environmental Protection Agency; NAAQS = National Ambient Air Quality Standard; CO = carbon monoxide; NO₂ = nitrogen dioxide; PM2.5 = particulate matter less than 2.5 microns in size; PM10 = particulate matter less than 10 microns in size; SO₂ = sulfur dioxide.

Table D-5. Changes in Emissions from U.S. Passenger Cars and Light Trucks by Nonattainment or Maintenance Area and Alternative, Direct and Indirect Impacts--Nitrogen Oxides (NOx), 2035

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Ada County; Boise, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.82	-2.33	-2.72	-4.00	-8.22
Adams, Denver, and Boulder Counties; Denver Metropolitan area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-5.44	-15.10	-18.94	-28.82	-59.25
Ajo (Pima County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.02	-0.02	-0.05
Albuquerque, NM	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-1.63	-4.72	-5.31	-7.71	-15.84
Allegan County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.17	-0.49	-0.58	-0.85	-1.75
Allegheny County Air Basin: Hazelwood monitor, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.19	-0.52	-0.64	-0.97	-1.99
Allegheny County, PA	PM _{2.5} (2012 Annual)	Nonattainment, Moderate	100	0	-2.56	-7.14	-8.82	-13.34	-27.43
Allegheny County; Liberty, Lincoln, Port Vue, Glassport, Clairton, PA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.09	-0.23	-0.32	-0.49	-1.02
Allegheny, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.93	-2.46	-3.44	-5.44	-11.19
Allentown, PA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	-1.20	-3.44	-4.01	-5.92	-12.16
Allentown-Bethlehem-Easton, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-1.35	-3.87	-4.49	-6.60	-13.57
Alton Township, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-1.95	-5.05	-7.44	-11.99	-24.68
Amador County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.08	-0.22	-0.25	-0.35	-0.73
Anchorage, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.44	-1.22	-1.57	-2.40	-4.94
Anchorage; Eagle River, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.03	-0.09	-0.12	-0.18	-0.38
Anne Arundel County and Baltimore County, MD	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-1.91	-5.57	-6.16	-8.87	-18.22
Archuleta County; Pagosa Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-2.81	-7.31	-10.73	-17.27	-35.54
Armstrong County; Madison, Mahoning, Boggs, Washington, Pine, PA	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	-0.46	-1.20	-1.75	-2.82	-5.80
Aroostock County; City of Presque Isle, ME	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.04	-0.04	-0.06	-0.12
Atlanta, GA	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-10.59	-30.63	-34.39	-49.87	-102.42
Atlanta, GA	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-8.16	-23.56	-26.57	-38.60	-79.28
Atlantic City, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.07	-0.21	-0.23	-0.34	-0.69
Bakersfield, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.97	-2.80	-3.19	-4.65	-9.55
Baltimore, MD	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	-5.45	-15.67	-17.89	-26.14	-53.70
Baltimore, MD	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-5.47	-15.74	-17.97	-26.25	-53.92
Baltimore, MD	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.03	-0.09	-0.12	-0.18	-0.36
Baton Rouge, LA	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-6.36	-16.98	-23.42	-36.92	-75.94

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Beaver, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.04	-0.10	-0.13	-0.19	-0.39
Benton County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.04	-0.13	-0.14	-0.20	-0.41
Berrien County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.46	-1.32	-1.53	-2.24	-4.60
Billings, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-1.18	-3.09	-4.42	-7.05	-14.49
Billings, MT	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-1.05	-2.72	-4.01	-6.46	-13.28
Birmingham, AL	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-2.96	-8.43	-9.90	-14.64	-30.09
Boise-Northern Ada County, ID	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.82	-2.33	-2.71	-4.00	-8.22
Bonner County; The Sandpoint Area, ID	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.04	-0.05	-0.07	-0.14
Boston, MA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-1.29	-3.74	-4.15	-5.99	-12.29
Boyd County (part), KY	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-1.09	-2.82	-4.15	-6.68	-13.75
Brooke; Follansbee area, WV	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.06	-0.09	-0.14	-0.28
Brown County: Green Bay, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.03	-0.09	-0.12	-0.18	-0.36
Burlington, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.04	-0.05	-0.07	-0.13
Butte County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.41	-1.17	-1.38	-2.05	-4.21
Calaveras County, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.08	-0.23	-0.25	-0.36	-0.74
Calaveras County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.08	-0.23	-0.25	-0.36	-0.74
Campbell-Clermont Counties, KY-OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.05	-0.15	-0.17	-0.24	-0.49
Canton-Massillon, OH	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-1.01	-2.81	-3.52	-5.35	-10.99
Central New Hampshire, NH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.33	-0.97	-1.07	-1.54	-3.16
Central Steptoe Valley, NV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.02	-0.02	-0.03	-0.06
Charleston, WV	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-1.49	-4.02	-5.39	-8.42	-17.31
Charlotte, NC	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-2.66	-7.73	-8.55	-12.30	-25.27
Charlotte-Rock Hill, NC-SC	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-4.93	-14.34	-15.87	-22.85	-46.92
Chicago, IL-IN-WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-19.31	-54.01	-66.33	-100.04	-205.62
Chicago-Naperville, IL-IN-WI	Ozone (2008 8-hour)	Maintenance, Serious	100	0	-16.65	-47.17	-56.07	-83.40	-171.38
Chico (Butte County), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.41	-1.17	-1.38	-2.05	-4.21
Chico, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.14	-0.39	-0.44	-0.64	-1.31
Chico, CA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	-0.40	-1.12	-1.33	-1.97	-4.05
Cincinnati, OH-KY (OH Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-3.03	-8.80	-9.81	-14.17	-29.10

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Cincinnati, OH-KY (KY Portion)	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	-0.94	-2.67	-3.14	-4.64	-9.54
Cincinnati, OH-KY-IN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-4.13	-11.93	-13.47	-19.57	-40.20
Clark County; Las Vegas planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-3.89	-11.32	-12.53	-18.05	-37.08
Cleveland, OH	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-4.67	-13.46	-15.26	-22.24	-45.68
Cleveland, OH	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-1.57	-4.57	-5.06	-7.28	-14.96
Cleveland, OH	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-2.07	-6.01	-6.66	-9.60	-19.71
Cleveland-Akron-Lorain, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-5.00	-14.37	-16.40	-23.97	-49.24
Cleveland-Akron-Lorain, OH	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-4.51	-13.01	-14.76	-21.51	-44.19
Cochise County; Paul Spur/Douglas planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.03	-0.08	-0.09	-0.13	-0.28
Colorado Springs, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-1.35	-3.82	-4.53	-6.73	-13.82
Columbus, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-3.47	-10.03	-11.26	-16.32	-33.52
Columbus, OH	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-3.22	-9.33	-10.47	-15.18	-31.18
Cook County; Lyons Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.13	-0.39	-0.44	-0.64	-1.31
Cook County; Southeast Chicago, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.75	-4.60	-6.60	-10.55	-21.70
Coshocton County; Franklin Township, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.03	-0.03	-0.05	-0.11
Coso Junction, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.09	-0.24	-0.35	-0.56	-1.16
Cuyahoga County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.57	-4.58	-5.07	-7.30	-14.99
Cuyahoga County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-1.28	-3.73	-4.12	-5.94	-12.20
Dallas-Fort Worth, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-16.53	-47.27	-54.75	-80.52	-165.43
Dallas-Fort Worth, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-16.29	-46.57	-53.98	-79.41	-163.14
Dane County; Madison sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.88	-2.57	-2.84	-4.09	-8.40
Delaware County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-4.28	-11.33	-15.98	-25.38	-52.22
Denver Metro/North Front Range, CO	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-11.73	-32.66	-40.57	-61.48	-126.37
Denver-Boulder, CO	CO (1971 8-hour)	Maintenance, Serious	100	0	-9.01	-25.08	-31.19	-47.28	-97.19
Denver-Boulder-Greeley-Ft. Collins-Loveland, CO	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-11.30	-31.54	-38.94	-58.86	-120.99
Detroit, MI	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	-10.85	-30.76	-36.43	-54.11	-111.20
Detroit, MI	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-3.58	-10.26	-11.84	-17.38	-35.70
Detroit, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.74	-2.03	-2.60	-3.99	-8.20
Detroit-Ann Arbor, MI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-10.87	-30.83	-36.51	-54.23	-111.43

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Doña Ana County; Anthony, NM	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.42	-1.09	-1.59	-2.55	-5.25
Door County, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	0.00	-0.01
Door County-Revised, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	-0.05	-0.14	-0.16	-0.22	-0.46
Douglas (Cochise County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.02	-0.07	-0.08	-0.11	-0.23
Dukes County, MA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.02	-0.05	-0.06	-0.08	-0.17
Duluth, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.28	-0.77	-0.95	-1.44	-2.96
East Chicago, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-1.62	-4.21	-6.15	-9.90	-20.36
East Helena Area, MT	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	-0.01
East Kern County, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.13	-0.35	-0.47	-0.73	-1.50
El Paso County, TX	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-1.60	-4.49	-5.45	-8.18	-16.81
El Paso, TX	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.50	-1.32	-1.85	-2.94	-6.04
El Paso-Las Cruces, TX-NM	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-2.27	-6.34	-7.78	-11.74	-24.13
Eugene-Springfield, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.36	-1.06	-1.17	-1.68	-3.45
Evangeline Parish (Partial), LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	-0.02	-0.02	-0.05
Fairbanks, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.18	-0.50	-0.66	-1.03	-2.12
Fairbanks, AK	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.24	-0.66	-0.84	-1.28	-2.64
Flathead County; Columbia Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.03	-0.03	-0.05	-0.10
Flathead County; Kalispell and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.06	-0.18	-0.20	-0.28	-0.58
Flathead County; Whitefish and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.03	-0.03	-0.04	-0.09
Fort Collins, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.36	-1.03	-1.19	-1.74	-3.58
Freehold, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.05	-0.06	-0.08	-0.17
Freestone and Anderson Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.24	-0.63	-0.90	-1.44	-2.97
Fremont County; Canon City Area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.09	-0.26	-0.29	-0.42	-0.86
Fresno, CA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-1.11	-3.23	-3.60	-5.19	-10.66
Gila County (part): Payson, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.06	-0.07	-0.10	-0.21
Giles County, VA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	-0.01
Grant County, NM	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.07	-0.20	-0.22	-0.32	-0.66

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Grants Pass, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.05	-0.16	-0.17	-0.25	-0.51
Great Falls, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.15	-0.38	-0.56	-0.90	-1.85
Greater Connecticut, CT	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-2.65	-7.70	-8.56	-12.35	-25.37
Greater Connecticut, CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-2.65	-7.71	-8.57	-12.36	-25.39
Greeley, CO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-3.99	-10.60	-14.80	-23.44	-48.21
Hancock County (part): Weirton, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.12	-0.32	-0.44	-0.70	-1.45
Hancock and Brooke Counties (Part); The city of Weirton, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.12	-0.32	-0.44	-0.70	-1.44
Harrisburg-Lebanon-Carlisle-York, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-2.05	-5.92	-6.70	-9.76	-20.05
Hartford-New Britain-Middletown, CT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-1.87	-5.41	-6.04	-8.73	-17.93
Hayden (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	-0.02	-0.06	-0.07	-0.09	-0.19
Hayden, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.03	-0.10	-0.11	-0.16	-0.33
Hayden, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.02	-0.06	-0.06	-0.09	-0.19
Henderson-Webster Counties, KY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.09	-0.23	-0.32	-0.52	-1.06
Hillsborough County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.04	-0.10	-0.12	-0.18	-0.36
Hillsborough-Polk County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.03	-0.04	-0.06	-0.12
Houston-Galveston-Brazoria, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-25.93	-71.55	-91.02	-139.24	-286.27
Houston-Galveston-Brazoria, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-25.46	-70.21	-89.43	-136.89	-281.42
Howard County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.89	-2.32	-3.41	-5.50	-11.31
Humphreys County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.06	-0.17	-0.19	-0.27	-0.56
Huntington, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.06	-0.18	-0.20	-0.29	-0.59
Hutchinson County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-1.15	-2.98	-4.38	-7.05	-14.50
Imperial County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-0.40	-1.18	-1.30	-1.87	-3.85
Imperial County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.40	-1.17	-1.30	-1.87	-3.84
Imperial County, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.32	-0.92	-1.02	-1.46	-3.00
Imperial County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	-0.32	-0.92	-1.02	-1.46	-3.00
Imperial Valley, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.38	-1.11	-1.23	-1.77	-3.64
Indian Wells, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.16	-0.45	-0.58	-0.89	-1.83
Indiana, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-1.52	-3.99	-5.72	-9.14	-18.81

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Indianapolis, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.01	-0.02	-0.02	-0.05
Indianapolis, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-1.01	-2.93	-3.26	-4.71	-9.68
Inland Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-0.11	-0.31	-0.34	-0.50	-1.02
Inyo County; Owens Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.02	-0.05	-0.06	-0.09	-0.19
Jackson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.13	-0.37	-0.42	-0.61	-1.24
Jackson County; Medford-Ashland (including White City), OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.27	-0.80	-0.88	-1.27	-2.60
Jamestown, NY	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-1.23	-3.26	-4.54	-7.17	-14.76
Jefferson County, KY	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.02	-0.02	-0.03	-0.05
Jefferson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.12	-0.35	-0.39	-0.56	-1.15
Jefferson County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.03	-0.07	-0.10	-0.16	-0.33
Jefferson County; (part) Steubenville & Mingo Junction, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.17	-0.48	-0.62	-0.96	-1.97
Johnstown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-1.08	-2.87	-4.01	-6.36	-13.07
Josephine County; Grants Pass, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.05	-0.15	-0.17	-0.25	-0.51
Juneau; Mendenhall Valley area, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.03	-0.04	-0.05	-0.11
Kern County (Eastern Kern), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-3.81	-9.93	-14.46	-23.21	-47.75
Kern County (Eastern Kern), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-3.81	-9.93	-14.46	-23.21	-47.75
King County; Kent, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.03	-0.10	-0.11	-0.15	-0.31
King County; Seattle, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.06	-0.07	-0.10	-0.20
Klamath Falls, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.08	-0.23	-0.26	-0.37	-0.76
Klamath Falls, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.08	-0.23	-0.26	-0.37	-0.76
Klamath Falls, OR	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.09	-0.26	-0.29	-0.43	-0.88
Knoxville, TN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-1.82	-5.16	-6.11	-9.07	-18.64
Knoxville-Sevierville-La Follette, TN	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-2.17	-6.17	-7.25	-10.73	-22.04
La Porte County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.11	-0.33	-0.36	-0.52	-1.08
LaSalle County; Oglesby, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.06	-0.18	-0.21	-0.31	-0.63
Lake County (part); Lakeview, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Lake County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-2.40	-6.47	-8.72	-13.63	-28.02
Lake County, OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.40	-1.16	-1.28	-1.85	-3.80
Lake County; (part) Eastlake, Timberlake, Lakeline, Willoughby, Mentor, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.07	-0.20	-0.22	-0.32	-0.65

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Lake County; Cities of East Chicago, Hammond, Whiting, and Gary, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-2.11	-5.65	-7.79	-12.27	-25.24
Lake County; Polson, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.01	-0.01	-0.03
Lake County; Ronan, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.01
Lake Tahoe North Shore, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.03	-0.07	-0.08	-0.12	-0.24
Lake Tahoe South Shore, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.07	-0.20	-0.22	-0.32	-0.66
Lake Tahoe, NV	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.04	-0.12	-0.13	-0.19	-0.39
Lancaster, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.90	-2.60	-2.92	-4.24	-8.71
Lancaster, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.90	-2.60	-2.92	-4.24	-8.71
Lane County (part); Oakridge, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Lane County; Eugene/Springfield, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.36	-1.06	-1.17	-1.68	-3.46
Las Vegas, NV	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-3.89	-11.32	-12.53	-18.05	-37.08
Las Vegas, NV	CO (1971 8-hour)	Maintenance, Serious	100	0	-3.90	-11.34	-12.55	-18.08	-37.14
Laurel Area (Yellowstone County), MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	-1.05	-2.73	-4.02	-6.47	-13.32
Lebanon County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-0.22	-0.65	-0.71	-1.03	-2.11
Lemont, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-2.07	-5.46	-7.75	-12.34	-25.39
Liberty-Clairton, PA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.09	-0.23	-0.32	-0.49	-1.02
Lincoln County; Libby and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.02	-0.02	-0.05
Logan, UT-ID	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.23	-0.67	-0.74	-1.06	-2.18
Longmont, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-1.85	-4.84	-6.97	-11.16	-22.95
Lorain County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.09	-0.27	-0.30	-0.43	-0.88
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-5.26	-14.09	-19.26	-30.27	-62.26
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-5.26	-14.09	-19.26	-30.27	-62.26
Los Angeles-South Coast Air Basin, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-33.62	-96.19	-111.30	-163.63	-336.17
Los Angeles-South Coast Air Basin, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-33.60	-96.15	-111.25	-163.56	-336.03
Los Angeles-South Coast Air Basin, CA	CO (1971 8-hour)	Maintenance, Serious	100	0	-33.62	-96.19	-111.30	-163.62	-336.16
Los Angeles-South Coast Air Basin, CA	NO ₂ (1971 Annual)	Maintenance, Primary	100	0	-33.62	-96.20	-111.30	-163.63	-336.17
Los Angeles-South Coast Air Basin, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-33.62	-96.20	-111.31	-163.64	-336.20
Los Angeles-South Coast Air Basin, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-33.62	-96.20	-111.31	-163.64	-336.20

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Louisville, KY-IN (IN Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.43	-1.25	-1.40	-2.04	-4.18
Louisville, KY-IN (KY Portion)	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-1.71	-4.97	-5.50	-7.92	-16.26
Lowell, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.17	-0.49	-0.54	-0.78	-1.61
Lucas County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-2.36	-6.28	-8.69	-13.71	-28.20
Madison County; Granite City Township and Nameoki Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-2.11	-5.50	-8.00	-12.84	-26.42
Manchester, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.18	-0.53	-0.58	-0.84	-1.72
Manitowoc County, WI	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.10	-0.29	-0.32	-0.47	-0.96
Marathon County: Rothschild Sub-city area, Rib Mountain, Weston, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.29	-0.84	-0.93	-1.33	-2.74
Maricopa and Pinal Counties; Phoenix planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-7.77	-22.61	-25.01	-36.01	-73.95
Marion County: Lawrence, Washington, and Warrant Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.83	-2.42	-2.70	-3.90	-8.02
Mariposa County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-0.03	-0.09	-0.10	-0.15	-0.31
Mariposa County, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.03	-0.09	-0.10	-0.15	-0.31
Marshall, WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.37	-0.96	-1.38	-2.21	-4.55
Medford, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.17	-0.48	-0.53	-0.77	-1.57
Memphis, TN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-2.25	-6.46	-7.35	-10.73	-22.04
Memphis, TN-MS-AR	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-2.92	-8.38	-9.58	-14.00	-28.76
Miami (Gila County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.03	-0.08	-0.09	-0.12	-0.25
Miami, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.02	-0.07	-0.08	-0.11	-0.22
Miami, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.03	-0.07	-0.08	-0.12	-0.24
Millinocket AQCR 109, ME	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.36	-1.03	-1.18	-1.73	-3.55
Milwaukee, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-2.40	-7.00	-7.74	-11.14	-22.88
Milwaukee, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-1.10	-3.21	-3.55	-5.11	-10.50
Milwaukee-Racine, WI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-2.13	-6.21	-6.87	-9.89	-20.31
Minneapolis-St. Paul, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-7.79	-22.04	-26.30	-39.20	-80.55
Minneapolis-St. Paul, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-7.62	-21.54	-25.76	-38.41	-78.94
Missoula, MT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.21	-0.57	-0.71	-1.06	-2.19
Missoula, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.21	-0.59	-0.73	-1.09	-2.25

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Modesto, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.52	-1.51	-1.68	-2.43	-5.00
Mohave County (part); Bullhead City, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.13	-0.36	-0.41	-0.61	-1.25
Mono Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.03	-0.03	-0.04	-0.09
Mono County; Mammoth Lake planning area, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.07	-0.08	-0.12	-0.24
Morenci (Greenlee County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.01	-0.01	-0.03
Morgan County, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.06	-0.16	-0.18	-0.26	-0.53
Morongo Band of Mission Indians, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.01	-0.03	-0.04	-0.05	-0.11
Morongo Band of Mission Indians, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.01	-0.03	-0.04	-0.05	-0.11
Morristown, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.03	-0.10	-0.11	-0.16	-0.32
Muscatine County, IA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.03	-0.09	-0.10	-0.14	-0.29
Muscatine, IA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.05	-0.15	-0.17	-0.24	-0.49
Muskegon County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.28	-0.80	-0.89	-1.30	-2.66
Muskingum River, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.06	-0.15	-0.22	-0.35	-0.73
Nashua, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.15	-0.45	-0.50	-0.72	-1.47
Nassau County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.04	-0.05	-0.07	-0.14
Navarro County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.29	-0.77	-1.12	-1.80	-3.70
Nevada County (Western part), CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-0.15	-0.45	-0.50	-0.71	-1.47
Nevada County (Western part), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.15	-0.45	-0.50	-0.72	-1.47
New Haven County, CT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.04	-0.11	-0.12	-0.18	-0.37
New Haven-Meriden-Waterbury, CT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-1.41	-4.09	-4.52	-6.51	-13.37
New Madrid County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
New Manchester-Grant magisterial district in Hancock County, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.12	-0.32	-0.47	-0.75	-1.55
New York County, NY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.56	-1.62	-1.80	-2.58	-5.31
New York-N. New Jersey-Long Island, NY-NJ-CT	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-23.88	-68.92	-77.91	-113.32	-232.76
New York-N. New Jersey-Long Island, NY-NJ-CT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-13.66	-39.28	-44.81	-65.46	-134.48
New York-N. New Jersey-Long Island, NY-NJ-CT	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-24.33	-70.23	-79.32	-115.33	-236.91
New York-Northern New Jersey-Long Island, NY-NJ-CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-23.90	-68.97	-77.97	-113.40	-232.95
Nogales, AZ	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.04	-0.11	-0.12	-0.17	-0.36
Northern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-3.92	-11.14	-13.14	-19.48	-40.04

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Oakridge, OR	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.01
Ogden, UT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.13	-0.39	-0.43	-0.62	-1.27
Ogden, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.13	-0.39	-0.43	-0.62	-1.27
Olmsted County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.08	-0.22	-0.26	-0.39	-0.80
Olmsted County; City of Rochester, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.28	-0.79	-0.95	-1.42	-2.92
Oneida County: Rhinelander Sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.09	-0.25	-0.28	-0.40	-0.82
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Pekin, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.08	-0.23	-0.25	-0.37	-0.75
Penns Grove, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Peoria County: Hollis twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	-0.01	-0.02	-0.03	-0.05
Peoria, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.20	-0.57	-0.65	-0.96	-1.96
Perth Amboy, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.10	-0.30	-0.35	-0.51	-1.05
Philadelphia-Camden County, PA-NJ	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-4.24	-11.57	-15.17	-23.49	-48.29
Philadelphia-Wilmington, PA-NJ-DE (NJ Portion)	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-2.35	-6.70	-7.81	-11.53	-23.69
Philadelphia-Wilmington, PA-NJ-DE (PA-DE Portion)	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-9.58	-26.71	-33.10	-50.12	-103.01
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-14.75	-41.61	-50.00	-74.72	-153.55
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-20.97	-57.76	-73.79	-113.06	-232.44
Phoenix, AZ	CO (1971 8-hour)	Maintenance, Serious	100	0	-7.58	-22.05	-24.39	-35.12	-72.13
Phoenix-Mesa, AZ	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-7.80	-22.68	-25.09	-36.13	-74.20
Phoenix-Mesa, AZ	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-7.89	-22.96	-25.41	-36.58	-75.13
Pierce County; Tacoma, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.06	-0.17	-0.24	-0.38	-0.78
Pima County; Ajo planning area, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.02	-0.04
Pima County; Rillito planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.07	-0.19	-0.21	-0.30	-0.62
Pinal County (part); West Pinal, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.40	-1.16	-1.29	-1.86	-3.82
Pitkin County; Aspen, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.61	-1.61	-2.31	-3.70	-7.61
Pittsburgh, PA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.51	-1.45	-1.69	-2.49	-5.11
Pittsburgh-Beaver Valley, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-6.63	-18.30	-23.27	-35.59	-73.16

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Pittsburgh-Beaver Valley, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-6.08	-16.76	-21.33	-32.63	-67.08
Plumas County, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	0.00	-0.01	-0.01	-0.02	-0.03
Polk County, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.04	-0.11	-0.12	-0.17	-0.36
Portland, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-2.40	-6.94	-7.82	-11.36	-23.33
Power-Bannock Counties; Fort Hall Indian Reservation, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.02	-0.02	-0.03	-0.06
Power-Bannock Counties; Portneuf Valley Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.12	-0.35	-0.39	-0.57	-1.16
Provo, UT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.29	-0.83	-0.92	-1.32	-2.71
Provo, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-1.29	-3.68	-4.32	-6.40	-13.15
Prowers County; Lamar, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.05	-0.05	-0.07	-0.15
Raleigh-Durham, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-3.21	-9.34	-10.35	-14.92	-30.64
Ramsey County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.51	-3.91	-5.76	-9.28	-19.10
Reading, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.70	-2.02	-2.29	-3.33	-6.85
Reno, NV	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.43	-1.25	-1.38	-1.99	-4.08
Rhineland, WI	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.04	-0.12	-0.13	-0.19	-0.39
Riverside County (Coachella Valley), CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-0.95	-2.77	-3.07	-4.42	-9.07
Riverside County (Coachella Valley), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-0.95	-2.77	-3.07	-4.42	-9.07
Riverside County; Coachella Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-1.10	-3.19	-3.53	-5.08	-10.43
Riverside, Los Angeles, Orange, & San Bernardino Counties; South Coast Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-33.49	-95.81	-110.88	-163.02	-334.93
Rosebud County; Lame Deer, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.01	-0.02	-0.03
Routt County (part); Steamboat Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.22	-3.19	-4.62	-7.40	-15.23
Rusk and Panola Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.61	-1.57	-2.31	-3.73	-7.67
Sacramento County, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-6.25	-16.95	-22.52	-35.03	-72.03
Sacramento Metro, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-7.97	-21.91	-28.09	-43.09	-88.59
Sacramento Metro, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-7.97	-21.91	-28.08	-43.09	-88.59
Sacramento, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-3.78	-10.64	-12.88	-19.32	-39.70
Sacramento, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-7.86	-21.59	-27.73	-42.57	-87.52

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Salem, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.42	-1.22	-1.35	-1.95	-4.00
Salt Lake City, UT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-1.26	-3.41	-4.59	-7.18	-14.76
Salt Lake City, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-4.07	-11.58	-13.64	-20.20	-41.50
Salt Lake County, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-2.81	-7.90	-9.56	-14.33	-29.45
Salt Lake County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	-2.81	-7.90	-9.56	-14.34	-29.46
San Antonio, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-4.18	-11.94	-13.85	-20.38	-41.86
San Bernardino County, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-4.86	-12.93	-17.98	-28.42	-58.46
San Diego County, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-6.32	-18.33	-20.42	-29.49	-60.57
San Diego County, CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-6.31	-18.30	-20.38	-29.44	-60.47
San Diego, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-6.30	-18.28	-20.36	-29.41	-60.41
San Francisco Bay Area, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-16.47	-46.67	-55.42	-82.41	-169.33
San Francisco Bay Area, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-16.45	-46.62	-55.37	-82.33	-169.18
San Francisco Bay Area, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-16.49	-46.73	-55.48	-82.50	-169.53
San Francisco-Oakland-San Jose, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-15.74	-44.54	-53.06	-79.00	-162.34
San Joaquin Valley Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-14.03	-38.73	-49.24	-75.31	-154.84
San Joaquin Valley, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-14.03	-38.73	-49.24	-75.31	-154.84
San Joaquin Valley, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-14.03	-38.73	-49.24	-75.31	-154.84
San Joaquin Valley, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-14.03	-38.73	-49.24	-75.31	-154.83
San Joaquin Valley, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-14.03	-38.73	-49.24	-75.31	-154.83
San Luis Obispo (Eastern San Luis Obispo), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.22	-0.59	-0.84	-1.33	-2.74
San Luis Obispo (Eastern part), CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.22	-0.59	-0.84	-1.33	-2.74
San Manuel (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.04	-0.11	-0.12	-0.17	-0.35
San Miguel County; Telluride, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.07	-0.18	-0.24	-0.38	-0.77
Sanders County (part); Thompson Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Santa Cruz County; Nogales planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.04	-0.11	-0.12	-0.18	-0.36
Seaford, DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.50	-1.46	-1.62	-2.33	-4.78
Seattle-Tacoma, WA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-5.38	-15.63	-17.35	-25.01	-51.37
Sheboygan County, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.12	-0.36	-0.40	-0.58	-1.19

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Sheridan County; City of Sheridan, WY	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.05	-0.13	-0.17	-0.25	-0.52
Shoreline Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-0.11	-0.33	-0.37	-0.53	-1.08
Shoshone County; City of Pinehurst, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Shoshone County; Pinehurst Expansion Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.04	-0.12	-0.13	-0.19	-0.38
Silver Bow County; Butte, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.06	-0.16	-0.18	-0.26	-0.53
Somerville, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.06	-0.07	-0.10	-0.21
Southern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-1.29	-3.68	-4.32	-6.40	-13.15
Southwest Indiana, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.09	-0.23	-0.33	-0.52	-1.08
Spokane County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.60	-1.73	-1.92	-2.77	-5.69
Spokane, WA	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.59	-1.72	-1.91	-2.75	-5.64
Springfield, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.22	-0.63	-0.70	-1.01	-2.07
St. Bernard Parish, LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-2.49	-6.48	-9.49	-15.26	-31.39
St. Clair, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.12	-0.34	-0.39	-0.57	-1.17
St. Lawrence County, NY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.04	-0.05	-0.07	-0.14
St. Louis, MO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-3.43	-9.32	-12.27	-19.02	-39.11
St. Louis, MO-IL	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-9.67	-26.56	-34.19	-52.55	-108.04
St. Louis-St. Charles-Farmington, MO-IL	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-7.50	-20.98	-25.75	-38.83	-79.82
Steubenville, OH-WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.73	-1.93	-2.74	-4.37	-9.00
Steubenville-Weirton, OH-WV	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.51	-1.37	-1.84	-2.86	-5.89
Stockton, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.72	-2.07	-2.33	-3.39	-6.96
Sullivan County, TN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.05	-0.16	-0.18	-0.26	-0.52
Sutter Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.02	-0.05	-0.07	-0.12	-0.24
Syracuse, NY	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.87	-2.54	-2.82	-4.07	-8.35
Tacoma, WA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.99	-2.86	-3.22	-4.67	-9.60
Tazewell County: Groveland twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.04	-0.10	-0.12	-0.17	-0.35
Terre Haute, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.13	-0.38	-0.43	-0.63	-1.29
Thurston County; Cities of Olympia, Tumwater, and Lacey, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.18	-0.53	-0.59	-0.85	-1.75
Titus County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.02	-0.02	-0.04	-0.07
Toms River, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.02	-0.02	-0.03	-0.07

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Tooele County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	-0.27	-0.70	-1.03	-1.66	-3.41
Trenton, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.14	-0.41	-0.46	-0.66	-1.35
Trona, CA	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	-0.09	-0.24	-0.34	-0.55	-1.13
Tucson, AZ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-1.32	-3.85	-4.26	-6.13	-12.58
Tuolumne County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.10	-0.28	-0.31	-0.45	-0.93
Tuscan Buttes, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.01	-0.02	-0.03	-0.05
Tuscan Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal (Rural Transport)	100	0	0.00	-0.01	-0.02	-0.03	-0.05
Uinta Basin, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-1.23	-3.22	-4.65	-7.46	-15.34
Union County; LaGrande, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.04	-0.04	-0.06	-0.12
Upper Green River Basin Area, WY	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-2.13	-5.55	-8.12	-13.06	-26.88
Utah County, UT	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-1.80	-5.00	-6.26	-9.51	-19.55
Vancouver, WA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.57	-1.66	-1.84	-2.66	-5.46
Ventura County, CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-5.08	-13.64	-18.58	-29.15	-59.96
Ventura County, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-5.08	-13.63	-18.57	-29.15	-59.95
Vermillion County; Part of Clinton Township, IN	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.04	-0.11	-0.13	-0.20	-0.42
Vigo County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.35	-0.97	-1.18	-1.77	-3.64
Walla Walla County; Wallula, WA	PM ₁₀ (1987 24-hour)	Maintenance, Serious	100	0	-0.01	-0.02	-0.02	-0.04	-0.07
Waltham, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.10	-0.28	-0.31	-0.45	-0.92
Warren County, NJ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.05	-0.15	-0.17	-0.24	-0.49
Warren County: Conewago Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.90	-2.35	-3.45	-5.56	-11.44
Warren County: Warren Boro, Pleasant Twp, Glade Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.93	-2.41	-3.54	-5.69	-11.71
Warren, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.94	-2.44	-3.57	-5.74	-11.81
Washington, DC-MD-VA	Ozone (2008 8-hour)	Nonattainment (DC) Maintenance (MD, VA), Marginal	50	0	-9.65	-28.03	-31.12	-44.88	-92.18
Washington, DC-MD-VA	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-9.65	-28.03	-31.11	-44.87	-92.16
Washington, DC-MD-VA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-1.21	-3.52	-3.89	-5.60	-11.51
Washoe County; Reno planning area, NV	PM ₁₀ (1987 24-hour)	Maintenance, Serious	100	0	-0.43	-1.26	-1.39	-2.01	-4.12
Wayne County, MI	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.45	-1.19	-1.65	-2.60	-5.35

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Wayne County: Boston, Center, Franklin, Wayne & Webster Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.12	-0.34	-0.37	-0.54	-1.10
West Central Pinal, AZ	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	-0.03	-0.10	-0.11	-0.16	-0.32
West Silver Valley, ID	PM _{2.5} (2012 Annual)	Maintenance, Moderate	100	0	-0.02	-0.04	-0.05	-0.07	-0.14
Whatcom County, WA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-2.39	-6.21	-9.15	-14.74	-30.33
Winston-Salem, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.88	-2.56	-2.83	-4.07	-8.36
Worcester, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.38	-1.09	-1.21	-1.74	-3.58
Yakima County, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.17	-0.49	-0.54	-0.78	-1.60
Yakima, WA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.06	-0.17	-0.19	-0.27	-0.55
Yuba City-Marysville, CA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	-0.35	-1.00	-1.14	-1.67	-3.42
Yuma, AZ	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.20	-0.58	-0.64	-0.92	-1.88
Yuma, AZ	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	-0.31	-0.90	-1.00	-1.43	-2.95

Notes:
^a Nonattainment or maintenance status as of 2/1/2024. Source: EPA, The Green Book Nonattainment Areas for Criteria Pollutants; <http://www.epa.gov/airquality/greenbook/>. "--" indicates that no severity classification has been established for the NAAQS pollutant.
^b Emissions thresholds in tons per year. Where the threshold differs by precursor pollutant, the smallest of the precursor thresholds is shown. These thresholds are provided for information only; a general conformity determination is not required for the Proposed Action. Source: 40 CFR 93.853.
^c Positive values are emissions increases; negative values are emissions decreases.
 EPA = U.S. Environmental Protection Agency; NAAQS = National Ambient Air Quality Standard; CO = carbon monoxide; NO₂ = nitrogen dioxide; PM_{2.5} = particulate matter less than 2.5 microns in size; PM₁₀ = particulate matter less than 10 microns in size; SO₂ = sulfur dioxide.

Table D-6. Changes in Emissions from U.S. Passenger Cars and Light Trucks by Nonattainment or Maintenance Area and Alternative, Direct and Indirect Impacts--Nitrogen Oxides (NOx), 2050

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Ada County; Boise, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.73	-1.19	-0.68	-2.83	-10.12
Adams, Denver, and Boulder Counties; Denver Metropolitan area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-4.99	-7.24	-6.98	-19.09	-59.75
Ajo (Pima County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	0.00	-0.01	-0.06
Albuquerque, NM	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-1.45	-2.46	-1.02	-5.58	-21.14
Allegan County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.15	-0.25	-0.15	-0.59	-2.09
Allegheny County Air Basin: Hazelwood monitor, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.17	-0.26	-0.22	-0.65	-2.13
Allegheny County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	-2.33	-3.46	-3.05	-8.94	-28.77
Allegheny County; Liberty, Lincoln, Port Vue, Glassport, Clairton, PA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.08	-0.11	-0.15	-0.31	-0.84
Allegheny, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.88	-1.07	-1.80	-3.33	-8.34
Allentown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-1.08	-1.74	-1.02	-4.15	-14.80
Allentown-Bethlehem-Easton, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-1.21	-1.97	-1.09	-4.66	-16.76
Alton Township, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-1.87	-2.07	-4.43	-7.09	-15.60
Amador County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.07	-0.12	-0.04	-0.26	-1.01
Anchorage, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.42	-0.59	-0.64	-1.61	-4.85
Anchorage; Eagle River, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.03	-0.04	-0.05	-0.12	-0.33
Anne Arundel County and Baltimore County, MD	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-1.69	-2.95	-1.00	-6.54	-25.46
Archuleta County; Pagosa Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-2.70	-3.01	-6.34	-10.23	-22.70
Armstrong County; Madison, Mahoning, Boggs, Washington, Pine, PA	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	-0.44	-0.49	-1.03	-1.67	-3.72
Aroostock County; City of Presque Isle, ME	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.01	-0.05	-0.20
Atlanta, GA	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-9.37	-15.98	-6.45	-36.17	-137.44
Atlanta, GA	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-7.23	-12.25	-5.18	-27.89	-105.26
Atlantic City, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.06	-0.11	-0.04	-0.25	-0.96
Bakersfield, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.89	-1.49	-0.69	-3.43	-12.73
Baltimore, MD	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	-4.85	-8.08	-3.86	-18.70	-69.17
Baltimore, MD	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-4.87	-8.12	-3.87	-18.78	-69.49
Baltimore, MD	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.03	-0.04	-0.04	-0.12	-0.35
Baton Rouge, LA	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-6.00	-7.47	-11.86	-22.81	-58.79

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Beaver, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.03	-0.05	-0.04	-0.13	-0.40
Benton County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.04	-0.07	-0.02	-0.15	-0.57
Berrien County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.41	-0.68	-0.35	-1.59	-5.79
Billings, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-1.13	-1.33	-2.45	-4.28	-10.21
Billings, MT	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-1.01	-1.12	-2.38	-3.82	-8.42
Birmingham, AL	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-2.66	-4.26	-2.59	-10.23	-36.12
Boise-Northern Ada County, ID	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.73	-1.19	-0.68	-2.82	-10.12
Bonner County; The Sandpoint Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.03	-0.01	-0.06	-0.22
Boston, MA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-1.14	-1.97	-0.70	-4.40	-17.02
Boyd County (part), KY	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-1.04	-1.16	-2.46	-3.95	-8.72
Brooke; Follansbee area, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.03	-0.05	-0.08	-0.20
Brown County: Green Bay, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.03	-0.04	-0.05	-0.12	-0.35
Burlington, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.02	-0.01	-0.05	-0.19
Butte County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.37	-0.59	-0.37	-1.43	-5.00
Calaveras County, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.07	-0.12	-0.04	-0.26	-1.03
Calaveras County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.07	-0.12	-0.04	-0.26	-1.03
Campbell-Clermont Counties, KY-OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.05	-0.08	-0.03	-0.18	-0.69
Canton-Massillon, OH	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.93	-1.35	-1.28	-3.55	-11.17
Central New Hampshire, NH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.30	-0.52	-0.18	-1.15	-4.49
Central Steptoe Valley, NV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.02	-0.03	-0.01	-0.07	-0.29
Charleston, WV	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-1.39	-1.82	-2.52	-5.31	-14.54
Charlotte, NC	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-2.34	-4.07	-1.38	-9.04	-35.19
Charlotte-Rock Hill, NC-SC	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-4.36	-7.59	-2.59	-16.86	-65.56
Chicago, IL-IN-WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-17.58	-26.38	-22.21	-67.42	-219.76
Chicago-Naperville, IL-IN-WI	Ozone (2008 8-hour)	Maintenance, Serious	100	0	-15.01	-23.63	-15.84	-57.68	-199.36
Chico (Butte County), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.37	-0.59	-0.37	-1.43	-5.00
Chico, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.13	-0.21	-0.09	-0.48	-1.83
Chico, CA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.36	-0.57	-0.36	-1.38	-4.82
Cincinnati, OH-KY (OH Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-2.68	-4.62	-1.71	-10.35	-39.82
Cincinnati, OH-KY (KY Portion)	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	-0.85	-1.35	-0.83	-3.25	-11.48

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Cincinnati, OH-KY-IN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-3.67	-6.21	-2.65	-14.15	-53.31
Clark County; Las Vegas planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-3.47	-6.03	-2.07	-13.41	-52.10
Cleveland, OH	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-4.14	-6.97	-3.13	-15.99	-59.78
Cleveland, OH	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-1.38	-2.41	-0.83	-5.35	-20.78
Cleveland, OH	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-1.82	-3.16	-1.10	-7.04	-27.33
Cleveland-Akron-Lorain, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-4.44	-7.41	-3.55	-17.14	-63.38
Cleveland-Akron-Lorain, OH	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-4.01	-6.73	-3.04	-15.46	-57.73
Cochise County; Paul Spur/Douglas planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.03	-0.05	-0.02	-0.11	-0.39
Colorado Springs, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-1.23	-1.94	-1.27	-4.72	-16.43
Columbus, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-3.07	-5.24	-2.10	-11.84	-45.05
Columbus, OH	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-2.85	-4.87	-1.96	-11.01	-41.86
Cook County; Lyons Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.12	-0.20	-0.09	-0.46	-1.72
Cook County; Southeast Chicago, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.67	-1.94	-3.70	-6.33	-14.86
Coshocton County; Franklin Township, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.01	-0.02	-0.03	-0.09
Coso Junction, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.09	-0.10	-0.20	-0.32	-0.73
Cuyahoga County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.39	-2.41	-0.83	-5.36	-20.82
Cuyahoga County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-1.13	-1.96	-0.67	-4.36	-16.95
Dallas-Fort Worth, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-14.77	-24.12	-13.14	-56.88	-205.43
Dallas-Fort Worth, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-14.56	-23.76	-13.02	-56.06	-202.25
Dane County; Madison sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.78	-1.35	-0.46	-3.01	-11.70
Delaware County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-4.07	-4.87	-8.59	-15.44	-37.79
Denver Metro/North Front Range, CO	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-10.72	-15.81	-14.32	-41.07	-131.05
Denver-Boulder, CO	CO (1971 8-hour)	Maintenance, Serious	100	0	-8.26	-12.16	-11.07	-31.63	-100.78
Denver-Boulder-Greeley-Ft. Collins-Loveland, CO	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-10.33	-15.37	-13.40	-39.59	-127.78
Detroit, MI	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	-9.76	-15.44	-10.09	-37.52	-130.44
Detroit, MI	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-3.21	-5.27	-2.77	-12.35	-44.93
Detroit, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.68	-0.96	-1.03	-2.59	-7.81
Detroit-Ann Arbor, MI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-9.78	-15.47	-10.11	-37.60	-130.73
Doña Ana County; Anthony, NM	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.40	-0.45	-0.93	-1.52	-3.40

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Door County, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	0.00	-0.01
Door County-Revised, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	-0.04	-0.08	-0.03	-0.17	-0.65
Douglas (Cochise County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.02	-0.04	-0.02	-0.09	-0.33
Dukes County, MA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.02	-0.03	-0.01	-0.06	-0.24
Duluth, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.27	-0.40	-0.34	-1.02	-3.34
East Chicago, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-1.55	-1.74	-3.61	-5.87	-13.13
East Helena Area, MT	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	-0.02
East Kern County, CA	PM ₁₀ (1987 24-hour)	Nonattainment, Serious	70	0	-0.11	-0.14	-0.21	-0.43	-1.14
El Paso County, TX	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	-1.46	-2.22	-1.73	-5.59	-18.62
El Paso, TX	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.47	-0.57	-0.98	-1.79	-4.44
El Paso-Las Cruces, TX-NM	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-2.06	-3.10	-2.61	-7.91	-25.80
Eugene-Springfield, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.34	-0.58	-0.20	-1.30	-5.06
Evangeline Parish (Partial), LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.01	-0.01	-0.03
Fairbanks, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.20	-0.27	-0.32	-0.75	-2.21
Fairbanks, AK	PM _{2.5} (2006 24-hour)	Nonattainment, Serious	70	0	-0.26	-0.39	-0.36	-1.01	-3.21
Flathead County; Columbia Falls and vicinity, MT	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.01	-0.04	-0.15
Flathead County; Kalispell and vicinity, MT	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.06	-0.11	-0.04	-0.25	-0.97
Flathead County; Whitefish and vicinity, MT	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.01	-0.04	-0.15
Fort Collins, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.33	-0.55	-0.29	-1.28	-4.65
Freehold, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.03	-0.01	-0.06	-0.24
Freestone and Anderson Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.23	-0.27	-0.51	-0.87	-2.05
Fremont County; Canon City Area, CO	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.08	-0.14	-0.05	-0.31	-1.19
Fresno, CA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-1.01	-1.74	-0.63	-3.89	-15.02
Gila County (part): Payson, AZ	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.04	-0.01	-0.09	-0.33
Giles County, VA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	-0.01
Grant County, NM	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.06	-0.11	-0.04	-0.24	-0.92
Grants Pass, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.05	-0.09	-0.03	-0.20	-0.79
Great Falls, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.14	-0.16	-0.33	-0.54	-1.21

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Greater Connecticut, CT	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-2.34	-4.04	-1.46	-9.04	-34.88
Greater Connecticut, CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-2.34	-4.05	-1.46	-9.05	-34.92
Greeley, CO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-3.78	-4.60	-7.76	-14.35	-35.93
Hancock County (part): Weirton, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.11	-0.14	-0.24	-0.43	-1.06
Hancock and Brooke Counties (Part); The city of Weirton, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.11	-0.14	-0.24	-0.43	-1.06
Harrisburg-Lebanon-Carlisle-York, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-1.82	-3.07	-1.36	-7.02	-26.31
Hartford-New Britain-Middletown, CT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-1.65	-2.84	-1.07	-6.37	-24.46
Hayden (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	-0.02	-0.03	-0.01	-0.06	-0.24
Hayden, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.03	-0.05	-0.02	-0.10	-0.40
Hayden, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.02	-0.03	-0.01	-0.06	-0.24
Henderson-Webster Counties, KY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.08	-0.10	-0.17	-0.31	-0.75
Hillsborough County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.03	-0.05	-0.03	-0.12	-0.44
Hillsborough-Polk County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.01	-0.01	-0.04	-0.11
Houston-Galveston-Brazoria, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-23.86	-33.92	-35.41	-91.25	-278.28
Houston-Galveston-Brazoria, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-23.44	-33.24	-34.98	-89.61	-272.57
Howard County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.86	-0.95	-2.03	-3.25	-7.15
Humphreys County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.05	-0.09	-0.03	-0.20	-0.78
Huntington, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.06	-0.10	-0.03	-0.22	-0.85
Hutchinson County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-1.10	-1.23	-2.59	-4.18	-9.28
Imperial County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-0.36	-0.62	-0.21	-1.38	-5.36
Imperial County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.36	-0.62	-0.21	-1.37	-5.35
Imperial County, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.29	-0.51	-0.17	-1.12	-4.37
Imperial County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	-0.29	-0.51	-0.17	-1.12	-4.37
Imperial Valley, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.34	-0.59	-0.20	-1.31	-5.11
Indian Wells, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.15	-0.21	-0.24	-0.58	-1.72
Indiana, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-1.45	-1.68	-3.21	-5.49	-12.89
Indianapolis, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	0.00	-0.02	-0.07
Indianapolis, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.89	-1.53	-0.57	-3.44	-13.23
Inland Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-0.09	-0.16	-0.06	-0.36	-1.37
Inyo County; Owens Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.01	-0.01	-0.01	-0.04	-0.12

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Jackson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.11	-0.19	-0.08	-0.44	-1.67
Jackson County; Medford-Ashland (including White City), OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.25	-0.44	-0.15	-0.97	-3.78
Jamestown, NY	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-1.16	-1.42	-2.36	-4.40	-11.11
Jefferson County, KY	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.01	0.00	-0.02	-0.07
Jefferson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.11	-0.18	-0.07	-0.41	-1.59
Jefferson County, OH	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.03	-0.03	-0.05	-0.10	-0.26
Jefferson County; (part) Steubenville & Mingo Junction, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.16	-0.22	-0.27	-0.62	-1.82
Johnstown, PA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	-1.02	-1.24	-2.11	-3.89	-9.70
Josephine County; Grants Pass, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.05	-0.09	-0.03	-0.20	-0.77
Juneau; Mendenhall Valley area, AK	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.03	-0.01	-0.06	-0.22
Kern County (Eastern Kern), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-3.63	-4.10	-8.37	-13.76	-31.13
Kern County (Eastern Kern), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-3.63	-4.10	-8.37	-13.76	-31.13
King County; Kent, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.03	-0.05	-0.02	-0.11	-0.44
King County; Seattle, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.03	-0.01	-0.07	-0.28
Klamath Falls, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.08	-0.14	-0.06	-0.33	-1.23
Klamath Falls, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.08	-0.14	-0.06	-0.33	-1.23
Klamath Falls, OR	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	-0.10	-0.16	-0.07	-0.37	-1.41
Knoxville, TN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-1.64	-2.59	-1.69	-6.29	-21.90
Knoxville-Sevierville-La Follette, TN	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	-1.95	-3.11	-1.91	-7.49	-26.38
La Porte County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.10	-0.18	-0.06	-0.40	-1.54
LaSalle County; Oglesby, IL	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.06	-0.10	-0.05	-0.23	-0.83
Lake County (part); Lakeview, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Lake County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-2.25	-2.91	-4.13	-8.56	-23.22
Lake County, OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.35	-0.61	-0.21	-1.36	-5.25
Lake County; (part) Eastlake, Timbertlake, Lakeline, Willoughby, Mentor, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.06	-0.10	-0.04	-0.23	-0.89
Lake County; Cities of East Chicago, Hammond, Whiting, and Gary, IN	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-2.00	-2.49	-3.94	-7.58	-19.55
Lake County; Polson, MT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	0.00	-0.01	-0.05
Lake County; Ronan, MT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.03

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Lake Tahoe North Shore, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.04	-0.01	-0.08	-0.32
Lake Tahoe South Shore, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.06	-0.11	-0.04	-0.24	-0.93
Lake Tahoe, NV	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.04	-0.06	-0.02	-0.14	-0.55
Lancaster, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.80	-1.35	-0.56	-3.07	-11.62
Lancaster, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.80	-1.35	-0.56	-3.07	-11.62
Lane County (part); Oakridge, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Lane County; Eugene/Springfield, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.34	-0.59	-0.20	-1.30	-5.06
Las Vegas, NV	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-3.47	-6.03	-2.07	-13.41	-52.10
Las Vegas, NV	CO (1971 8-hour)	Maintenance, Serious	100	0	-3.47	-6.04	-2.08	-13.43	-52.18
Laurel Area (Yellowstone County), MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	-1.01	-1.12	-2.38	-3.83	-8.47
Lebanon County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-0.20	-0.34	-0.12	-0.76	-2.94
Lemont, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-1.97	-2.33	-4.24	-7.48	-18.03
Liberty-Clairton, PA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.08	-0.11	-0.15	-0.31	-0.84
Lincoln County; Libby and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	0.00	-0.03	-0.11
Logan, UT-ID	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.20	-0.35	-0.12	-0.79	-3.06
Longmont, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-1.77	-2.03	-3.95	-6.69	-15.56
Lorain County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.08	-0.14	-0.05	-0.32	-1.23
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-4.89	-6.17	-9.47	-18.61	-48.72
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-4.89	-6.17	-9.47	-18.61	-48.72
Los Angeles-South Coast Air Basin, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-30.16	-49.33	-26.65	-116.17	-420.23
Los Angeles-South Coast Air Basin, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-30.14	-49.31	-26.65	-116.12	-420.04
Los Angeles-South Coast Air Basin, CA	CO (1971 8-hour)	Maintenance, Serious	100	0	-30.16	-49.34	-26.65	-116.17	-420.26
Los Angeles-South Coast Air Basin, CA	NO ₂ (1971 Annual)	Maintenance, Primary	100	0	-30.16	-49.34	-26.65	-116.17	-420.26
Los Angeles-South Coast Air Basin, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-30.16	-49.34	-26.66	-116.18	-420.28
Los Angeles-South Coast Air Basin, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-30.16	-49.34	-26.66	-116.18	-420.28
Louisville, KY-IN (IN Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.38	-0.65	-0.26	-1.48	-5.61
Louisville, KY-IN (KY Portion)	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-1.51	-2.62	-0.89	-5.82	-22.63
Lowell, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.15	-0.26	-0.09	-0.57	-2.23
Lucas County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-2.23	-2.76	-4.44	-8.46	-21.67

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Madison County; Granite City Township and Nameoki Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-2.02	-2.29	-4.64	-7.65	-17.38
Manchester, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.16	-0.29	-0.10	-0.63	-2.46
Manitowoc County, WI	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.09	-0.16	-0.05	-0.35	-1.37
Marathon County: Rothschild Sub-city area, Rib Mountain, Weston, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.25	-0.44	-0.15	-0.98	-3.81
Maricopa and Pinal Counties; Phoenix planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-6.88	-11.98	-4.07	-26.61	-103.55
Marion County: Lawrence, Washington, and Warrant Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.74	-1.27	-0.48	-2.85	-10.94
Mariposa County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-0.03	-0.05	-0.02	-0.11	-0.43
Mariposa County, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.03	-0.05	-0.02	-0.11	-0.43
Marshall, WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.35	-0.40	-0.79	-1.33	-3.08
Medford, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.15	-0.27	-0.09	-0.59	-2.30
Memphis, TN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-1.99	-3.34	-1.55	-7.69	-28.62
Memphis, TN-MS-AR	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-2.60	-4.33	-2.09	-10.02	-37.01
Miami (Gila County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.03	-0.05	-0.02	-0.11	-0.42
Miami, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.03	-0.04	-0.01	-0.10	-0.38
Miami, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.03	-0.05	-0.02	-0.10	-0.40
Millinocket AQCR 109, ME	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.32	-0.53	-0.26	-1.23	-4.56
Milwaukee, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-2.12	-3.69	-1.25	-8.20	-31.93
Milwaukee, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.97	-1.69	-0.57	-3.76	-14.62
Milwaukee-Racine, WI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-1.88	-3.27	-1.11	-7.27	-28.28
Minneapolis-St. Paul, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-7.04	-11.02	-7.62	-27.06	-92.84
Minneapolis-St. Paul, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-6.88	-10.74	-7.53	-26.43	-90.38
Missoula, MT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.20	-0.30	-0.26	-0.78	-2.53
Missoula, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.21	-0.31	-0.27	-0.80	-2.61
Modesto, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.47	-0.80	-0.30	-1.80	-6.91
Mohave County (part); Bullhead City, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.13	-0.22	-0.12	-0.52	-1.88
Mono Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	0.00	-0.02	-0.07
Mono County; Mammoth Lake planning area, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.04	-0.06	-0.02	-0.14	-0.55

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Morenci (Greenlee County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	0.00	-0.01	-0.05
Morgan County, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.05	-0.09	-0.03	-0.19	-0.75
Morongo Band of Mission Indians, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.01	-0.02	-0.01	-0.04	-0.15
Morongo Band of Mission Indians, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.01	-0.02	-0.01	-0.04	-0.14
Morristown, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.03	-0.05	-0.02	-0.12	-0.45
Muscatine County, IA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.03	-0.05	-0.02	-0.11	-0.42
Muscatine, IA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.05	-0.08	-0.03	-0.18	-0.71
Muskegon County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.25	-0.42	-0.17	-0.95	-3.62
Muskingum River, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.06	-0.06	-0.12	-0.21	-0.49
Nashua, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.14	-0.24	-0.08	-0.54	-2.09
Nassau County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.02	-0.01	-0.05	-0.20
Navarro County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.28	-0.32	-0.65	-1.06	-2.39
Nevada County (Western part), CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-0.13	-0.23	-0.08	-0.52	-2.02
Nevada County (Western part), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.13	-0.23	-0.08	-0.52	-2.03
New Haven County, CT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.03	-0.06	-0.02	-0.13	-0.51
New Haven-Meriden-Waterbury, CT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-1.24	-2.16	-0.73	-4.79	-18.64
New Madrid County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
New Manchester-Grant magisterial district in Hancock County, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.12	-0.14	-0.27	-0.45	-1.03
New York County, NY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.49	-0.86	-0.29	-1.90	-7.39
New York-N. New Jersey-Long Island, NY-NJ-CT	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-21.18	-35.79	-15.51	-81.72	-307.25
New York-N. New Jersey-Long Island, NY-NJ-CT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-12.15	-20.27	-9.63	-46.84	-173.46
New York-N. New Jersey-Long Island, NY-NJ-CT	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-21.57	-36.49	-15.68	-83.23	-313.32
New York-Northern New Jersey-Long Island, NY-NJ-CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-21.19	-35.81	-15.53	-81.78	-307.43
Nogales, AZ	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.04	-0.07	-0.02	-0.15	-0.59
Northern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-3.55	-5.66	-3.57	-13.66	-47.86
Oakridge, OR	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.02
Ogden, UT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.12	-0.21	-0.07	-0.46	-1.79
Ogden, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.12	-0.21	-0.07	-0.46	-1.79
Olmsted County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.07	-0.11	-0.08	-0.27	-0.93
Olmsted County; City of Rochester, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.26	-0.41	-0.29	-1.00	-3.41

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Oneida County: Rhinelander Sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.08	-0.13	-0.04	-0.29	-1.14
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Pekin, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.07	-0.12	-0.04	-0.27	-1.05
Penns Grove, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	-0.01
Peoria County: Hollis twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	-0.01	-0.01	-0.02	-0.06
Peoria, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.18	-0.30	-0.15	-0.69	-2.55
Perth Amboy, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.09	-0.15	-0.09	-0.36	-1.30
Philadelphia-Camden County, PA-NJ	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-3.94	-5.34	-6.60	-15.04	-43.15
Philadelphia-Wilmington, PA-NJ-DE (NJ Portion)	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-2.10	-3.40	-1.97	-8.09	-28.88
Philadelphia-Wilmington, PA-NJ-DE (PA-DE Portion)	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	-8.74	-12.94	-11.56	-33.51	-107.37
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-13.33	-20.66	-15.00	-51.21	-173.65
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-19.32	-27.28	-29.17	-73.86	-223.45
Phoenix, AZ	CO (1971 8-hour)	Maintenance, Serious	100	0	-6.71	-11.68	-3.96	-25.94	-100.94
Phoenix-Mesa, AZ	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-6.90	-12.00	-4.08	-26.66	-103.75
Phoenix-Mesa, AZ	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-6.99	-12.16	-4.14	-27.01	-105.07
Pierce County; Tacoma, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.06	-0.07	-0.13	-0.23	-0.54
Pima County; Ajo planning area, AZ	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	0.00	-0.01	-0.05
Pima County; Rillito planning area, AZ	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	-0.06	-0.10	-0.03	-0.22	-0.85
Pinal County (part); West Pinal, AZ	PM ₁₀ (1987 24-hour)	Nonattainment, Serious	70	0	-0.36	-0.62	-0.23	-1.40	-5.39
Pitkin County; Aspen, CO	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.59	-0.68	-1.30	-2.22	-5.19
Pittsburgh, PA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.45	-0.74	-0.42	-1.75	-6.25
Pittsburgh-Beaver Valley, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-6.10	-8.68	-9.03	-23.33	-71.26
Pittsburgh-Beaver Valley, PA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	-5.59	-7.94	-8.30	-21.38	-65.18
Plumas County, CA	PM _{2.5} (2012 Annual)	Nonattainment, Serious	70	0	0.00	0.00	0.00	-0.01	-0.04
Polk County, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.03	-0.06	-0.02	-0.13	-0.50
Portland, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-2.14	-3.63	-1.53	-8.27	-31.22
Power-Bannock Counties; Fort Hall Indian Reservation, ID	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.01	0.00	-0.03	-0.11
Power-Bannock Counties; Portneuf Valley Area, ID	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.11	-0.19	-0.07	-0.43	-1.68

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Provo, UT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.26	-0.44	-0.15	-0.99	-3.84
Provo, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-1.17	-1.87	-1.14	-4.48	-15.80
Prowers County; Lamar, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.03	-0.01	-0.07	-0.28
Raleigh-Durham, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-2.83	-4.92	-1.71	-10.95	-42.47
Ramsey County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.45	-1.60	-3.43	-5.49	-12.08
Reading, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.62	-1.05	-0.46	-2.40	-9.00
Reno, NV	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.39	-0.68	-0.23	-1.52	-5.92
Rhineland, WI	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.04	-0.07	-0.02	-0.15	-0.59
Riverside County (Coachella Valley), CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-0.84	-1.45	-0.50	-3.23	-12.57
Riverside County (Coachella Valley), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-0.84	-1.45	-0.50	-3.23	-12.57
Riverside County; Coachella Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.96	-1.67	-0.57	-3.72	-14.46
Riverside, Los Angeles, Orange, & San Bernardino Counties; South Coast Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-30.04	-49.13	-26.59	-115.72	-418.50
Rosebud County; Lame Deer, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.01	-0.02	-0.06
Routt County (part); Steamboat Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.17	-1.33	-2.65	-4.42	-10.13
Rusk and Panola Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.58	-0.65	-1.37	-2.20	-4.86
Sacramento County, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-5.83	-7.73	-10.22	-22.22	-62.06
Sacramento Metro, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-7.34	-10.32	-11.24	-28.06	-84.35
Sacramento Metro, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-7.34	-10.31	-11.24	-28.06	-84.34
Sacramento, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-3.44	-5.28	-4.04	-13.22	-44.22
Sacramento, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-7.26	-10.17	-11.19	-27.74	-83.09
Salem, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.38	-0.66	-0.22	-1.46	-5.70
Salt Lake City, UT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-1.18	-1.54	-2.17	-4.51	-12.25
Salt Lake City, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-3.72	-5.95	-3.67	-14.31	-50.39
Salt Lake County, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-2.54	-3.90	-2.98	-9.77	-32.69
Salt Lake County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	-2.54	-3.90	-2.98	-9.77	-32.70
San Antonio, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-3.73	-6.09	-3.35	-14.38	-51.85
San Bernardino County, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-4.50	-5.48	-9.22	-17.08	-42.80
San Diego County, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-5.58	-9.62	-3.54	-21.54	-82.93

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
San Diego County, CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-5.57	-9.60	-3.54	-21.51	-82.80
San Diego, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-5.57	-9.60	-3.54	-21.51	-82.79
San Francisco Bay Area, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-14.84	-23.40	-15.58	-57.05	-197.47
San Francisco Bay Area, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-14.83	-23.37	-15.57	-57.00	-197.27
San Francisco Bay Area, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-14.86	-23.43	-15.59	-57.12	-197.74
San Francisco-Oakland-San Jose, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-14.22	-22.32	-15.21	-54.65	-188.15
San Joaquin Valley Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-12.93	-18.39	-19.13	-49.43	-150.96
San Joaquin Valley, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-12.93	-18.39	-19.13	-49.43	-150.96
San Joaquin Valley, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-12.93	-18.39	-19.13	-49.43	-150.96
San Joaquin Valley, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-12.93	-18.39	-19.13	-49.43	-150.95
San Joaquin Valley, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-12.93	-18.39	-19.13	-49.43	-150.95
San Luis Obispo (Eastern San Luis Obispo), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.21	-0.24	-0.45	-0.78	-1.87
San Luis Obispo (Eastern part), CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.21	-0.24	-0.45	-0.78	-1.87
San Manuel (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.03	-0.05	-0.02	-0.11	-0.43
San Miguel County; Telluride, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.06	-0.08	-0.11	-0.24	-0.63
Sanders County (part); Thompson Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Santa Cruz County; Nogales planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.04	-0.07	-0.02	-0.15	-0.59
Seaford, DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.44	-0.77	-0.26	-1.71	-6.64
Seattle-Tacoma, WA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-4.77	-8.28	-2.92	-18.45	-71.46
Sheboygan County, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.11	-0.19	-0.07	-0.43	-1.68
Sheridan County; City of Sheridan, WY	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.05	-0.08	-0.07	-0.21	-0.67
Shoreline Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-0.10	-0.18	-0.06	-0.39	-1.52
Shoshone County; City of Pinehurst, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Shoshone County; Pinehurst Expansion Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.04	-0.06	-0.02	-0.14	-0.53
Silver Bow County; Butte, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.05	-0.09	-0.03	-0.20	-0.77
Somerville, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.03	-0.01	-0.08	-0.29
Southern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-1.17	-1.87	-1.14	-4.48	-15.80
Southwest Indiana, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.09	-0.10	-0.18	-0.32	-0.79
Spokane County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.54	-0.93	-0.32	-2.07	-8.02

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Spokane, WA	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.53	-0.92	-0.32	-2.05	-7.95
Springfield, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.19	-0.33	-0.12	-0.75	-2.89
St. Bernard Parish, LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-2.39	-2.68	-5.57	-9.06	-20.25
St. Clair, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.11	-0.17	-0.09	-0.41	-1.47
St. Lawrence County, NY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.03	-0.01	-0.06	-0.22
St. Louis, MO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-3.19	-4.29	-5.40	-12.16	-34.63
St. Louis, MO-IL	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-8.93	-12.47	-13.91	-34.13	-101.72
St. Louis-St. Charles-Farmington, MO-IL	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-6.82	-10.25	-8.60	-26.17	-85.37
Steubenville, OH-WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.70	-0.82	-1.51	-2.65	-6.34
Steubenville-Weirton, OH-WV	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.47	-0.62	-0.85	-1.81	-4.98
Stockton, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.64	-1.09	-0.45	-2.48	-9.40
Sullivan County, TN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.05	-0.08	-0.03	-0.19	-0.72
Sutter Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.02	-0.02	-0.04	-0.07	-0.15
Syracuse, NY	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.77	-1.34	-0.47	-2.98	-11.52
Tacoma, WA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	-0.89	-1.51	-0.62	-3.42	-12.96
Tazewell County: Groveland twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.03	-0.06	-0.02	-0.13	-0.48
Terre Haute, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.12	-0.20	-0.09	-0.46	-1.70
Thurston County; Cities of Olympia, Tumwater, and Lacey, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.17	-0.29	-0.10	-0.64	-2.51
Titus County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.01	-0.01	-0.02	-0.05
Toms River, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.01	0.00	-0.02	-0.09
Tooele County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	-0.26	-0.29	-0.61	-0.98	-2.18
Trenton, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.13	-0.22	-0.07	-0.48	-1.88
Trona, CA	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	-0.08	-0.09	-0.19	-0.31	-0.69
Tucson, AZ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-1.20	-2.08	-0.71	-4.62	-17.98
Tuolumne County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.09	-0.15	-0.05	-0.33	-1.29
Tuscan Buttes, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	-0.01	-0.02	-0.03
Tuscan Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal (Rural Transport)	100	0	0.00	0.00	-0.01	-0.02	-0.03
Uinta Basin, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-1.19	-1.36	-2.67	-4.50	-10.41
Union County; LaGrande, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.01	-0.05	-0.20

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Upper Green River Basin Area, WY	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-2.04	-2.28	-4.75	-7.71	-17.22
Utah County, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.65	-2.40	-2.28	-6.31	-19.87
Vancouver, WA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.51	-0.88	-0.31	-1.96	-7.60
Ventura County, CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-4.78	-6.07	-9.09	-18.17	-48.12
Ventura County, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-4.77	-6.07	-9.09	-18.16	-48.09
Vermillion County; Part of Clinton Township, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.04	-0.06	-0.05	-0.14	-0.46
Vigo County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.31	-0.48	-0.37	-1.21	-4.02
Walla Walla County; Wallula, WA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.01	-0.01	0.00	-0.02	-0.09
Waltham, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.09	-0.15	-0.05	-0.33	-1.28
Warren County, NJ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.04	-0.08	-0.03	-0.17	-0.67
Warren County: Conewago Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.87	-0.96	-2.05	-3.29	-7.27
Warren County: Warren Boro, Pleasant Twp, Glade Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.89	-1.00	-2.09	-3.38	-7.55
Warren, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.90	-1.01	-2.10	-3.42	-7.66
Washington, DC-MD-VA	Ozone (2008 8-hour)	Nonattainment (DC) Maintenance (MD, VA), Marginal	50	0	-8.51	-14.73	-5.23	-32.88	-127.21
Washington, DC-MD-VA	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-8.51	-14.74	-5.22	-32.87	-127.22
Washington, DC-MD-VA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-1.07	-1.85	-0.63	-4.12	-16.02
Washoe County; Reno planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.40	-0.69	-0.23	-1.53	-5.97
Wayne County, MI	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.42	-0.52	-0.84	-1.60	-4.09
Wayne County: Boston, Center, Franklin, Wayne & Webster Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.10	-0.18	-0.06	-0.40	-1.58
West Central Pinal, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.03	-0.04	-0.02	-0.10	-0.38
West Silver Valley, ID	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-0.02	-0.03	-0.01	-0.07	-0.28
Whatcom County, WA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-2.30	-2.55	-5.45	-8.71	-19.16
Winston-Salem, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.77	-1.35	-0.46	-2.99	-11.64
Worcester, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.34	-0.59	-0.20	-1.32	-5.12
Yakima County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.16	-0.27	-0.09	-0.61	-2.36
Yakima, WA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.05	-0.09	-0.03	-0.21	-0.81
Yuba City-Marysville, CA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.31	-0.52	-0.25	-1.19	-4.41
Yuma, AZ	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.18	-0.32	-0.11	-0.70	-2.73

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Yuma, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.28	-0.49	-0.17	-1.09	-4.24

Notes:

^a Nonattainment or maintenance status as of 2/1/2024. Source: EPA, The Green Book Nonattainment Areas for Criteria Pollutants; <http://www.epa.gov/airquality/greenbook/>. "--" indicates that no severity classification has been established for the NAAQS pollutant.

^b Emissions thresholds in tons per year. Where the threshold differs by precursor pollutant, the smallest of the precursor thresholds is shown. These thresholds are provided for information only; a general conformity determination is not required for the Proposed Action. Source: 40 CFR 93.853.

^c Positive values are emissions increases; negative values are emissions decreases.

EPA = U.S. Environmental Protection Agency; NAAQS = National Ambient Air Quality Standard; CO = carbon monoxide; NO₂ = nitrogen dioxide; PM2.5 = particulate matter less than 2.5 microns in size; PM10 = particulate matter less than 10 microns in size; SO₂ = sulfur dioxide.

Table D-7. Changes in Emissions from U.S. Passenger Cars and Light Trucks by Nonattainment or Maintenance Area and Alternative, Direct and Indirect Impacts--Volatile Organic Compounds (VOCs), 2035

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Ada County; Boise, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-7.56	-22.87	-26.85	-40.29	-80.23
Adams, Denver, and Boulder Counties; Denver Metropolitan area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-33.22	-100.40	-117.76	-176.63	-351.65
Ajo (Pima County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.02	-0.06	-0.07	-0.10	-0.21
Albuquerque, NM	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-10.06	-30.19	-34.97	-51.90	-103.24
Allegan County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.48	-1.41	-1.59	-2.30	-4.56
Allegheny County Air Basin: Hazelwood monitor, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.83	-2.49	-2.89	-4.29	-8.54
Allegheny County, PA	PM _{2.5} (2012 Annual)	Nonattainment, Moderate	100	0	-10.96	-32.91	-38.19	-56.76	-112.92
Allegheny County; Liberty, Lincoln, Port Vue, Glassport, Clairton, PA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.22	-0.67	-0.78	-1.17	-2.33
Allegheny, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-1.70	-5.14	-6.02	-9.01	-17.93
Allentown, PA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	-6.42	-19.25	-22.30	-33.10	-65.83
Allentown-Bethlehem-Easton, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-6.85	-20.52	-23.71	-35.11	-69.82
Alton Township, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.42	-1.28	-1.53	-2.33	-4.64
Amador County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.35	-1.03	-1.18	-1.73	-3.43
Anchorage, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	-1.31	-3.94	-4.55	-6.73	-13.38
Anchorage; Eagle River, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.08	-0.23	-0.26	-0.39	-0.77
Anne Arundel County and Baltimore County, MD	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-7.40	-21.89	-24.79	-36.04	-71.56
Archuleta County; Pagosa Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.32	-4.01	-4.77	-7.23	-14.41
Armstrong County; Madison, Mahoning, Boggs, Washington, Pine, PA	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	-0.42	-1.28	-1.52	-2.31	-4.61
Aroostock County; City of Presque Isle, ME	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.04	-0.12	-0.14	-0.20	-0.39
Atlanta, GA	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-52.90	-157.92	-181.52	-267.54	-531.81
Atlanta, GA	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-43.08	-128.83	-148.50	-219.40	-436.22
Atlantic City, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.33	-0.99	-1.13	-1.66	-3.30
Bakersfield, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-4.27	-12.72	-14.58	-21.42	-42.58
Baltimore, MD	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	-19.75	-58.54	-66.48	-96.92	-192.47
Baltimore, MD	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-19.85	-58.83	-66.80	-97.39	-193.40
Baltimore, MD	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.09	-0.25	-0.29	-0.43	-0.85
Baton Rouge, LA	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-26.01	-78.97	-93.29	-140.77	-280.40

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Beaver, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.14	-0.43	-0.50	-0.74	-1.46
Benton County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.22	-0.66	-0.76	-1.12	-2.23
Berrien County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-2.29	-6.84	-7.89	-11.66	-23.19
Billings, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-5.52	-16.84	-20.03	-30.39	-60.56
Billings, MT	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.74	-2.25	-2.69	-4.10	-8.16
Birmingham, AL	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-14.73	-44.13	-51.04	-75.64	-150.43
Boise-Northern Ada County, ID	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-7.56	-22.86	-26.84	-40.28	-80.19
Bonner County; The Sandpoint Area, ID	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.11	-0.33	-0.39	-0.58	-1.15
Boston, MA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-12.96	-39.15	-45.86	-68.73	-136.81
Boyd County (part), KY	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.40	-1.22	-1.45	-2.21	-4.40
Brooke; Follansbee area, WV	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.03	-0.09	-0.11	-0.16	-0.32
Brown County: Green Bay, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.09	-0.27	-0.31	-0.47	-0.92
Burlington, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.05	-0.14	-0.16	-0.24	-0.47
Butte County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-2.04	-6.10	-7.06	-10.47	-20.82
Calaveras County, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.36	-1.07	-1.22	-1.79	-3.56
Calaveras County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.36	-1.07	-1.22	-1.79	-3.56
Campbell-Clermont Counties, KY-OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.25	-0.74	-0.84	-1.24	-2.46
Canton-Massillon, OH	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-5.70	-17.19	-20.13	-30.14	-59.99
Central New Hampshire, NH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.96	-2.82	-3.13	-4.47	-8.87
Central Steptoe Valley, NV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.05	-0.16	-0.18	-0.27	-0.54
Charleston, WV	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-2.64	-7.87	-9.05	-13.34	-26.53
Charlotte, NC	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-11.25	-33.39	-38.00	-55.52	-110.27
Charlotte-Rock Hill, NC-SC	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-22.58	-67.17	-76.76	-112.53	-223.58
Chicago, IL-IN-WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-58.98	-175.63	-201.02	-295.13	-586.48
Chicago-Naperville, IL-IN-WI	Ozone (2008 8-hour)	Maintenance, Serious	100	0	-102.21	-307.76	-358.75	-535.25	-1,065.13
Chico (Butte County), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-2.04	-6.10	-7.06	-10.47	-20.81
Chico, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.78	-2.33	-2.70	-3.99	-7.94
Chico, CA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	-1.93	-5.80	-6.70	-9.94	-19.77
Cincinnati, OH-KY (OH Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-9.85	-28.99	-32.53	-46.90	-93.05

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Cincinnati, OH-KY (KY Portion)	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	-10.13	-30.69	-36.13	-54.37	-108.28
Cincinnati, OH-KY-IN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-24.38	-73.09	-84.59	-125.42	-249.44
Clark County; Las Vegas planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-17.60	-52.33	-59.77	-87.57	-173.99
Cleveland, OH	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-31.49	-94.66	-110.06	-163.84	-325.97
Cleveland, OH	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-17.34	-52.42	-61.51	-92.30	-183.77
Cleveland, OH	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-19.89	-60.04	-70.27	-105.21	-209.42
Cleveland-Akron-Lorain, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-32.42	-97.43	-113.23	-168.50	-335.24
Cleveland-Akron-Lorain, OH	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-30.57	-91.92	-106.89	-159.15	-316.64
Cochise County; Paul Spur/Douglas planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.12	-0.34	-0.39	-0.57	-1.14
Colorado Springs, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-11.82	-35.76	-41.99	-63.04	-125.52
Columbus, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-19.31	-57.79	-66.70	-98.66	-196.18
Columbus, OH	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-17.14	-51.24	-59.05	-87.21	-173.39
Cook County; Lyons Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.08	-3.26	-3.80	-5.69	-11.32
Cook County; Southeast Chicago, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.69	-5.09	-5.97	-8.95	-17.82
Coshocton County; Franklin Township, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.03	-0.08	-0.09	-0.13	-0.27
Coso Junction, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.16	-0.49	-0.57	-0.87	-1.73
Cuyahoga County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-17.37	-52.52	-61.64	-92.49	-184.15
Cuyahoga County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-14.15	-42.79	-50.21	-75.35	-150.01
Dallas-Fort Worth, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-64.34	-191.42	-218.78	-320.80	-637.41
Dallas-Fort Worth, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-63.52	-189.02	-216.08	-316.91	-629.69
Dane County; Madison sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-4.38	-13.06	-14.98	-22.03	-43.78
Delaware County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-6.15	-18.56	-21.70	-32.47	-64.62
Denver Metro/North Front Range, CO	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-80.83	-244.48	-287.07	-431.00	-858.14
Denver-Boulder, CO	CO (1971 8-hour)	Maintenance, Serious	100	0	-64.69	-195.77	-230.05	-345.63	-688.19
Denver-Boulder-Greeley-Ft. Collins-Loveland, CO	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-80.39	-243.15	-285.49	-428.60	-853.36
Detroit, MI	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	-39.82	-118.58	-135.77	-199.38	-396.21
Detroit, MI	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-16.00	-47.75	-54.86	-80.82	-160.66
Detroit, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-2.22	-6.64	-7.67	-11.35	-22.58
Detroit-Ann Arbor, MI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-39.94	-118.95	-136.19	-200.00	-397.45

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Doña Ana County; Anthony, NM	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.13	-0.40	-0.47	-0.71	-1.40
Door County, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	-0.01	-0.01	-0.01	-0.02
Door County-Revised, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	-0.18	-0.53	-0.60	-0.87	-1.74
Douglas (Cochise County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.09	-0.28	-0.32	-0.47	-0.93
Dukes County, MA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.11	-0.34	-0.39	-0.58	-1.16
Duluth, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-1.97	-5.96	-6.99	-10.50	-20.91
East Chicago, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.58	-1.76	-2.08	-3.13	-6.23
East Helena Area, MT	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.01	-0.02	-0.02	-0.03	-0.06
East Kern County, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.31	-0.94	-1.09	-1.63	-3.23
El Paso County, TX	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-5.09	-15.15	-17.33	-25.42	-50.51
El Paso, TX	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.49	-1.45	-1.68	-2.48	-4.92
El Paso-Las Cruces, TX-NM	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-3.83	-11.15	-12.29	-17.42	-34.50
Eugene-Springfield, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-1.42	-4.21	-4.78	-6.95	-13.80
Evangeline Parish (Partial), LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.02	-0.05	-0.06	-0.09	-0.18
Fairbanks, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.32	-0.96	-1.10	-1.61	-3.21
Fairbanks, AK	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.52	-1.54	-1.75	-2.56	-5.08
Flathead County; Columbia Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.21	-0.63	-0.74	-1.13	-2.24
Flathead County; Kalispell and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.26	-3.82	-4.52	-6.84	-13.62
Flathead County; Whitefish and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.20	-0.60	-0.71	-1.07	-2.14
Fort Collins, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-2.94	-8.88	-10.39	-15.55	-30.96
Freehold, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.06	-0.17	-0.19	-0.27	-0.54
Freestone and Anderson Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.30	-0.90	-1.06	-1.60	-3.18
Fremont County; Canon City Area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.50	-1.51	-1.74	-2.57	-5.11
Fresno, CA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-4.16	-12.31	-13.93	-20.25	-40.20
Gila County (part): Payson, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.08	-0.23	-0.25	-0.37	-0.73
Giles County, VA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	-0.01	-0.01	-0.02
Grant County, NM	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.21	-0.62	-0.69	-0.99	-1.96

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Grants Pass, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.26	-0.78	-0.89	-1.31	-2.59
Great Falls, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.07	-0.21	-0.25	-0.38	-0.76
Greater Connecticut, CT	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-13.79	-41.17	-47.33	-69.77	-138.70
Greater Connecticut, CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-13.80	-41.22	-47.39	-69.86	-138.86
Greeley, CO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-8.40	-25.39	-29.80	-44.72	-89.03
Hancock County (part): Weirton, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.59	-1.81	-2.14	-3.25	-6.47
Hancock and Brooke Counties (Part); The city of Weirton, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.43	-1.30	-1.54	-2.33	-4.63
Harrisburg-Lebanon-Carlisle-York, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-8.66	-25.77	-29.45	-43.18	-85.79
Hartford-New Britain-Middletown, CT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-9.76	-29.14	-33.53	-49.46	-98.33
Hayden (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	-0.06	-0.18	-0.20	-0.29	-0.58
Hayden, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.11	-0.31	-0.35	-0.50	-0.99
Hayden, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.06	-0.18	-0.20	-0.29	-0.58
Henderson-Webster Counties, KY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.16	-0.47	-0.55	-0.83	-1.66
Hillsborough County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.25	-0.74	-0.87	-1.30	-2.58
Hillsborough-Polk County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.04	-0.13	-0.16	-0.23	-0.46
Houston-Galveston-Brazoria, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-123.15	-371.43	-434.18	-649.37	-1,292.49
Houston-Galveston-Brazoria, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-120.86	-364.57	-426.24	-637.60	-1,269.09
Howard County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.50	-1.52	-1.81	-2.76	-5.50
Humphreys County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.25	-0.75	-0.86	-1.25	-2.49
Huntington, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-1.20	-3.65	-4.32	-6.52	-13.00
Hutchinson County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-2.18	-6.67	-7.96	-12.11	-24.13
Imperial County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-2.26	-6.76	-7.78	-11.49	-22.85
Imperial County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-2.26	-6.75	-7.77	-11.48	-22.82
Imperial County, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-1.69	-5.03	-5.79	-8.54	-16.97
Imperial County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	-1.69	-5.03	-5.79	-8.54	-16.97
Imperial Valley, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-2.15	-6.42	-7.39	-10.92	-21.71
Indian Wells, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.50	-1.50	-1.74	-2.58	-5.12
Indiana, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-2.57	-7.80	-9.21	-13.91	-27.71

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Indianapolis, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.07	-0.08	-0.12	-0.24
Indianapolis, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-4.82	-14.38	-16.48	-24.22	-48.14
Inland Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-0.56	-1.66	-1.91	-2.81	-5.59
Inyo County; Owens Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.09	-0.26	-0.29	-0.44	-0.87
Jackson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.54	-1.60	-1.83	-2.67	-5.31
Jackson County; Medford-Ashland (including White City), OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.13	-3.35	-3.80	-5.55	-11.03
Jamestown, NY	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-2.88	-8.73	-10.25	-15.39	-30.64
Jefferson County, KY	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.03	-0.09	-0.11	-0.16	-0.32
Jefferson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.77	-2.32	-2.68	-3.98	-7.92
Jefferson County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.13	-0.39	-0.46	-0.69	-1.38
Jefferson County; (part) Steubenville & Mingo Junction, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-1.21	-3.68	-4.35	-6.56	-13.06
Johnstown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-1.53	-4.61	-5.37	-8.00	-15.92
Josephine County; Grants Pass, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.26	-0.76	-0.87	-1.28	-2.55
Juneau; Mendenhall Valley area, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.07	-0.22	-0.25	-0.37	-0.74
Kern County (Eastern Kern), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-1.58	-4.78	-5.60	-8.38	-16.68
Kern County (Eastern Kern), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-1.58	-4.78	-5.60	-8.38	-16.67
King County; Kent, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.17	-0.52	-0.60	-0.88	-1.76
King County; Seattle, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.11	-0.34	-0.39	-0.57	-1.13
Klamath Falls, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.26	-0.76	-0.85	-1.23	-2.45
Klamath Falls, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.26	-0.76	-0.85	-1.24	-2.45
Klamath Falls, OR	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.30	-0.87	-0.98	-1.42	-2.81
Knoxville, TN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-8.95	-26.85	-31.08	-46.10	-91.69
Knoxville-Sevierville-La Follette, TN	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-10.05	-30.09	-34.73	-51.36	-102.12
La Porte County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.42	-1.23	-1.39	-2.01	-3.99
LaSalle County; Oglesby, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.26	-0.77	-0.88	-1.29	-2.57
Lake County (part); Lakeview, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.01
Lake County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-6.75	-20.36	-23.79	-35.55	-70.76
Lake County, OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-1.56	-4.63	-5.25	-7.65	-15.18
Lake County; (part) Eastlake, Timberlake, Lakeline, Willoughby, Mentor, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.27	-0.80	-0.91	-1.32	-2.62

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Lake County; Cities of East Chicago, Hammond, Whiting, and Gary, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-4.51	-13.61	-15.91	-23.79	-47.35
Lake County; Polson, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.07	-0.20	-0.24	-0.36	-0.72
Lake County; Ronan, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.03	-0.10	-0.12	-0.18	-0.36
Lake Tahoe North Shore, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.13	-0.39	-0.44	-0.65	-1.29
Lake Tahoe South Shore, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.25	-0.73	-0.83	-1.20	-2.37
Lake Tahoe, NV	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.25	-0.76	-0.88	-1.31	-2.60
Lancaster, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-5.68	-17.05	-19.77	-29.36	-58.40
Lancaster, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-5.68	-17.04	-19.76	-29.35	-58.38
Lane County (part); Oakridge, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.01
Lane County; Eugene/Springfield, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.42	-4.22	-4.78	-6.96	-13.81
Las Vegas, NV	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-17.60	-52.33	-59.77	-87.57	-173.99
Las Vegas, NV	CO (1971 8-hour)	Maintenance, Serious	100	0	-17.63	-52.42	-59.86	-87.71	-174.27
Laurel Area (Yellowstone County), MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	-0.88	-2.68	-3.20	-4.87	-9.70
Lebanon County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-1.66	-4.98	-5.79	-8.62	-17.15
Lemont, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-2.59	-7.80	-9.13	-13.66	-27.19
Liberty-Clairton, PA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.22	-0.67	-0.78	-1.17	-2.33
Lincoln County; Libby and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.05	-0.14	-0.16	-0.25	-0.49
Logan, UT-ID	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-1.17	-3.50	-4.02	-5.92	-11.76
Longmont, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-2.84	-8.64	-10.22	-15.44	-30.76
Lorain County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.47	-1.41	-1.62	-2.38	-4.73
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-6.33	-18.83	-21.50	-31.50	-62.58
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-6.33	-18.83	-21.50	-31.49	-62.57
Los Angeles-South Coast Air Basin, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-99.74	-294.14	-331.18	-479.03	-950.65
Los Angeles-South Coast Air Basin, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-99.69	-293.99	-331.02	-478.79	-950.17
Los Angeles-South Coast Air Basin, CA	CO (1971 8-hour)	Maintenance, Serious	100	0	-99.71	-294.04	-331.06	-478.83	-950.25
Los Angeles-South Coast Air Basin, CA	NO ₂ (1971 Annual)	Maintenance, Primary	100	0	-99.71	-294.04	-331.06	-478.84	-950.27
Los Angeles-South Coast Air Basin, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-99.75	-294.15	-331.20	-479.05	-950.68
Los Angeles-South Coast Air Basin, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-99.75	-294.15	-331.20	-479.05	-950.68

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Louisville, KY-IN (IN Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-3.16	-9.52	-11.08	-16.51	-32.85
Louisville, KY-IN (KY Portion)	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-4.38	-12.74	-14.00	-19.81	-39.22
Lowell, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.98	-2.92	-3.37	-4.98	-9.91
Lucas County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-7.10	-21.50	-25.31	-38.09	-75.85
Madison County; Granite City Township and Nameoki Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.95	-5.93	-7.02	-10.61	-21.13
Manchester, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.58	-1.70	-1.90	-2.73	-5.42
Manitowoc County, WI	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.33	-0.97	-1.08	-1.56	-3.09
Marathon County: Rothschild Sub-city area, Rib Mountain, Weston, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.96	-2.84	-3.18	-4.59	-9.11
Maricopa and Pinal Counties; Phoenix planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-32.58	-96.65	-109.95	-160.54	-318.85
Marion County: Lawrence, Washington, and Warrant Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-3.99	-11.89	-13.63	-20.03	-39.81
Mariposa County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-0.16	-0.48	-0.55	-0.81	-1.61
Mariposa County, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.16	-0.48	-0.55	-0.81	-1.61
Marshall, WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.71	-2.16	-2.56	-3.88	-7.73
Medford, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.68	-2.03	-2.30	-3.36	-6.67
Memphis, TN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-9.25	-27.51	-31.43	-46.06	-91.50
Memphis, TN-MS-AR	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-13.57	-40.49	-46.53	-68.57	-136.30
Miami (Gila County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.09	-0.28	-0.31	-0.45	-0.90
Miami, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.08	-0.25	-0.28	-0.40	-0.79
Miami, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.09	-0.26	-0.30	-0.43	-0.85
Millinocket AQCR 109, ME	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-1.22	-3.62	-4.10	-5.96	-11.83
Milwaukee, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-12.56	-37.49	-43.08	-63.47	-126.17
Milwaukee, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-6.58	-19.69	-22.74	-33.65	-66.91
Milwaukee-Racine, WI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-11.14	-33.25	-38.20	-56.29	-111.89
Minneapolis-St. Paul, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-31.56	-94.30	-108.56	-160.22	-318.52
Minneapolis-St. Paul, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-31.24	-93.38	-107.59	-158.88	-315.89
Missoula, MT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-3.36	-10.23	-12.13	-18.36	-36.57
Missoula, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-3.46	-10.52	-12.47	-18.87	-37.61

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Modesto, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-2.06	-6.11	-6.95	-10.13	-20.12
Mohave County (part); Bullhead City, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.41	-1.21	-1.36	-1.98	-3.94
Mono Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.05	-0.14	-0.16	-0.23	-0.46
Mono County; Mammoth Lake planning area, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.08	-0.24	-0.27	-0.38	-0.76
Morenci (Greenlee County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.03	-0.03	-0.04	-0.08
Morgan County, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.23	-0.69	-0.78	-1.14	-2.27
Morongo Band of Mission Indians, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.05	-0.14	-0.16	-0.23	-0.46
Morongo Band of Mission Indians, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.05	-0.14	-0.16	-0.23	-0.46
Morristown, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.15	-0.45	-0.52	-0.76	-1.50
Muscatine County, IA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.23	-0.70	-0.81	-1.21	-2.40
Muscatine, IA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.40	-1.19	-1.39	-2.07	-4.11
Muskegon County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-1.36	-4.05	-4.65	-6.85	-13.62
Muskingum River, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.12	-0.37	-0.43	-0.66	-1.31
Nashua, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.49	-1.45	-1.62	-2.33	-4.63
Nassau County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.05	-0.15	-0.17	-0.25	-0.49
Navarro County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.37	-1.12	-1.33	-2.01	-4.01
Nevada County (Western part), CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-0.57	-1.70	-1.92	-2.78	-5.52
Nevada County (Western part), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.58	-1.70	-1.92	-2.79	-5.54
New Haven County, CT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.26	-0.78	-0.91	-1.35	-2.69
New Haven-Meriden-Waterbury, CT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-9.77	-29.35	-34.07	-50.64	-100.73
New Madrid County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
New Manchester-Grant magisterial district in Hancock County, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.28	-0.85	-1.01	-1.53	-3.05
New York County, NY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-12.47	-37.93	-44.92	-67.93	-135.33
New York-N. New Jersey-Long Island, NY-NJ-CT	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-182.39	-549.28	-640.51	-955.93	-1,902.30
New York-N. New Jersey-Long Island, NY-NJ-CT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-120.03	-362.36	-424.23	-635.33	-1,264.68
New York-N. New Jersey-Long Island, NY-NJ-CT	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-188.01	-566.28	-660.48	-985.93	-1,962.03
New York-Northern New Jersey-Long Island, NY-NJ-CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-188.42	-567.72	-662.53	-989.47	-1,969.16
Nogales, AZ	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.13	-0.38	-0.42	-0.61	-1.21
Northern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-19.75	-59.23	-68.59	-101.74	-202.37

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Oakridge, OR	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.02	-0.03	-0.06
Ogden, UT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.71	-2.13	-2.44	-3.60	-7.16
Ogden, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.71	-2.13	-2.44	-3.60	-7.16
Olmsted County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.24	-0.70	-0.80	-1.17	-2.32
Olmsted County; City of Rochester, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.87	-2.57	-2.92	-4.27	-8.48
Oneida County: Rhinelander Sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.49	-1.45	-1.68	-2.48	-4.92
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Pekin, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.41	-1.23	-1.41	-2.08	-4.14
Penns Grove, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.01	-0.01	-0.02
Peoria County: Hollis twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.02	-0.06	-0.08	-0.11	-0.22
Peoria, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-1.11	-3.31	-3.83	-5.68	-11.30
Perth Amboy, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.80	-2.40	-2.81	-4.20	-8.36
Philadelphia-Camden County, PA-NJ	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-12.12	-36.40	-42.24	-62.79	-124.90
Philadelphia-Wilmington, PA-NJ-DE (NJ Portion)	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-11.24	-33.63	-38.81	-57.40	-114.14
Philadelphia-Wilmington, PA-NJ-DE (PA-DE Portion)	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-34.32	-102.72	-118.57	-175.39	-348.76
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-59.38	-177.54	-204.59	-302.18	-600.80
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-54.55	-162.78	-186.95	-275.32	-547.25
Phoenix, AZ	CO (1971 8-hour)	Maintenance, Serious	100	0	-31.95	-94.81	-107.88	-157.55	-312.93
Phoenix-Mesa, AZ	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-32.69	-96.97	-110.32	-161.07	-319.92
Phoenix-Mesa, AZ	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-32.97	-97.81	-111.25	-162.41	-322.57
Pierce County; Tacoma, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.07	-0.23	-0.26	-0.40	-0.79
Pima County; Ajo planning area, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.06	-0.06	-0.09	-0.19
Pima County; Rillito planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.28	-0.82	-0.93	-1.36	-2.70
Pinal County (part); West Pinal, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-1.17	-3.44	-3.83	-5.49	-10.88
Pitkin County; Aspen, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.64	-1.93	-2.26	-3.40	-6.77
Pittsburgh, PA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-2.77	-8.31	-9.63	-14.30	-28.44
Pittsburgh-Beaver Valley, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-25.68	-77.19	-89.76	-133.65	-265.90

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Pittsburgh-Beaver Valley, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-23.42	-70.43	-81.90	-121.94	-242.62
Plumas County, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-0.03	-0.10	-0.12	-0.17	-0.34
Polk County, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.14	-0.42	-0.48	-0.69	-1.37
Portland, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-11.83	-35.32	-40.60	-59.84	-118.95
Power-Bannock Counties; Fort Hall Indian Reservation, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.08	-0.23	-0.27	-0.41	-0.82
Power-Bannock Counties; Portneuf Valley Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.99	-6.04	-7.13	-10.76	-21.42
Provo, UT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-1.26	-3.73	-4.25	-6.22	-12.36
Provo, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-4.55	-13.51	-15.41	-22.56	-44.81
Prowers County; Lamar, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.09	-0.28	-0.32	-0.47	-0.93
Raleigh-Durham, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-12.32	-36.46	-41.29	-60.05	-119.22
Ramsey County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.21	-0.63	-0.75	-1.14	-2.27
Reading, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-3.71	-11.09	-12.79	-18.90	-37.59
Reno, NV	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-2.90	-8.70	-10.08	-14.98	-29.79
Rhineland, WI	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.23	-0.70	-0.80	-1.19	-2.36
Riverside County (Coachella Valley), CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-2.92	-8.57	-9.56	-13.71	-27.19
Riverside County (Coachella Valley), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-2.92	-8.57	-9.56	-13.71	-27.19
Riverside County; Coachella Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-3.33	-9.78	-10.90	-15.63	-30.99
Riverside, Los Angeles, Orange, & San Bernardino Counties; South Coast Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-99.37	-293.04	-329.97	-477.29	-947.20
Rosebud County; Lame Deer, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.02	-0.07	-0.08	-0.12	-0.24
Routt County (part); Steamboat Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.69	-5.13	-6.08	-9.19	-18.31
Rusk and Panola Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.62	-1.88	-2.25	-3.42	-6.81
Sacramento County, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-9.02	-26.71	-30.28	-44.08	-87.52
Sacramento Metro, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-17.29	-51.38	-58.60	-85.75	-170.34
Sacramento Metro, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-17.29	-51.38	-58.59	-85.74	-170.32
Sacramento, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-10.05	-29.74	-33.68	-48.97	-97.23
Sacramento, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-16.79	-49.89	-56.89	-83.24	-165.37

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Salem, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-1.84	-5.47	-6.23	-9.12	-18.11
Salt Lake City, UT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-2.61	-7.84	-9.08	-13.47	-26.80
Salt Lake City, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-20.49	-61.43	-71.11	-105.45	-209.72
Salt Lake County, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-11.66	-34.90	-40.31	-59.67	-118.66
Salt Lake County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	-11.66	-34.92	-40.33	-59.70	-118.71
San Antonio, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-18.51	-55.26	-63.53	-93.64	-186.14
San Bernardino County, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-4.94	-14.72	-16.88	-24.81	-49.32
San Diego County, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-34.17	-102.13	-117.64	-173.68	-345.30
San Diego County, CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-34.12	-101.98	-117.45	-173.41	-344.77
San Diego, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-34.06	-101.79	-117.24	-173.09	-344.13
San Francisco Bay Area, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-48.05	-142.15	-160.96	-234.03	-464.65
San Francisco Bay Area, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-47.99	-141.98	-160.77	-233.75	-464.09
San Francisco Bay Area, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-48.11	-142.35	-161.19	-234.35	-465.30
San Francisco-Oakland-San Jose, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-45.31	-134.08	-151.83	-220.77	-438.33
San Joaquin Valley Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-31.73	-94.23	-107.38	-157.04	-311.95
San Joaquin Valley, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-31.73	-94.23	-107.38	-157.04	-311.95
San Joaquin Valley, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-31.73	-94.23	-107.38	-157.04	-311.95
San Joaquin Valley, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-31.73	-94.23	-107.38	-157.03	-311.94
San Joaquin Valley, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-31.73	-94.23	-107.38	-157.03	-311.94
San Luis Obispo (Eastern San Luis Obispo), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.29	-0.89	-1.04	-1.55	-3.09
San Luis Obispo (Eastern part), CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.29	-0.89	-1.04	-1.55	-3.09
San Manuel (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.12	-0.34	-0.38	-0.54	-1.08
San Miguel County; Telluride, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.33	-0.99	-1.17	-1.76	-3.50
Sanders County (part); Thompson Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.02	-0.02	-0.05
Santa Cruz County; Nogales planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.13	-0.38	-0.43	-0.62	-1.22
Seaford, DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-1.87	-5.53	-6.25	-9.07	-18.00
Seattle-Tacoma, WA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-28.65	-85.59	-98.47	-145.24	-288.74
Sheboygan County, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.65	-1.94	-2.23	-3.29	-6.54

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Sheridan County; City of Sheridan, WY	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.28	-0.83	-0.97	-1.46	-2.90
Shoreline Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-0.59	-1.76	-2.03	-2.99	-5.94
Shoshone County; City of Pinehurst, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Shoshone County; Pinehurst Expansion Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.23	-0.70	-0.80	-1.19	-2.36
Silver Bow County; Butte, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.24	-0.71	-0.81	-1.18	-2.35
Somerville, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.15	-0.44	-0.51	-0.75	-1.50
Southern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-4.55	-13.51	-15.41	-22.56	-44.81
Southwest Indiana, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.11	-0.33	-0.38	-0.57	-1.14
Spokane County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-3.01	-8.97	-10.30	-15.16	-30.13
Spokane, WA	CO (1971 8-hour)	Maintenance, Serious	100	0	-2.98	-8.90	-10.21	-15.03	-29.88
Springfield, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.98	-2.92	-3.34	-4.89	-9.71
St. Bernard Parish, LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-3.26	-9.94	-11.83	-17.97	-35.82
St. Clair, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.56	-1.67	-1.92	-2.84	-5.65
St. Lawrence County, NY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.09	-0.26	-0.30	-0.44	-0.88
St. Louis, MO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-8.21	-24.58	-28.39	-42.02	-83.57
St. Louis, MO-IL	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-31.74	-95.31	-110.58	-164.31	-326.86
St. Louis-St. Charles-Farmington, MO-IL	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-32.32	-96.97	-112.43	-166.94	-332.07
Steubenville, OH-WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-1.41	-4.27	-5.05	-7.61	-15.15
Steubenville-Weirton, OH-WV	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-2.85	-8.66	-10.22	-15.42	-30.71
Stockton, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-2.71	-8.03	-9.11	-13.28	-26.37
Sullivan County, TN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.19	-0.57	-0.65	-0.94	-1.87
Sutter Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.04	-0.05	-0.07	-0.15
Syracuse, NY	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-6.37	-19.16	-22.28	-33.17	-65.99
Tacoma, WA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-6.15	-18.45	-21.37	-31.72	-63.10
Tazewell County: Groveland twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.19	-0.56	-0.64	-0.94	-1.87
Terre Haute, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.42	-1.25	-1.41	-2.05	-4.06
Thurston County; Cities of Olympia, Tumwater, and Lacey, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.64	-1.89	-2.12	-3.07	-6.09
Titus County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.02	-0.06	-0.08	-0.12	-0.23
Toms River, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.07	-0.08	-0.12	-0.23

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Tooele County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	-0.04	-0.11	-0.13	-0.20	-0.39
Trenton, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.59	-1.75	-1.99	-2.91	-5.78
Trona, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.15	-0.44	-0.53	-0.80	-1.59
Tucson, AZ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-5.56	-16.50	-18.77	-27.41	-54.45
Tuolumne County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.46	-1.38	-1.58	-2.31	-4.59
Tuscan Buttes, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.01	-0.01	-0.02	-0.04
Tuscan Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal (Rural Transport)	100	0	0.00	-0.01	-0.01	-0.02	-0.04
Uinta Basin, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-2.98	-9.07	-10.78	-16.36	-32.60
Union County; LaGrande, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.08	-0.24	-0.28	-0.41	-0.82
Upper Green River Basin Area, WY	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-4.20	-12.82	-15.28	-23.24	-46.32
Utah County, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-5.01	-14.94	-17.11	-25.13	-49.94
Vancouver, WA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-2.57	-7.63	-8.72	-12.78	-25.39
Ventura County, CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-5.50	-16.29	-18.46	-26.85	-53.32
Ventura County, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-5.50	-16.27	-18.44	-26.82	-53.25
Vermillion County; Part of Clinton Township, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.10	-0.30	-0.35	-0.50	-1.00
Vigo County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.95	-2.83	-3.21	-4.68	-9.30
Walla Walla County; Wallula, WA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.07	-0.21	-0.25	-0.37	-0.73
Waltham, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.56	-1.67	-1.93	-2.85	-5.66
Warren County, NJ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.18	-0.54	-0.61	-0.88	-1.75
Warren County: Conewago Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.94	-2.87	-3.43	-5.22	-10.41
Warren County: Warren Boro, Pleasant Twp, Glade Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-1.72	-5.26	-6.28	-9.55	-19.03
Warren, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-2.03	-6.19	-7.38	-11.22	-22.37
Washington, DC-MD-VA	Ozone (2008 8-hour)	Nonattainment (DC) Maintenance (MD, VA), Marginal	50	0	-37.86	-112.12	-127.18	-185.22	-367.80
Washington, DC-MD-VA	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-32.31	-95.16	-106.91	-154.34	-306.23
Washington, DC-MD-VA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-3.95	-11.62	-13.03	-18.76	-37.22
Washoe County; Reno planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-2.92	-8.75	-10.15	-15.07	-29.97
Wayne County, MI	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.65	-1.96	-2.27	-3.38	-6.72

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Wayne County: Boston, Center, Franklin, Wayne & Webster Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.35	-1.01	-1.13	-1.61	-3.20
West Central Pinal, AZ	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	-0.10	-0.29	-0.32	-0.46	-0.92
West Silver Valley, ID	PM _{2.5} (2012 Annual)	Maintenance, Moderate	100	0	-0.09	-0.26	-0.30	-0.44	-0.88
Whatcom County, WA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.19	-0.58	-0.69	-1.05	-2.09
Winston-Salem, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-2.62	-7.69	-8.56	-12.26	-24.30
Worcester, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-1.48	-4.39	-4.98	-7.24	-14.38
Yakima County, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-1.49	-4.50	-5.25	-7.85	-15.62
Yakima, WA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.51	-1.54	-1.80	-2.69	-5.35
Yuba City-Marysville, CA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	-1.66	-4.97	-5.72	-8.44	-16.77
Yuma, AZ	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-1.09	-3.25	-3.74	-5.52	-10.97
Yuma, AZ	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	-1.69	-5.04	-5.80	-8.56	-17.01

Notes:
^a Nonattainment or maintenance status as of 2/1/2024. Source: EPA, The Green Book Nonattainment Areas for Criteria Pollutants; <http://www.epa.gov/airquality/greenbook/>. "--" indicates that no severity classification has been established for the NAAQS pollutant.
^b Emissions thresholds in tons per year. Where the threshold differs by precursor pollutant, the smallest of the precursor thresholds is shown. These thresholds are provided for information only; a general conformity determination is not required for the Proposed Action. Source: 40 CFR 93.853.
^c Positive values are emissions increases; negative values are emissions decreases.
 EPA = U.S. Environmental Protection Agency; NAAQS = National Ambient Air Quality Standard; CO = carbon monoxide; NO₂ = nitrogen dioxide; PM_{2.5} = particulate matter less than 2.5 microns in size; PM₁₀ = particulate matter less than 10 microns in size; SO₂ = sulfur dioxide.

Table D-8. Changes in Emissions from U.S. Passenger Cars and Light Trucks by Nonattainment or Maintenance Area and Alternative, Direct and Indirect Impacts--Volatile Organic Compounds (VOCs), 2050

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Ada County; Boise, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-5.52	-13.94	-10.35	-31.13	-98.91
Adams, Denver, and Boulder Counties; Denver Metropolitan area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-24.47	-61.60	-45.77	-137.22	-435.56
Ajo (Pima County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.02	-0.05	-0.04	-0.10	-0.30
Albuquerque, NM	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-9.03	-21.88	-16.36	-46.73	-146.34
Allegan County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.60	-1.38	-1.04	-2.76	-8.46
Allegheny County Air Basin: Hazelwood monitor, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.73	-1.77	-1.32	-3.79	-11.89
Allegheny County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	-9.59	-23.32	-17.43	-50.08	-157.12
Allegheny County; Liberty, Lincoln, Port Vue, Glassport, Clairton, PA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.18	-0.45	-0.33	-0.98	-3.08
Allegheny, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-1.30	-3.26	-2.42	-7.19	-22.76
Allentown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-5.77	-13.96	-10.44	-29.82	-93.39
Allentown-Bethlehem-Easton, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-6.38	-15.34	-11.48	-32.53	-101.62
Alton Township, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.21	-0.58	-0.43	-1.42	-4.63
Amador County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.37	-0.88	-0.66	-1.81	-5.59
Anchorage, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	-1.27	-3.05	-2.28	-6.45	-20.15
Anchorage; Eagle River, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.07	-0.17	-0.13	-0.36	-1.13
Anne Arundel County and Baltimore County, MD	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-8.77	-20.31	-15.31	-41.17	-126.64
Archuleta County; Pagosa Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.74	-1.98	-1.46	-4.71	-15.22
Armstrong County; Madison, Mahoning, Boggs, Washington, Pine, PA	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	-0.22	-0.61	-0.45	-1.46	-4.74
Aroostock County; City of Presque Isle, ME	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.06	-0.15	-0.11	-0.29	-0.89
Atlanta, GA	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-52.75	-125.40	-94.08	-262.31	-815.82
Atlanta, GA	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-41.45	-99.15	-74.30	-208.85	-651.08
Atlantic City, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.36	-0.84	-0.63	-1.73	-5.36
Bakersfield, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-4.56	-10.78	-8.10	-22.38	-69.43
Baltimore, MD	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	-22.69	-52.76	-39.74	-107.47	-331.22
Baltimore, MD	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-22.81	-53.03	-39.94	-108.01	-332.88
Baltimore, MD	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.09	-0.21	-0.16	-0.43	-1.34
Baton Rouge, LA	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-16.70	-43.35	-32.04	-99.61	-319.18

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Beaver, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.13	-0.31	-0.23	-0.66	-2.06
Benton County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.22	-0.53	-0.40	-1.11	-3.45
Berrien County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-2.18	-5.23	-3.92	-11.03	-34.39
Billings, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-3.22	-8.68	-6.38	-20.67	-66.92
Billings, MT	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.38	-1.04	-0.76	-2.53	-8.23
Birmingham, AL	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-13.52	-32.60	-24.40	-69.32	-216.76
Boise-Northern Ada County, ID	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-5.52	-13.93	-10.34	-31.12	-98.87
Bonner County; The Sandpoint Area, ID	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.11	-0.26	-0.20	-0.58	-1.83
Boston, MA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-9.75	-24.44	-18.17	-54.21	-171.84
Boyd County (part), KY	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.20	-0.55	-0.41	-1.34	-4.34
Brooke; Follansbee area, WV	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.06	-0.04	-0.12	-0.40
Brown County: Green Bay, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.09	-0.21	-0.16	-0.45	-1.39
Burlington, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.06	-0.14	-0.11	-0.29	-0.88
Butte County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-1.86	-4.49	-3.36	-9.56	-29.89
Calaveras County, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.38	-0.90	-0.68	-1.86	-5.76
Calaveras County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.38	-0.90	-0.68	-1.86	-5.76
Campbell-Clermont Counties, KY-OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.26	-0.62	-0.46	-1.28	-3.96
Canton-Massillon, OH	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-4.34	-10.86	-8.08	-24.00	-75.99
Central New Hampshire, NH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-1.39	-3.14	-2.37	-6.16	-18.76
Central Steptoe Valley, NV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.14	-0.35	-0.26	-0.76	-2.39
Charleston, WV	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-2.62	-6.24	-4.68	-13.05	-40.61
Charlotte, NC	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-12.61	-29.43	-22.15	-60.21	-185.86
Charlotte-Rock Hill, NC-SC	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-24.32	-57.16	-42.97	-117.92	-365.03
Chicago, IL-IN-WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-62.08	-146.33	-109.95	-303.02	-939.21
Chicago-Naperville, IL-IN-WI	Ozone (2008 8-hour)	Maintenance, Serious	100	0	-83.60	-206.01	-153.60	-448.65	-1,413.98
Chico (Butte County), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-1.86	-4.49	-3.36	-9.55	-29.89
Chico, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.75	-1.81	-1.36	-3.85	-12.03
Chico, CA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	-1.78	-4.30	-3.22	-9.15	-28.62
Cincinnati, OH-KY (OH Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-12.75	-29.15	-22.02	-58.15	-177.87
Cincinnati, OH-KY (KY Portion)	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	-6.97	-17.84	-13.22	-40.37	-128.79

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Cincinnati, OH-KY-IN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-22.24	-53.70	-40.18	-114.37	-357.83
Clark County; Las Vegas planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-19.21	-45.08	-33.90	-92.90	-287.46
Cleveland, OH	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-26.81	-65.56	-48.95	-141.57	-444.97
Cleveland, OH	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-12.65	-31.91	-23.70	-71.23	-226.24
Cleveland, OH	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-15.21	-38.00	-28.27	-83.95	-265.78
Cleveland-Akron-Lorain, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-27.77	-67.82	-50.64	-146.26	-459.53
Cleveland-Akron-Lorain, OH	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-25.95	-63.50	-47.40	-137.20	-431.31
Cochise County; Paul Spur/Douglas planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.14	-0.32	-0.24	-0.66	-2.05
Colorado Springs, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-8.65	-21.87	-16.24	-48.94	-155.54
Columbus, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-18.27	-43.82	-32.82	-92.61	-289.04
Columbus, OH	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-16.57	-39.60	-29.68	-83.34	-259.72
Cook County; Lyons Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.86	-2.12	-1.58	-4.66	-14.73
Cook County; Southeast Chicago, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.25	-3.14	-2.33	-6.98	-22.13
Coshocton County; Franklin Township, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.02	-0.05	-0.04	-0.11	-0.35
Coso Junction, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.08	-0.22	-0.16	-0.52	-1.69
Cuyahoga County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-12.68	-31.98	-23.75	-71.38	-226.70
Cuyahoga County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-10.33	-26.05	-19.34	-58.14	-184.66
Dallas-Fort Worth, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-68.78	-161.67	-121.53	-333.72	-1,033.24
Dallas-Fort Worth, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-67.74	-159.29	-119.73	-328.95	-1,018.64
Dane County; Madison sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-4.51	-10.66	-8.00	-22.16	-68.79
Delaware County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-4.78	-11.90	-8.86	-26.21	-82.88
Denver Metro/North Front Range, CO	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-58.41	-147.69	-109.64	-330.45	-1,050.36
Denver-Boulder, CO	CO (1971 8-hour)	Maintenance, Serious	100	0	-46.20	-117.17	-86.94	-263.02	-836.86
Denver-Boulder-Greeley-Ft. Collins-Loveland, CO	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-58.25	-147.25	-109.32	-329.39	-1,046.91
Detroit, MI	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	-41.72	-98.39	-73.92	-203.87	-632.02
Detroit, MI	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-16.09	-38.21	-28.67	-79.84	-248.22
Detroit, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-2.06	-4.95	-3.70	-10.49	-32.76
Detroit-Ann Arbor, MI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-41.84	-98.67	-74.13	-204.45	-633.83
Doña Ana County; Anthony, NM	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.10	-0.25	-0.18	-0.55	-1.75

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Door County, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	-0.01	0.00	-0.01	-0.03
Door County-Revised, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	-0.22	-0.51	-0.38	-1.03	-3.16
Douglas (Cochise County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.12	-0.27	-0.20	-0.56	-1.74
Dukes County, MA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.10	-0.25	-0.19	-0.53	-1.67
Duluth, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-1.56	-3.94	-2.93	-8.82	-28.03
East Chicago, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.38	-0.99	-0.73	-2.25	-7.20
East Helena Area, MT	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.01	-0.02	-0.01	-0.04	-0.12
East Kern County, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.22	-0.55	-0.41	-1.19	-3.75
El Paso County, TX	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-5.45	-12.82	-9.63	-26.48	-82.03
El Paso, TX	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.47	-1.12	-0.84	-2.37	-7.38
El Paso-Las Cruces, TX-NM	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-5.78	-12.96	-9.83	-25.23	-76.48
Eugene-Springfield, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-1.75	-4.06	-3.06	-8.25	-25.39
Evangeline Parish (Partial), LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.02	-0.02	-0.06	-0.18
Fairbanks, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.47	-1.09	-0.82	-2.25	-6.96
Fairbanks, AK	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.80	-1.86	-1.40	-3.80	-11.70
Flathead County; Columbia Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.15	-0.39	-0.29	-0.90	-2.88
Flathead County; Kalispell and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.93	-2.44	-1.80	-5.66	-18.20
Flathead County; Whitefish and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.14	-0.37	-0.28	-0.87	-2.79
Fort Collins, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-2.34	-5.85	-4.35	-12.91	-40.86
Freehold, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.08	-0.17	-0.13	-0.35	-1.06
Freestone and Anderson Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.21	-0.53	-0.39	-1.20	-3.83
Fremont County; Canon City Area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.48	-1.16	-0.87	-2.44	-7.62
Fresno, CA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-5.09	-11.77	-8.87	-23.82	-73.22
Gila County (part): Payson, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.11	-0.25	-0.19	-0.51	-1.56
Giles County, VA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	-0.01	-0.03
Grant County, NM	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.29	-0.65	-0.49	-1.29	-3.94
Grants Pass, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.30	-0.71	-0.53	-1.46	-4.53
Great Falls, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.05	-0.13	-0.10	-0.30	-0.95

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Greater Connecticut, CT	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-13.71	-32.61	-24.46	-68.25	-212.31
Greater Connecticut, CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-13.73	-32.65	-24.49	-68.33	-212.55
Greeley, CO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-6.13	-15.45	-11.48	-34.50	-109.57
Hancock County (part): Weirton, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.35	-0.93	-0.68	-2.18	-7.04
Hancock and Brooke Counties (Part); The city of Weirton, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.27	-0.70	-0.52	-1.63	-5.24
Harrisburg-Lebanon-Carlisle-York, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-9.28	-21.81	-16.40	-45.00	-139.31
Hartford-New Britain-Middletown, CT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-9.62	-22.92	-17.19	-48.06	-149.59
Hayden (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	-0.08	-0.17	-0.13	-0.35	-1.05
Hayden, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.13	-0.29	-0.22	-0.57	-1.73
Hayden, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.08	-0.17	-0.13	-0.35	-1.05
Henderson-Webster Counties, KY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.11	-0.27	-0.20	-0.61	-1.94
Hillsborough County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.20	-0.49	-0.36	-1.07	-3.37
Hillsborough-Polk County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.03	-0.08	-0.06	-0.18	-0.56
Houston-Galveston-Brazoria, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-96.17	-239.17	-178.05	-526.02	-1,663.01
Houston-Galveston-Brazoria, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-94.07	-234.10	-174.26	-515.24	-1,629.31
Howard County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.24	-0.68	-0.50	-1.67	-5.43
Humphreys County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.28	-0.66	-0.50	-1.35	-4.17
Huntington, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.78	-2.04	-1.51	-4.72	-15.14
Hutchinson County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-1.15	-3.18	-2.33	-7.73	-25.17
Imperial County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-2.19	-5.22	-3.92	-10.99	-34.26
Imperial County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-2.18	-5.22	-3.91	-10.98	-34.21
Imperial County, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-1.74	-4.15	-3.11	-8.70	-27.06
Imperial County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	-1.74	-4.15	-3.11	-8.70	-27.06
Imperial Valley, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-2.09	-5.00	-3.74	-10.51	-32.77
Indian Wells, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.45	-1.09	-0.82	-2.33	-7.28
Indiana, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-1.63	-4.24	-3.13	-9.76	-31.30
Indianapolis, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.03	-0.06	-0.04	-0.12	-0.38
Indianapolis, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-4.99	-11.79	-8.85	-24.49	-75.99
Inland Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-0.54	-1.28	-0.96	-2.69	-8.36
Inyo County; Owens Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.05	-0.12	-0.09	-0.26	-0.82

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Jackson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.59	-1.38	-1.04	-2.84	-8.78
Jackson County; Medford-Ashland (including White City), OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-1.34	-3.12	-2.35	-6.36	-19.62
Jamestown, NY	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-2.07	-5.24	-3.89	-11.74	-37.34
Jefferson County, KY	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.03	-0.07	-0.05	-0.15	-0.46
Jefferson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.69	-1.68	-1.26	-3.59	-11.26
Jefferson County, OH	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.08	-0.22	-0.16	-0.50	-1.61
Jefferson County; (part) Steubenville & Mingo Junction, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.82	-2.11	-1.56	-4.83	-15.44
Johnstown, PA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	-1.28	-3.15	-2.35	-6.82	-21.46
Josephine County; Grants Pass, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.29	-0.69	-0.52	-1.44	-4.46
Juneau; Mendenhall Valley area, AK	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.10	-0.23	-0.17	-0.49	-1.54
Kern County (Eastern Kern), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-1.13	-2.83	-2.11	-6.28	-19.91
Kern County (Eastern Kern), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-1.13	-2.83	-2.11	-6.28	-19.91
King County; Kent, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.17	-0.42	-0.31	-0.87	-2.71
King County; Seattle, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.11	-0.27	-0.20	-0.55	-1.73
Klamath Falls, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.39	-0.90	-0.68	-1.81	-5.54
Klamath Falls, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.39	-0.90	-0.68	-1.81	-5.54
Klamath Falls, OR	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	-0.45	-1.03	-0.77	-2.06	-6.31
Knoxville, TN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-8.12	-19.62	-14.68	-41.83	-130.93
Knoxville-Sevierville-La Follette, TN	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	-9.52	-22.83	-17.10	-48.25	-150.57
La Porte County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.52	-1.20	-0.90	-2.42	-7.43
LaSalle County; Oglesby, IL	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.28	-0.67	-0.50	-1.38	-4.29
Lake County (part); Lakeview, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.01	-0.03	-0.10
Lake County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-5.34	-13.26	-9.87	-29.09	-91.90
Lake County, OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-1.82	-4.22	-3.18	-8.58	-26.41
Lake County; (part) Eastlake, Timbertlake, Lakeline, Willoughby, Mentor, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.31	-0.72	-0.54	-1.46	-4.49
Lake County; Cities of East Chicago, Hammond, Whiting, and Gary, IN	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-3.54	-8.80	-6.55	-19.33	-61.11
Lake County; Polson, MT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	-0.05	-0.14	-0.10	-0.31	-1.01
Lake County; Ronan, MT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	-0.03	-0.07	-0.05	-0.16	-0.51

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Lake Tahoe North Shore, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.13	-0.30	-0.22	-0.63	-1.94
Lake Tahoe South Shore, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.31	-0.72	-0.54	-1.44	-4.41
Lake Tahoe, NV	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.23	-0.56	-0.42	-1.20	-3.74
Lancaster, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-5.04	-12.22	-9.14	-26.17	-82.03
Lancaster, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-5.03	-12.22	-9.13	-26.16	-82.01
Lane County (part); Oakridge, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.02
Lane County; Eugene/Springfield, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.75	-4.07	-3.06	-8.25	-25.40
Las Vegas, NV	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-19.21	-45.08	-33.90	-92.90	-287.46
Las Vegas, NV	CO (1971 8-hour)	Maintenance, Serious	100	0	-19.24	-45.16	-33.95	-93.05	-287.91
Laurel Area (Yellowstone County), MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	-0.46	-1.26	-0.92	-3.06	-9.96
Lebanon County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-1.40	-3.43	-2.56	-7.42	-23.33
Lemont, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-2.00	-5.00	-3.72	-11.02	-34.88
Liberty-Clairton, PA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.18	-0.45	-0.33	-0.98	-3.08
Lincoln County; Libby and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.06	-0.15	-0.11	-0.34	-1.07
Logan, UT-ID	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-1.20	-2.84	-2.13	-5.93	-18.43
Longmont, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-1.78	-4.66	-3.44	-10.77	-34.56
Lorain County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.48	-1.14	-0.85	-2.37	-7.38
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-6.61	-15.52	-11.67	-31.98	-98.96
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-6.61	-15.52	-11.67	-31.98	-98.94
Los Angeles-South Coast Air Basin, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-125.57	-288.37	-217.68	-578.46	-1,773.08
Los Angeles-South Coast Air Basin, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-125.51	-288.23	-217.57	-578.17	-1,772.21
Los Angeles-South Coast Air Basin, CA	CO (1971 8-hour)	Maintenance, Serious	100	0	-125.57	-288.35	-217.66	-578.38	-1,772.81
Los Angeles-South Coast Air Basin, CA	NO ₂ (1971 Annual)	Maintenance, Primary	100	0	-125.57	-288.36	-217.67	-578.39	-1,772.84
Los Angeles-South Coast Air Basin, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-125.59	-288.41	-217.70	-578.52	-1,773.27
Los Angeles-South Coast Air Basin, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-125.59	-288.41	-217.70	-578.52	-1,773.27
Louisville, KY-IN (IN Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-2.64	-6.48	-4.83	-14.05	-44.22
Louisville, KY-IN (KY Portion)	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-6.72	-15.04	-11.40	-29.18	-88.37
Lowell, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.93	-2.22	-1.66	-4.69	-14.65
Lucas County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-4.90	-12.52	-9.27	-28.31	-90.28

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Madison County; Granite City Township and Nameoki Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.21	-3.18	-2.35	-7.38	-23.72
Manchester, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.79	-1.80	-1.36	-3.57	-10.89
Manitowoc County, WI	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.44	-1.01	-0.76	-2.01	-6.15
Marathon County: Rothschild Sub-city area, Rib Mountain, Weston, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-1.24	-2.84	-2.14	-5.67	-17.35
Maricopa and Pinal Counties; Phoenix planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-36.93	-86.10	-64.82	-175.97	-542.97
Marion County: Lawrence, Washington, and Warrant Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-4.12	-9.75	-7.32	-20.25	-62.82
Mariposa County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-0.17	-0.39	-0.29	-0.81	-2.53
Mariposa County, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.17	-0.39	-0.29	-0.82	-2.53
Marshall, WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.42	-1.11	-0.82	-2.61	-8.43
Medford, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.81	-1.90	-1.43	-3.87	-11.93
Memphis, TN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-9.96	-23.38	-17.58	-48.20	-149.17
Memphis, TN-MS-AR	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-13.60	-32.31	-24.24	-67.54	-210.01
Miami (Gila County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.14	-0.32	-0.24	-0.65	-1.99
Miami, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.13	-0.29	-0.22	-0.58	-1.79
Miami, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.13	-0.31	-0.23	-0.62	-1.89
Millinocket AQCR 109, ME	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-1.46	-3.37	-2.54	-6.82	-20.96
Milwaukee, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-12.60	-29.94	-22.46	-62.57	-194.54
Milwaukee, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-6.17	-14.82	-11.10	-31.37	-97.96
Milwaukee-Racine, WI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-11.16	-26.50	-19.89	-55.39	-172.24
Minneapolis-St. Paul, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-30.94	-73.78	-55.32	-154.90	-482.36
Minneapolis-St. Paul, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-30.25	-72.26	-54.16	-152.02	-473.73
Missoula, MT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-2.17	-5.74	-4.23	-13.44	-43.30
Missoula, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-2.23	-5.90	-4.35	-13.82	-44.53
Modesto, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-2.39	-5.57	-4.19	-11.35	-34.99
Mohave County (part); Bullhead City, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.58	-1.35	-1.02	-2.74	-8.41
Mono Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.03	-0.07	-0.05	-0.15	-0.48
Mono County; Mammoth Lake planning area, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.17	-0.39	-0.30	-0.78	-2.38

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Morenci (Greenlee County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.02	-0.04	-0.03	-0.07	-0.23
Morgan County, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.27	-0.62	-0.47	-1.27	-3.92
Morongo Band of Mission Indians, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.05	-0.12	-0.09	-0.25	-0.76
Morongo Band of Mission Indians, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.05	-0.12	-0.09	-0.24	-0.75
Morristown, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.17	-0.39	-0.29	-0.80	-2.48
Muscatine County, IA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.21	-0.50	-0.38	-1.09	-3.44
Muscatine, IA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.35	-0.85	-0.63	-1.84	-5.79
Muskegon County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-1.38	-3.27	-2.46	-6.83	-21.24
Muskingum River, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.07	-0.19	-0.14	-0.44	-1.41
Nashua, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.67	-1.52	-1.15	-3.02	-9.23
Nassau County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.07	-0.15	-0.12	-0.31	-0.95
Navarro County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.19	-0.53	-0.39	-1.25	-4.04
Nevada County (Western part), CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-0.69	-1.59	-1.20	-3.20	-9.84
Nevada County (Western part), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.69	-1.59	-1.20	-3.21	-9.88
New Haven County, CT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.23	-0.56	-0.42	-1.21	-3.78
New Haven-Meriden-Waterbury, CT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-8.55	-20.80	-15.54	-44.68	-140.19
New Madrid County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
New Manchester-Grant magisterial district in Hancock County, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.15	-0.41	-0.30	-0.97	-3.15
New York County, NY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-7.58	-19.94	-14.71	-46.41	-149.27
New York-N. New Jersey-Long Island, NY-NJ-CT	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-148.30	-365.86	-272.73	-797.74	-2,515.15
New York-N. New Jersey-Long Island, NY-NJ-CT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-91.32	-228.33	-169.83	-505.04	-1,599.52
New York-N. New Jersey-Long Island, NY-NJ-CT	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-152.32	-376.04	-280.29	-820.56	-2,587.74
New York-Northern New Jersey-Long Island, NY-NJ-CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-151.27	-374.12	-278.77	-817.96	-2,581.13
Nogales, AZ	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.19	-0.44	-0.33	-0.88	-2.69
Northern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-17.99	-43.49	-32.53	-92.74	-290.31
Oakridge, OR	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.01	-0.03	-0.08
Ogden, UT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.71	-1.70	-1.27	-3.55	-11.04
Ogden, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.71	-1.70	-1.27	-3.55	-11.04
Olmsted County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.27	-0.64	-0.48	-1.30	-4.02
Olmsted County; City of Rochester, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-1.00	-2.32	-1.75	-4.75	-14.66

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Oneida County: Rhinelander Sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.47	-1.12	-0.84	-2.36	-7.35
Pechanga Band of Luiseno Mission Indians of the Pechanga Reservation, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Pechanga Band of Luiseno Mission Indians of the Pechanga Reservation, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Pekin, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.42	-0.99	-0.74	-2.07	-6.44
Penns Grove, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01	-0.03
Peoria County: Hollis twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.02	-0.05	-0.03	-0.10	-0.31
Peoria, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-1.03	-2.48	-1.85	-5.28	-16.51
Perth Amboy, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.62	-1.55	-1.15	-3.41	-10.77
Philadelphia-Camden County, PA-NJ	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-10.60	-25.78	-19.26	-55.37	-173.71
Philadelphia-Wilmington, PA-NJ-DE (NJ Portion)	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-10.64	-25.51	-19.11	-53.92	-168.27
Philadelphia-Wilmington, PA-NJ-DE (PA-DE Portion)	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	-32.41	-77.78	-58.26	-164.44	-513.27
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-57.36	-137.10	-102.76	-288.58	-899.40
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-55.00	-130.52	-97.95	-272.44	-846.72
Phoenix, AZ	CO (1971 8-hour)	Maintenance, Serious	100	0	-36.09	-84.19	-63.37	-172.16	-531.30
Phoenix-Mesa, AZ	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-37.00	-86.27	-64.94	-176.32	-544.03
Phoenix-Mesa, AZ	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-37.41	-87.19	-65.64	-178.15	-549.60
Pierce County; Tacoma, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.05	-0.14	-0.10	-0.30	-0.96
Pima County; Ajo planning area, AZ	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.04	-0.03	-0.09	-0.28
Pima County; Rillito planning area, AZ	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	-0.30	-0.71	-0.53	-1.44	-4.46
Pinal County (part); West Pinal, AZ	PM ₁₀ (1987 24-hour)	Nonattainment, Serious	70	0	-1.66	-3.77	-2.86	-7.45	-22.71
Pitkin County; Aspen, CO	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.45	-1.15	-0.85	-2.58	-8.22
Pittsburgh, PA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-2.47	-5.99	-4.48	-12.81	-40.13
Pittsburgh-Beaver Valley, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-21.80	-53.33	-39.81	-115.23	-362.25
Pittsburgh-Beaver Valley, PA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	-19.87	-48.63	-36.30	-105.09	-330.37
Plumas County, CA	PM _{2.5} (2012 Annual)	Nonattainment, Serious	70	0	-0.02	-0.06	-0.04	-0.13	-0.41
Polk County, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.17	-0.39	-0.30	-0.80	-2.45
Portland, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-11.88	-28.24	-21.18	-59.06	-183.68
Power-Bannock Counties; Fort Hall Indian Reservation, ID	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	-0.07	-0.17	-0.13	-0.39	-1.24
Power-Bannock Counties; Portneuf Valley Area, ID	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-1.35	-3.50	-2.59	-8.01	-25.65

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Provo, UT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-1.40	-3.28	-2.47	-6.74	-20.82
Provo, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-4.99	-11.70	-8.80	-24.05	-74.34
Prowers County; Lamar, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.11	-0.27	-0.21	-0.58	-1.81
Raleigh-Durham, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-14.58	-33.75	-25.44	-68.38	-210.36
Ramsey County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.11	-0.29	-0.22	-0.71	-2.31
Reading, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-3.54	-8.47	-6.35	-17.88	-55.76
Reno, NV	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-2.67	-6.48	-4.84	-13.87	-43.49
Rhineland, WI	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.24	-0.58	-0.44	-1.23	-3.82
Riverside County (Coachella Valley), CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-3.96	-9.00	-6.81	-17.80	-54.27
Riverside County (Coachella Valley), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-3.96	-9.00	-6.81	-17.80	-54.27
Riverside County; Coachella Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-4.54	-10.32	-7.80	-20.39	-62.16
Riverside, Los Angeles, Orange, & San Bernardino Counties; South Coast Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-125.04	-287.17	-216.77	-576.09	-1,765.88
Rosebud County; Lame Deer, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.02	-0.06	-0.04	-0.12	-0.39
Routt County (part); Steamboat Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.01	-2.67	-1.97	-6.24	-20.07
Rusk and Panola Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.31	-0.85	-0.62	-2.07	-6.76
Sacramento County, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-10.54	-24.44	-18.41	-49.63	-152.78
Sacramento Metro, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-18.96	-44.38	-33.39	-91.17	-281.80
Sacramento Metro, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-18.95	-44.38	-33.38	-91.16	-281.77
Sacramento, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-12.00	-27.77	-20.94	-56.28	-173.14
Sacramento, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-18.49	-43.30	-32.57	-88.94	-274.89
Salem, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-2.07	-4.85	-3.65	-9.95	-30.74
Salt Lake City, UT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-2.36	-5.71	-4.27	-12.19	-38.17
Salt Lake City, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-18.95	-45.75	-34.23	-97.43	-304.86
Salt Lake County, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-10.90	-26.21	-19.62	-55.51	-173.39
Salt Lake County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	-10.91	-26.22	-19.63	-55.54	-173.46
San Antonio, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-18.44	-43.84	-32.89	-91.73	-285.31
San Bernardino County, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-4.66	-11.04	-8.29	-22.99	-71.40
San Diego County, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-33.21	-79.30	-59.45	-166.71	-519.37

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
San Diego County, CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-33.16	-79.18	-59.36	-166.45	-518.56
San Diego, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-33.14	-79.13	-59.32	-166.34	-518.19
San Francisco Bay Area, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-56.97	-131.85	-99.39	-267.10	-821.56
San Francisco Bay Area, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-56.90	-131.69	-99.27	-266.78	-820.57
San Francisco Bay Area, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-57.05	-132.05	-99.54	-267.49	-822.77
San Francisco-Oakland-San Jose, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-53.80	-124.55	-93.88	-252.33	-776.20
San Joaquin Valley Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-35.17	-82.25	-61.89	-168.72	-521.23
San Joaquin Valley, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-35.17	-82.25	-61.89	-168.72	-521.23
San Joaquin Valley, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-35.17	-82.25	-61.89	-168.72	-521.24
San Joaquin Valley, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-35.17	-82.25	-61.88	-168.71	-521.21
San Joaquin Valley, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-35.17	-82.25	-61.88	-168.71	-521.21
San Luis Obispo (Eastern San Luis Obispo), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.20	-0.50	-0.37	-1.12	-3.55
San Luis Obispo (Eastern part), CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.20	-0.50	-0.37	-1.12	-3.55
San Manuel (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.14	-0.31	-0.23	-0.62	-1.88
San Miguel County; Telluride, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.21	-0.55	-0.41	-1.26	-4.02
Sanders County (part); Thompson Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.01	-0.04	-0.12
Santa Cruz County; Nogales planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.19	-0.44	-0.34	-0.89	-2.72
Seaford, DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-2.26	-5.21	-3.93	-10.51	-32.30
Seattle-Tacoma, WA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-28.44	-67.74	-50.80	-142.00	-441.97
Sheboygan County, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.66	-1.57	-1.18	-3.28	-10.21
Sheridan County; City of Sheridan, WY	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.27	-0.67	-0.50	-1.48	-4.68
Shoreline Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-0.60	-1.43	-1.07	-2.98	-9.28
Shoshone County; City of Pinehurst, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Shoshone County; Pinehurst Expansion Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.22	-0.53	-0.40	-1.12	-3.49
Silver Bow County; Butte, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.28	-0.65	-0.49	-1.34	-4.13
Somerville, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.13	-0.32	-0.24	-0.68	-2.13
Southern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-4.99	-11.70	-8.80	-24.05	-74.34
Southwest Indiana, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.09	-0.22	-0.16	-0.48	-1.52
Spokane County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-3.11	-7.37	-5.53	-15.35	-47.70

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Spokane, WA	CO (1971 8-hour)	Maintenance, Serious	100	0	-3.08	-7.31	-5.49	-15.23	-47.33
Springfield, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-1.07	-2.51	-1.88	-5.17	-15.99
St. Bernard Parish, LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-1.75	-4.75	-3.48	-11.39	-36.97
St. Clair, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.54	-1.30	-0.97	-2.73	-8.52
St. Lawrence County, NY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.09	-0.22	-0.17	-0.47	-1.45
St. Louis, MO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-7.68	-18.46	-13.83	-39.12	-122.19
St. Louis, MO-IL	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-27.89	-67.79	-50.66	-145.45	-456.20
St. Louis-St. Charles-Farmington, MO-IL	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-28.71	-69.65	-52.07	-149.08	-467.23
Steubenville, OH-WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.94	-2.43	-1.80	-5.56	-17.79
Steubenville-Weirton, OH-WV	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-1.86	-4.81	-3.56	-11.02	-35.26
Stockton, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-3.17	-7.37	-5.55	-14.99	-46.18
Sullivan County, TN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.24	-0.55	-0.42	-1.11	-3.41
Sutter Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.02	-0.01	-0.04	-0.14
Syracuse, NY	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-5.42	-13.26	-9.90	-28.64	-90.03
Tacoma, WA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	-5.56	-13.48	-10.08	-28.81	-90.24
Tazewell County: Groveland twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.19	-0.45	-0.33	-0.93	-2.91
Terre Haute, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.53	-1.22	-0.92	-2.46	-7.55
Thurston County; Cities of Olympia, Tumwater, and Lacey, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.83	-1.90	-1.44	-3.82	-11.70
Titus County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.03	-0.02	-0.07	-0.23
Toms River, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.03	-0.07	-0.05	-0.14	-0.44
Tooele County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	-0.03	-0.07	-0.05	-0.15	-0.48
Trenton, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.67	-1.56	-1.18	-3.19	-9.84
Trona, CA	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	-0.07	-0.18	-0.13	-0.45	-1.45
Tucson, AZ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-6.42	-14.98	-11.28	-30.62	-94.50
Tuolumne County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.49	-1.15	-0.86	-2.38	-7.36
Tuscan Buttes, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.01	0.00	-0.01	-0.04
Tuscan Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal (Rural Transport)	100	0	0.00	-0.01	0.00	-0.01	-0.04
Uinta Basin, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-1.72	-4.60	-3.39	-10.90	-35.23
Union County; LaGrande, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.09	-0.22	-0.16	-0.47	-1.47

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Upper Green River Basin Area, WY	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-2.06	-5.64	-4.14	-13.65	-44.38
Utah County, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-5.23	-12.35	-9.28	-25.61	-79.41
Vancouver, WA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-2.79	-6.55	-4.92	-13.50	-41.77
Ventura County, CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-6.48	-15.02	-11.32	-30.45	-93.71
Ventura County, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-6.47	-15.00	-11.30	-30.42	-93.59
Vermillion County; Part of Clinton Township, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.12	-0.29	-0.22	-0.58	-1.80
Vigo County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-1.10	-2.56	-1.93	-5.21	-16.05
Walla Walla County; Wallula, WA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.05	-0.12	-0.09	-0.27	-0.85
Waltham, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.53	-1.27	-0.95	-2.69	-8.39
Warren County, NJ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.22	-0.51	-0.39	-1.03	-3.16
Warren County: Conewago Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.48	-1.34	-0.98	-3.25	-10.60
Warren County: Warren Boro, Pleasant Twp, Glade Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.94	-2.59	-1.89	-6.26	-20.35
Warren, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-1.11	-3.05	-2.24	-7.38	-24.01
Washington, DC-MD-VA	Ozone (2008 8-hour)	Nonattainment (DC) Maintenance (MD, VA), Marginal	50	0	-44.02	-102.16	-76.97	-207.65	-639.46
Washington, DC-MD-VA	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-41.33	-94.64	-71.48	-189.17	-579.11
Washington, DC-MD-VA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-5.17	-11.81	-8.92	-23.51	-71.87
Washoe County; Reno planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-2.69	-6.52	-4.88	-13.97	-43.79
Wayne County, MI	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.58	-1.41	-1.05	-3.01	-9.45
Wayne County: Boston, Center, Franklin, Wayne & Webster Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.49	-1.11	-0.84	-2.20	-6.70
West Central Pinal, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.12	-0.27	-0.20	-0.53	-1.60
West Silver Valley, ID	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-0.12	-0.28	-0.21	-0.58	-1.82
Whatcom County, WA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.09	-0.26	-0.19	-0.63	-2.06
Winston-Salem, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-3.64	-8.24	-6.24	-16.26	-49.52
Worcester, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-1.78	-4.13	-3.11	-8.38	-25.80
Yakima County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.25	-3.10	-2.31	-6.79	-21.45
Yakima, WA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.43	-1.06	-0.79	-2.33	-7.37
Yuba City-Marysville, CA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-1.65	-3.92	-2.94	-8.22	-25.58
Yuma, AZ	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-1.11	-2.64	-1.98	-5.54	-17.25

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Yuma, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-1.71	-4.07	-3.05	-8.55	-26.62

Notes:

^a Nonattainment or maintenance status as of 2/1/2024. Source: EPA, The Green Book Nonattainment Areas for Criteria Pollutants; <http://www.epa.gov/airquality/greenbook/>. "--" indicates that no severity classification has been established for the NAAQS pollutant.

^b Emissions thresholds in tons per year. Where the threshold differs by precursor pollutant, the smallest of the precursor thresholds is shown. These thresholds are provided for information only; a general conformity determination is not required for the Proposed Action. Source: 40 CFR 93.853.

^c Positive values are emissions increases; negative values are emissions decreases.

EPA = U.S. Environmental Protection Agency; NAAQS = National Ambient Air Quality Standard; CO = carbon monoxide; NO₂ = nitrogen dioxide; PM2.5 = particulate matter less than 2.5 microns in size; PM10 = particulate matter less than 10 microns in size; SO₂ = sulfur dioxide.

Table D-9. Changes in Emissions from U.S. Passenger Cars and Light Trucks by Nonattainment or Maintenance Area and Alternative, Direct and Indirect Impacts--Carbon Monoxide (CO), 2035

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Ada County; Boise, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-24.32	-69.31	-77.23	-109.93	-218.70
Adams, Denver, and Boulder Counties; Denver Metropolitan area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-111.40	-317.14	-353.96	-504.22	-1,003.43
Ajo (Pima County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.18	-0.51	-0.57	-0.81	-1.61
Albuquerque, NM	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-55.30	-157.71	-175.48	-249.63	-496.54
Allegan County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-4.98	-14.19	-15.79	-22.46	-44.67
Allegheny County Air Basin: Hazelwood monitor, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-4.31	-12.29	-13.70	-19.51	-38.82
Allegheny County, PA	PM _{2.5} (2012 Annual)	Nonattainment, Moderate	100	0	-57.04	-162.47	-181.14	-257.92	-513.20
Allegheny County; Liberty, Lincoln, Port Vue, Glassport, Clairton, PA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.99	-2.80	-3.15	-4.50	-8.97
Allegheny, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-6.50	-18.36	-20.78	-29.77	-59.37
Allentown, PA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	-35.38	-100.87	-112.27	-159.74	-317.75
Allentown-Bethlehem-Easton, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-40.69	-116.03	-129.13	-183.71	-365.43
Alton Township, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.43	-0.84	-1.73	-2.95	-6.22
Amador County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-2.73	-7.79	-8.66	-12.31	-24.49
Anchorage, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	-8.08	-22.85	-25.83	-37.00	-73.77
Anchorage; Eagle River, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.45	-1.27	-1.45	-2.09	-4.18
Anne Arundel County and Baltimore County, MD	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-68.79	-196.25	-218.22	-310.35	-617.26
Archuleta County; Pagosa Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-2.04	-4.98	-7.23	-11.34	-23.29
Armstrong County; Madison, Mahoning, Boggs, Washington, Pine, PA	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	-0.44	-1.10	-1.53	-2.37	-4.85
Aroostock County; City of Presque Isle, ME	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.46	-1.32	-1.47	-2.09	-4.15
Atlanta, GA	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-361.02	-1,029.89	-1,145.33	-1,628.94	-3,239.89
Atlanta, GA	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-273.87	-781.25	-868.85	-1,235.73	-2,457.83
Atlantic City, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-2.61	-7.45	-8.29	-11.79	-23.44
Bakersfield, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-31.40	-89.55	-99.63	-141.74	-281.93
Baltimore, MD	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	-175.08	-499.28	-555.59	-790.40	-1,572.23
Baltimore, MD	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-176.00	-501.91	-558.51	-794.56	-1,580.50
Baltimore, MD	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.63	-1.78	-1.99	-2.84	-5.66
Baton Rouge, LA	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-54.56	-154.72	-173.88	-248.44	-494.93

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Beaver, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.81	-2.31	-2.57	-3.66	-7.27
Benton County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-1.55	-4.43	-4.92	-7.00	-13.92
Berrien County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-14.29	-40.76	-45.33	-64.47	-128.23
Billings, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-4.89	-13.76	-15.69	-22.56	-45.04
Billings, MT	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.32	-0.72	-1.19	-1.93	-4.01
Birmingham, AL	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-85.10	-242.63	-270.12	-384.36	-764.59
Boise-Northern Ada County, ID	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-24.31	-69.28	-77.19	-109.88	-218.61
Bonner County; The Sandpoint Area, ID	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.43	-1.23	-1.37	-1.95	-3.89
Boston, MA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-45.73	-130.46	-145.07	-206.31	-410.34
Boyd County (part), KY	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.38	-0.87	-1.37	-2.19	-4.54
Brooke; Follansbee area, WV	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.10	-0.27	-0.31	-0.44	-0.89
Brown County: Green Bay, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.58	-1.66	-1.85	-2.63	-5.23
Burlington, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.50	-1.43	-1.60	-2.27	-4.51
Butte County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-11.62	-33.15	-36.88	-52.46	-104.34
Calaveras County, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-2.79	-7.95	-8.85	-12.58	-25.02
Calaveras County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-2.79	-7.96	-8.85	-12.58	-25.03
Campbell-Clermont Counties, KY-OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-1.85	-5.27	-5.86	-8.33	-16.56
Canton-Massillon, OH	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-21.07	-60.02	-66.92	-95.28	-189.59
Central New Hampshire, NH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-11.95	-34.08	-37.90	-53.89	-107.19
Central Steptoe Valley, NV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.24	-0.68	-0.76	-1.08	-2.14
Charleston, WV	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-18.19	-51.56	-57.98	-82.87	-165.09
Charlotte, NC	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-95.42	-272.21	-302.69	-430.48	-856.19
Charlotte-Rock Hill, NC-SC	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-176.72	-504.15	-560.60	-797.28	-1,585.72
Chicago, IL-IN-WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-446.10	-1,271.71	-1,416.01	-2,015.01	-4,008.53
Chicago-Naperville, IL-IN-WI	Ozone (2008 8-hour)	Maintenance, Serious	100	0	-452.41	-1,289.95	-1,435.78	-2,042.80	-4,063.59
Chico (Butte County), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-11.62	-33.15	-36.88	-52.45	-104.34
Chico, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-4.56	-13.00	-14.46	-20.57	-40.92
Chico, CA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	-11.07	-31.57	-35.12	-49.96	-99.37
Cincinnati, OH-KY (OH Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-106.41	-303.57	-337.58	-480.10	-954.89

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Cincinnati, OH-KY (KY Portion)	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	-26.91	-76.67	-85.46	-121.67	-242.07
Cincinnati, OH-KY-IN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-138.32	-394.49	-438.87	-624.27	-1,241.72
Clark County; Las Vegas planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-139.36	-397.58	-442.10	-628.75	-1,250.53
Cleveland, OH	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-153.53	-437.90	-487.10	-692.85	-1,378.09
Cleveland, OH	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-56.22	-160.39	-178.35	-253.65	-504.49
Cleveland, OH	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-73.86	-210.71	-234.31	-333.24	-662.79
Cleveland-Akron-Lorain, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-160.29	-457.15	-508.61	-723.50	-1,439.10
Cleveland-Akron-Lorain, OH	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-148.01	-422.17	-469.61	-667.97	-1,328.61
Cochise County; Paul Spur/Douglas planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.90	-2.57	-2.86	-4.07	-8.10
Colorado Springs, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-37.33	-106.29	-118.59	-168.92	-336.14
Columbus, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-118.55	-338.15	-376.13	-534.99	-1,064.10
Columbus, OH	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-110.01	-313.79	-349.04	-496.47	-987.48
Cook County; Lyons Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-4.37	-12.47	-13.88	-19.74	-39.27
Cook County; Southeast Chicago, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-6.02	-16.94	-19.30	-27.74	-55.37
Coshocton County; Franklin Township, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.10	-0.30	-0.33	-0.48	-0.95
Coso Junction, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.33	-0.92	-1.08	-1.57	-3.15
Cuyahoga County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-56.33	-160.69	-178.69	-254.13	-505.45
Cuyahoga County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-45.89	-130.91	-145.57	-207.03	-411.76
Dallas-Fort Worth, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-501.57	-1,430.12	-1,591.80	-2,264.80	-4,505.20
Dallas-Fort Worth, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-492.94	-1,405.50	-1,564.43	-2,225.88	-4,427.78
Dane County; Madison sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-31.72	-90.50	-100.64	-143.12	-284.66
Delaware County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-24.43	-69.05	-78.06	-111.82	-222.95
Denver Metro/North Front Range, CO	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-255.16	-726.07	-811.06	-1,155.79	-2,300.37
Denver-Boulder, CO	CO (1971 8-hour)	Maintenance, Serious	100	0	-195.30	-555.59	-620.94	-885.08	-1,761.71
Denver-Boulder-Greeley-Ft. Collins-Loveland, CO	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-254.43	-724.06	-808.73	-1,152.41	-2,293.62
Detroit, MI	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	-299.10	-852.83	-949.21	-1,350.50	-2,686.43
Detroit, MI	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-110.44	-314.99	-350.39	-498.41	-991.36
Detroit, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-13.24	-37.73	-42.03	-59.83	-119.03
Detroit-Ann Arbor, MI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-299.88	-855.07	-951.69	-1,354.03	-2,693.46

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Doña Ana County; Anthony, NM	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.45	-1.26	-1.46	-2.11	-4.22
Door County, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	-0.02	-0.06	-0.07	-0.10	-0.19
Door County-Revised, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	-1.74	-4.97	-5.53	-7.86	-15.63
Douglas (Cochise County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.74	-2.10	-2.34	-3.33	-6.62
Dukes County, MA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.64	-1.84	-2.04	-2.91	-5.78
Duluth, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-6.20	-17.68	-19.70	-28.03	-55.78
East Chicago, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-1.59	-4.31	-5.25	-7.76	-15.63
East Helena Area, MT	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.04	-0.11	-0.12	-0.17	-0.34
East Kern County, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-1.58	-4.49	-5.05	-7.22	-14.38
El Paso County, TX	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-39.25	-111.90	-124.55	-177.22	-352.53
El Paso, TX	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-3.10	-8.80	-9.85	-14.05	-27.97
El Paso-Las Cruces, TX-NM	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-52.34	-149.26	-166.08	-236.27	-469.98
Eugene-Springfield, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-13.05	-37.22	-41.39	-58.86	-117.07
Evangeline Parish (Partial), LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.03	-0.04	-0.06	-0.11
Fairbanks, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	-2.40	-6.85	-7.63	-10.86	-21.61
Fairbanks, AK	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-4.36	-12.43	-13.84	-19.69	-39.18
Flathead County; Columbia Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.36	-1.03	-1.14	-1.62	-3.23
Flathead County; Kalispell and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-2.19	-6.24	-6.94	-9.86	-19.62
Flathead County; Whitefish and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.34	-0.98	-1.09	-1.55	-3.08
Fort Collins, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-11.02	-31.42	-34.95	-49.71	-98.88
Freehold, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.64	-1.82	-2.02	-2.87	-5.72
Freestone and Anderson Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.85	-2.36	-2.77	-4.03	-8.08
Fremont County; Canon City Area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-3.20	-9.12	-10.14	-14.42	-28.69
Fresno, CA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-39.31	-112.15	-124.71	-177.37	-352.78
Gila County (part): Payson, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.78	-2.22	-2.47	-3.52	-7.00
Giles County, VA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.02	-0.07	-0.08	-0.11	-0.22
Grant County, NM	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-2.48	-7.09	-7.88	-11.21	-22.29

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Grants Pass, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-1.94	-5.55	-6.17	-8.77	-17.45
Great Falls, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.18	-0.49	-0.62	-0.92	-1.85
Greater Connecticut, CT	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-93.62	-267.07	-297.03	-422.46	-840.26
Greater Connecticut, CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-93.72	-267.34	-297.33	-422.89	-841.12
Greeley, CO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-27.97	-78.91	-89.51	-128.40	-256.15
Hancock County (part): Weirton, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.76	-2.12	-2.43	-3.50	-7.00
Hancock and Brooke Counties (Part); The city of Weirton, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.75	-2.11	-2.42	-3.49	-6.98
Harrisburg-Lebanon-Carlisle-York, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-67.78	-193.29	-215.09	-305.99	-608.66
Hartford-New Britain-Middletown, CT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-64.97	-185.33	-206.14	-293.20	-583.17
Hayden (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	-0.71	-2.03	-2.26	-3.21	-6.39
Hayden, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-1.21	-3.46	-3.85	-5.48	-10.89
Hayden, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.71	-2.02	-2.25	-3.20	-6.37
Henderson-Webster Counties, KY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.49	-1.37	-1.57	-2.26	-4.52
Hillsborough County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-1.05	-2.99	-3.33	-4.73	-9.42
Hillsborough-Polk County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.19	-0.55	-0.62	-0.88	-1.74
Houston-Galveston-Brazoria, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-486.10	-1,384.08	-1,544.42	-2,199.81	-4,377.58
Houston-Galveston-Brazoria, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-472.90	-1,346.47	-1,502.53	-2,140.19	-4,258.98
Howard County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.14	-0.28	-0.57	-0.96	-2.03
Humphreys County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-2.13	-6.07	-6.75	-9.59	-19.08
Huntington, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-2.20	-6.28	-6.98	-9.93	-19.74
Hutchinson County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.72	-1.83	-2.47	-3.78	-7.71
Imperial County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-14.53	-41.44	-46.08	-65.53	-130.34
Imperial County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-14.51	-41.38	-46.02	-65.44	-130.16
Imperial County, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-11.34	-32.36	-35.98	-51.18	-101.78
Imperial County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	-11.34	-32.36	-35.98	-51.18	-101.78
Imperial Valley, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-13.75	-39.22	-43.61	-62.02	-123.36
Indian Wells, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-2.83	-8.04	-8.99	-12.83	-25.54
Indiana, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-5.47	-15.11	-17.76	-25.85	-51.83

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Indianapolis, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.18	-0.51	-0.56	-0.80	-1.59
Indianapolis, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-35.28	-100.65	-111.93	-159.18	-316.61
Inland Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-3.77	-10.76	-11.96	-17.01	-33.84
Inyo County; Owens Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.53	-1.51	-1.68	-2.39	-4.76
Jackson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-4.34	-12.38	-13.78	-19.60	-38.98
Jackson County; Medford-Ashland (including White City), OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-9.82	-28.02	-31.16	-44.31	-88.13
Jamestown, NY	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-9.12	-25.76	-29.14	-41.76	-83.27
Jefferson County, KY	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.19	-0.54	-0.60	-0.86	-1.71
Jefferson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-4.22	-12.05	-13.40	-19.06	-37.90
Jefferson County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.26	-0.74	-0.83	-1.19	-2.37
Jefferson County; (part) Steubenville & Mingo Junction, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-2.75	-7.81	-8.76	-12.50	-24.90
Johnstown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-7.40	-20.82	-23.75	-34.14	-68.17
Josephine County; Grants Pass, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.91	-5.45	-6.06	-8.62	-17.15
Juneau; Mendenhall Valley area, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.41	-1.18	-1.31	-1.87	-3.71
Kern County (Eastern Kern), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-6.56	-18.01	-21.43	-31.37	-63.01
Kern County (Eastern Kern), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-6.56	-18.01	-21.43	-31.37	-63.01
King County; Kent, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.18	-3.37	-3.75	-5.33	-10.61
King County; Seattle, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.76	-2.17	-2.41	-3.43	-6.82
Klamath Falls, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-2.62	-7.48	-8.32	-11.83	-23.53
Klamath Falls, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-2.63	-7.49	-8.33	-11.85	-23.57
Klamath Falls, OR	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-3.01	-8.59	-9.56	-13.59	-27.03
Knoxville, TN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-50.40	-143.56	-160.09	-227.95	-453.58
Knoxville-Sevierville-La Follette, TN	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-62.01	-176.68	-196.93	-280.37	-557.84
La Porte County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-4.06	-11.60	-12.89	-18.34	-36.47
LaSalle County; Oglesby, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.96	-5.59	-6.22	-8.84	-17.59
Lake County (part); Lakeview, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.02	-0.03	-0.07
Lake County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-27.52	-78.26	-87.54	-124.82	-248.49
Lake County, OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-14.14	-40.35	-44.87	-63.81	-126.92
Lake County; (part) Eastlake, Timberlake, Lakeline, Willoughby, Mentor, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-2.46	-7.01	-7.80	-11.09	-22.06

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Lake County; Cities of East Chicago, Hammond, Whiting, and Gary, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-18.11	-51.43	-57.68	-82.35	-164.00
Lake County; Polson, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.11	-0.31	-0.35	-0.50	-0.99
Lake County; Ronan, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.05	-0.15	-0.17	-0.24	-0.49
Lake Tahoe North Shore, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.91	-2.59	-2.88	-4.10	-8.15
Lake Tahoe South Shore, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-2.50	-7.12	-7.92	-11.27	-22.41
Lake Tahoe, NV	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-1.48	-4.22	-4.69	-6.67	-13.26
Lancaster, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-30.35	-86.57	-96.27	-136.92	-272.32
Lancaster, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-30.34	-86.55	-96.25	-136.89	-272.26
Lane County (part); Oakridge, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.04	-0.04	-0.06	-0.12
Lane County; Eugene/Springfield, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-13.05	-37.24	-41.41	-58.89	-117.13
Las Vegas, NV	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-139.36	-397.58	-442.10	-628.75	-1,250.53
Las Vegas, NV	CO (1971 8-hour)	Maintenance, Serious	100	0	-139.59	-398.22	-442.81	-629.76	-1,252.54
Laurel Area (Yellowstone County), MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	-0.45	-1.10	-1.61	-2.54	-5.22
Lebanon County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-7.97	-22.75	-25.30	-35.98	-71.55
Lemont, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-10.00	-28.32	-31.92	-45.67	-91.01
Liberty-Clairton, PA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.99	-2.80	-3.15	-4.50	-8.97
Lincoln County; Libby and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.18	-0.51	-0.57	-0.81	-1.61
Logan, UT-ID	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-8.22	-23.46	-26.09	-37.11	-73.80
Longmont, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-5.70	-15.71	-18.57	-27.11	-54.40
Lorain County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-3.30	-9.42	-10.47	-14.89	-29.62
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-51.00	-144.76	-162.41	-231.89	-461.83
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-50.98	-144.72	-162.37	-231.83	-461.72
Los Angeles-South Coast Air Basin, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-1,023.66	-2,919.29	-3,248.27	-4,620.95	-9,191.64
Los Angeles-South Coast Air Basin, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-1,023.15	-2,917.84	-3,246.66	-4,618.66	-9,187.09
Los Angeles-South Coast Air Basin, CA	CO (1971 8-hour)	Maintenance, Serious	100	0	-1,023.85	-2,919.85	-3,248.88	-4,621.82	-9,193.36
Los Angeles-South Coast Air Basin, CA	NO ₂ (1971 Annual)	Maintenance, Primary	100	0	-1,023.87	-2,919.91	-3,248.95	-4,621.91	-9,193.56
Los Angeles-South Coast Air Basin, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-1,023.79	-2,919.66	-3,248.68	-4,621.53	-9,192.81
Los Angeles-South Coast Air Basin, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-1,023.79	-2,919.66	-3,248.68	-4,621.53	-9,192.81

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Louisville, KY-IN (IN Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-14.71	-41.96	-46.67	-66.38	-132.03
Louisville, KY-IN (KY Portion)	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-61.34	-174.99	-194.58	-276.73	-550.40
Lowell, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-6.00	-17.11	-19.03	-27.07	-53.83
Lucas County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-19.35	-54.82	-61.71	-88.23	-175.80
Madison County; Granite City Township and Nameoki Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-3.69	-10.11	-12.09	-17.72	-35.60
Manchester, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-6.51	-18.58	-20.66	-29.38	-58.44
Manitowoc County, WI	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-3.63	-10.35	-11.50	-16.36	-32.54
Marathon County: Rothschild Sub-city area, Rib Mountain, Weston, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-10.33	-29.47	-32.77	-46.61	-92.70
Maricopa and Pinal Counties; Phoenix planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-279.08	-796.17	-885.32	-1,259.08	-2,504.22
Marion County: Lawrence, Washington, and Warrant Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-29.16	-83.19	-92.51	-131.57	-261.68
Mariposa County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-1.17	-3.33	-3.70	-5.26	-10.47
Mariposa County, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-1.17	-3.34	-3.71	-5.28	-10.50
Marshall, WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-1.02	-2.81	-3.32	-4.84	-9.71
Medford, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-5.94	-16.96	-18.85	-26.81	-53.33
Memphis, TN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-72.96	-208.13	-231.49	-329.26	-654.90
Memphis, TN-MS-AR	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-93.17	-265.71	-295.62	-420.52	-836.46
Miami (Gila County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.96	-2.73	-3.04	-4.32	-8.59
Miami, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.85	-2.41	-2.69	-3.82	-7.60
Miami, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.91	-2.59	-2.88	-4.09	-8.14
Millinocket AQCR 109, ME	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-11.54	-32.87	-36.63	-52.14	-103.74
Milwaukee, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-86.39	-246.45	-274.04	-389.74	-775.15
Milwaukee, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-39.65	-113.11	-125.78	-178.88	-355.78
Milwaukee-Racine, WI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-76.68	-218.75	-243.24	-345.93	-688.03
Minneapolis-St. Paul, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-207.77	-592.24	-659.53	-938.58	-1,867.20
Minneapolis-St. Paul, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-201.49	-574.34	-639.63	-910.28	-1,810.89
Missoula, MT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-4.72	-13.42	-15.00	-21.37	-42.54
Missoula, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-4.85	-13.80	-15.42	-21.98	-43.74

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Modesto, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-18.14	-51.75	-57.55	-81.85	-162.79
Mohave County (part); Bullhead City, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-3.85	-10.99	-12.22	-17.38	-34.57
Mono Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.35	-0.99	-1.10	-1.57	-3.11
Mono County; Mammoth Lake planning area, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.90	-2.56	-2.84	-4.04	-8.04
Morenci (Greenlee County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.11	-0.30	-0.34	-0.48	-0.95
Morgan County, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-1.97	-5.62	-6.25	-8.89	-17.67
Morongo Band of Mission Indians, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.41	-1.17	-1.30	-1.85	-3.69
Morongo Band of Mission Indians, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.40	-1.15	-1.28	-1.83	-3.63
Morristown, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-1.21	-3.45	-3.83	-5.45	-10.84
Muscatine County, IA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-1.08	-3.08	-3.43	-4.87	-9.69
Muscatine, IA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-1.85	-5.27	-5.86	-8.34	-16.59
Muskegon County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-9.42	-26.88	-29.90	-42.53	-84.58
Muskingum River, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.21	-0.60	-0.69	-1.00	-2.00
Nashua, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-5.55	-15.84	-17.61	-25.05	-49.82
Nassau County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.52	-1.48	-1.65	-2.34	-4.65
Navarro County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.44	-1.16	-1.48	-2.22	-4.50
Nevada County (Western part), CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-5.53	-15.79	-17.56	-24.97	-49.66
Nevada County (Western part), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-5.55	-15.84	-17.61	-25.05	-49.82
New Haven County, CT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.38	-3.94	-4.38	-6.24	-12.40
New Haven-Meriden-Waterbury, CT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-50.48	-144.02	-160.14	-227.75	-452.98
New Madrid County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	-0.01
New Manchester-Grant magisterial district in Hancock County, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.33	-0.90	-1.09	-1.60	-3.23
New York County, NY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-20.05	-57.19	-63.59	-90.44	-179.88
New York-N. New Jersey-Long Island, NY-NJ-CT	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-795.20	-2,268.29	-2,522.87	-3,588.35	-7,137.23
New York-N. New Jersey-Long Island, NY-NJ-CT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-439.19	-1,252.79	-1,393.36	-1,981.79	-3,941.76
New York-N. New Jersey-Long Island, NY-NJ-CT	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-812.36	-2,317.23	-2,577.29	-3,665.75	-7,291.16
New York-Northern New Jersey-Long Island, NY-NJ-CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-795.57	-2,269.34	-2,524.04	-3,590.01	-7,140.52
Nogales, AZ	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-1.35	-3.85	-4.28	-6.09	-12.11
Northern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-110.09	-313.80	-349.45	-497.30	-989.32

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Oakridge, OR	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.05	-0.15	-0.17	-0.24	-0.48
Ogden, UT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-4.81	-13.73	-15.26	-21.71	-43.18
Ogden, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-4.81	-13.73	-15.26	-21.71	-43.18
Olmsted County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-2.02	-5.76	-6.42	-9.15	-18.21
Olmsted County; City of Rochester, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-7.38	-21.02	-23.46	-33.42	-66.50
Oneida County: Rhinelander Sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-3.09	-8.83	-9.82	-13.96	-27.77
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Pekin, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-2.76	-7.86	-8.74	-12.44	-24.73
Penns Grove, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.04	-0.04	-0.06	-0.12
Peoria County: Hollis twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.11	-0.32	-0.36	-0.51	-1.02
Peoria, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-6.30	-17.97	-19.99	-28.43	-56.55
Perth Amboy, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-3.14	-8.94	-9.95	-14.17	-28.19
Philadelphia-Camden County, PA-NJ	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-63.24	-179.86	-201.11	-286.70	-570.71
Philadelphia-Wilmington, PA-NJ-DE (NJ Portion)	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-69.12	-197.14	-219.31	-311.96	-620.52
Philadelphia-Wilmington, PA-NJ-DE (PA-DE Portion)	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-210.70	-600.25	-669.12	-952.66	-1,895.48
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-381.17	-1,086.53	-1,209.95	-1,721.87	-3,425.44
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-382.01	-1,087.87	-1,213.53	-1,728.29	-3,439.10
Phoenix, AZ	CO (1971 8-hour)	Maintenance, Serious	100	0	-272.34	-776.96	-863.96	-1,228.70	-2,443.78
Phoenix-Mesa, AZ	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-280.02	-798.84	-888.29	-1,263.30	-2,512.62
Phoenix-Mesa, AZ	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-283.42	-808.55	-899.08	-1,278.66	-2,543.15
Pierce County; Tacoma, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.24	-0.67	-0.77	-1.11	-2.21
Pima County; Ajo planning area, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.16	-0.46	-0.51	-0.73	-1.46
Pima County; Rillito planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-2.36	-6.72	-7.47	-10.63	-21.13
Pinal County (part); West Pinal, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-14.01	-39.96	-44.43	-63.19	-125.69
Pitkin County; Aspen, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.99	-5.59	-6.37	-9.16	-18.28
Pittsburgh, PA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-14.97	-42.68	-47.52	-67.61	-134.49
Pittsburgh-Beaver Valley, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-125.13	-356.03	-397.79	-566.92	-1,128.38

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Pittsburgh-Beaver Valley, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-113.96	-324.25	-362.27	-516.30	-1,027.63
Plumas County, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-0.13	-0.37	-0.41	-0.58	-1.15
Polk County, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-1.35	-3.87	-4.30	-6.11	-12.16
Portland, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-80.83	-230.52	-256.47	-364.83	-725.68
Power-Bannock Counties; Fort Hall Indian Reservation, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.23	-0.65	-0.73	-1.03	-2.05
Power-Bannock Counties; Portneuf Valley Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-4.35	-12.41	-13.80	-19.63	-39.04
Provo, UT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-10.24	-29.22	-32.49	-46.20	-91.89
Provo, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-36.93	-105.31	-117.21	-166.76	-331.72
Prowers County; Lamar, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.57	-1.63	-1.82	-2.59	-5.14
Raleigh-Durham, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-114.73	-327.29	-363.96	-517.64	-1,029.55
Ramsey County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.29	-0.60	-1.12	-1.88	-3.93
Reading, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-23.18	-66.13	-73.54	-104.59	-208.03
Reno, NV	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-15.42	-43.99	-48.91	-69.56	-138.35
Rhineland, WI	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-1.48	-4.23	-4.70	-6.69	-13.31
Riverside County (Coachella Valley), CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-34.20	-97.57	-108.50	-154.30	-306.90
Riverside County (Coachella Valley), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-34.20	-97.57	-108.50	-154.30	-306.90
Riverside County; Coachella Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-39.32	-112.17	-124.73	-177.39	-352.82
Riverside, Los Angeles, Orange, & San Bernardino Counties; South Coast Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-1,019.01	-2,906.01	-3,233.51	-4,599.96	-9,149.89
Rosebud County; Lame Deer, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.05	-0.14	-0.15	-0.22	-0.43
Routt County (part); Steamboat Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-2.75	-7.62	-8.91	-12.94	-25.91
Rusk and Panola Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.27	-0.59	-1.02	-1.67	-3.48
Sacramento County, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-83.00	-235.90	-264.10	-376.73	-750.07
Sacramento Metro, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-142.05	-404.25	-451.52	-643.40	-1,280.54
Sacramento Metro, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-142.04	-404.20	-451.47	-643.33	-1,280.39
Sacramento, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-93.89	-267.66	-298.03	-424.10	-843.67
Sacramento, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-138.10	-392.99	-438.99	-625.57	-1,245.09

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Salem, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-15.10	-43.08	-47.90	-68.12	-135.48
Salt Lake City, UT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-14.72	-41.74	-46.92	-67.05	-133.59
Salt Lake City, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-115.63	-329.61	-367.02	-522.30	-1,039.03
Salt Lake County, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-70.13	-199.81	-222.70	-317.04	-630.80
Salt Lake County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	-70.16	-199.91	-222.81	-317.19	-631.10
San Antonio, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-126.27	-359.99	-400.77	-570.26	-1,134.40
San Bernardino County, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-36.50	-103.41	-116.42	-166.47	-331.71
San Diego County, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-221.66	-632.36	-703.20	-1,000.10	-1,989.15
San Diego County, CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-221.32	-631.38	-702.11	-998.55	-1,986.07
San Diego, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-221.11	-630.78	-701.45	-997.61	-1,984.19
San Francisco Bay Area, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-449.24	-1,280.75	-1,425.90	-2,028.99	-4,036.28
San Francisco Bay Area, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-448.69	-1,279.15	-1,424.13	-2,026.48	-4,031.27
San Francisco Bay Area, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-449.99	-1,282.87	-1,428.27	-2,032.36	-4,042.97
San Francisco-Oakland-San Jose, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-423.06	-1,206.04	-1,342.84	-1,910.85	-3,801.31
San Joaquin Valley Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-264.01	-751.65	-838.86	-1,194.92	-2,377.92
San Joaquin Valley, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-264.01	-751.66	-838.86	-1,194.92	-2,377.93
San Joaquin Valley, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-264.01	-751.67	-838.87	-1,194.94	-2,377.96
San Joaquin Valley, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-264.00	-751.62	-838.82	-1,194.87	-2,377.82
San Joaquin Valley, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-264.00	-751.62	-838.82	-1,194.87	-2,377.82
San Luis Obispo (Eastern San Luis Obispo), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-1.19	-3.35	-3.81	-5.47	-10.92
San Luis Obispo (Eastern part), CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-1.19	-3.35	-3.81	-5.47	-10.92
San Manuel (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-1.30	-3.71	-4.13	-5.87	-11.67
San Miguel County; Telluride, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.73	-2.06	-2.32	-3.31	-6.60
Sanders County (part); Thompson Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.04	-0.05	-0.07	-0.13
Santa Cruz County; Nogales planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-1.37	-3.91	-4.34	-6.18	-12.28
Seaford, DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-18.00	-51.34	-57.09	-81.19	-161.48
Seattle-Tacoma, WA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-191.27	-545.65	-606.77	-862.95	-1,716.35
Sheboygan County, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-4.41	-12.59	-14.00	-19.90	-39.59

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Sheridan County; City of Sheridan, WY	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.04	-2.96	-3.30	-4.69	-9.34
Shoreline Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-4.01	-11.44	-12.72	-18.09	-35.98
Shoshone County; City of Pinehurst, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.01	-0.02
Shoshone County; Pinehurst Expansion Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.45	-4.13	-4.59	-6.53	-12.98
Silver Bow County; Butte, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.99	-5.67	-6.30	-8.96	-17.83
Somerville, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.79	-2.26	-2.51	-3.57	-7.10
Southern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-36.93	-105.30	-117.20	-166.75	-331.70
Southwest Indiana, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.49	-1.36	-1.56	-2.24	-4.48
Spokane County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-21.25	-60.62	-67.41	-95.87	-190.68
Spokane, WA	CO (1971 8-hour)	Maintenance, Serious	100	0	-21.07	-60.10	-66.83	-95.05	-189.05
Springfield, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-7.72	-22.03	-24.50	-34.84	-69.30
St. Bernard Parish, LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-2.69	-6.97	-9.17	-13.94	-28.35
St. Clair, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-3.59	-10.24	-11.39	-16.20	-32.23
St. Lawrence County, NY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.53	-1.52	-1.69	-2.40	-4.78
St. Louis, MO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-49.50	-140.80	-157.41	-224.39	-446.66
St. Louis, MO-IL	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-167.07	-475.52	-530.94	-756.46	-1,505.49
St. Louis-St. Charles-Farmington, MO-IL	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-173.98	-495.77	-552.44	-786.39	-1,564.57
Steubenville, OH-WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-3.26	-9.15	-10.46	-15.05	-30.07
Steubenville-Weirton, OH-WV	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-6.34	-18.00	-20.21	-28.86	-57.49
Stockton, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-24.27	-69.22	-77.01	-109.55	-217.91
Sullivan County, TN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-1.89	-5.40	-6.01	-8.54	-16.99
Sutter Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	-0.01
Syracuse, NY	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-31.01	-88.45	-98.36	-139.90	-278.24
Tacoma, WA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-33.55	-95.72	-106.46	-151.41	-301.16
Tazewell County: Groveland twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-1.25	-3.56	-3.96	-5.64	-11.22
Terre Haute, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-4.22	-12.03	-13.38	-19.04	-37.87
Thurston County; Cities of Olympia, Tumwater, and Lacey, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-6.61	-18.85	-20.96	-29.80	-59.28
Titus County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.03	-0.07	-0.08	-0.12	-0.24
Toms River, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.25	-0.72	-0.80	-1.13	-2.25

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Tooele County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	-0.15	-0.37	-0.52	-0.81	-1.66
Trenton, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-5.08	-14.51	-16.13	-22.94	-45.63
Trona, CA	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	-0.19	-0.51	-0.62	-0.92	-1.86
Tucson, AZ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-47.52	-135.57	-150.75	-214.40	-426.42
Tuolumne County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-3.51	-10.01	-11.13	-15.83	-31.48
Tuscan Buttes, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	-0.01
Tuscan Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	0.00	-0.01
Uinta Basin, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-3.02	-8.36	-9.80	-14.25	-28.56
Union County; LaGrande, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.44	-1.25	-1.38	-1.97	-3.92
Upper Green River Basin Area, WY	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-2.09	-5.64	-6.91	-10.22	-20.60
Utah County, UT	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-37.49	-106.78	-119.08	-169.56	-337.39
Vancouver, WA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-20.27	-57.82	-64.30	-91.44	-181.88
Ventura County, CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-51.44	-146.02	-163.81	-233.87	-465.76
Ventura County, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-51.37	-145.82	-163.58	-233.54	-465.12
Vermillion County; Part of Clinton Township, IN	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.90	-2.56	-2.86	-4.07	-8.10
Vigo County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-8.54	-24.34	-27.13	-38.64	-76.88
Walla Walla County; Wallula, WA	PM ₁₀ (1987 24-hour)	Maintenance, Serious	100	0	-0.24	-0.70	-0.77	-1.10	-2.19
Waltham, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-3.43	-9.78	-10.88	-15.47	-30.78
Warren County, NJ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-1.87	-5.33	-5.93	-8.43	-16.76
Warren County: Conewago Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.38	-0.85	-1.39	-2.26	-4.68
Warren County: Warren Boro, Pleasant Twp, Glade Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.83	-2.15	-2.85	-4.35	-8.86
Warren, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-1.01	-2.65	-3.42	-5.17	-10.48
Washington, DC-MD-VA	Ozone (2008 8-hour)	Nonattainment (DC) Maintenance (MD, VA), Marginal	50	0	-342.30	-976.47	-1,085.94	-1,544.49	-3,071.93
Washington, DC-MD-VA	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-342.47	-976.95	-1,086.47	-1,545.23	-3,073.41
Washington, DC-MD-VA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-43.45	-123.95	-137.83	-196.01	-389.85
Washoe County; Reno planning area, NV	PM ₁₀ (1987 24-hour)	Maintenance, Serious	100	0	-15.57	-44.42	-49.39	-70.24	-139.70
Wayne County, MI	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-3.55	-10.08	-11.28	-16.09	-32.03

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Wayne County: Boston, Center, Franklin, Wayne & Webster Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-4.15	-11.84	-13.17	-18.73	-37.25
West Central Pinal, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-1.18	-3.36	-3.74	-5.32	-10.57
West Silver Valley, ID	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-0.54	-1.54	-1.72	-2.44	-4.86
Whatcom County, WA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.14	-0.25	-0.57	-0.99	-2.10
Winston-Salem, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-31.56	-90.04	-100.12	-142.39	-283.21
Worcester, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-13.49	-38.49	-42.80	-60.88	-121.08
Yakima County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-6.05	-17.26	-19.19	-27.29	-54.27
Yakima, WA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-2.07	-5.91	-6.57	-9.35	-18.60
Yuba City-Marysville, CA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-11.09	-31.63	-35.18	-50.03	-99.51
Yuma, AZ	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-7.10	-20.26	-22.53	-32.05	-63.74
Yuma, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-11.13	-31.74	-35.29	-50.19	-99.83

Notes:
^a Nonattainment or maintenance status as of 2/1/2024. Source: EPA, The Green Book Nonattainment Areas for Criteria Pollutants; <http://www.epa.gov/airquality/greenbook/>. "--" indicates that no severity classification has been established for the NAAQS pollutant.
^b Emissions thresholds in tons per year. Where the threshold differs by precursor pollutant, the smallest of the precursor thresholds is shown. These thresholds are provided for information only; a general conformity determination is not required for the Proposed Action. Source: 40 CFR 93.853.
^c Positive values are emissions increases; negative values are emissions decreases.
 EPA = U.S. Environmental Protection Agency; NAAQS = National Ambient Air Quality Standard; CO = carbon monoxide; NO₂ = nitrogen dioxide; PM2.5 = particulate matter less than 2.5 microns in size; PM10 = particulate matter less than 10 microns in size; SO₂ = sulfur dioxide.

Table D-10. Changes in Emissions from U.S. Passenger Cars and Light Trucks by Nonattainment or Maintenance Area and Alternative, Direct and Indirect Impacts--Carbon Monoxide (CO), 2050

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Ada County; Boise, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-23.93	-49.26	-22.77	-104.55	-389.18
Adams, Denver, and Boulder Counties; Denver Metropolitan area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-109.36	-223.95	-104.75	-476.11	-1,768.60
Ajo (Pima County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.15	-0.32	-0.14	-0.67	-2.50
Albuquerque, NM	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-54.16	-111.91	-51.23	-237.17	-884.29
Allegan County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-4.84	-9.99	-4.57	-21.18	-78.97
Allegheny County Air Basin: Hazelwood monitor, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-4.24	-8.70	-4.04	-18.48	-68.72
Allegheny County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	-55.94	-114.91	-53.36	-244.04	-907.67
Allegheny County; Liberty, Lincoln, Port Vue, Glassport, Clairton, PA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.98	-1.96	-0.96	-4.20	-15.48
Allegheny, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-6.45	-12.70	-6.52	-27.38	-100.00
Allentown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-34.65	-71.52	-32.82	-151.64	-565.16
Allentown-Bethlehem-Easton, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-39.85	-82.29	-37.72	-174.44	-650.24
Alton Township, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.63	0.16	-1.55	-0.73	2.07
Amador County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-2.67	-5.53	-2.52	-11.71	-43.69
Anchorage, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	-8.26	-16.29	-8.32	-35.10	-128.34
Anchorage; Eagle River, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.46	-0.89	-0.48	-1.93	-6.98
Anne Arundel County and Baltimore County, MD	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-67.56	-139.84	-63.73	-296.18	-1,105.16
Archuleta County; Pagosa Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-2.43	-1.93	-4.33	-6.36	-13.53
Armstrong County; Madison, Mahoning, Boggs, Washington, Pine, PA	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	-0.48	-0.44	-0.83	-1.34	-3.15
Aroostock County; City of Presque Isle, ME	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.53	-1.10	-0.50	-2.32	-8.67
Atlanta, GA	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-353.37	-731.20	-333.52	-1,548.90	-5,778.67
Atlanta, GA	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-268.07	-554.64	-253.05	-1,174.93	-4,383.29
Atlantic City, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-2.56	-5.29	-2.41	-11.20	-41.80
Bakersfield, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-31.72	-65.54	-30.00	-138.91	-517.94
Baltimore, MD	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	-171.46	-354.15	-162.25	-750.65	-2,798.44
Baltimore, MD	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-172.36	-356.02	-163.10	-754.61	-2,813.22
Baltimore, MD	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.62	-1.26	-0.60	-2.68	-9.92
Baton Rouge, LA	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-53.86	-108.12	-53.03	-231.47	-852.61

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Beaver, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.78	-1.61	-0.74	-3.41	-12.70
Benton County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-1.52	-3.14	-1.43	-6.66	-24.85
Berrien County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-13.99	-28.93	-13.20	-61.30	-228.67
Billings, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-5.18	-10.00	-5.36	-21.71	-78.64
Billings, MT	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.42	-0.15	-0.87	-0.85	-0.80
Birmingham, AL	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-83.36	-171.95	-79.03	-364.64	-1,358.64
Boise-Northern Ada County, ID	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-23.92	-49.24	-22.76	-104.50	-389.01
Bonner County; The Sandpoint Area, ID	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.52	-1.08	-0.50	-2.29	-8.54
Boston, MA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-44.85	-92.83	-42.32	-196.63	-733.67
Boyd County (part), KY	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.45	-0.21	-0.91	-0.97	-1.22
Brooke; Follansbee area, WV	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.10	-0.19	-0.10	-0.41	-1.47
Brown County: Green Bay, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.58	-1.18	-0.55	-2.52	-9.36
Burlington, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.50	-1.03	-0.47	-2.18	-8.14
Butte County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-11.38	-23.52	-10.76	-49.84	-185.88
Calaveras County, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-2.73	-5.65	-2.58	-11.96	-44.64
Calaveras County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-2.73	-5.65	-2.58	-11.97	-44.66
Campbell-Clermont Counties, KY-OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-1.83	-3.78	-1.72	-8.01	-29.87
Canton-Massillon, OH	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-20.67	-42.44	-19.71	-90.14	-335.25
Central New Hampshire, NH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-11.91	-24.66	-11.24	-52.22	-194.85
Central Steptoe Valley, NV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.76	-1.58	-0.72	-3.35	-12.51
Charleston, WV	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-17.96	-36.00	-17.73	-77.11	-283.82
Charlotte, NC	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-93.38	-193.29	-88.10	-409.39	-1,527.58
Charlotte-Rock Hill, NC-SC	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-173.76	-359.66	-163.93	-761.78	-2,842.42
Chicago, IL-IN-WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-437.49	-902.07	-415.04	-1,913.20	-7,127.27
Chicago-Naperville, IL-IN-WI	Ozone (2008 8-hour)	Maintenance, Serious	100	0	-443.28	-915.00	-419.88	-1,939.90	-7,229.98
Chico (Butte County), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-11.38	-23.52	-10.76	-49.84	-185.87
Chico, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-4.67	-9.65	-4.41	-20.45	-76.29
Chico, CA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	-10.92	-22.57	-10.32	-47.82	-178.34
Cincinnati, OH-KY (OH Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-104.15	-215.55	-98.27	-456.57	-1,703.51
Cincinnati, OH-KY (KY Portion)	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	-26.51	-54.50	-25.26	-115.70	-430.47

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Cincinnati, OH-KY-IN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-135.57	-280.25	-128.14	-593.85	-2,214.61
Clark County; Las Vegas planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-137.96	-285.57	-130.16	-604.86	-2,256.92
Cleveland, OH	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-150.30	-310.79	-141.99	-658.50	-2,456.07
Cleveland, OH	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-55.02	-113.89	-51.92	-241.23	-900.08
Cleveland, OH	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-72.29	-149.62	-68.21	-316.91	-1,182.46
Cleveland-Akron-Lorain, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-156.94	-324.36	-148.39	-687.38	-2,563.21
Cleveland-Akron-Lorain, OH	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-144.90	-299.62	-136.90	-634.83	-2,367.76
Cochise County; Paul Spur/Douglas planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.98	-2.02	-0.92	-4.28	-15.95
Colorado Springs, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-37.12	-76.08	-35.52	-161.70	-600.88
Columbus, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-116.05	-240.01	-109.62	-508.51	-1,896.74
Columbus, OH	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-107.70	-222.72	-101.74	-471.88	-1,760.08
Cook County; Lyons Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-4.30	-8.88	-4.07	-18.83	-70.19
Cook County; Southeast Chicago, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-5.98	-11.52	-6.20	-25.03	-90.59
Coshocton County; Franklin Township, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.10	-0.21	-0.10	-0.44	-1.62
Coso Junction, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.19	-0.28	-0.25	-0.68	-2.17
Cuyahoga County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-55.13	-114.11	-52.01	-241.69	-901.79
Cuyahoga County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-44.91	-92.95	-42.37	-196.87	-734.57
Dallas-Fort Worth, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-491.27	-1,014.03	-465.35	-2,149.86	-8,012.39
Dallas-Fort Worth, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-482.83	-996.55	-457.39	-2,112.84	-7,874.27
Dane County; Madison sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-31.05	-64.26	-29.29	-136.12	-507.89
Delaware County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-24.23	-47.82	-24.40	-102.99	-376.61
Denver Metro/North Front Range, CO	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-250.99	-512.76	-241.25	-1,091.01	-4,048.67
Denver-Boulder, CO	CO (1971 8-hour)	Maintenance, Serious	100	0	-192.65	-392.97	-185.57	-836.58	-3,102.47
Denver-Boulder-Greeley-Ft. Collins-Loveland, CO	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-250.79	-512.50	-240.95	-1,090.35	-4,046.72
Detroit, MI	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	-292.96	-604.78	-277.46	-1,282.15	-4,778.74
Detroit, MI	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-108.46	-224.25	-102.49	-475.17	-1,772.18
Detroit, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-12.92	-26.59	-12.28	-56.42	-210.02
Detroit-Ann Arbor, MI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-293.71	-606.32	-278.16	-1,285.42	-4,790.95
Doña Ana County; Anthony, NM	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.47	-0.87	-0.52	-1.92	-6.82

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Door County, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	-0.02	-0.04	-0.02	-0.08	-0.28
Door County-Revised, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	-1.72	-3.57	-1.63	-7.56	-28.21
Douglas (Cochise County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.83	-1.71	-0.78	-3.63	-13.53
Dukes County, MA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.63	-1.31	-0.60	-2.77	-10.32
Duluth, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-6.68	-13.75	-6.35	-29.18	-108.66
East Chicago, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-1.66	-2.59	-2.12	-6.11	-20.04
East Helena Area, MT	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.05	-0.09	-0.04	-0.20	-0.75
East Kern County, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-1.24	-2.47	-1.25	-5.30	-19.44
El Paso County, TX	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-38.71	-79.89	-36.67	-169.37	-631.22
El Paso, TX	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-3.07	-6.23	-2.97	-13.29	-49.20
El Paso-Las Cruces, TX-NM	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-51.31	-105.99	-48.55	-224.65	-837.54
Eugene-Springfield, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-13.42	-27.77	-12.66	-58.82	-219.46
Evangeline Parish (Partial), LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.02	-0.01	-0.05	-0.17
Fairbanks, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	-3.40	-7.00	-3.22	-14.85	-55.32
Fairbanks, AK	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-6.04	-12.48	-5.72	-26.46	-98.64
Flathead County; Columbia Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.41	-0.84	-0.38	-1.78	-6.65
Flathead County; Kalispell and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-2.57	-5.32	-2.42	-11.26	-42.01
Flathead County; Whitefish and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.39	-0.82	-0.37	-1.73	-6.45
Fort Collins, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-11.19	-23.15	-10.57	-49.05	-182.98
Freehold, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.63	-1.30	-0.59	-2.76	-10.29
Freestone and Anderson Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.90	-1.59	-1.02	-3.56	-12.41
Fremont County; Canon City Area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-3.13	-6.48	-2.95	-13.72	-51.18
Fresno, CA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-39.44	-81.63	-37.21	-172.91	-645.14
Gila County (part): Payson, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.88	-1.82	-0.83	-3.86	-14.41
Giles County, VA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.02	-0.04	-0.02	-0.08	-0.29
Grant County, NM	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-2.43	-5.03	-2.29	-10.66	-39.77
Grants Pass, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-2.09	-4.33	-1.97	-9.16	-34.19
Great Falls, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.22	-0.32	-0.28	-0.77	-2.48

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Greater Connecticut, CT	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-91.64	-189.58	-86.52	-401.61	-1,498.19
Greater Connecticut, CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-91.73	-189.77	-86.61	-402.02	-1,499.74
Greeley, CO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-27.82	-54.35	-28.37	-117.49	-427.77
Hancock County (part): Weirton, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.77	-1.45	-0.81	-3.18	-11.41
Hancock and Brooke Counties (Part); The city of Weirton, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.77	-1.46	-0.82	-3.20	-11.49
Harrisburg-Lebanon-Carlisle-York, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-66.37	-137.10	-62.81	-290.60	-1,083.39
Hartford-New Britain-Middletown, CT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-63.71	-131.78	-60.17	-279.19	-1,041.43
Hayden (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	-0.64	-1.32	-0.60	-2.79	-10.43
Hayden, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-1.05	-2.17	-0.99	-4.59	-17.14
Hayden, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.64	-1.32	-0.60	-2.79	-10.42
Henderson-Webster Counties, KY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.46	-0.86	-0.49	-1.88	-6.72
Hillsborough County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-1.02	-2.11	-0.97	-4.47	-16.67
Hillsborough-Polk County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.17	-0.36	-0.16	-0.76	-2.82
Houston-Galveston-Brazoria, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-477.11	-977.72	-456.60	-2,078.08	-7,721.61
Houston-Galveston-Brazoria, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-464.18	-951.08	-444.32	-2,021.56	-7,511.12
Howard County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.21	0.04	-0.50	-0.26	0.56
Humphreys County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-2.08	-4.31	-1.96	-9.12	-34.04
Huntington, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-2.24	-4.64	-2.11	-9.82	-36.64
Hutchinson County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.84	-0.94	-1.32	-2.58	-6.99
Imperial County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-14.22	-29.43	-13.41	-62.32	-232.55
Imperial County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-14.19	-29.38	-13.39	-62.23	-232.21
Imperial County, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-11.61	-24.03	-10.95	-50.90	-189.91
Imperial County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	-11.61	-24.03	-10.95	-50.90	-189.91
Imperial Valley, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-13.57	-28.09	-12.80	-59.49	-221.98
Indian Wells, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-2.77	-5.62	-2.68	-11.99	-44.38
Indiana, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-5.57	-9.79	-6.41	-22.02	-76.44
Indianapolis, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.17	-0.36	-0.16	-0.76	-2.84
Indianapolis, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-34.54	-71.49	-32.60	-151.43	-565.02
Inland Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-3.61	-7.47	-3.41	-15.83	-59.05
Inyo County; Owens Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.24	-0.50	-0.23	-1.07	-3.99

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Jackson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-4.27	-8.82	-4.03	-18.69	-69.72
Jackson County; Medford-Ashland (including White City), OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-10.03	-20.75	-9.46	-43.96	-164.01
Jamestown, NY	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-9.05	-17.82	-9.14	-38.41	-140.33
Jefferson County, KY	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.18	-0.38	-0.17	-0.81	-3.00
Jefferson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-4.15	-8.59	-3.92	-18.19	-67.87
Jefferson County, OH	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.27	-0.54	-0.26	-1.15	-4.25
Jefferson County; (part) Steubenville & Mingo Junction, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-2.78	-5.63	-2.72	-12.01	-44.38
Johnstown, PA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	-7.40	-14.23	-7.70	-30.93	-111.84
Josephine County; Grants Pass, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-2.05	-4.25	-1.94	-9.01	-33.61
Juneau; Mendenhall Valley area, AK	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.59	-1.21	-0.55	-2.57	-9.58
Kern County (Eastern Kern), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-6.18	-10.20	-7.54	-23.51	-79.19
Kern County (Eastern Kern), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-6.18	-10.20	-7.54	-23.51	-79.19
King County; Kent, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-1.17	-2.41	-1.10	-5.11	-19.06
King County; Seattle, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.74	-1.54	-0.70	-3.26	-12.16
Klamath Falls, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-3.13	-6.48	-2.96	-13.73	-51.22
Klamath Falls, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-3.14	-6.49	-2.96	-13.75	-51.27
Klamath Falls, OR	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	-3.57	-7.39	-3.37	-15.65	-58.39
Knoxville, TN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-49.47	-101.57	-47.21	-215.73	-802.25
Knoxville-Sevierville-La Follette, TN	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	-60.82	-125.03	-57.94	-265.44	-987.63
La Porte County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-4.09	-8.46	-3.86	-17.92	-66.87
LaSalle County; Oglesby, IL	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-2.00	-4.14	-1.89	-8.77	-32.68
Lake County (part); Lakeview, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.04	-0.08	-0.03	-0.16	-0.60
Lake County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-27.13	-55.20	-26.22	-117.61	-435.73
Lake County, OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-13.84	-28.65	-13.06	-60.68	-226.41
Lake County; (part) Eastlake, Timbertlake, Lakeline, Willoughby, Mentor, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-2.36	-4.89	-2.23	-10.36	-38.67
Lake County; Cities of East Chicago, Hammond, Whiting, and Gary, IN	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-17.87	-36.08	-17.46	-77.08	-284.62
Lake County; Polson, MT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	-0.14	-0.28	-0.13	-0.60	-2.23
Lake County; Ronan, MT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	-0.07	-0.14	-0.06	-0.30	-1.11

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Lake Tahoe North Shore, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.86	-1.77	-0.81	-3.75	-13.99
Lake Tahoe South Shore, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-2.47	-5.12	-2.33	-10.84	-40.46
Lake Tahoe, NV	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-1.45	-2.99	-1.36	-6.34	-23.66
Lancaster, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-29.70	-61.47	-28.03	-130.20	-485.79
Lancaster, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-29.69	-61.46	-28.02	-130.17	-485.68
Lane County (part); Oakridge, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.01	-0.05	-0.19
Lane County; Eugene/Springfield, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-13.42	-27.78	-12.66	-58.85	-219.58
Las Vegas, NV	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-137.96	-285.57	-130.16	-604.86	-2,256.92
Las Vegas, NV	CO (1971 8-hour)	Maintenance, Serious	100	0	-138.18	-286.02	-130.36	-605.81	-2,260.47
Laurel Area (Yellowstone County), MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	-0.56	-0.44	-1.00	-1.46	-3.10
Lebanon County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-7.80	-16.15	-7.36	-34.22	-127.67
Lemont, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-9.95	-19.82	-9.91	-42.55	-156.19
Liberty-Clairton, PA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.98	-1.96	-0.96	-4.20	-15.48
Lincoln County; Libby and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.30	-0.62	-0.28	-1.31	-4.88
Logan, UT-ID	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-8.12	-16.80	-7.66	-35.59	-132.79
Longmont, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-5.88	-10.15	-6.88	-22.99	-79.14
Lorain County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-3.25	-6.73	-3.07	-14.25	-53.19
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-48.50	-97.73	-47.50	-208.94	-770.93
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-48.49	-97.71	-47.49	-208.90	-770.75
Los Angeles-South Coast Air Basin, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-1,006.67	-2,079.83	-952.27	-4,408.04	#####
Los Angeles-South Coast Air Basin, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-1,006.17	-2,078.80	-951.80	-4,405.87	#####
Los Angeles-South Coast Air Basin, CA	CO (1971 8-hour)	Maintenance, Serious	100	0	-1,006.83	-2,080.18	-952.41	-4,408.78	#####
Los Angeles-South Coast Air Basin, CA	NO ₂ (1971 Annual)	Maintenance, Primary	100	0	-1,006.85	-2,080.21	-952.43	-4,408.85	#####
Los Angeles-South Coast Air Basin, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-1,006.82	-2,080.14	-952.41	-4,408.70	#####
Los Angeles-South Coast Air Basin, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-1,006.82	-2,080.14	-952.41	-4,408.70	#####
Louisville, KY-IN (IN Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-14.40	-29.78	-13.60	-63.10	-235.38
Louisville, KY-IN (KY Portion)	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-60.03	-124.26	-56.63	-263.19	-982.02
Lowell, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-5.89	-12.19	-5.56	-25.81	-96.32
Lucas County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-19.19	-38.35	-19.01	-82.23	-302.29

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Madison County; Granite City Township and Nameoki Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-3.87	-6.47	-4.67	-14.83	-50.28
Manchester, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-6.54	-13.53	-6.17	-28.66	-106.93
Manitowoc County, WI	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-3.65	-7.55	-3.44	-15.99	-59.65
Marathon County: Rothschild Sub-city area, Rib Mountain, Weston, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-10.11	-20.93	-9.54	-44.33	-165.40
Maricopa and Pinal Counties; Phoenix planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-274.69	-568.60	-259.15	-1,204.32	-4,493.69
Marion County: Lawrence, Washington, and Warrant Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-28.54	-59.07	-26.94	-125.13	-466.87
Mariposa County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-1.14	-2.36	-1.08	-5.00	-18.66
Mariposa County, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-1.14	-2.37	-1.08	-5.01	-18.71
Marshall, WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-1.07	-1.85	-1.24	-4.18	-14.45
Medford, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-6.10	-12.62	-5.75	-26.73	-99.75
Memphis, TN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-71.43	-147.74	-67.46	-313.00	-1,167.56
Memphis, TN-MS-AR	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-91.42	-188.96	-86.44	-400.43	-1,493.20
Miami (Gila County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-1.13	-2.33	-1.06	-4.94	-18.43
Miami, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-1.01	-2.09	-0.95	-4.43	-16.51
Miami, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-1.07	-2.21	-1.01	-4.68	-17.45
Millinocket AQCR 109, ME	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-11.31	-23.26	-10.76	-49.38	-183.78
Milwaukee, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-84.72	-175.37	-79.93	-371.44	-1,385.95
Milwaukee, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-38.80	-80.32	-36.61	-170.13	-634.80
Milwaukee-Racine, WI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-75.04	-155.33	-70.79	-329.00	-1,227.60
Minneapolis-St. Paul, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-204.06	-420.59	-193.69	-892.15	-3,323.00
Minneapolis-St. Paul, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-197.45	-406.90	-187.45	-863.16	-3,214.81
Missoula, MT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-5.05	-10.31	-4.86	-21.94	-81.39
Missoula, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-5.19	-10.60	-5.00	-22.57	-83.71
Modesto, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-18.00	-37.26	-16.99	-78.93	-294.50
Mohave County (part); Bullhead City, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-4.53	-9.38	-4.28	-19.87	-74.12
Mono Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.18	-0.37	-0.17	-0.78	-2.92
Mono County; Mammoth Lake planning area, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.45	-3.00	-1.37	-6.36	-23.75

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Morenci (Greenlee County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.14	-0.29	-0.13	-0.62	-2.30
Morgan County, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-1.97	-4.08	-1.86	-8.65	-32.28
Morongo Band of Mission Indians, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.39	-0.80	-0.37	-1.70	-6.34
Morongo Band of Mission Indians, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.38	-0.79	-0.36	-1.67	-6.25
Morristown, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-1.19	-2.47	-1.13	-5.23	-19.53
Muscatine County, IA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-1.12	-2.33	-1.06	-4.93	-18.38
Muscatine, IA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-1.89	-3.91	-1.78	-8.28	-30.88
Muskegon County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-9.31	-19.27	-8.79	-40.82	-152.26
Muskingum River, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.20	-0.36	-0.22	-0.81	-2.83
Nashua, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-5.54	-11.46	-5.22	-24.27	-90.56
Nassau County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.53	-1.11	-0.50	-2.34	-8.74
Navarro County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.44	-0.56	-0.64	-1.44	-4.26
Nevada County (Western part), CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-5.37	-11.12	-5.07	-23.55	-87.86
Nevada County (Western part), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-5.39	-11.15	-5.08	-23.62	-88.15
New Haven County, CT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.36	-2.81	-1.28	-5.96	-22.24
New Haven-Meriden-Waterbury, CT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-49.47	-102.39	-46.67	-216.87	-809.22
New Madrid County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
New Manchester-Grant magisterial district in Hancock County, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.34	-0.54	-0.42	-1.26	-4.20
New York County, NY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-19.62	-40.61	-18.51	-86.02	-320.96
New York-N. New Jersey-Long Island, NY-NJ-CT	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-778.46	-1,610.22	-735.14	-3,411.36	#####
New York-N. New Jersey-Long Island, NY-NJ-CT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-429.99	-889.49	-406.01	-1,884.39	-7,029.46
New York-N. New Jersey-Long Island, NY-NJ-CT	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-795.23	-1,644.95	-750.96	-3,484.91	#####
New York-Northern New Jersey-Long Island, NY-NJ-CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-778.81	-1,610.96	-735.47	-3,412.92	#####
Nogales, AZ	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-1.55	-3.22	-1.47	-6.82	-25.43
Northern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-109.02	-224.71	-103.47	-476.64	-1,775.40
Oakridge, OR	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.04	-0.09	-0.04	-0.19	-0.72
Ogden, UT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-4.75	-9.83	-4.48	-20.83	-77.71
Ogden, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-4.75	-9.83	-4.48	-20.83	-77.71
Olmsted County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-2.04	-4.17	-1.95	-8.87	-32.96
Olmsted County; City of Rochester, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-7.43	-15.23	-7.12	-32.37	-120.25

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Oneida County: Rhinelander Sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-3.03	-6.27	-2.86	-13.28	-49.55
Pechanga Band of Luiseno Mission Indians of the Pechanga Reservation, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Pechanga Band of Luiseno Mission Indians of the Pechanga Reservation, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Pekin, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-2.76	-5.70	-2.60	-12.08	-45.08
Penns Grove, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.03	-0.01	-0.06	-0.23
Peoria County: Hollis twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.11	-0.23	-0.10	-0.48	-1.78
Peoria, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-6.28	-12.98	-5.92	-27.50	-102.61
Perth Amboy, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-3.08	-6.34	-2.92	-13.45	-50.07
Philadelphia-Camden County, PA-NJ	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-62.17	-126.67	-59.99	-269.77	-999.95
Philadelphia-Wilmington, PA-NJ-DE (NJ Portion)	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-67.67	-139.89	-63.97	-296.43	-1,105.44
Philadelphia-Wilmington, PA-NJ-DE (PA-DE Portion)	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-206.63	-424.65	-196.94	-901.66	-3,354.34
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-373.50	-769.88	-354.50	-1,633.01	-6,082.63
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-374.86	-768.85	-358.31	-1,633.65	-6,072.40
Phoenix, AZ	CO (1971 8-hour)	Maintenance, Serious	100	0	-267.84	-554.41	-252.68	-1,174.26	-4,381.54
Phoenix-Mesa, AZ	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-275.23	-569.71	-259.66	-1,206.69	-4,502.53
Phoenix-Mesa, AZ	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-278.69	-576.87	-262.92	-1,221.84	-4,559.08
Pierce County; Tacoma, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.24	-0.45	-0.25	-0.99	-3.57
Pima County; Ajo planning area, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.14	-0.29	-0.13	-0.62	-2.31
Pima County; Rillito planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-2.25	-4.66	-2.12	-9.87	-36.81
Pinal County (part); West Pinal, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-14.10	-29.19	-13.30	-61.82	-230.68
Pitkin County; Aspen, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.98	-3.83	-2.05	-8.31	-30.09
Pittsburgh, PA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-14.68	-30.30	-13.92	-64.24	-239.38
Pittsburgh-Beaver Valley, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-122.94	-251.01	-118.28	-534.19	-1,981.81
Pittsburgh-Beaver Valley, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-111.96	-228.59	-107.71	-486.48	-1,804.81
Plumas County, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-0.11	-0.24	-0.11	-0.50	-1.87
Polk County, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-1.33	-2.74	-1.25	-5.81	-21.69
Portland, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-79.67	-164.66	-75.33	-348.95	-1,301.21
Power-Bannock Counties; Fort Hall Indian Reservation, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.29	-0.61	-0.28	-1.29	-4.82
Power-Bannock Counties; Portneuf Valley Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-4.44	-9.20	-4.19	-19.49	-72.71

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Provo, UT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-10.20	-21.11	-9.62	-44.70	-166.81
Provo, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-36.34	-75.03	-34.41	-159.05	-592.82
Prowers County; Lamar, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.73	-1.52	-0.69	-3.21	-12.00
Raleigh-Durham, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-112.30	-232.40	-105.97	-492.27	-1,836.68
Ramsey County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.40	0.00	-0.92	-0.60	0.49
Reading, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-22.69	-46.95	-21.41	-99.45	-371.05
Reno, NV	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-15.70	-32.49	-14.81	-68.82	-256.78
Rhineland, WI	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-1.57	-3.26	-1.48	-6.90	-25.75
Riverside County (Coachella Valley), CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-33.33	-68.98	-31.44	-146.11	-545.16
Riverside County (Coachella Valley), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-33.33	-68.98	-31.44	-146.11	-545.16
Riverside County; Coachella Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-38.34	-79.35	-36.17	-168.07	-627.13
Riverside, Los Angeles, Orange, & San Bernardino Counties; South Coast Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-1,002.10	-2,070.36	-947.95	-4,387.99	#####
Rosebud County; Lame Deer, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.12	-0.25	-0.11	-0.53	-1.98
Routt County (part); Steamboat Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-2.80	-5.00	-3.16	-11.18	-39.11
Rusk and Panola Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.34	-0.05	-0.76	-0.59	-0.05
Sacramento County, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-81.69	-165.79	-79.24	-353.57	-1,308.45
Sacramento Metro, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-139.40	-284.87	-133.93	-606.06	-2,249.29
Sacramento Metro, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-139.38	-284.83	-133.92	-605.99	-2,249.04
Sacramento, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-92.66	-191.07	-87.90	-405.22	-1,509.61
Sacramento, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-136.07	-277.99	-130.79	-591.49	-2,194.96
Salem, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-15.12	-31.30	-14.26	-66.29	-247.34
Salt Lake City, UT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-14.56	-29.20	-14.36	-62.53	-230.24
Salt Lake City, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-115.74	-238.63	-109.81	-506.12	-1,885.39
Salt Lake County, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-68.77	-141.40	-65.50	-300.19	-1,116.99
Salt Lake County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	-68.80	-141.46	-65.53	-300.32	-1,117.49
San Antonio, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-123.70	-255.18	-117.26	-541.11	-2,016.22
San Bernardino County, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-32.92	-65.53	-32.78	-140.72	-516.45
San Diego County, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-216.95	-449.00	-204.73	-951.06	-3,548.46

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
San Diego County, CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-216.62	-448.30	-204.41	-949.58	-3,542.94
San Diego, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-216.59	-448.25	-204.39	-949.47	-3,542.52
San Francisco Bay Area, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-440.48	-908.53	-417.68	-1,926.67	-7,178.41
San Francisco Bay Area, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-439.94	-907.41	-417.17	-1,924.32	-7,169.63
San Francisco Bay Area, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-441.19	-910.01	-418.35	-1,929.80	-7,190.11
San Francisco-Oakland-San Jose, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-415.83	-857.51	-394.42	-1,818.61	-6,775.23
San Joaquin Valley Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-259.76	-532.10	-248.74	-1,131.12	-4,202.19
San Joaquin Valley, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-259.76	-532.10	-248.74	-1,131.12	-4,202.20
San Joaquin Valley, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-259.77	-532.11	-248.75	-1,131.13	-4,202.26
San Joaquin Valley, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-259.75	-532.08	-248.73	-1,131.06	-4,202.00
San Joaquin Valley, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-259.75	-532.08	-248.73	-1,131.06	-4,202.00
San Luis Obispo (Eastern San Luis Obispo), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.93	-1.77	-0.98	-3.86	-13.86
San Luis Obispo (Eastern part), CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.93	-1.77	-0.98	-3.86	-13.86
San Manuel (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-1.13	-2.35	-1.07	-4.97	-18.56
San Miguel County; Telluride, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.72	-1.44	-0.71	-3.09	-11.38
Sanders County (part); Thompson Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.03	-0.06	-0.03	-0.13	-0.48
Santa Cruz County; Nogales planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-1.57	-3.26	-1.48	-6.90	-25.74
Seaford, DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-17.61	-36.45	-16.61	-77.19	-288.03
Seattle-Tacoma, WA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-188.44	-390.02	-177.81	-826.12	-3,082.38
Sheboygan County, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-4.41	-9.12	-4.16	-19.32	-72.09
Sheridan County; City of Sheridan, WY	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.29	-2.66	-1.23	-5.64	-20.99
Shoreline Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-4.01	-8.29	-3.78	-17.56	-65.52
Shoshone County; City of Pinehurst, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	0.00	-0.01	-0.05
Shoshone County; Pinehurst Expansion Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.42	-2.93	-1.34	-6.21	-23.17
Silver Bow County; Butte, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-2.04	-4.23	-1.93	-8.96	-33.44
Somerville, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.78	-1.61	-0.74	-3.42	-12.76
Southern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-36.34	-75.02	-34.41	-159.04	-592.79
Southwest Indiana, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.50	-0.96	-0.52	-2.08	-7.51
Spokane County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-21.16	-43.80	-19.97	-92.78	-346.18

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Spokane, WA	CO (1971 8-hour)	Maintenance, Serious	100	0	-21.00	-43.46	-19.82	-92.06	-343.47
Springfield, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-7.64	-15.81	-7.21	-33.49	-124.96
St. Bernard Parish, LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-3.00	-3.59	-4.56	-9.53	-26.96
St. Clair, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-3.54	-7.32	-3.34	-15.51	-57.84
St. Lawrence County, NY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.58	-1.21	-0.55	-2.56	-9.55
St. Louis, MO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-48.73	-99.32	-46.98	-211.49	-784.07
St. Louis, MO-IL	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-164.11	-335.69	-157.45	-713.94	-2,650.79
St. Louis-St. Charles-Farmington, MO-IL	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-170.57	-350.94	-162.32	-744.88	-2,772.38
Steubenville, OH-WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-3.33	-6.38	-3.49	-13.89	-50.11
Steubenville-Weirton, OH-WV	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-6.26	-12.60	-6.14	-26.95	-99.38
Stockton, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-24.06	-49.72	-22.76	-105.37	-392.88
Sullivan County, TN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-1.87	-3.88	-1.77	-8.21	-30.63
Sutter Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.01
Syracuse, NY	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-30.35	-62.81	-28.64	-133.03	-496.35
Tacoma, WA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	-33.21	-68.70	-31.36	-145.54	-542.90
Tazewell County: Groveland twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-1.25	-2.58	-1.18	-5.47	-20.39
Terre Haute, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-4.21	-8.69	-3.98	-18.42	-68.68
Thurston County; Cities of Olympia, Tumwater, and Lacey, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-6.66	-13.78	-6.28	-29.20	-108.94
Titus County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.02	-0.04	-0.02	-0.08	-0.28
Toms River, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.25	-0.52	-0.24	-1.10	-4.09
Tooele County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	-0.18	-0.18	-0.30	-0.53	-1.33
Trenton, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-5.00	-10.34	-4.71	-21.90	-81.73
Trona, CA	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	-0.08	-0.06	-0.15	-0.20	-0.38
Tucson, AZ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-47.72	-98.77	-45.02	-209.20	-780.59
Tuolumne County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-3.43	-7.11	-3.24	-15.05	-56.17
Tuscan Buttes, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00
Tuscan Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	0.00	0.00
Uinta Basin, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-3.44	-6.19	-3.86	-13.80	-48.45
Union County; LaGrande, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.54	-1.12	-0.51	-2.37	-8.83

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Upper Green River Basin Area, WY	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-2.00	-2.98	-2.65	-7.17	-22.93
Utah County, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-36.78	-75.51	-35.11	-160.38	-596.39
Vancouver, WA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-20.01	-41.41	-18.88	-87.71	-327.27
Ventura County, CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-50.73	-102.38	-49.60	-218.78	-807.69
Ventura County, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-50.66	-102.24	-49.53	-218.48	-806.55
Vermillion County; Part of Clinton Township, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.94	-1.92	-0.89	-4.08	-15.16
Vigo County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-8.38	-17.21	-8.00	-36.55	-135.93
Walla Walla County; Wallula, WA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.22	-0.46	-0.21	-0.97	-3.63
Waltham, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-3.37	-6.98	-3.18	-14.77	-55.13
Warren County, NJ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-1.79	-3.70	-1.69	-7.83	-29.22
Warren County: Conewago Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.49	-0.20	-1.01	-1.02	-1.12
Warren County: Warren Boro, Pleasant Twp, Glade Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.99	-1.19	-1.51	-3.16	-8.96
Warren, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-1.18	-1.57	-1.70	-3.96	-11.90
Washington, DC-MD-VA	Ozone (2008 8-hour)	Nonattainment (DC) Maintenance (MD, VA), Marginal	50	0	-335.05	-693.28	-316.26	-1,468.59	-5,478.93
Washington, DC-MD-VA	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-335.21	-693.62	-316.41	-1,469.30	-5,481.62
Washington, DC-MD-VA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-42.52	-88.01	-40.11	-186.42	-695.59
Washoe County; Reno planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-15.85	-32.80	-14.95	-69.48	-259.25
Wayne County, MI	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-3.48	-7.08	-3.38	-15.09	-55.87
Wayne County: Boston, Center, Franklin, Wayne & Webster Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-4.18	-8.65	-3.94	-18.31	-68.33
West Central Pinal, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.99	-2.06	-0.94	-4.36	-16.26
West Silver Valley, ID	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-0.74	-1.53	-0.70	-3.24	-12.10
Whatcom County, WA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.21	0.10	-0.55	-0.17	1.11
Winston-Salem, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-30.89	-63.94	-29.14	-135.43	-505.32
Worcester, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-13.58	-28.10	-12.81	-59.52	-222.08
Yakima County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-6.27	-12.97	-5.91	-27.47	-102.52
Yakima, WA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-2.15	-4.45	-2.03	-9.44	-35.21
Yuba City-Marysville, CA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-10.89	-22.54	-10.28	-47.75	-178.16
Yuma, AZ	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-7.25	-15.01	-6.84	-31.78	-118.60

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Yuma, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-11.26	-23.31	-10.62	-49.36	-184.19

Notes:

^a Nonattainment or maintenance status as of 2/1/2024. Source: EPA, The Green Book Nonattainment Areas for Criteria Pollutants; <http://www.epa.gov/airquality/greenbook/>. "--" indicates that no severity classification has been established for the NAAQS pollutant.

^b Emissions thresholds in tons per year. Where the threshold differs by precursor pollutant, the smallest of the precursor thresholds is shown. These thresholds are provided for information only; a general conformity determination is not required for the Proposed Action. Source: 40 CFR 93.853.

^c Positive values are emissions increases; negative values are emissions decreases.

EPA = U.S. Environmental Protection Agency; NAAQS = National Ambient Air Quality Standard; CO = carbon monoxide; NO₂ = nitrogen dioxide; PM2.5 = particulate matter less than 2.5 microns in size; PM10 = particulate matter less than 10 microns in size; SO₂ = sulfur dioxide.

Table D-11. Changes in Emissions from U.S. Passenger Cars and Light Trucks by Nonattainment or Maintenance Area and Alternative, Direct and Indirect Impacts--Acetaldehyde, 2035

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Ada County; Boise, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.04	-0.05	-0.07	-0.16
Adams, Denver, and Boulder Counties; Denver Metropolitan area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.07	-0.21	-0.23	-0.35	-0.74
Ajo (Pima County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Albuquerque, NM	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.03	-0.10	-0.11	-0.16	-0.35
Allegan County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.01	-0.02	-0.03
Allegheny County Air Basin: Hazelwood monitor, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.01	-0.01	-0.03
Allegheny County, PA	PM _{2.5} (2012 Annual)	Nonattainment, Moderate	100	0	-0.03	-0.11	-0.12	-0.17	-0.37
Allegheny County; Liberty, Lincoln, Port Vue, Glassport, Clairton, PA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Allegheny, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	-0.02	-0.02	-0.05
Allentown, PA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.07	-0.07	-0.11	-0.23
Allentown-Bethlehem-Easton, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.02	-0.07	-0.08	-0.12	-0.26
Alton Township, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Amador County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.01	-0.01	-0.01	-0.02
Anchorage, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	-0.01	-0.02	-0.02	-0.05
Anchorage; Eagle River, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Anne Arundel County and Baltimore County, MD	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.04	-0.13	-0.14	-0.21	-0.44
Archuleta County; Pagosa Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Armstrong County; Madison, Mahoning, Boggs, Washington, Pine, PA	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	0.00	0.00	-0.01
Aroostock County; City of Presque Isle, ME	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Atlanta, GA	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-0.22	-0.67	-0.74	-1.09	-2.34
Atlanta, GA	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.17	-0.51	-0.56	-0.83	-1.78
Atlantic City, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.01	-0.01	-0.02
Bakersfield, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.06	-0.07	-0.10	-0.21
Baltimore, MD	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	-0.11	-0.32	-0.35	-0.52	-1.12
Baltimore, MD	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.11	-0.32	-0.35	-0.52	-1.13
Baltimore, MD	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00
Baton Rouge, LA	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.04	-0.11	-0.13	-0.19	-0.40

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Beaver, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	-0.01
Benton County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	-0.01
Berrien County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.03	-0.03	-0.04	-0.09
Billings, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.01	-0.01	-0.03
Billings, MT	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00
Birmingham, AL	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.05	-0.16	-0.17	-0.26	-0.55
Boise-Northern Ada County, ID	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.04	-0.05	-0.07	-0.16
Bonner County; The Sandpoint Area, ID	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Boston, MA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.03	-0.08	-0.09	-0.14	-0.29
Boyd County (part), KY	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Brooke; Follansbee area, WV	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Brown County: Green Bay, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Burlington, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Butte County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.02	-0.02	-0.03	-0.07
Calaveras County, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.01	-0.01	-0.01	-0.02
Calaveras County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.01	-0.01	-0.01	-0.02
Campbell-Clermont Counties, KY-OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	-0.01	-0.01
Canton-Massillon, OH	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.01	-0.04	-0.04	-0.06	-0.14
Central New Hampshire, NH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.02	-0.02	-0.04	-0.08
Central Steptoe Valley, NV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Charleston, WV	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.01	-0.04	-0.05	-0.07	-0.15
Charlotte, NC	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.06	-0.18	-0.19	-0.28	-0.61
Charlotte-Rock Hill, NC-SC	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.11	-0.33	-0.36	-0.53	-1.14
Chicago, IL-IN-WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.27	-0.82	-0.90	-1.33	-2.86
Chicago-Naperville, IL-IN-WI	Ozone (2008 8-hour)	Maintenance, Serious	100	0	-0.27	-0.83	-0.91	-1.35	-2.90
Chico (Butte County), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.02	-0.02	-0.03	-0.07
Chico, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.01	-0.01	-0.03
Chico, CA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.02	-0.03	-0.07
Cincinnati, OH-KY (OH Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.06	-0.20	-0.21	-0.32	-0.68

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Cincinnati, OH-KY (KY Portion)	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	-0.02	-0.05	-0.05	-0.08	-0.17
Cincinnati, OH-KY-IN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.08	-0.25	-0.28	-0.41	-0.89
Clark County; Las Vegas planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.08	-0.26	-0.28	-0.42	-0.89
Cleveland, OH	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.09	-0.28	-0.31	-0.46	-0.99
Cleveland, OH	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.03	-0.10	-0.11	-0.17	-0.36
Cleveland, OH	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-0.04	-0.14	-0.15	-0.22	-0.47
Cleveland-Akron-Lorain, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.10	-0.30	-0.32	-0.48	-1.03
Cleveland-Akron-Lorain, OH	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.09	-0.27	-0.30	-0.44	-0.95
Cochise County; Paul Spur/Douglas planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Colorado Springs, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.07	-0.07	-0.11	-0.24
Columbus, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.07	-0.22	-0.24	-0.35	-0.76
Columbus, OH	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.07	-0.20	-0.22	-0.33	-0.71
Cook County; Lyons Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.01	-0.03
Cook County; Southeast Chicago, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.02	-0.04
Coshocton County; Franklin Township, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Coso Junction, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Cuyahoga County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.03	-0.10	-0.11	-0.17	-0.36
Cuyahoga County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.03	-0.08	-0.09	-0.14	-0.29
Dallas-Fort Worth, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.32	-0.99	-1.09	-1.61	-3.45
Dallas-Fort Worth, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.32	-0.97	-1.07	-1.58	-3.39
Dane County; Madison sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.02	-0.06	-0.06	-0.09	-0.20
Delaware County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-0.01	-0.04	-0.05	-0.07	-0.15
Denver Metro/North Front Range, CO	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.16	-0.48	-0.52	-0.77	-1.66
Denver-Boulder, CO	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.12	-0.37	-0.40	-0.59	-1.28
Denver-Boulder-Greeley-Ft. Collins-Loveland, CO	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.16	-0.47	-0.52	-0.77	-1.66
Detroit, MI	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	-0.18	-0.55	-0.61	-0.90	-1.92
Detroit, MI	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.07	-0.20	-0.22	-0.33	-0.71
Detroit, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.02	-0.03	-0.04	-0.09
Detroit-Ann Arbor, MI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.18	-0.55	-0.61	-0.90	-1.93

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Doña Ana County; Anthony, NM	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Door County, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	0.00	0.00
Door County-Revised, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	-0.01	-0.01
Douglas (Cochise County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Dukes County, MA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	0.00	0.00
Duluth, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.01	-0.02	-0.04
East Chicago, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	-0.01
East Helena Area, MT	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	0.00
East Kern County, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	-0.01	-0.02
El Paso County, TX	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.02	-0.07	-0.08	-0.12	-0.26
El Paso, TX	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.01	-0.01	-0.03
El Paso-Las Cruces, TX-NM	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.03	-0.10	-0.11	-0.16	-0.35
Eugene-Springfield, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.02	-0.03	-0.04	-0.08
Evangeline Parish (Partial), LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Fairbanks, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	-0.01	-0.02
Fairbanks, AK	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	0.00	-0.01	-0.01	-0.01	-0.03
Flathead County; Columbia Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Flathead County; Kalispell and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.01
Flathead County; Whitefish and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Fort Collins, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.02	-0.02	-0.03	-0.07
Freehold, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Freestone and Anderson Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.01	-0.01	-0.02
Fremont County; Canon City Area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.01	-0.02
Fresno, CA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.02	-0.07	-0.08	-0.12	-0.25
Gila County (part): Payson, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Giles County, VA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Grant County, NM	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.01	-0.01	-0.02

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Grants Pass, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	-0.01	-0.01
Great Falls, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Greater Connecticut, CT	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-0.06	-0.17	-0.19	-0.28	-0.60
Greater Connecticut, CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.06	-0.17	-0.19	-0.28	-0.60
Greeley, CO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.06	-0.07	-0.10	-0.21
Hancock County (part): Weirton, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	-0.01
Hancock and Brooke Counties (Part); The city of Weirton, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Harrisburg-Lebanon-Carlisle-York, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.04	-0.12	-0.14	-0.20	-0.43
Hartford-New Britain-Middletown, CT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.04	-0.12	-0.13	-0.19	-0.42
Hayden (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Hayden, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Hayden, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Henderson-Webster Counties, KY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Hillsborough County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	-0.01
Hillsborough-Polk County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00
Houston-Galveston-Brazoria, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.31	-0.96	-1.06	-1.57	-3.35
Houston-Galveston-Brazoria, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.30	-0.93	-1.03	-1.52	-3.26
Howard County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.01	-0.01	-0.02
Humphreys County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	-0.01	-0.01
Huntington, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	-0.01	-0.01
Hutchinson County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	-0.01	-0.01	-0.02
Imperial County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.03	-0.03	-0.04	-0.09
Imperial County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.03	-0.03	-0.04	-0.09
Imperial County, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.02	-0.02	-0.03	-0.07
Imperial County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	-0.01	-0.02	-0.02	-0.03	-0.07
Imperial Valley, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.01	-0.03	-0.03	-0.04	-0.09
Indian Wells, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.01	-0.02
Indiana, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.02	-0.02	-0.03	-0.06

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Indianapolis, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Indianapolis, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.02	-0.07	-0.07	-0.11	-0.23
Inland Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.01	-0.02
Inyo County; Owens Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00	0.00
Jackson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.01	-0.01	-0.01	-0.03
Jackson County; Medford-Ashland (including White City), OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.02	-0.03	-0.06
Jamestown, NY	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.01	-0.02	-0.02	-0.03	-0.07
Jefferson County, KY	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00
Jefferson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.01	-0.01	-0.01	-0.03
Jefferson County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Jefferson County; (part) Steubenville & Mingo Junction, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.01	-0.01	-0.02
Johnstown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.02	-0.03	-0.06
Josephine County; Grants Pass, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.01
Juneau; Mendenhall Valley area, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Kern County (Eastern Kern), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	-0.01	-0.01	-0.02	-0.04
Kern County (Eastern Kern), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	-0.01	-0.01	-0.02	-0.04
King County; Kent, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
King County; Seattle, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Klamath Falls, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.01	-0.01	-0.02
Klamath Falls, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01	-0.01	-0.02
Klamath Falls, OR	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.01	-0.01	-0.02
Knoxville, TN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.03	-0.09	-0.10	-0.15	-0.32
Knoxville-Sevierville-La Follette, TN	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.04	-0.11	-0.12	-0.18	-0.40
La Porte County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.01	-0.01	-0.03
LaSalle County; Oglesby, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.01
Lake County (part); Lakeview, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Lake County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.02	-0.05	-0.06	-0.08	-0.18
Lake County, OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.03	-0.03	-0.04	-0.09
Lake County; (part) Eastlake, Timberlake, Lakeline, Willoughby, Mentor, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01	-0.02

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Lake County; Cities of East Chicago, Hammond, Whiting, and Gary, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.03	-0.04	-0.05	-0.12
Lake County; Polson, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Lake County; Ronan, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Lake Tahoe North Shore, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	-0.01
Lake Tahoe South Shore, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.01	-0.01	-0.02
Lake Tahoe, NV	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	-0.01
Lancaster, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.02	-0.06	-0.06	-0.09	-0.20
Lancaster, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.06	-0.06	-0.09	-0.20
Lane County (part); Oakridge, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Lane County; Eugene/Springfield, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.03	-0.04	-0.08
Las Vegas, NV	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.08	-0.26	-0.28	-0.42	-0.89
Las Vegas, NV	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.08	-0.26	-0.28	-0.42	-0.90
Laurel Area (Yellowstone County), MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Lebanon County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	-0.01	-0.02	-0.02	-0.05
Lemont, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.02	-0.02	-0.03	-0.06
Liberty-Clairton, PA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Lincoln County; Libby and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Logan, UT-ID	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	-0.02	-0.02	-0.02	-0.05
Longmont, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.02	-0.02	-0.03	-0.07
Lorain County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.01	-0.01	-0.02
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.03	-0.09	-0.10	-0.15	-0.33
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-0.03	-0.09	-0.10	-0.15	-0.33
Los Angeles-South Coast Air Basin, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-0.62	-1.89	-2.07	-3.06	-6.57
Los Angeles-South Coast Air Basin, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-0.62	-1.88	-2.07	-3.05	-6.57
Los Angeles-South Coast Air Basin, CA	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.62	-1.89	-2.07	-3.06	-6.57
Los Angeles-South Coast Air Basin, CA	NO ₂ (1971 Annual)	Maintenance, Primary	100	0	-0.62	-1.89	-2.07	-3.06	-6.57
Los Angeles-South Coast Air Basin, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.62	-1.89	-2.07	-3.06	-6.57
Los Angeles-South Coast Air Basin, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-0.62	-1.89	-2.07	-3.06	-6.57

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Louisville, KY-IN (IN Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.01	-0.03	-0.03	-0.04	-0.10
Louisville, KY-IN (KY Portion)	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.04	-0.11	-0.12	-0.18	-0.39
Lowell, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.01	-0.02	-0.04
Lucas County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.04	-0.04	-0.06	-0.12
Madison County; Granite City Township and Nameoki Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.01	-0.02
Manchester, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.01	-0.02	-0.04
Manitowoc County, WI	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	-0.01	-0.01	-0.01	-0.02
Marathon County: Rothschild Sub-city area, Rib Mountain, Weston, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.01	-0.02	-0.02	-0.03	-0.07
Maricopa and Pinal Counties; Phoenix planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.17	-0.51	-0.56	-0.83	-1.79
Marion County: Lawrence, Washington, and Warrant Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.02	-0.05	-0.06	-0.09	-0.19
Mariposa County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Mariposa County, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Marshall, WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.01	-0.01	-0.02
Medford, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.01	-0.02	-0.04
Memphis, TN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.04	-0.13	-0.15	-0.22	-0.47
Memphis, TN-MS-AR	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.06	-0.17	-0.19	-0.28	-0.60
Miami (Gila County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	-0.01
Miami, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Miami, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	-0.01
Millinocket AQCR 109, ME	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.02	-0.02	-0.03	-0.07
Milwaukee, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.05	-0.16	-0.17	-0.26	-0.55
Milwaukee, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.02	-0.07	-0.08	-0.12	-0.25
Milwaukee-Racine, WI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.05	-0.14	-0.15	-0.23	-0.49
Minneapolis-St. Paul, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.12	-0.38	-0.42	-0.62	-1.33
Minneapolis-St. Paul, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.12	-0.37	-0.41	-0.60	-1.29
Missoula, MT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.01	-0.01	-0.03
Missoula, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.01	-0.03

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Modesto, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.03	-0.04	-0.05	-0.12
Mohave County (part); Bullhead City, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.01	-0.03
Mono Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Mono County; Mammoth Lake planning area, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Morenci (Greenlee County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Morgan County, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	-0.01	-0.01
Morongo Band of Mission Indians, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	0.00	0.00	0.00
Morongo Band of Mission Indians, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00	0.00
Morristown, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	-0.01
Muscatine County, IA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	-0.01
Muscatine, IA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	-0.01	-0.01
Muskegon County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.02	-0.02	-0.03	-0.06
Muskingum River, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Nashua, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.01	-0.02	-0.04
Nassau County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00
Navarro County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.01	-0.01	-0.02
Nevada County (Western part), CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.00	-0.01	-0.01	-0.02	-0.04
Nevada County (Western part), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	-0.01	-0.01	-0.02	-0.04
New Haven County, CT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
New Haven-Meriden-Waterbury, CT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.03	-0.09	-0.10	-0.15	-0.32
New Madrid County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
New Manchester-Grant magisterial district in Hancock County, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
New York County, NY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.04	-0.04	-0.06	-0.13
New York-N. New Jersey-Long Island, NY-NJ-CT	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.48	-1.47	-1.61	-2.37	-5.11
New York-N. New Jersey-Long Island, NY-NJ-CT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.26	-0.81	-0.89	-1.31	-2.82
New York-N. New Jersey-Long Island, NY-NJ-CT	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.49	-1.50	-1.64	-2.43	-5.22
New York-Northern New Jersey-Long Island, NY-NJ-CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.48	-1.47	-1.61	-2.38	-5.11
Nogales, AZ	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Northern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.07	-0.20	-0.22	-0.33	-0.71

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Oakridge, OR	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Ogden, UT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.01	-0.01	-0.03
Ogden, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.01	-0.03
Olmsted County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.01
Olmsted County; City of Rochester, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.01	-0.02	-0.05
Oneida County: Rhinelander Sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	-0.01	-0.01	-0.01	-0.02
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Pekin, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.01	-0.01	-0.01	-0.02
Penns Grove, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Peoria County: Hollis twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	0.00
Peoria, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.01	-0.02	-0.04
Perth Amboy, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.01	-0.01	-0.02
Philadelphia-Camden County, PA-NJ	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.04	-0.12	-0.13	-0.19	-0.40
Philadelphia-Wilmington, PA-NJ-DE (NJ Portion)	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.04	-0.13	-0.14	-0.21	-0.44
Philadelphia-Wilmington, PA-NJ-DE (PA-DE Portion)	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.13	-0.39	-0.42	-0.63	-1.35
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.23	-0.70	-0.77	-1.14	-2.44
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.23	-0.70	-0.77	-1.13	-2.44
Phoenix, AZ	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.16	-0.50	-0.55	-0.81	-1.75
Phoenix-Mesa, AZ	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-0.17	-0.52	-0.56	-0.83	-1.80
Phoenix-Mesa, AZ	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.17	-0.52	-0.57	-0.85	-1.82
Pierce County; Tacoma, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Pima County; Ajo planning area, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Pima County; Rillito planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.02
Pinal County (part); West Pinal, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.01	-0.03	-0.03	-0.04	-0.09
Pitkin County; Aspen, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.01	-0.02
Pittsburgh, PA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.03	-0.03	-0.04	-0.10
Pittsburgh-Beaver Valley, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.08	-0.24	-0.27	-0.39	-0.84

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Pittsburgh-Beaver Valley, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.07	-0.22	-0.24	-0.36	-0.77
Plumas County, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00	0.00
Polk County, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	-0.01
Portland, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.05	-0.15	-0.16	-0.24	-0.52
Power-Bannock Counties; Fort Hall Indian Reservation, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Power-Bannock Counties; Portneuf Valley Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.01	-0.03
Provo, UT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.01	-0.02	-0.02	-0.03	-0.07
Provo, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.02	-0.07	-0.07	-0.11	-0.24
Prowers County; Lamar, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Raleigh-Durham, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.07	-0.21	-0.23	-0.34	-0.74
Ramsey County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Reading, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.01	-0.04	-0.05	-0.07	-0.15
Reno, NV	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.03	-0.03	-0.05	-0.10
Rhineland, WI	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	-0.01
Riverside County (Coachella Valley), CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-0.02	-0.06	-0.07	-0.10	-0.22
Riverside County (Coachella Valley), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-0.02	-0.06	-0.07	-0.10	-0.22
Riverside County; Coachella Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.02	-0.07	-0.08	-0.12	-0.25
Riverside, Los Angeles, Orange, & San Bernardino Counties; South Coast Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.61	-1.88	-2.06	-3.04	-6.54
Rosebud County; Lame Deer, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Routt County (part); Steamboat Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.01	-0.03
Rusk and Panola Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	-0.01	-0.02	-0.04
Sacramento County, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.05	-0.16	-0.17	-0.25	-0.54
Sacramento Metro, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.09	-0.26	-0.29	-0.43	-0.92
Sacramento Metro, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.09	-0.26	-0.29	-0.43	-0.92
Sacramento, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.06	-0.17	-0.19	-0.28	-0.60
Sacramento, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.08	-0.26	-0.28	-0.42	-0.89

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Salem, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.03	-0.03	-0.05	-0.10
Salt Lake City, UT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.03	-0.03	-0.04	-0.10
Salt Lake City, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.07	-0.21	-0.23	-0.35	-0.74
Salt Lake County, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.04	-0.13	-0.14	-0.21	-0.45
Salt Lake County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	-0.04	-0.13	-0.14	-0.21	-0.45
San Antonio, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.08	-0.24	-0.26	-0.38	-0.82
San Bernardino County, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.02	-0.07	-0.07	-0.11	-0.24
San Diego County, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.13	-0.41	-0.45	-0.66	-1.42
San Diego County, CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-0.13	-0.41	-0.45	-0.66	-1.42
San Diego, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.13	-0.41	-0.45	-0.66	-1.42
San Francisco Bay Area, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.27	-0.83	-0.91	-1.34	-2.89
San Francisco Bay Area, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.27	-0.83	-0.91	-1.34	-2.89
San Francisco Bay Area, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.27	-0.83	-0.91	-1.35	-2.90
San Francisco-Oakland-San Jose, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.26	-0.78	-0.86	-1.27	-2.72
San Joaquin Valley Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.16	-0.49	-0.54	-0.79	-1.70
San Joaquin Valley, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-0.16	-0.49	-0.54	-0.79	-1.70
San Joaquin Valley, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-0.16	-0.49	-0.54	-0.79	-1.70
San Joaquin Valley, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.16	-0.49	-0.54	-0.79	-1.70
San Joaquin Valley, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-0.16	-0.49	-0.54	-0.79	-1.70
San Luis Obispo (Eastern San Luis Obispo), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	-0.01	-0.01
San Luis Obispo (Eastern part), CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	-0.01	-0.01
San Manuel (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	-0.01
San Miguel County; Telluride, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Sanders County (part); Thompson Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Santa Cruz County; Nogales planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Seaford, DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.01	-0.03	-0.04	-0.05	-0.12
Seattle-Tacoma, WA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.11	-0.35	-0.39	-0.57	-1.23
Sheboygan County, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.01	-0.01	-0.03

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Sheridan County; City of Sheridan, WY	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Shoreline Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.01	-0.03
Shoshone County; City of Pinehurst, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Shoshone County; Pinehurst Expansion Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Silver Bow County; Butte, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.01
Somerville, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	-0.01
Southern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.02	-0.07	-0.07	-0.11	-0.24
Southwest Indiana, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00
Spokane County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.04	-0.04	-0.06	-0.14
Spokane, WA	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.01	-0.04	-0.04	-0.06	-0.14
Springfield, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.02	-0.02	-0.05
St. Bernard Parish, LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	-0.01	-0.02	-0.04
St. Clair, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	-0.01	-0.01	-0.02
St. Lawrence County, NY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
St. Louis, MO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.03	-0.09	-0.10	-0.15	-0.32
St. Louis, MO-IL	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.10	-0.31	-0.34	-0.50	-1.07
St. Louis-St. Charles-Farmington, MO-IL	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.10	-0.32	-0.35	-0.52	-1.11
Steubenville, OH-WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.01	-0.01	-0.01	-0.03
Steubenville-Weirton, OH-WV	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.01	-0.02	-0.02	-0.03	-0.05
Stockton, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.04	-0.05	-0.07	-0.16
Sullivan County, TN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	-0.01	-0.01
Sutter Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00
Syracuse, NY	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.06	-0.06	-0.09	-0.20
Tacoma, WA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.06	-0.07	-0.10	-0.22
Tazewell County: Groveland twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	-0.01
Terre Haute, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.01	-0.01	-0.01	-0.03
Thurston County; Cities of Olympia, Tumwater, and Lacey, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.02	-0.04
Titus County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Toms River, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Tooele County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	0.00
Trenton, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.01	-0.02	-0.03
Trona, CA	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Tucson, AZ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.03	-0.09	-0.10	-0.14	-0.30
Tuolumne County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.01	-0.01	-0.01	-0.02
Tuscan Buttes, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00
Tuscan Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	0.00	0.00
Uinta Basin, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.01	-0.01	-0.01	-0.02
Union County; LaGrande, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Upper Green River Basin Area, WY	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.01	-0.01	-0.01	-0.02
Utah County, UT	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.07	-0.08	-0.11	-0.24
Vancouver, WA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.04	-0.04	-0.06	-0.13
Ventura County, CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-0.03	-0.10	-0.10	-0.15	-0.33
Ventura County, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.03	-0.10	-0.10	-0.15	-0.33
Vermillion County; Part of Clinton Township, IN	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Vigo County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.02	-0.02	-0.03	-0.06
Walla Walla County; Wallula, WA	PM ₁₀ (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00	0.00
Waltham, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.01	-0.01	-0.02
Warren County, NJ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	-0.01	-0.01
Warren County: Conewago Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	-0.01
Warren County: Warren Boro, Pleasant Twp, Glade Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	-0.01	-0.01
Warren, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	-0.01	-0.01
Washington, DC-MD-VA	Ozone (2008 8-hour)	Nonattainment (DC) Maintenance (MD, VA), Marginal	50	0	-0.21	-0.63	-0.69	-1.02	-2.20
Washington, DC-MD-VA	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.21	-0.63	-0.69	-1.02	-2.20
Washington, DC-MD-VA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.03	-0.08	-0.09	-0.13	-0.28
Washoe County; Reno planning area, NV	PM ₁₀ (1987 24-hour)	Maintenance, Serious	100	0	-0.01	-0.03	-0.03	-0.05	-0.10
Wayne County, MI	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.01	-0.02

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Wayne County: Boston, Center, Franklin, Wayne & Webster Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.01	-0.01	-0.03
West Central Pinal, AZ	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
West Silver Valley, ID	PM _{2.5} (2012 Annual)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Whatcom County, WA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Winston-Salem, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.06	-0.06	-0.09	-0.20
Worcester, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.02	-0.03	-0.04	-0.09
Yakima County, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.02	-0.04
Yakima, WA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01	-0.01
Yuba City-Marysville, CA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.02	-0.03	-0.07
Yuma, AZ	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.01	-0.01	-0.02	-0.05
Yuma, AZ	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.02	-0.02	-0.03	-0.07

Notes:
^a Nonattainment or maintenance status as of 2/1/2024. Source: EPA, The Green Book Nonattainment Areas for Criteria Pollutants; <http://www.epa.gov/airquality/greenbook/>. "--" indicates that no severity classification has been established for the NAAQS pollutant.
^b Emissions thresholds in tons per year. Where the threshold differs by precursor pollutant, the smallest of the precursor thresholds is shown. These thresholds are provided for information only; a general conformity determination is not required for the Proposed Action. Source: 40 CFR 93.853.
^c Positive values are emissions increases; negative values are emissions decreases.
 EPA = U.S. Environmental Protection Agency; NAAQS = National Ambient Air Quality Standard; CO = carbon monoxide; NO₂ = nitrogen dioxide; PM_{2.5} = particulate matter less than 2.5 microns in size; PM₁₀ = particulate matter less than 10 microns in size; SO₂ = sulfur dioxide.

Table D-12. Changes in Emissions from U.S. Passenger Cars and Light Trucks by Nonattainment or Maintenance Area and Alternative, Direct and Indirect Impacts--Acetaldehyde, 2050

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Ada County; Boise, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	0.00	-0.05	-0.19
Adams, Denver, and Boulder Counties; Denver Metropolitan area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.05	-0.10	-0.02	-0.22	-0.89
Ajo (Pima County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Albuquerque, NM	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.03	-0.05	-0.01	-0.10	-0.43
Allegan County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.04
Allegheny County Air Basin: Hazelwood monitor, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01	-0.03
Allegheny County, PA	PM _{2.5} (2012 Annual)	Nonattainment, Moderate	100	0	-0.03	-0.05	-0.01	-0.11	-0.45
Allegheny County; Liberty, Lincoln, Port Vue, Glassport, Clairton, PA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Allegheny, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	0.00	-0.01	-0.06
Allentown, PA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.03	-0.01	-0.07	-0.27
Allentown-Bethlehem-Easton, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.02	-0.03	-0.01	-0.08	-0.31
Alton Township, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Amador County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	-0.01	-0.02
Anchorage, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	-0.01	0.00	-0.02	-0.06
Anchorage; Eagle River, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Anne Arundel County and Baltimore County, MD	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.03	-0.06	-0.01	-0.13	-0.53
Archuleta County; Pagosa Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Armstrong County; Madison, Mahoning, Boggs, Washington, Pine, PA	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	0.00	0.00	-0.01
Aroostock County; City of Presque Isle, ME	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Atlanta, GA	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-0.17	-0.31	-0.06	-0.68	-2.81
Atlanta, GA	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.13	-0.23	-0.04	-0.52	-2.14
Atlantic City, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	-0.02
Bakersfield, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.03	-0.01	-0.06	-0.26
Baltimore, MD	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	-0.08	-0.15	-0.03	-0.33	-1.35
Baltimore, MD	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.08	-0.15	-0.03	-0.33	-1.36
Baltimore, MD	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00
Baton Rouge, LA	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.03	-0.05	-0.01	-0.12	-0.47

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Beaver, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	-0.01
Benton County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	-0.01
Berrien County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.01	0.00	-0.03	-0.11
Billings, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01	-0.04
Billings, MT	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00
Birmingham, AL	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.04	-0.07	-0.01	-0.16	-0.66
Boise-Northern Ada County, ID	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.02	0.00	-0.05	-0.19
Bonner County; The Sandpoint Area, ID	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Boston, MA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.04	-0.01	-0.09	-0.35
Boyd County (part), KY	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Brooke; Follansbee area, WV	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Brown County: Green Bay, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Burlington, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Butte County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.01	0.00	-0.02	-0.09
Calaveras County, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	-0.01	-0.02
Calaveras County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	-0.01	-0.02
Campbell-Clermont Counties, KY-OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	-0.01
Canton-Massillon, OH	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.01	-0.02	0.00	-0.04	-0.17
Central New Hampshire, NH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.01	0.00	-0.02	-0.09
Central Steptoe Valley, NV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	-0.01
Charleston, WV	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.01	-0.02	-0.01	-0.04	-0.17
Charlotte, NC	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.04	-0.08	-0.01	-0.18	-0.74
Charlotte-Rock Hill, NC-SC	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.08	-0.15	-0.03	-0.33	-1.38
Chicago, IL-IN-WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.21	-0.38	-0.07	-0.84	-3.45
Chicago-Naperville, IL-IN-WI	Ozone (2008 8-hour)	Maintenance, Serious	100	0	-0.21	-0.38	-0.07	-0.85	-3.49
Chico (Butte County), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.01	0.00	-0.02	-0.09
Chico, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	-0.01	-0.04
Chico, CA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	0.00	-0.02	-0.09
Cincinnati, OH-KY (OH Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.05	-0.09	-0.02	-0.20	-0.82

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Cincinnati, OH-KY (KY Portion)	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	0.00	-0.05	-0.21
Cincinnati, OH-KY-IN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.06	-0.12	-0.02	-0.26	-1.07
Clark County; Las Vegas planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.06	-0.12	-0.02	-0.26	-1.09
Cleveland, OH	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.07	-0.13	-0.02	-0.29	-1.19
Cleveland, OH	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.03	-0.05	-0.01	-0.11	-0.43
Cleveland, OH	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-0.03	-0.06	-0.01	-0.14	-0.57
Cleveland-Akron-Lorain, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.07	-0.14	-0.02	-0.30	-1.24
Cleveland-Akron-Lorain, OH	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.07	-0.12	-0.02	-0.28	-1.14
Cochise County; Paul Spur/Douglas planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Colorado Springs, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.03	-0.01	-0.07	-0.29
Columbus, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.05	-0.10	-0.02	-0.22	-0.92
Columbus, OH	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.05	-0.09	-0.02	-0.21	-0.85
Cook County; Lyons Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.03
Cook County; Southeast Chicago, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.04
Coshocton County; Franklin Township, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Coso Junction, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Cuyahoga County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.03	-0.05	-0.01	-0.11	-0.44
Cuyahoga County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.02	-0.04	-0.01	-0.09	-0.35
Dallas-Fort Worth, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.24	-0.45	-0.10	-1.01	-4.10
Dallas-Fort Worth, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.24	-0.44	-0.10	-0.99	-4.04
Dane County; Madison sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.03	0.00	-0.06	-0.25
Delaware County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-0.01	-0.02	0.00	-0.04	-0.18
Denver Metro/North Front Range, CO	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.12	-0.22	-0.04	-0.49	-2.00
Denver-Boulder, CO	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.09	-0.17	-0.03	-0.37	-1.54
Denver-Boulder-Greeley-Ft. Collins-Loveland, CO	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.12	-0.22	-0.04	-0.49	-1.99
Detroit, MI	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	-0.14	-0.25	-0.05	-0.56	-2.32
Detroit, MI	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.05	-0.09	-0.02	-0.21	-0.86
Detroit, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.01	0.00	-0.02	-0.10
Detroit-Ann Arbor, MI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.14	-0.25	-0.05	-0.56	-2.32

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Doña Ana County; Anthony, NM	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Door County, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	0.00	0.00
Door County-Revised, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	0.00	-0.01
Douglas (Cochise County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	-0.01
Dukes County, MA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	0.00	0.00
Duluth, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	0.00	-0.01	-0.05
East Chicago, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	-0.01
East Helena Area, MT	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	0.00
East Kern County, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00	-0.01
El Paso County, TX	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.02	-0.03	-0.01	-0.08	-0.31
El Paso, TX	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	-0.01	-0.03
El Paso-Las Cruces, TX-NM	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.02	-0.05	-0.01	-0.10	-0.42
Eugene-Springfield, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.01	0.00	-0.03	-0.11
Evangeline Parish (Partial), LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Fairbanks, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	-0.01	-0.03
Fairbanks, AK	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	0.00	-0.01	0.00	-0.01	-0.05
Flathead County; Columbia Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Flathead County; Kalispell and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.02
Flathead County; Whitefish and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Fort Collins, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.01	0.00	-0.02	-0.09
Freehold, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Freestone and Anderson Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	-0.02
Fremont County; Canon City Area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.02
Fresno, CA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.02	-0.03	-0.01	-0.08	-0.31
Gila County (part): Payson, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Giles County, VA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Grant County, NM	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	-0.02

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Grants Pass, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	-0.02
Great Falls, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Greater Connecticut, CT	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-0.04	-0.08	-0.01	-0.18	-0.72
Greater Connecticut, CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.04	-0.08	-0.01	-0.18	-0.72
Greeley, CO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.03	-0.01	-0.06	-0.24
Hancock County (part): Weirton, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	-0.01
Hancock and Brooke Counties (Part); The city of Weirton, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Harrisburg-Lebanon-Carlisle-York, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.03	-0.06	-0.01	-0.13	-0.52
Hartford-New Britain-Middletown, CT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.03	-0.05	-0.01	-0.12	-0.50
Hayden (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	0.00	0.00	-0.01
Hayden, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Hayden, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	-0.01
Henderson-Webster Counties, KY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Hillsborough County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	-0.01
Hillsborough-Polk County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00
Houston-Galveston-Brazoria, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.23	-0.44	-0.10	-0.98	-3.99
Houston-Galveston-Brazoria, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.23	-0.43	-0.09	-0.95	-3.88
Howard County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	-0.01	-0.02
Humphreys County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	-0.02
Huntington, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	-0.02
Hutchinson County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	-0.01	-0.03
Imperial County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.01	0.00	-0.03	-0.11
Imperial County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.01	0.00	-0.03	-0.11
Imperial County, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.01	0.00	-0.02	-0.09
Imperial County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	-0.01	-0.01	0.00	-0.02	-0.09
Imperial Valley, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.01	-0.01	0.00	-0.03	-0.11
Indian Wells, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.03
Indiana, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	0.00	-0.02	-0.06

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Indianapolis, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Indianapolis, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.02	-0.03	-0.01	-0.07	-0.28
Inland Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.03
Inyo County; Owens Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00	0.00
Jackson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	-0.01	-0.03
Jackson County; Medford-Ashland (including White City), OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	0.00	-0.02	-0.08
Jamestown, NY	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	-0.01	0.00	-0.02	-0.08
Jefferson County, KY	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00
Jefferson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	-0.01	-0.03
Jefferson County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Jefferson County; (part) Steubenville & Mingo Junction, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01	-0.02
Johnstown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	0.00	-0.02	-0.07
Josephine County; Grants Pass, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.02
Juneau; Mendenhall Valley area, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Kern County (Eastern Kern), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	-0.01	0.00	-0.01	-0.05
Kern County (Eastern Kern), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	-0.01	0.00	-0.01	-0.05
King County; Kent, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
King County; Seattle, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Klamath Falls, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	-0.01	-0.02
Klamath Falls, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.02
Klamath Falls, OR	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.03
Knoxville, TN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.02	-0.04	-0.01	-0.09	-0.39
Knoxville-Sevierville-La Follette, TN	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.03	-0.05	-0.01	-0.12	-0.48
La Porte County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01	-0.03
LaSalle County; Oglesby, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.02
Lake County (part); Lakeview, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Lake County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.02	0.00	-0.05	-0.21
Lake County, OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.01	0.00	-0.03	-0.11
Lake County; (part) Eastlake, Timberlake, Lakeline, Willoughby, Mentor, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	-0.02

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Lake County; Cities of East Chicago, Hammond, Whiting, and Gary, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	0.00	-0.03	-0.14
Lake County; Polson, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Lake County; Ronan, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Lake Tahoe North Shore, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	-0.01
Lake Tahoe South Shore, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	-0.02
Lake Tahoe, NV	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	-0.01
Lancaster, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.01	-0.03	0.00	-0.06	-0.24
Lancaster, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.03	0.00	-0.06	-0.24
Lane County (part); Oakridge, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Lane County; Eugene/Springfield, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	0.00	-0.03	-0.11
Las Vegas, NV	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.06	-0.12	-0.02	-0.26	-1.09
Las Vegas, NV	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.06	-0.12	-0.02	-0.26	-1.09
Laurel Area (Yellowstone County), MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Lebanon County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	-0.01	0.00	-0.01	-0.06
Lemont, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.01	0.00	-0.02	-0.08
Liberty-Clairton, PA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Lincoln County; Libby and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Logan, UT-ID	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	0.00	-0.02	-0.06
Longmont, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	0.00	-0.02	-0.07
Lorain County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01	-0.03
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.02	-0.04	-0.01	-0.09	-0.38
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-0.02	-0.04	-0.01	-0.09	-0.38
Los Angeles-South Coast Air Basin, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-0.47	-0.87	-0.16	-1.93	-7.95
Los Angeles-South Coast Air Basin, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-0.47	-0.87	-0.16	-1.93	-7.95
Los Angeles-South Coast Air Basin, CA	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.47	-0.87	-0.16	-1.93	-7.95
Los Angeles-South Coast Air Basin, CA	NO ₂ (1971 Annual)	Maintenance, Primary	100	0	-0.47	-0.87	-0.16	-1.93	-7.95
Los Angeles-South Coast Air Basin, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.47	-0.87	-0.16	-1.93	-7.95
Los Angeles-South Coast Air Basin, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-0.47	-0.87	-0.16	-1.93	-7.95

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Louisville, KY-IN (IN Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.01	-0.01	0.00	-0.03	-0.11
Louisville, KY-IN (KY Portion)	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.03	-0.05	-0.01	-0.11	-0.47
Lowell, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	0.00	-0.01	-0.05
Lucas County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.02	0.00	-0.04	-0.15
Madison County; Granite City Township and Nameoki Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.03
Manchester, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	0.00	-0.01	-0.05
Manitowoc County, WI	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	0.00	-0.01	-0.03
Marathon County: Rothschild Sub-city area, Rib Mountain, Weston, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	-0.01	0.00	-0.02	-0.08
Maricopa and Pinal Counties; Phoenix planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.13	-0.24	-0.04	-0.53	-2.17
Marion County: Lawrence, Washington, and Warrant Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.02	0.00	-0.06	-0.23
Mariposa County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Mariposa County, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Marshall, WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	-0.02
Medford, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	0.00	-0.01	-0.05
Memphis, TN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.03	-0.06	-0.01	-0.14	-0.56
Memphis, TN-MS-AR	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.04	-0.08	-0.01	-0.18	-0.72
Miami (Gila County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	-0.01
Miami, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Miami, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	-0.01
Millinocket AQCR 109, ME	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.01	0.00	-0.02	-0.09
Milwaukee, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.04	-0.07	-0.01	-0.16	-0.67
Milwaukee, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.02	-0.03	-0.01	-0.07	-0.31
Milwaukee-Racine, WI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.04	-0.06	-0.01	-0.14	-0.59
Minneapolis-St. Paul, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.10	-0.18	-0.03	-0.39	-1.61
Minneapolis-St. Paul, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.09	-0.17	-0.03	-0.38	-1.56
Missoula, MT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	-0.01	-0.04
Missoula, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.04

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Modesto, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.02	0.00	-0.03	-0.14
Mohave County (part); Bullhead City, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.04
Mono Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Mono County; Mammoth Lake planning area, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Morenci (Greenlee County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Morgan County, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	-0.02
Morongo Band of Mission Indians, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	0.00	0.00	0.00
Morongo Band of Mission Indians, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00	0.00
Morristown, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	-0.01
Muscatine County, IA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	-0.01
Muscatine, IA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	-0.01
Muskegon County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	0.00	-0.02	-0.07
Muskingum River, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Nashua, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01	-0.04
Nassau County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00
Navarro County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	-0.02
Nevada County (Western part), CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	-0.01	-0.04
Nevada County (Western part), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	-0.01	-0.04
New Haven County, CT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
New Haven-Meriden-Waterbury, CT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.04	-0.01	-0.09	-0.39
New Madrid County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
New Manchester-Grant magisterial district in Hancock County, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
New York County, NY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.02	0.00	-0.04	-0.15
New York-N. New Jersey-Long Island, NY-NJ-CT	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.37	-0.67	-0.12	-1.49	-6.15
New York-N. New Jersey-Long Island, NY-NJ-CT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.20	-0.37	-0.07	-0.82	-3.40
New York-N. New Jersey-Long Island, NY-NJ-CT	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.37	-0.68	-0.13	-1.52	-6.28
New York-Northern New Jersey-Long Island, NY-NJ-CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.37	-0.67	-0.12	-1.49	-6.15
Nogales, AZ	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Northern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.05	-0.09	-0.02	-0.21	-0.86

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Oakridge, OR	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Ogden, UT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	-0.01	-0.04
Ogden, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.04
Olmsted County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.02
Olmsted County; City of Rochester, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	0.00	-0.01	-0.06
Oneida County: Rhinelander Sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	-0.01	-0.02
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Pekin, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	-0.01	-0.02
Penns Grove, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Peoria County: Hollis twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	0.00
Peoria, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	0.00	-0.01	-0.05
Perth Amboy, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01	-0.02
Philadelphia-Camden County, PA-NJ	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.03	-0.05	-0.01	-0.12	-0.48
Philadelphia-Wilmington, PA-NJ-DE (NJ Portion)	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.03	-0.06	-0.01	-0.13	-0.53
Philadelphia-Wilmington, PA-NJ-DE (PA-DE Portion)	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.10	-0.18	-0.03	-0.39	-1.62
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.18	-0.32	-0.06	-0.71	-2.94
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.18	-0.32	-0.06	-0.71	-2.94
Phoenix, AZ	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.13	-0.23	-0.04	-0.51	-2.11
Phoenix-Mesa, AZ	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-0.13	-0.24	-0.04	-0.53	-2.17
Phoenix-Mesa, AZ	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.13	-0.24	-0.04	-0.53	-2.20
Pierce County; Tacoma, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Pima County; Ajo planning area, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Pima County; Rillito planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	-0.02
Pinal County (part); West Pinal, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.01	-0.01	0.00	-0.03	-0.11
Pitkin County; Aspen, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.02
Pittsburgh, PA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.01	0.00	-0.03	-0.12
Pittsburgh-Beaver Valley, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.06	-0.11	-0.02	-0.25	-1.01

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Pittsburgh-Beaver Valley, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.05	-0.10	-0.02	-0.22	-0.91
Plumas County, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00	0.00
Polk County, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	-0.01
Portland, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.04	-0.07	-0.01	-0.15	-0.63
Power-Bannock Counties; Fort Hall Indian Reservation, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Power-Bannock Counties; Portneuf Valley Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.04
Provo, UT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.00	-0.01	0.00	-0.02	-0.08
Provo, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.02	-0.03	-0.01	-0.07	-0.29
Prowers County; Lamar, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Raleigh-Durham, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.05	-0.10	-0.02	-0.21	-0.89
Ramsey County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Reading, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.01	-0.02	0.00	-0.04	-0.18
Reno, NV	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.01	0.00	-0.03	-0.12
Rhineland, WI	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	-0.01
Riverside County (Coachella Valley), CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-0.02	-0.03	-0.01	-0.06	-0.26
Riverside County (Coachella Valley), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-0.02	-0.03	-0.01	-0.06	-0.26
Riverside County; Coachella Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.02	-0.03	-0.01	-0.07	-0.30
Riverside, Los Angeles, Orange, & San Bernardino Counties; South Coast Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.47	-0.86	-0.16	-1.92	-7.91
Rosebud County; Lame Deer, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Routt County (part); Steamboat Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.03
Rusk and Panola Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	-0.01	-0.04
Sacramento County, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.04	-0.07	-0.01	-0.16	-0.65
Sacramento Metro, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.07	-0.12	-0.02	-0.27	-1.10
Sacramento Metro, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.07	-0.12	-0.02	-0.27	-1.10
Sacramento, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.04	-0.08	-0.01	-0.18	-0.73
Sacramento, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.06	-0.12	-0.02	-0.26	-1.08

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Salem, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.01	0.00	-0.03	-0.12
Salt Lake City, UT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.01	0.00	-0.03	-0.12
Salt Lake City, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.05	-0.10	-0.02	-0.22	-0.91
Salt Lake County, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.03	-0.06	-0.01	-0.13	-0.54
Salt Lake County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	-0.03	-0.06	-0.01	-0.13	-0.54
San Antonio, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.06	-0.11	-0.02	-0.24	-0.99
San Bernardino County, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.02	-0.03	-0.01	-0.06	-0.26
San Diego County, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.10	-0.19	-0.03	-0.42	-1.71
San Diego County, CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-0.10	-0.19	-0.03	-0.41	-1.71
San Diego, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.10	-0.19	-0.03	-0.41	-1.71
San Francisco Bay Area, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.21	-0.38	-0.07	-0.85	-3.48
San Francisco Bay Area, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.21	-0.38	-0.07	-0.84	-3.48
San Francisco Bay Area, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.21	-0.38	-0.07	-0.85	-3.49
San Francisco-Oakland-San Jose, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.20	-0.36	-0.07	-0.80	-3.29
San Joaquin Valley Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.12	-0.22	-0.04	-0.50	-2.05
San Joaquin Valley, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-0.12	-0.22	-0.04	-0.50	-2.05
San Joaquin Valley, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-0.12	-0.22	-0.04	-0.50	-2.05
San Joaquin Valley, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.12	-0.22	-0.04	-0.50	-2.05
San Joaquin Valley, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-0.12	-0.22	-0.04	-0.50	-2.05
San Luis Obispo (Eastern San Luis Obispo), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	-0.01
San Luis Obispo (Eastern part), CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	-0.01
San Manuel (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	-0.01
San Miguel County; Telluride, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Sanders County (part); Thompson Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Santa Cruz County; Nogales planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Seaford, DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.01	-0.02	0.00	-0.03	-0.14
Seattle-Tacoma, WA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.09	-0.16	-0.03	-0.36	-1.49
Sheboygan County, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.03

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Sheridan County; City of Sheridan, WY	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Shoreline Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.03
Shoshone County; City of Pinehurst, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Shoshone County; Pinehurst Expansion Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Silver Bow County; Butte, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.02
Somerville, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	-0.01
Southern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.02	-0.03	-0.01	-0.07	-0.29
Southwest Indiana, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00
Spokane County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	0.00	-0.04	-0.17
Spokane, WA	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.01	-0.02	0.00	-0.04	-0.17
Springfield, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	0.00	-0.01	-0.06
St. Bernard Parish, LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	-0.01	-0.04
St. Clair, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	-0.01	-0.03
St. Lawrence County, NY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
St. Louis, MO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.04	-0.01	-0.09	-0.38
St. Louis, MO-IL	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.08	-0.14	-0.03	-0.31	-1.29
St. Louis-St. Charles-Farmington, MO-IL	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.08	-0.15	-0.03	-0.33	-1.34
Steubenville, OH-WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	-0.01	-0.03
Steubenville-Weirton, OH-WV	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	-0.01	0.00	-0.02	-0.06
Stockton, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.02	0.00	-0.05	-0.19
Sullivan County, TN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	-0.01
Sutter Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00
Syracuse, NY	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.03	0.00	-0.06	-0.24
Tacoma, WA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.03	-0.01	-0.06	-0.26
Tazewell County: Groveland twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	-0.01
Terre Haute, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	-0.01	-0.03
Thurston County; Cities of Olympia, Tumwater, and Lacey, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	0.00	-0.01	-0.05
Titus County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Toms River, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Tooele County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	0.00
Trenton, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01	-0.04
Trona, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Tucson, AZ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.04	-0.01	-0.09	-0.38
Tuolumne County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	-0.01	-0.03
Tuscan Buttes, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00
Tuscan Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	0.00	0.00
Uinta Basin, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	-0.01	-0.03
Union County; LaGrande, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Upper Green River Basin Area, WY	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	-0.01	-0.02
Utah County, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.03	-0.01	-0.07	-0.29
Vancouver, WA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.02	0.00	-0.04	-0.16
Ventura County, CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-0.02	-0.04	-0.01	-0.10	-0.40
Ventura County, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.02	-0.04	-0.01	-0.10	-0.40
Vermillion County; Part of Clinton Township, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Vigo County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	0.00	-0.02	-0.07
Walla Walla County; Wallula, WA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00	0.00
Waltham, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01	-0.03
Warren County, NJ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	-0.01
Warren County: Conewago Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	-0.01
Warren County: Warren Boro, Pleasant Twp, Glade Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	-0.01
Warren, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	-0.01
Washington, DC-MD-VA	Ozone (2008 8-hour)	Nonattainment (DC) Maintenance (MD, VA), Marginal	50	0	-0.16	-0.29	-0.05	-0.64	-2.65
Washington, DC-MD-VA	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.16	-0.29	-0.05	-0.64	-2.65
Washington, DC-MD-VA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.04	-0.01	-0.08	-0.34
Washoe County; Reno planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.01	-0.01	0.00	-0.03	-0.13
Wayne County, MI	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.03

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Wayne County: Boston, Center, Franklin, Wayne & Webster Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01	-0.03
West Central Pinal, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
West Silver Valley, ID	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Whatcom County, WA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Winston-Salem, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.03	0.00	-0.06	-0.24
Worcester, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.01	0.00	-0.03	-0.11
Yakima County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	0.00	-0.01	-0.05
Yakima, WA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	-0.02
Yuba City-Marysville, CA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	0.00	-0.02	-0.09
Yuma, AZ	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.01	0.00	-0.01	-0.06
Yuma, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.01	0.00	-0.02	-0.09

Notes:
^a Nonattainment or maintenance status as of 2/1/2024. Source: EPA, The Green Book Nonattainment Areas for Criteria Pollutants; <http://www.epa.gov/airquality/greenbook/>. "--" indicates that no severity classification has been established for the NAAQS pollutant.
^b Emissions thresholds in tons per year. Where the threshold differs by precursor pollutant, the smallest of the precursor thresholds is shown. These thresholds are provided for information only; a general conformity determination is not required for the Proposed Action. Source: 40 CFR 93.853.
^c Positive values are emissions increases; negative values are emissions decreases.
 EPA = U.S. Environmental Protection Agency; NAAQS = National Ambient Air Quality Standard; CO = carbon monoxide; NO₂ = nitrogen dioxide; PM2.5 = particulate matter less than 2.5 microns in size; PM10 = particulate matter less than 10 microns in size; SO₂ = sulfur dioxide.

Table D-13. Changes in Emissions from U.S. Passenger Cars and Light Trucks by Nonattainment or Maintenance Area and Alternative, Direct and Indirect Impacts—Acrolein, 2035

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Ada County; Boise, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Adams, Denver, and Boulder Counties; Denver Metropolitan area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.02	-0.04
Ajo (Pima County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Albuquerque, NM	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.01	-0.01	-0.02
Allegan County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Allegheny County Air Basin: Hazelwood monitor, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Allegheny County, PA	PM _{2.5} (2012 Annual)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.01	-0.01	-0.02
Allegheny County; Liberty, Lincoln, Port Vue, Glassport, Clairton, PA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Allegheny, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Allentown, PA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.01
Allentown-Bethlehem-Easton, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	-0.01	-0.01	-0.02
Alton Township, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Amador County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00
Anchorage, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00	0.00
Anchorage; Eagle River, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Anne Arundel County and Baltimore County, MD	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	-0.01	-0.01	-0.03
Archuleta County; Pagosa Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Armstrong County; Madison, Mahoning, Boggs, Washington, Pine, PA	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Aroostock County; City of Presque Isle, ME	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Atlanta, GA	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-0.01	-0.04	-0.05	-0.07	-0.15
Atlanta, GA	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.01	-0.03	-0.04	-0.05	-0.11
Atlantic City, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Bakersfield, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01	-0.01
Baltimore, MD	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	-0.01	-0.02	-0.02	-0.03	-0.07
Baltimore, MD	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.01	-0.02	-0.02	-0.03	-0.07
Baltimore, MD	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00
Baton Rouge, LA	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	-0.01	-0.01	-0.01	-0.03

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Beaver, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Benton County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	0.00
Berrien County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Billings, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Billings, MT	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00
Birmingham, AL	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	-0.01	-0.01	-0.02	-0.04
Boise-Northern Ada County, ID	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	-0.01
Bonner County; The Sandpoint Area, ID	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Boston, MA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.01	-0.01	-0.02
Boyd County (part), KY	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Brooke; Follansbee area, WV	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Brown County: Green Bay, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Burlington, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Butte County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00
Calaveras County, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00
Calaveras County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00
Campbell-Clermont Counties, KY-OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00
Canton-Massillon, OH	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	0.00	0.00	0.00	-0.01
Central New Hampshire, NH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00
Central Steptoe Valley, NV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Charleston, WV	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	0.00	0.00	-0.01	-0.01
Charlotte, NC	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.01	-0.02	-0.04
Charlotte-Rock Hill, NC-SC	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.01	-0.02	-0.02	-0.03	-0.07
Chicago, IL-IN-WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.02	-0.05	-0.06	-0.08	-0.18
Chicago-Naperville, IL-IN-WI	Ozone (2008 8-hour)	Maintenance, Serious	100	0	-0.02	-0.05	-0.06	-0.08	-0.18
Chico (Butte County), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00
Chico, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00
Chico, CA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Cincinnati, OH-KY (OH Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	-0.01	-0.01	-0.02	-0.04

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Cincinnati, OH-KY (KY Portion)	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Cincinnati, OH-KY-IN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.01	-0.02	-0.02	-0.03	-0.06
Clark County; Las Vegas planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.01	-0.02	-0.02	-0.03	-0.06
Cleveland, OH	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.02	-0.02	-0.03	-0.06
Cleveland, OH	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.01	-0.01	-0.02
Cleveland, OH	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.01	-0.03
Cleveland-Akron-Lorain, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.01	-0.02	-0.02	-0.03	-0.06
Cleveland-Akron-Lorain, OH	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.01	-0.02	-0.02	-0.03	-0.06
Cochise County; Paul Spur/Douglas planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Colorado Springs, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	-0.01	-0.01
Columbus, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	-0.01	-0.02	-0.02	-0.05
Columbus, OH	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	-0.01	-0.01	-0.02	-0.04
Cook County; Lyons Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Cook County; Southeast Chicago, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Coshocton County; Franklin Township, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Coso Junction, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Cuyahoga County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.01	-0.02
Cuyahoga County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.01	-0.01	-0.02
Dallas-Fort Worth, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.02	-0.07	-0.08	-0.11	-0.24
Dallas-Fort Worth, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.02	-0.07	-0.07	-0.11	-0.23
Dane County; Madison sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01	-0.01
Delaware County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Denver Metro/North Front Range, CO	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.03	-0.03	-0.05	-0.10
Denver-Boulder, CO	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.01	-0.02	-0.02	-0.04	-0.08
Denver-Boulder-Greeley-Ft. Collins-Loveland, CO	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.01	-0.03	-0.03	-0.05	-0.10
Detroit, MI	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	-0.01	-0.03	-0.04	-0.06	-0.12
Detroit, MI	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.01	-0.02	-0.04
Detroit, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	-0.01
Detroit-Ann Arbor, MI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.01	-0.03	-0.04	-0.06	-0.12

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Doña Ana County; Anthony, NM	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Door County, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	0.00	0.00
Door County-Revised, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	0.00	0.00
Douglas (Cochise County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Dukes County, MA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	0.00	0.00
Duluth, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00
East Chicago, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
East Helena Area, MT	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	0.00
East Kern County, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00	0.00
El Paso County, TX	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01	-0.01	-0.02
El Paso, TX	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00
El Paso-Las Cruces, TX-NM	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.01	-0.01	-0.01	-0.02
Eugene-Springfield, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	-0.01
Evangeline Parish (Partial), LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Fairbanks, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00	0.00
Fairbanks, AK	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00	0.00
Flathead County; Columbia Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Flathead County; Kalispell and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Flathead County; Whitefish and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Fort Collins, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00
Freehold, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Freestone and Anderson Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Fremont County; Canon City Area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Fresno, CA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.00	0.00	0.00	-0.01	-0.02
Gila County (part): Payson, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Giles County, VA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Grant County, NM	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Grants Pass, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00
Great Falls, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Greater Connecticut, CT	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.00	-0.01	-0.01	-0.02	-0.04
Greater Connecticut, CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	0.00	-0.01	-0.01	-0.02	-0.04
Greeley, CO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01	-0.01
Hancock County (part): Weirton, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	0.00
Hancock and Brooke Counties (Part); The city of Weirton, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Harrisburg-Lebanon-Carlisle-York, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.01	-0.03
Hartford-New Britain-Middletown, CT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.01	-0.01	-0.03
Hayden (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Hayden, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Hayden, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Henderson-Webster Counties, KY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Hillsborough County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00
Hillsborough-Polk County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00
Houston-Galveston-Brazoria, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.02	-0.06	-0.07	-0.10	-0.21
Houston-Galveston-Brazoria, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.02	-0.06	-0.06	-0.09	-0.20
Howard County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Humphreys County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	0.00
Huntington, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Hutchinson County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Imperial County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Imperial County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	-0.01
Imperial County, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Imperial County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Imperial Valley, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00	-0.01
Indian Wells, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Indiana, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	-0.01

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Indianapolis, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Indianapolis, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	-0.01	-0.01
Inland Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Inyo County; Owens Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00	0.00
Jackson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00
Jackson County; Medford-Ashland (including White City), OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Jamestown, NY	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	0.00	-0.01
Jefferson County, KY	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00
Jefferson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00
Jefferson County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Jefferson County; (part) Steubenville & Mingo Junction, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Johnstown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Josephine County; Grants Pass, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Juneau; Mendenhall Valley area, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Kern County (Eastern Kern), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	0.00	0.00	0.00
Kern County (Eastern Kern), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00	0.00
King County; Kent, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
King County; Seattle, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Klamath Falls, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00
Klamath Falls, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Klamath Falls, OR	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Knoxville, TN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	-0.01	-0.01	-0.01	-0.02
Knoxville-Sevierville-La Follette, TN	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.01	-0.02
La Porte County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
LaSalle County; Oglesby, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Lake County (part); Lakeview, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Lake County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01	-0.01
Lake County, OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	-0.01
Lake County; (part) Eastlake, Timberlake, Lakeline, Willoughby, Mentor, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Lake County; Cities of East Chicago, Hammond, Whiting, and Gary, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Lake County; Polson, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Lake County; Ronan, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Lake Tahoe North Shore, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Lake Tahoe South Shore, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00
Lake Tahoe, NV	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Lancaster, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	-0.01	-0.01
Lancaster, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.01
Lane County (part); Oakridge, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Lane County; Eugene/Springfield, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Las Vegas, NV	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.02	-0.02	-0.03	-0.06
Las Vegas, NV	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.01	-0.02	-0.02	-0.03	-0.06
Laurel Area (Yellowstone County), MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Lebanon County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Lemont, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00
Liberty-Clairton, PA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Lincoln County; Libby and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Logan, UT-ID	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Longmont, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00
Lorain County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	-0.01	-0.01	-0.01	-0.02
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	0.00	-0.01	-0.01	-0.01	-0.02
Los Angeles-South Coast Air Basin, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-0.04	-0.12	-0.13	-0.19	-0.41
Los Angeles-South Coast Air Basin, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-0.04	-0.12	-0.13	-0.19	-0.41
Los Angeles-South Coast Air Basin, CA	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.04	-0.12	-0.13	-0.19	-0.41
Los Angeles-South Coast Air Basin, CA	NO ₂ (1971 Annual)	Maintenance, Primary	100	0	-0.04	-0.12	-0.13	-0.19	-0.41
Los Angeles-South Coast Air Basin, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.04	-0.12	-0.13	-0.19	-0.41
Los Angeles-South Coast Air Basin, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-0.04	-0.12	-0.13	-0.19	-0.41

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Louisville, KY-IN (IN Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	0.00	0.00	-0.01
Louisville, KY-IN (KY Portion)	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.01	-0.01	-0.02
Lowell, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Lucas County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	-0.01
Madison County; Granite City Township and Nameoki Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Manchester, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Manitowoc County, WI	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	0.00	0.00	0.00
Marathon County: Rothschild Sub-city area, Rib Mountain, Weston, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	0.00
Maricopa and Pinal Counties; Phoenix planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.01	-0.03	-0.04	-0.05	-0.11
Marion County: Lawrence, Washington, and Warrant Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01	-0.01
Mariposa County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Mariposa County, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Marshall, WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00
Medford, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00
Memphis, TN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.01	-0.01	-0.03
Memphis, TN-MS-AR	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	-0.01	-0.01	-0.02	-0.04
Miami (Gila County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Miami, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Miami, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Millinocket AQCR 109, ME	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Milwaukee, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.01	-0.02	-0.03
Milwaukee, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.01	-0.01	-0.02
Milwaukee-Racine, WI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	-0.01	-0.01	-0.01	-0.03
Minneapolis-St. Paul, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.02	-0.03	-0.04	-0.08
Minneapolis-St. Paul, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.02	-0.03	-0.04	-0.08
Missoula, MT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00
Missoula, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Modesto, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	-0.01
Mohave County (part); Bullhead City, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Mono Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Mono County; Mammoth Lake planning area, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Morenci (Greenlee County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Morgan County, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00
Morongo Band of Mission Indians, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	0.00	0.00	0.00
Morongo Band of Mission Indians, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00	0.00
Morristown, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Muscatine County, IA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Muscatine, IA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Muskegon County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Muskingum River, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Nashua, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Nassau County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00
Navarro County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Nevada County (Western part), CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00	0.00
Nevada County (Western part), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00	0.00
New Haven County, CT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
New Haven-Meriden-Waterbury, CT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.01	-0.01	-0.02
New Madrid County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
New Manchester-Grant magisterial district in Hancock County, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
New York County, NY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
New York-N. New Jersey-Long Island, NY-NJ-CT	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.03	-0.09	-0.10	-0.15	-0.32
New York-N. New Jersey-Long Island, NY-NJ-CT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.02	-0.05	-0.06	-0.08	-0.18
New York-N. New Jersey-Long Island, NY-NJ-CT	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.03	-0.09	-0.10	-0.15	-0.32
New York-Northern New Jersey-Long Island, NY-NJ-CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.03	-0.09	-0.10	-0.15	-0.32
Nogales, AZ	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Northern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.01	-0.02	-0.04

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Oakridge, OR	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Ogden, UT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00
Ogden, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Olmsted County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Olmsted County; City of Rochester, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Oneida County: Rhinelander Sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	0.00
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Pekin, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00
Penns Grove, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Peoria County: Hollis twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	0.00
Peoria, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Perth Amboy, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Philadelphia-Camden County, PA-NJ	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.01	-0.01	-0.02
Philadelphia-Wilmington, PA-NJ-DE (NJ Portion)	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	-0.01	-0.01	-0.01	-0.03
Philadelphia-Wilmington, PA-NJ-DE (PA-DE Portion)	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.03	-0.04	-0.08
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.01	-0.04	-0.05	-0.07	-0.15
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.01	-0.04	-0.05	-0.07	-0.15
Phoenix, AZ	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.01	-0.03	-0.03	-0.05	-0.11
Phoenix-Mesa, AZ	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.03	-0.04	-0.05	-0.11
Phoenix-Mesa, AZ	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.03	-0.04	-0.05	-0.11
Pierce County; Tacoma, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Pima County; Ajo planning area, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Pima County; Rillito planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Pinal County (part); West Pinal, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00	-0.01
Pitkin County; Aspen, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Pittsburgh, PA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	-0.01
Pittsburgh-Beaver Valley, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.01	-0.02	-0.02	-0.03	-0.06

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Pittsburgh-Beaver Valley, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.02	-0.02	-0.05
Plumas County, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00	0.00
Polk County, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	0.00
Portland, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.01	-0.02	-0.03
Power-Bannock Counties; Fort Hall Indian Reservation, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Power-Bannock Counties; Portneuf Valley Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Provo, UT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00
Provo, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	-0.01	-0.01
Prowers County; Lamar, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Raleigh-Durham, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.01	-0.02	-0.05
Ramsey County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Reading, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	0.00	-0.01
Reno, NV	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	-0.01
Rhineland, WI	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00
Riverside County (Coachella Valley), CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	0.00	0.00	0.00	-0.01	-0.01
Riverside County (Coachella Valley), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	0.00	-0.01	-0.01
Riverside County; Coachella Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	-0.01	-0.02
Riverside, Los Angeles, Orange, & San Bernardino Counties; South Coast Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.04	-0.12	-0.13	-0.19	-0.41
Rosebud County; Lame Deer, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Routt County (part); Steamboat Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Rusk and Panola Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	-0.01
Sacramento County, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.02	-0.03
Sacramento Metro, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.01	-0.02	-0.02	-0.03	-0.06
Sacramento Metro, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.01	-0.02	-0.02	-0.03	-0.06
Sacramento, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.01	-0.02	-0.04
Sacramento, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.02	-0.02	-0.03	-0.06

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Salem, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	-0.01
Salt Lake City, UT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	-0.01
Salt Lake City, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	0.00	-0.01	-0.01	-0.02	-0.05
Salt Lake County, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.01	-0.03
Salt Lake County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	0.00	-0.01	-0.01	-0.01	-0.03
San Antonio, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.02	-0.02	-0.05
San Bernardino County, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.01
San Diego County, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.01	-0.03	-0.03	-0.04	-0.09
San Diego County, CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-0.01	-0.03	-0.03	-0.04	-0.09
San Diego, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.03	-0.03	-0.04	-0.09
San Francisco Bay Area, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.02	-0.05	-0.06	-0.08	-0.18
San Francisco Bay Area, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.02	-0.05	-0.06	-0.08	-0.18
San Francisco Bay Area, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.02	-0.05	-0.06	-0.08	-0.18
San Francisco-Oakland-San Jose, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.05	-0.05	-0.08	-0.17
San Joaquin Valley Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.01	-0.03	-0.03	-0.05	-0.11
San Joaquin Valley, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-0.01	-0.03	-0.03	-0.05	-0.11
San Joaquin Valley, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-0.01	-0.03	-0.03	-0.05	-0.11
San Joaquin Valley, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.01	-0.03	-0.03	-0.05	-0.11
San Joaquin Valley, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-0.01	-0.03	-0.03	-0.05	-0.11
San Luis Obispo (Eastern San Luis Obispo), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00
San Luis Obispo (Eastern part), CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00
San Manuel (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
San Miguel County; Telluride, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Sanders County (part); Thompson Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Santa Cruz County; Nogales planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Seaford, DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	0.00	-0.01
Seattle-Tacoma, WA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.01	-0.02	-0.02	-0.04	-0.08
Sheboygan County, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Sheridan County; City of Sheridan, WY	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Shoreline Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Shoshone County; City of Pinehurst, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Shoshone County; Pinehurst Expansion Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Silver Bow County; Butte, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Somerville, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Southern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	-0.01	-0.01
Southwest Indiana, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00
Spokane County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Spokane, WA	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00	-0.01
Springfield, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
St. Bernard Parish, LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	-0.01
St. Clair, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
St. Lawrence County, NY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
St. Louis, MO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.01	-0.01	-0.02
St. Louis, MO-IL	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.02	-0.02	-0.03	-0.07
St. Louis-St. Charles-Farmington, MO-IL	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.01	-0.02	-0.02	-0.03	-0.07
Steubenville, OH-WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00
Steubenville-Weirton, OH-WV	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	0.00	0.00	0.00	0.00
Stockton, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	-0.01
Sullivan County, TN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Sutter Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00
Syracuse, NY	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	-0.01	-0.01
Tacoma, WA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.01
Tazewell County: Groveland twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Terre Haute, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00
Thurston County; Cities of Olympia, Tumwater, and Lacey, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Titus County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Toms River, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Tooele County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	0.00
Trenton, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Trona, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Tucson, AZ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.01	-0.01	-0.02
Tuolumne County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00
Tuscan Buttes, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00
Tuscan Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	0.00	0.00
Uinta Basin, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00
Union County; LaGrande, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Upper Green River Basin Area, WY	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00
Utah County, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.01
Vancouver, WA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	-0.01
Ventura County, CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.00	-0.01	-0.01	-0.01	-0.02
Ventura County, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	-0.01	-0.01	-0.01	-0.02
Vermillion County; Part of Clinton Township, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Vigo County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Walla Walla County; Wallula, WA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00	0.00
Waltham, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Warren County, NJ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	0.00
Warren County: Conewago Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Warren County: Warren Boro, Pleasant Twp, Glade Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	0.00
Warren, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Washington, DC-MD-VA	Ozone (2008 8-hour)	Nonattainment (DC) Maintenance (MD, VA), Marginal	50	0	-0.01	-0.04	-0.04	-0.06	-0.14
Washington, DC-MD-VA	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.01	-0.04	-0.04	-0.06	-0.14
Washington, DC-MD-VA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.01	-0.01	-0.02
Washoe County; Reno planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00	-0.01
Wayne County, MI	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Wayne County: Boston, Center, Franklin, Wayne & Webster Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
West Central Pinal, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
West Silver Valley, ID	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Whatcom County, WA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Winston-Salem, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	-0.01	-0.01
Worcester, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	-0.01
Yakima County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Yakima, WA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Yuba City-Marysville, CA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Yuma, AZ	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00
Yuma, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00

Notes:
^a Nonattainment or maintenance status as of 2/1/2024. Source: EPA, The Green Book Nonattainment Areas for Criteria Pollutants; <http://www.epa.gov/airquality/greenbook/>. "--" indicates that no severity classification has been established for the NAAQS pollutant.
^b Emissions thresholds in tons per year. Where the threshold differs by precursor pollutant, the smallest of the precursor thresholds is shown. These thresholds are provided for information only; a general conformity determination is not required for the Proposed Action. Source: 40 CFR 93.853.
^c Positive values are emissions increases; negative values are emissions decreases.
 EPA = U.S. Environmental Protection Agency; NAAQS = National Ambient Air Quality Standard; CO = carbon monoxide; NO₂ = nitrogen dioxide; PM2.5 = particulate matter less than 2.5 microns in size; PM10 = particulate matter less than 10 microns in size; SO₂ = sulfur dioxide.

Table D-14. Changes in Emissions from U.S. Passenger Cars and Light Trucks by Nonattainment or Maintenance Area and Alternative, Direct and Indirect Impacts--Acrolein, 2050

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Ada County; Boise, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Adams, Denver, and Boulder Counties; Denver Metropolitan area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	0.00	-0.01	-0.05
Ajo (Pima County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Albuquerque, NM	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	-0.01	-0.03
Allegan County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Allegheny County Air Basin: Hazelwood monitor, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Allegheny County, PA	PM _{2.5} (2012 Annual)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.03
Allegheny County; Liberty, Lincoln, Port Vue, Glassport, Clairton, PA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Allegheny, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Allentown, PA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.02
Allentown-Bethlehem-Easton, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	0.00	-0.02
Alton Township, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Amador County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00
Anchorage, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00	0.00
Anchorage; Eagle River, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Anne Arundel County and Baltimore County, MD	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	-0.01	-0.03
Archuleta County; Pagosa Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Armstrong County; Madison, Mahoning, Boggs, Washington, Pine, PA	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Aroostock County; City of Presque Isle, ME	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Atlanta, GA	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	0.00	-0.04	-0.18
Atlanta, GA	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.01	-0.02	0.00	-0.03	-0.14
Atlantic City, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Bakersfield, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	-0.02
Baltimore, MD	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	-0.01	-0.01	0.00	-0.02	-0.09
Baltimore, MD	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.01	-0.01	0.00	-0.02	-0.09
Baltimore, MD	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00
Baton Rouge, LA	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	0.00	-0.01	-0.03

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Beaver, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Benton County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	0.00
Berrien County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Billings, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Billings, MT	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00
Birmingham, AL	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	0.00	0.00	-0.01	-0.04
Boise-Northern Ada County, ID	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	-0.01
Bonner County; The Sandpoint Area, ID	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Boston, MA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	-0.01	-0.02
Boyd County (part), KY	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Brooke; Follansbee area, WV	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Brown County: Green Bay, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Burlington, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Butte County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	-0.01
Calaveras County, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00
Calaveras County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00
Campbell-Clermont Counties, KY-OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00
Canton-Massillon, OH	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	0.00	0.00	0.00	-0.01
Central New Hampshire, NH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	-0.01
Central Steptoe Valley, NV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Charleston, WV	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	0.00	0.00	0.00	-0.01
Charlotte, NC	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	0.00	-0.01	-0.05
Charlotte-Rock Hill, NC-SC	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.01	-0.01	0.00	-0.02	-0.09
Chicago, IL-IN-WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.02	-0.01	-0.05	-0.22
Chicago-Naperville, IL-IN-WI	Ozone (2008 8-hour)	Maintenance, Serious	100	0	-0.01	-0.02	-0.01	-0.05	-0.22
Chico (Butte County), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	-0.01
Chico, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00
Chico, CA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Cincinnati, OH-KY (OH Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	-0.01	0.00	-0.01	-0.05

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Cincinnati, OH-KY (KY Portion)	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Cincinnati, OH-KY-IN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	-0.01	0.00	-0.02	-0.07
Clark County; Las Vegas planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	-0.01	0.00	-0.02	-0.07
Cleveland, OH	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	0.00	-0.02	-0.08
Cleveland, OH	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	-0.01	-0.03
Cleveland, OH	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.04
Cleveland-Akron-Lorain, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	-0.01	0.00	-0.02	-0.08
Cleveland-Akron-Lorain, OH	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	-0.01	0.00	-0.02	-0.07
Cochise County; Paul Spur/Douglas planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Colorado Springs, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	-0.02
Columbus, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	-0.01	0.00	-0.01	-0.06
Columbus, OH	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	-0.01	0.00	-0.01	-0.05
Cook County; Lyons Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Cook County; Southeast Chicago, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Coshocton County; Franklin Township, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Coso Junction, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Cuyahoga County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.03
Cuyahoga County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01	-0.02
Dallas-Fort Worth, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.02	-0.03	-0.01	-0.07	-0.28
Dallas-Fort Worth, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.02	-0.03	-0.01	-0.07	-0.28
Dane County; Madison sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	-0.02
Delaware County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Denver Metro/North Front Range, CO	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.01	0.00	-0.03	-0.12
Denver-Boulder, CO	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.01	-0.01	0.00	-0.02	-0.10
Denver-Boulder-Greeley-Ft. Collins-Loveland, CO	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.01	-0.01	0.00	-0.03	-0.12
Detroit, MI	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	0.00	-0.04	-0.15
Detroit, MI	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	0.00	-0.01	-0.05
Detroit, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	-0.01
Detroit-Ann Arbor, MI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.01	-0.02	0.00	-0.04	-0.15

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Doña Ana County; Anthony, NM	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Door County, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	0.00	0.00
Door County-Revised, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	0.00	0.00
Douglas (Cochise County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Dukes County, MA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	0.00	0.00
Duluth, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00
East Chicago, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
East Helena Area, MT	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	0.00
East Kern County, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00	0.00
El Paso County, TX	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	-0.02
El Paso, TX	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00
El Paso-Las Cruces, TX-NM	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	-0.01	-0.03
Eugene-Springfield, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	-0.01
Evangeline Parish (Partial), LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Fairbanks, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00	0.00
Fairbanks, AK	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00	0.00
Flathead County; Columbia Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Flathead County; Kalispell and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Flathead County; Whitefish and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Fort Collins, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	-0.01
Freehold, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Freestone and Anderson Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Fremont County; Canon City Area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Fresno, CA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.00	0.00	0.00	0.00	-0.02
Gila County (part): Payson, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Giles County, VA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Grant County, NM	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Grants Pass, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00
Great Falls, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Greater Connecticut, CT	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.00	-0.01	0.00	-0.01	-0.05
Greater Connecticut, CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	0.00	-0.01	0.00	-0.01	-0.05
Greeley, CO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	-0.01
Hancock County (part): Weirton, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	0.00
Hancock and Brooke Counties (Part); The city of Weirton, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Harrisburg-Lebanon-Carlisle-York, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.03
Hartford-New Britain-Middletown, CT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	-0.01	-0.03
Hayden (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Hayden, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Hayden, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Henderson-Webster Counties, KY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Hillsborough County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00
Hillsborough-Polk County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00
Houston-Galveston-Brazoria, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.01	-0.03	-0.01	-0.06	-0.25
Houston-Galveston-Brazoria, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.03	-0.01	-0.06	-0.24
Howard County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Humphreys County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	0.00
Huntington, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Hutchinson County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Imperial County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Imperial County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	-0.01
Imperial County, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Imperial County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Imperial Valley, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00	-0.01
Indian Wells, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Indiana, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	-0.01

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Indianapolis, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Indianapolis, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	-0.02
Inland Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Inyo County; Owens Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00	0.00
Jackson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00
Jackson County; Medford-Ashland (including White City), OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Jamestown, NY	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	0.00	-0.01
Jefferson County, KY	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00
Jefferson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00
Jefferson County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Jefferson County; (part) Steubenville & Mingo Junction, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Johnstown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Josephine County; Grants Pass, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Juneau; Mendenhall Valley area, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Kern County (Eastern Kern), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	0.00	0.00	0.00
Kern County (Eastern Kern), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00	0.00
King County; Kent, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
King County; Seattle, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Klamath Falls, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00
Klamath Falls, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Klamath Falls, OR	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Knoxville, TN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	0.00	-0.01	-0.02
Knoxville-Sevierville-La Follette, TN	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.03
La Porte County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
LaSalle County; Oglesby, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Lake County (part); Lakeview, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Lake County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	-0.01
Lake County, OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	-0.01
Lake County; (part) Eastlake, Timberlake, Lakeline, Willoughby, Mentor, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Lake County; Cities of East Chicago, Hammond, Whiting, and Gary, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Lake County; Polson, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Lake County; Ronan, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Lake Tahoe North Shore, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Lake Tahoe South Shore, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00
Lake Tahoe, NV	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Lancaster, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	0.00	-0.02
Lancaster, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.02
Lane County (part); Oakridge, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Lane County; Eugene/Springfield, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Las Vegas, NV	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	0.00	-0.02	-0.07
Las Vegas, NV	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	-0.01	0.00	-0.02	-0.07
Laurel Area (Yellowstone County), MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Lebanon County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Lemont, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00
Liberty-Clairton, PA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Lincoln County; Libby and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Logan, UT-ID	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Longmont, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00
Lorain County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	0.00	-0.01	-0.02
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	0.00	-0.01	-0.02
Los Angeles-South Coast Air Basin, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-0.03	-0.06	-0.01	-0.12	-0.50
Los Angeles-South Coast Air Basin, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-0.03	-0.06	-0.01	-0.12	-0.50
Los Angeles-South Coast Air Basin, CA	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.03	-0.06	-0.01	-0.12	-0.50
Los Angeles-South Coast Air Basin, CA	NO ₂ (1971 Annual)	Maintenance, Primary	100	0	-0.03	-0.06	-0.01	-0.12	-0.50
Los Angeles-South Coast Air Basin, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.03	-0.06	-0.01	-0.12	-0.50
Los Angeles-South Coast Air Basin, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-0.03	-0.06	-0.01	-0.12	-0.50

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Louisville, KY-IN (IN Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	0.00	0.00	-0.01
Louisville, KY-IN (KY Portion)	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.03
Lowell, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Lucas County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	-0.01
Madison County; Granite City Township and Nameoki Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Manchester, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Manitowoc County, WI	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	0.00	0.00	0.00
Marathon County: Rothschild Sub-city area, Rib Mountain, Weston, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	-0.01
Maricopa and Pinal Counties; Phoenix planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.01	-0.02	0.00	-0.03	-0.14
Marion County: Lawrence, Washington, and Warrant Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	-0.01
Mariposa County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Mariposa County, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Marshall, WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00
Medford, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00
Memphis, TN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	-0.01	-0.04
Memphis, TN-MS-AR	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	-0.01	0.00	-0.01	-0.05
Miami (Gila County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Miami, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Miami, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Millinocket AQCR 109, ME	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	-0.01
Milwaukee, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.04
Milwaukee, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	-0.02
Milwaukee-Racine, WI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	0.00	0.00	-0.01	-0.04
Minneapolis-St. Paul, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.01	0.00	-0.02	-0.10
Minneapolis-St. Paul, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.01	0.00	-0.02	-0.10
Missoula, MT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00
Missoula, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Modesto, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	-0.01
Mohave County (part); Bullhead City, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Mono Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Mono County; Mammoth Lake planning area, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Morenci (Greenlee County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Morgan County, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00
Morongo Band of Mission Indians, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	0.00	0.00	0.00
Morongo Band of Mission Indians, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00	0.00
Morristown, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Muscatine County, IA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Muscatine, IA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Muskegon County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Muskingum River, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Nashua, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Nassau County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00
Navarro County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Nevada County (Western part), CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00	0.00
Nevada County (Western part), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00	0.00
New Haven County, CT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
New Haven-Meriden-Waterbury, CT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01	-0.02
New Madrid County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
New Manchester-Grant magisterial district in Hancock County, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
New York County, NY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
New York-N. New Jersey-Long Island, NY-NJ-CT	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.02	-0.04	-0.01	-0.10	-0.39
New York-N. New Jersey-Long Island, NY-NJ-CT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.01	-0.02	0.00	-0.05	-0.22
New York-N. New Jersey-Long Island, NY-NJ-CT	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.02	-0.04	-0.01	-0.10	-0.40
New York-Northern New Jersey-Long Island, NY-NJ-CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.02	-0.04	-0.01	-0.10	-0.39
Nogales, AZ	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Northern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	0.00	-0.01	-0.05

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Oakridge, OR	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Ogden, UT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00
Ogden, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Olmsted County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Olmsted County; City of Rochester, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Oneida County: Rhinelander Sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	0.00
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Pekin, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00
Penns Grove, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Peoria County: Hollis twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	0.00
Peoria, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Perth Amboy, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Philadelphia-Camden County, PA-NJ	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	-0.01	-0.03
Philadelphia-Wilmington, PA-NJ-DE (NJ Portion)	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	0.00	0.00	-0.01	-0.03
Philadelphia-Wilmington, PA-NJ-DE (PA-DE Portion)	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	0.00	-0.03	-0.10
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.01	-0.02	0.00	-0.05	-0.19
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.01	-0.02	0.00	-0.05	-0.19
Phoenix, AZ	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.01	-0.01	0.00	-0.03	-0.13
Phoenix-Mesa, AZ	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.02	0.00	-0.03	-0.14
Phoenix-Mesa, AZ	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.02	0.00	-0.03	-0.14
Pierce County; Tacoma, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Pima County; Ajo planning area, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Pima County; Rillito planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Pinal County (part); West Pinal, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00	-0.01
Pitkin County; Aspen, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Pittsburgh, PA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	-0.01
Pittsburgh-Beaver Valley, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	-0.01	0.00	-0.02	-0.07

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Pittsburgh-Beaver Valley, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	0.00	-0.02	-0.06
Plumas County, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00	0.00
Polk County, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	0.00
Portland, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	-0.01	-0.04
Power-Bannock Counties; Fort Hall Indian Reservation, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Power-Bannock Counties; Portneuf Valley Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Provo, UT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.00	0.00	0.00	0.00	-0.01
Provo, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00	-0.02
Prowers County; Lamar, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Raleigh-Durham, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	0.00	-0.01	-0.06
Ramsey County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Reading, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	0.00	-0.01
Reno, NV	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	-0.01
Rhineland, WI	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00
Riverside County (Coachella Valley), CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	0.00	0.00	0.00	0.00	-0.02
Riverside County (Coachella Valley), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	0.00	0.00	-0.02
Riverside County; Coachella Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00	-0.02
Riverside, Los Angeles, Orange, & San Bernardino Counties; South Coast Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.03	-0.06	-0.01	-0.12	-0.50
Rosebud County; Lame Deer, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Routt County (part); Steamboat Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Rusk and Panola Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	-0.01
Sacramento County, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.04
Sacramento Metro, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	-0.01	0.00	-0.02	-0.07
Sacramento Metro, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	-0.01	0.00	-0.02	-0.07
Sacramento, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	0.00	-0.01	-0.05
Sacramento, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	0.00	-0.02	-0.07

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Salem, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	-0.01
Salt Lake City, UT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	-0.01
Salt Lake City, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	0.00	-0.01	0.00	-0.01	-0.06
Salt Lake County, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.03
Salt Lake County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	0.00	0.00	0.00	-0.01	-0.03
San Antonio, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	0.00	-0.02	-0.06
San Bernardino County, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	-0.02
San Diego County, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.01	-0.01	0.00	-0.03	-0.11
San Diego County, CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-0.01	-0.01	0.00	-0.03	-0.11
San Diego, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.01	0.00	-0.03	-0.11
San Francisco Bay Area, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.02	-0.01	-0.05	-0.22
San Francisco Bay Area, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.02	-0.01	-0.05	-0.22
San Francisco Bay Area, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.02	-0.01	-0.05	-0.22
San Francisco-Oakland-San Jose, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.02	0.00	-0.05	-0.21
San Joaquin Valley Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.01	-0.01	0.00	-0.03	-0.13
San Joaquin Valley, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-0.01	-0.01	0.00	-0.03	-0.13
San Joaquin Valley, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-0.01	-0.01	0.00	-0.03	-0.13
San Joaquin Valley, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.01	-0.01	0.00	-0.03	-0.13
San Joaquin Valley, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-0.01	-0.01	0.00	-0.03	-0.13
San Luis Obispo (Eastern San Luis Obispo), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00
San Luis Obispo (Eastern part), CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00
San Manuel (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
San Miguel County; Telluride, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Sanders County (part); Thompson Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Santa Cruz County; Nogales planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Seaford, DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	0.00	-0.01
Seattle-Tacoma, WA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.01	-0.01	0.00	-0.02	-0.09
Sheboygan County, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Sheridan County; City of Sheridan, WY	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Shoreline Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Shoshone County; City of Pinehurst, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Shoshone County; Pinehurst Expansion Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Silver Bow County; Butte, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Somerville, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Southern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	-0.02
Southwest Indiana, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00
Spokane County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Spokane, WA	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00	-0.01
Springfield, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
St. Bernard Parish, LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	-0.01
St. Clair, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
St. Lawrence County, NY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
St. Louis, MO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01	-0.02
St. Louis, MO-IL	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	0.00	-0.02	-0.08
St. Louis-St. Charles-Farmington, MO-IL	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.01	-0.01	0.00	-0.02	-0.09
Steubenville, OH-WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00
Steubenville-Weirton, OH-WV	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	0.00	0.00	0.00	0.00
Stockton, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	-0.01
Sullivan County, TN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Sutter Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00
Syracuse, NY	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	-0.02
Tacoma, WA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.02
Tazewell County: Groveland twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Terre Haute, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00
Thurston County; Cities of Olympia, Tumwater, and Lacey, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Titus County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Toms River, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Tooele County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	0.00
Trenton, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Trona, CA	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Tucson, AZ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01	-0.02
Tuolumne County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00
Tuscan Buttes, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00
Tuscan Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	0.00	0.00
Uinta Basin, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00
Union County; LaGrande, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Upper Green River Basin Area, WY	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00
Utah County, UT	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.02
Vancouver, WA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	-0.01
Ventura County, CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	-0.01	-0.03
Ventura County, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	-0.01	-0.03
Vermillion County; Part of Clinton Township, IN	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Vigo County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Walla Walla County; Wallula, WA	PM ₁₀ (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00	0.00
Waltham, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Warren County, NJ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	0.00
Warren County: Conewago Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Warren County: Warren Boro, Pleasant Twp, Glade Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	0.00
Warren, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Washington, DC-MD-VA	Ozone (2008 8-hour)	Nonattainment (DC) Maintenance (MD, VA), Marginal	50	0	-0.01	-0.02	0.00	-0.04	-0.17
Washington, DC-MD-VA	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.01	-0.02	0.00	-0.04	-0.17
Washington, DC-MD-VA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	-0.01	-0.02
Washoe County; Reno planning area, NV	PM ₁₀ (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00	-0.01
Wayne County, MI	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Wayne County: Boston, Center, Franklin, Wayne & Webster Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
West Central Pinal, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
West Silver Valley, ID	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Whatcom County, WA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Winston-Salem, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	-0.02
Worcester, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	-0.01
Yakima County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Yakima, WA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Yuba City-Marysville, CA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Yuma, AZ	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00
Yuma, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01

Notes:

^a Nonattainment or maintenance status as of 2/1/2024. Source: EPA, The Green Book Nonattainment Areas for Criteria Pollutants;

<http://www.epa.gov/airquality/greenbook/>. "--" indicates that no severity classification has been established for the NAAQS pollutant.

^b Emissions thresholds in tons per year. Where the threshold differs by precursor pollutant, the smallest of the precursor thresholds is shown. These thresholds are provided for information only; a general conformity determination is not required for the Proposed Action. Source: 40 CFR 93.853.

^c Positive values are emissions increases; negative values are emissions decreases.

EPA = U.S. Environmental Protection Agency; NAAQS = National Ambient Air Quality Standard; CO = carbon monoxide; NO₂ = nitrogen dioxide; PM2.5 = particulate matter less than 2.5 microns in size; PM10 = particulate matter less than 10 microns in size; SO₂ = sulfur dioxide.

Table D-15. Changes in Emissions from U.S. Passenger Cars and Light Trucks by Nonattainment or Maintenance Area and Alternative, Direct and Indirect Impacts--Benzene, 2035

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Ada County; Boise, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.22	-0.69	-0.81	-1.22	-2.45
Adams, Denver, and Boulder Counties; Denver Metropolitan area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.40	-1.22	-1.40	-2.09	-4.28
Ajo (Pima County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Albuquerque, NM	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.13	-0.41	-0.46	-0.68	-1.41
Allegan County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.03	-0.03	-0.05	-0.10
Allegheny County Air Basin: Hazelwood monitor, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.03	-0.04	-0.05	-0.11
Allegheny County, PA	PM _{2.5} (2012 Annual)	Nonattainment, Moderate	100	0	-0.14	-0.44	-0.49	-0.73	-1.51
Allegheny County; Liberty, Lincoln, Port Vue, Glassport, Clairton, PA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.02	-0.03
Allegheny, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.03	-0.10	-0.11	-0.17	-0.35
Allentown, PA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	-0.08	-0.25	-0.28	-0.41	-0.86
Allentown-Bethlehem-Easton, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.09	-0.28	-0.31	-0.46	-0.96
Alton Township, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	-0.01	-0.02	-0.03
Amador County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.02	-0.02	-0.03	-0.05
Anchorage, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.03	-0.08	-0.09	-0.14	-0.29
Anchorage; Eagle River, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01	-0.01	-0.02
Anne Arundel County and Baltimore County, MD	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.13	-0.38	-0.42	-0.62	-1.30
Archuleta County; Pagosa Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.02	-0.04
Armstrong County; Madison, Mahoning, Boggs, Washington, Pine, PA	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	-0.01	-0.01	-0.01	-0.03
Aroostock County; City of Presque Isle, ME	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Atlanta, GA	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-0.75	-2.27	-2.52	-3.71	-7.78
Atlanta, GA	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.58	-1.75	-1.94	-2.86	-6.00
Atlantic City, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.02	-0.02	-0.02	-0.05
Bakersfield, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.06	-0.19	-0.21	-0.30	-0.64
Baltimore, MD	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	-0.33	-0.98	-1.08	-1.59	-3.35
Baltimore, MD	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.33	-0.99	-1.09	-1.60	-3.37
Baltimore, MD	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	-0.01	-0.01
Baton Rouge, LA	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.16	-0.50	-0.56	-0.84	-1.73

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Beaver, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	-0.01	-0.01	-0.02
Benton County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	-0.01	-0.01	-0.02	-0.03
Berrien County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.03	-0.09	-0.10	-0.14	-0.30
Billings, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.06	-0.07	-0.11	-0.22
Billings, MT	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.01	-0.01	-0.02	-0.03
Birmingham, AL	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.20	-0.61	-0.68	-1.00	-2.09
Boise-Northern Ada County, ID	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.22	-0.69	-0.81	-1.22	-2.45
Bonner County; The Sandpoint Area, ID	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.02	-0.03
Boston, MA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.10	-0.30	-0.33	-0.49	-1.02
Boyd County (part), KY	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.01	-0.02	-0.03
Brooke; Follansbee area, WV	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Brown County: Green Bay, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01	-0.01
Burlington, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	-0.01
Butte County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.02	-0.07	-0.08	-0.12	-0.25
Calaveras County, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.02	-0.02	-0.03	-0.06
Calaveras County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.02	-0.02	-0.03	-0.06
Campbell-Clermont Counties, KY-OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.01	-0.01	-0.02	-0.04
Canton-Massillon, OH	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.05	-0.15	-0.17	-0.25	-0.53
Central New Hampshire, NH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.02	-0.07	-0.08	-0.11	-0.23
Central Steptoe Valley, NV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	-0.01
Charleston, WV	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.04	-0.13	-0.14	-0.21	-0.43
Charlotte, NC	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.19	-0.57	-0.63	-0.93	-1.96
Charlotte-Rock Hill, NC-SC	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.35	-1.07	-1.18	-1.74	-3.65
Chicago, IL-IN-WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.86	-2.59	-2.87	-4.21	-8.87
Chicago-Naperville, IL-IN-WI	Ozone (2008 8-hour)	Maintenance, Serious	100	0	-0.94	-2.85	-3.17	-4.67	-9.79
Chico (Butte County), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.02	-0.07	-0.08	-0.12	-0.25
Chico, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.03	-0.03	-0.05	-0.10
Chico, CA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.07	-0.08	-0.11	-0.23
Cincinnati, OH-KY (OH Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.20	-0.61	-0.67	-0.99	-2.09

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Cincinnati, OH-KY (KY Portion)	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	-0.07	-0.22	-0.25	-0.37	-0.77
Cincinnati, OH-KY-IN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.30	-0.90	-1.00	-1.48	-3.10
Clark County; Las Vegas planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.28	-0.85	-0.94	-1.39	-2.92
Cleveland, OH	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.36	-1.08	-1.21	-1.79	-3.73
Cleveland, OH	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.14	-0.44	-0.49	-0.73	-1.52
Cleveland, OH	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-0.18	-0.55	-0.62	-0.92	-1.91
Cleveland-Akron-Lorain, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.37	-1.12	-1.26	-1.86	-3.88
Cleveland-Akron-Lorain, OH	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.34	-1.04	-1.16	-1.72	-3.59
Cochise County; Paul Spur/Douglas planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.01	-0.01	-0.02
Colorado Springs, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.14	-0.44	-0.50	-0.75	-1.53
Columbus, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.25	-0.76	-0.85	-1.25	-2.62
Columbus, OH	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.23	-0.70	-0.78	-1.15	-2.42
Cook County; Lyons Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.03	-0.03	-0.05	-0.10
Cook County; Southeast Chicago, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.04	-0.05	-0.07	-0.15
Coshocton County; Franklin Township, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Coso Junction, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Cuyahoga County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.14	-0.44	-0.49	-0.73	-1.52
Cuyahoga County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.12	-0.36	-0.40	-0.60	-1.24
Dallas-Fort Worth, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-1.04	-3.14	-3.49	-5.13	-10.76
Dallas-Fort Worth, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-1.02	-3.09	-3.43	-5.05	-10.59
Dane County; Madison sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.07	-0.21	-0.24	-0.35	-0.73
Delaware County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-0.06	-0.19	-0.21	-0.31	-0.65
Denver Metro/North Front Range, CO	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.96	-2.92	-3.36	-5.02	-10.27
Denver-Boulder, CO	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.75	-2.29	-2.63	-3.93	-8.04
Denver-Boulder-Greeley-Ft. Collins-Loveland, CO	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.96	-2.92	-3.35	-5.01	-10.24
Detroit, MI	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	-0.63	-1.91	-2.13	-3.14	-6.58
Detroit, MI	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.24	-0.71	-0.79	-1.17	-2.45
Detroit, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.03	-0.09	-0.10	-0.14	-0.29
Detroit-Ann Arbor, MI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.63	-1.92	-2.14	-3.15	-6.59

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Doña Ana County; Anthony, NM	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.01
Door County, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	0.00	0.00
Door County-Revised, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	-0.01	-0.01	-0.02	-0.04
Douglas (Cochise County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01	-0.01
Dukes County, MA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	-0.01	-0.01	-0.02
Duluth, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.05	-0.05	-0.08	-0.17
East Chicago, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.02	-0.02	-0.03	-0.05
East Helena Area, MT	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	0.00
East Kern County, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	-0.01	-0.01	-0.02	-0.03
El Paso County, TX	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.08	-0.26	-0.28	-0.42	-0.88
El Paso, TX	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.02	-0.02	-0.04	-0.07
El Paso-Las Cruces, TX-NM	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.10	-0.29	-0.32	-0.46	-0.98
Eugene-Springfield, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.03	-0.09	-0.10	-0.14	-0.30
Evangeline Parish (Partial), LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Fairbanks, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.01	-0.02	-0.02	-0.03	-0.06
Fairbanks, AK	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.01	-0.03	-0.04	-0.05	-0.11
Flathead County; Columbia Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.01
Flathead County; Kalispell and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.02	-0.04	-0.08
Flathead County; Whitefish and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.01
Fort Collins, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.04	-0.11	-0.13	-0.20	-0.40
Freehold, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01	-0.01
Freestone and Anderson Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	-0.01	-0.02	-0.04
Fremont County; Canon City Area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.03	-0.03	-0.04	-0.09
Fresno, CA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.08	-0.23	-0.25	-0.37	-0.78
Gila County (part): Payson, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.02
Giles County, VA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Grant County, NM	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.02	-0.02	-0.05

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Grants Pass, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.01	-0.02	-0.04
Great Falls, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01	-0.01
Greater Connecticut, CT	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-0.19	-0.58	-0.64	-0.94	-1.97
Greater Connecticut, CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.19	-0.58	-0.64	-0.94	-1.97
Greeley, CO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.09	-0.29	-0.33	-0.49	-1.01
Hancock County (part): Weirton, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	-0.01	-0.01	-0.02	-0.03
Hancock and Brooke Counties (Part); The city of Weirton, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.01	-0.03
Harrisburg-Lebanon-Carlisle-York, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.14	-0.41	-0.46	-0.68	-1.42
Hartford-New Britain-Middletown, CT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.13	-0.40	-0.44	-0.65	-1.37
Hayden (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	0.00	-0.01	-0.01
Hayden, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.01	-0.01	-0.02
Hayden, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	-0.01	-0.01
Henderson-Webster Counties, KY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	-0.01	-0.01
Hillsborough County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.01	-0.01	-0.01	-0.03
Hillsborough-Polk County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00
Houston-Galveston-Brazoria, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-1.25	-3.79	-4.27	-6.33	-13.14
Houston-Galveston-Brazoria, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-1.22	-3.70	-4.18	-6.19	-12.84
Howard County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.02	-0.02	-0.03	-0.06
Humphreys County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	-0.01	-0.01	-0.02	-0.04
Huntington, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.02	-0.02	-0.03	-0.07
Hutchinson County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.03	-0.04	-0.05	-0.11
Imperial County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-0.03	-0.09	-0.10	-0.15	-0.31
Imperial County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.03	-0.09	-0.10	-0.15	-0.31
Imperial County, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.02	-0.07	-0.08	-0.11	-0.24
Imperial County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	-0.02	-0.07	-0.08	-0.11	-0.24
Imperial Valley, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.03	-0.09	-0.09	-0.14	-0.29
Indian Wells, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.02	-0.03	-0.06
Indiana, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.02	-0.06	-0.06	-0.10	-0.19

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Indianapolis, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Indianapolis, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.07	-0.22	-0.25	-0.36	-0.76
Inland Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.03	-0.04	-0.08
Inyo County; Owens Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00	-0.01
Jackson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.03	-0.03	-0.05	-0.09
Jackson County; Medford-Ashland (including White City), OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.07	-0.07	-0.11	-0.23
Jamestown, NY	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.02	-0.06	-0.07	-0.10	-0.22
Jefferson County, KY	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00
Jefferson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.03	-0.03	-0.04	-0.09
Jefferson County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.01
Jefferson County; (part) Steubenville & Mingo Junction, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.02	-0.03	-0.04	-0.08
Johnstown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.06	-0.07	-0.10	-0.20
Josephine County; Grants Pass, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.02	-0.04
Juneau; Mendenhall Valley area, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.02
Kern County (Eastern Kern), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.01	-0.04	-0.05	-0.07	-0.14
Kern County (Eastern Kern), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.01	-0.04	-0.05	-0.07	-0.14
King County; Kent, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.01	-0.03
King County; Seattle, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.01	-0.02
Klamath Falls, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.02	-0.02	-0.03	-0.06
Klamath Falls, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.02	-0.03	-0.06
Klamath Falls, OR	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.02	-0.02	-0.03	-0.07
Knoxville, TN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.11	-0.34	-0.37	-0.55	-1.16
Knoxville-Sevierville-La Follette, TN	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.13	-0.40	-0.45	-0.66	-1.39
La Porte County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.02	-0.03	-0.04	-0.08
LaSalle County; Oglesby, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.02	-0.04
Lake County (part); Lakeview, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Lake County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.06	-0.18	-0.20	-0.30	-0.62
Lake County, OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.03	-0.09	-0.10	-0.14	-0.30
Lake County; (part) Eastlake, Timberlake, Lakeline, Willoughby, Mentor, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.02	-0.02	-0.02	-0.05

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Lake County; Cities of East Chicago, Hammond, Whiting, and Gary, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.04	-0.12	-0.13	-0.20	-0.42
Lake County; Polson, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Lake County; Ronan, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Lake Tahoe North Shore, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.01	-0.01	-0.02
Lake Tahoe South Shore, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.02	-0.02	-0.05
Lake Tahoe, NV	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.01	-0.02	-0.03
Lancaster, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.06	-0.20	-0.22	-0.32	-0.67
Lancaster, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.06	-0.20	-0.22	-0.32	-0.67
Lane County (part); Oakridge, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Lane County; Eugene/Springfield, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.03	-0.09	-0.10	-0.14	-0.30
Las Vegas, NV	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.28	-0.85	-0.94	-1.39	-2.92
Las Vegas, NV	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.28	-0.85	-0.95	-1.39	-2.92
Laurel Area (Yellowstone County), MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	-0.01	-0.01	-0.02	-0.04
Lebanon County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-0.02	-0.05	-0.06	-0.09	-0.18
Lemont, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.02	-0.07	-0.08	-0.11	-0.24
Liberty-Clairton, PA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.01	-0.02	-0.03
Lincoln County; Libby and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Logan, UT-ID	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.06	-0.07	-0.10	-0.22
Longmont, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.06	-0.07	-0.11	-0.22
Lorain County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.02	-0.02	-0.03	-0.07
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.10	-0.30	-0.33	-0.49	-1.03
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-0.10	-0.30	-0.33	-0.49	-1.03
Los Angeles-South Coast Air Basin, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-1.94	-5.86	-6.47	-9.49	-20.01
Los Angeles-South Coast Air Basin, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-1.94	-5.86	-6.47	-9.49	-20.00
Los Angeles-South Coast Air Basin, CA	CO (1971 8-hour)	Maintenance, Serious	100	0	-1.94	-5.86	-6.47	-9.49	-20.01
Los Angeles-South Coast Air Basin, CA	NO ₂ (1971 Annual)	Maintenance, Primary	100	0	-1.94	-5.86	-6.47	-9.49	-20.01
Los Angeles-South Coast Air Basin, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-1.94	-5.86	-6.47	-9.49	-20.01
Los Angeles-South Coast Air Basin, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-1.94	-5.86	-6.47	-9.49	-20.01

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Louisville, KY-IN (IN Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.03	-0.10	-0.11	-0.17	-0.35
Louisville, KY-IN (KY Portion)	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.11	-0.34	-0.37	-0.54	-1.15
Lowell, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.04	-0.04	-0.06	-0.13
Lucas County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.05	-0.14	-0.16	-0.24	-0.50
Madison County; Granite City Township and Nameoki Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.05	-0.06	-0.08	-0.17
Manchester, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.04	-0.04	-0.06	-0.13
Manitowoc County, WI	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.01	-0.02	-0.02	-0.04	-0.07
Marathon County: Rothschild Sub-city area, Rib Mountain, Weston, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.02	-0.06	-0.07	-0.10	-0.21
Maricopa and Pinal Counties; Phoenix planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.52	-1.57	-1.74	-2.54	-5.37
Marion County: Lawrence, Washington, and Warrant Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.06	-0.18	-0.20	-0.30	-0.63
Mariposa County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.01	-0.01	-0.02
Mariposa County, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.01	-0.01	-0.02
Marshall, WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.02	-0.05	-0.06	-0.10	-0.20
Medford, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.04	-0.04	-0.07	-0.14
Memphis, TN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.15	-0.47	-0.52	-0.77	-1.60
Memphis, TN-MS-AR	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.20	-0.60	-0.67	-0.99	-2.08
Miami (Gila County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.01	-0.01	-0.02
Miami, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01	-0.01	-0.02
Miami, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	-0.01	-0.01	-0.02
Millinocket AQCR 109, ME	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.02	-0.07	-0.07	-0.11	-0.22
Milwaukee, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.20	-0.60	-0.67	-0.99	-2.06
Milwaukee, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.09	-0.28	-0.31	-0.46	-0.96
Milwaukee-Racine, WI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.17	-0.53	-0.59	-0.88	-1.83
Minneapolis-St. Paul, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.45	-1.38	-1.53	-2.26	-4.73
Minneapolis-St. Paul, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.44	-1.34	-1.50	-2.21	-4.61
Missoula, MT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.05	-0.05	-0.08	-0.17
Missoula, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.05	-0.06	-0.08	-0.17

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Modesto, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.04	-0.11	-0.13	-0.19	-0.39
Mohave County (part); Bullhead City, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.02	-0.04	-0.08
Mono Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Mono County; Mammoth Lake planning area, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01	-0.01	-0.02
Morenci (Greenlee County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Morgan County, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.01	-0.01	-0.02	-0.04
Morongo Band of Mission Indians, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	0.00	0.00	-0.01
Morongo Band of Mission Indians, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00	-0.01
Morristown, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.01	-0.01	-0.02
Muscatine County, IA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.01	-0.01	-0.02
Muscatine, IA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	-0.01	-0.02	-0.04
Muskegon County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.02	-0.06	-0.06	-0.10	-0.20
Muskingum River, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	-0.01
Nashua, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.03	-0.04	-0.05	-0.11
Nassau County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	-0.01
Navarro County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	-0.02	-0.02	-0.05
Nevada County (Western part), CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-0.01	-0.03	-0.03	-0.05	-0.11
Nevada County (Western part), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.01	-0.03	-0.03	-0.05	-0.11
New Haven County, CT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.02	-0.03
New Haven-Meriden-Waterbury, CT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.11	-0.34	-0.38	-0.56	-1.17
New Madrid County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
New Manchester-Grant magisterial district in Hancock County, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.01	-0.01	-0.02
New York County, NY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.05	-0.16	-0.18	-0.26	-0.55
New York-N. New Jersey-Long Island, NY-NJ-CT	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-1.67	-5.04	-5.61	-8.27	-17.32
New York-N. New Jersey-Long Island, NY-NJ-CT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.95	-2.87	-3.20	-4.72	-9.86
New York-N. New Jersey-Long Island, NY-NJ-CT	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-1.70	-5.16	-5.74	-8.46	-17.73
New York-Northern New Jersey-Long Island, NY-NJ-CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-1.69	-5.11	-5.69	-8.39	-17.57
Nogales, AZ	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.01	-0.03
Northern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.25	-0.76	-0.85	-1.26	-2.63

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Oakridge, OR	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Ogden, UT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.03	-0.04	-0.05	-0.11
Ogden, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.03	-0.04	-0.05	-0.11
Olmsted County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.02	-0.05
Olmsted County; City of Rochester, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.02	-0.05	-0.05	-0.08	-0.17
Oneida County: Rhinelander Sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.01	-0.02	-0.02	-0.03	-0.07
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Pekin, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.02	-0.02	-0.03	-0.05
Penns Grove, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Peoria County: Hollis twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	0.00
Peoria, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.04	-0.04	-0.06	-0.13
Perth Amboy, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.02	-0.02	-0.03	-0.07
Philadelphia-Camden County, PA-NJ	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.15	-0.47	-0.53	-0.78	-1.62
Philadelphia-Wilmington, PA-NJ-DE (NJ Portion)	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.14	-0.42	-0.46	-0.68	-1.43
Philadelphia-Wilmington, PA-NJ-DE (PA-DE Portion)	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.47	-1.42	-1.59	-2.35	-4.90
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.80	-2.42	-2.70	-3.98	-8.33
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.75	-2.28	-2.53	-3.72	-7.82
Phoenix, AZ	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.51	-1.54	-1.69	-2.48	-5.24
Phoenix-Mesa, AZ	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-0.52	-1.58	-1.74	-2.55	-5.39
Phoenix-Mesa, AZ	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.53	-1.60	-1.76	-2.58	-5.45
Pierce County; Tacoma, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Pima County; Ajo planning area, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Pima County; Rillito planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.02	-0.02	-0.05
Pinal County (part); West Pinal, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.03	-0.08	-0.09	-0.13	-0.27
Pitkin County; Aspen, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.02	-0.03	-0.06
Pittsburgh, PA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.03	-0.10	-0.11	-0.17	-0.35
Pittsburgh-Beaver Valley, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.31	-0.95	-1.06	-1.58	-3.27

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Pittsburgh-Beaver Valley, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.29	-0.87	-0.98	-1.45	-3.01
Plumas County, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00	0.00
Polk County, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	-0.01	-0.01	-0.01	-0.03
Portland, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.20	-0.60	-0.67	-1.00	-2.07
Power-Bannock Counties; Fort Hall Indian Reservation, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.01
Power-Bannock Counties; Portneuf Valley Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.04	-0.12	-0.14	-0.21	-0.41
Provo, UT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.02	-0.06	-0.07	-0.11	-0.22
Provo, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.08	-0.23	-0.26	-0.38	-0.80
Prowers County; Lamar, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01	-0.01	-0.02
Raleigh-Durham, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.22	-0.67	-0.75	-1.10	-2.31
Ramsey County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.01
Reading, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.05	-0.15	-0.16	-0.24	-0.51
Reno, NV	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.03	-0.10	-0.11	-0.17	-0.35
Rhineland, WI	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.01	-0.01	-0.02	-0.03
Riverside County (Coachella Valley), CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-0.06	-0.19	-0.21	-0.31	-0.65
Riverside County (Coachella Valley), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-0.06	-0.19	-0.21	-0.31	-0.65
Riverside County; Coachella Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.07	-0.22	-0.24	-0.35	-0.74
Riverside, Los Angeles, Orange, & San Bernardino Counties; South Coast Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-1.93	-5.83	-6.44	-9.45	-19.92
Rosebud County; Lame Deer, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Routt County (part); Steamboat Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.03	-0.04	-0.09
Rusk and Panola Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.03	-0.03	-0.05	-0.10
Sacramento County, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.16	-0.47	-0.52	-0.76	-1.61
Sacramento Metro, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.27	-0.82	-0.90	-1.32	-2.79
Sacramento Metro, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.27	-0.82	-0.90	-1.32	-2.79
Sacramento, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.18	-0.54	-0.59	-0.87	-1.84
Sacramento, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.26	-0.79	-0.88	-1.29	-2.71

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Salem, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.03	-0.10	-0.11	-0.16	-0.34
Salt Lake City, UT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.03	-0.10	-0.11	-0.17	-0.35
Salt Lake City, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.26	-0.80	-0.89	-1.32	-2.75
Salt Lake County, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.16	-0.48	-0.54	-0.79	-1.65
Salt Lake County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	-0.16	-0.48	-0.54	-0.79	-1.65
San Antonio, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.27	-0.81	-0.91	-1.34	-2.80
San Bernardino County, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.07	-0.22	-0.24	-0.36	-0.75
San Diego County, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.42	-1.26	-1.39	-2.04	-4.29
San Diego County, CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-0.42	-1.26	-1.39	-2.03	-4.29
San Diego, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.41	-1.25	-1.38	-2.03	-4.28
San Francisco Bay Area, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.84	-2.55	-2.81	-4.12	-8.69
San Francisco Bay Area, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.84	-2.54	-2.81	-4.12	-8.68
San Francisco Bay Area, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.84	-2.55	-2.81	-4.13	-8.71
San Francisco-Oakland-San Jose, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.79	-2.40	-2.64	-3.88	-8.18
San Joaquin Valley Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.52	-1.59	-1.76	-2.58	-5.43
San Joaquin Valley, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-0.52	-1.59	-1.76	-2.58	-5.43
San Joaquin Valley, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-0.52	-1.59	-1.76	-2.58	-5.43
San Joaquin Valley, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.52	-1.59	-1.76	-2.58	-5.43
San Joaquin Valley, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-0.52	-1.59	-1.76	-2.58	-5.43
San Luis Obispo (Eastern San Luis Obispo), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.01	-0.01	-0.01	-0.03
San Luis Obispo (Eastern part), CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.01	-0.01	-0.01	-0.03
San Manuel (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.01	-0.01	-0.03
San Miguel County; Telluride, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01	-0.01	-0.02
Sanders County (part); Thompson Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Santa Cruz County; Nogales planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.01	-0.01	-0.03
Seaford, DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.03	-0.10	-0.11	-0.16	-0.34
Seattle-Tacoma, WA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.45	-1.36	-1.53	-2.26	-4.71
Sheboygan County, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.03	-0.03	-0.05	-0.10

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Sheridan County; City of Sheridan, WY	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.01	-0.03
Shoreline Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-0.01	-0.03	-0.03	-0.04	-0.09
Shoshone County; City of Pinehurst, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Shoshone County; Pinehurst Expansion Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.03	-0.04	-0.09
Silver Bow County; Butte, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.02	-0.05
Somerville, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.01	-0.01	-0.02
Southern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.08	-0.23	-0.26	-0.38	-0.80
Southwest Indiana, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	-0.01
Spokane County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.05	-0.15	-0.16	-0.24	-0.51
Spokane, WA	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.05	-0.15	-0.16	-0.24	-0.50
Springfield, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.05	-0.05	-0.07	-0.16
St. Bernard Parish, LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.04	-0.11	-0.13	-0.20	-0.40
St. Clair, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.02	-0.03	-0.04	-0.08
St. Lawrence County, NY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	-0.01	-0.01
St. Louis, MO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.11	-0.33	-0.37	-0.54	-1.13
St. Louis, MO-IL	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.40	-1.20	-1.35	-1.99	-4.14
St. Louis-St. Charles-Farmington, MO-IL	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.40	-1.22	-1.36	-2.01	-4.20
Steubenville, OH-WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.03	-0.08	-0.09	-0.14	-0.27
Steubenville-Weirton, OH-WV	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.02	-0.06	-0.07	-0.10	-0.21
Stockton, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.05	-0.15	-0.16	-0.24	-0.50
Sullivan County, TN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	-0.01	-0.02	-0.04
Sutter Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00
Syracuse, NY	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.06	-0.19	-0.21	-0.31	-0.64
Tacoma, WA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.08	-0.24	-0.27	-0.39	-0.82
Tazewell County: Groveland twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.01	-0.01	-0.02
Terre Haute, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.02	-0.03	-0.04	-0.08
Thurston County; Cities of Olympia, Tumwater, and Lacey, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.04	-0.05	-0.07	-0.14
Titus County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Toms River, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Tooele County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	0.00
Trenton, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.03	-0.03	-0.05	-0.10
Trona, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Tucson, AZ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.09	-0.29	-0.32	-0.47	-0.98
Tuolumne County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.02	-0.02	-0.03	-0.07
Tuscan Buttes, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00
Tuscan Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	0.00	0.00
Uinta Basin, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.02	-0.02	-0.03	-0.06
Union County; LaGrande, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Upper Green River Basin Area, WY	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.03	-0.03	-0.05	-0.10
Utah County, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.08	-0.24	-0.26	-0.39	-0.81
Vancouver, WA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.04	-0.14	-0.15	-0.22	-0.47
Ventura County, CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-0.10	-0.30	-0.33	-0.49	-1.03
Ventura County, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.10	-0.30	-0.33	-0.49	-1.03
Vermillion County; Part of Clinton Township, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.01	-0.02
Vigo County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.02	-0.05	-0.06	-0.08	-0.17
Walla Walla County; Wallula, WA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00	-0.01
Waltham, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.02	-0.02	-0.03	-0.07
Warren County, NJ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	-0.01	-0.01	-0.02	-0.04
Warren County: Conewago Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.01	-0.02	-0.03
Warren County: Warren Boro, Pleasant Twp, Glade Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.01	-0.02	-0.02	-0.04	-0.07
Warren, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.02	-0.03	-0.04	-0.09
Washington, DC-MD-VA	Ozone (2008 8-hour)	Nonattainment (DC) Maintenance (MD, VA), Marginal	50	0	-0.66	-2.00	-2.21	-3.25	-6.84
Washington, DC-MD-VA	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.65	-1.96	-2.16	-3.17	-6.68
Washington, DC-MD-VA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.09	-0.26	-0.29	-0.42	-0.89
Washoe County; Reno planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.03	-0.10	-0.11	-0.17	-0.35
Wayne County, MI	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.03	-0.04	-0.08

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Wayne County: Boston, Center, Franklin, Wayne & Webster Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.02	-0.03	-0.04	-0.08
West Central Pinal, AZ	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.01	-0.01	-0.02
West Silver Valley, ID	PM _{2.5} (2012 Annual)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.02	-0.03
Whatcom County, WA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	-0.01	-0.01
Winston-Salem, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.06	-0.18	-0.20	-0.29	-0.61
Worcester, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.03	-0.08	-0.09	-0.13	-0.27
Yakima County, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.04	-0.05	-0.07	-0.15
Yakima, WA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.02	-0.02	-0.05
Yuba City-Marysville, CA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.06	-0.07	-0.11	-0.22
Yuma, AZ	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.04	-0.05	-0.07	-0.15
Yuma, AZ	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	-0.02	-0.07	-0.08	-0.11	-0.23

Notes:

^a Nonattainment or maintenance status as of 2/1/2024. Source: EPA, The Green Book Nonattainment Areas for Criteria Pollutants; <http://www.epa.gov/airquality/greenbook/>. "--" indicates that no severity classification has been established for the NAAQS pollutant.

^b Emissions thresholds in tons per year. Where the threshold differs by precursor pollutant, the smallest of the precursor thresholds is shown. These thresholds are provided for information only; a general conformity determination is not required for the Proposed Action. Source: 40 CFR 93.853.

^c Positive values are emissions increases; negative values are emissions decreases.

EPA = U.S. Environmental Protection Agency; NAAQS = National Ambient Air Quality Standard; CO = carbon monoxide; NO₂ = nitrogen dioxide; PM_{2.5} = particulate matter less than 2.5 microns in size; PM₁₀ = particulate matter less than 10 microns in size; SO₂ = sulfur dioxide.

Table D-16. Changes in Emissions from U.S. Passenger Cars and Light Trucks by Nonattainment or Maintenance Area and Alternative, Direct and Indirect Impacts--Benzene, 2050

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Ada County; Boise, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.13	-0.33	-0.21	-0.77	-2.62
Adams, Denver, and Boulder Counties; Denver Metropolitan area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.27	-0.62	-0.32	-1.41	-5.03
Ajo (Pima County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Albuquerque, NM	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.11	-0.22	-0.10	-0.49	-1.79
Allegan County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.02	-0.01	-0.04	-0.14
Allegheny County Air Basin: Hazelwood monitor, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.02	-0.01	-0.04	-0.14
Allegheny County, PA	PM _{2.5} (2012 Annual)	Nonattainment, Moderate	100	0	-0.11	-0.23	-0.11	-0.52	-1.89
Allegheny County; Liberty, Lincoln, Port Vue, Glassport, Clairton, PA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	0.00	-0.01	-0.04
Allegheny, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.02	-0.05	-0.03	-0.11	-0.39
Allentown, PA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	-0.07	-0.14	-0.06	-0.30	-1.10
Allentown-Bethlehem-Easton, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.07	-0.15	-0.07	-0.33	-1.24
Alton Township, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	-0.01	-0.03
Amador County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.01	0.00	-0.02	-0.07
Anchorage, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.02	-0.04	-0.02	-0.10	-0.35
Anchorage; Eagle River, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.02
Anne Arundel County and Baltimore County, MD	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.11	-0.22	-0.08	-0.47	-1.78
Archuleta County; Pagosa Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	0.00	-0.01	-0.05
Armstrong County; Madison, Mahoning, Boggs, Washington, Pine, PA	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	0.00	-0.01	-0.03
Aroostock County; City of Presque Isle, ME	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Atlanta, GA	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-0.63	-1.26	-0.51	-2.74	-10.25
Atlanta, GA	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.48	-0.97	-0.40	-2.10	-7.87
Atlantic City, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	0.00	-0.02	-0.07
Bakersfield, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.05	-0.11	-0.04	-0.23	-0.88
Baltimore, MD	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	-0.29	-0.56	-0.21	-1.20	-4.55
Baltimore, MD	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.29	-0.56	-0.21	-1.21	-4.57
Baltimore, MD	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	-0.02
Baton Rouge, LA	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.12	-0.26	-0.13	-0.58	-2.09

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Beaver, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	-0.01	-0.03
Benton County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	-0.01	0.00	-0.01	-0.04
Berrien County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.02	-0.05	-0.02	-0.11	-0.40
Billings, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.03	-0.02	-0.08	-0.27
Billings, MT	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	-0.01	-0.03
Birmingham, AL	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.16	-0.33	-0.14	-0.72	-2.67
Boise-Northern Ada County, ID	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.13	-0.33	-0.21	-0.77	-2.62
Bonner County; The Sandpoint Area, ID	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	0.00	-0.01	-0.05
Boston, MA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.08	-0.16	-0.07	-0.36	-1.33
Boyd County (part), KY	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01	-0.03
Brooke; Follansbee area, WV	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Brown County: Green Bay, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	-0.02
Burlington, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	-0.01
Butte County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.02	-0.04	-0.02	-0.09	-0.33
Calaveras County, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.01	0.00	-0.02	-0.07
Calaveras County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.01	0.00	-0.02	-0.07
Campbell-Clermont Counties, KY-OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.01	0.00	-0.01	-0.05
Canton-Massillon, OH	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.04	-0.08	-0.04	-0.18	-0.67
Central New Hampshire, NH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.02	-0.04	-0.02	-0.08	-0.32
Central Steptoe Valley, NV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01	-0.02
Charleston, WV	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.03	-0.07	-0.03	-0.15	-0.55
Charlotte, NC	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.16	-0.32	-0.13	-0.69	-2.61
Charlotte-Rock Hill, NC-SC	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.30	-0.60	-0.24	-1.30	-4.88
Chicago, IL-IN-WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.74	-1.46	-0.57	-3.16	-11.92
Chicago-Naperville, IL-IN-WI	Ozone (2008 8-hour)	Maintenance, Serious	100	0	-0.79	-1.58	-0.64	-3.44	-12.88
Chico (Butte County), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.02	-0.04	-0.02	-0.09	-0.33
Chico, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.02	-0.01	-0.04	-0.13
Chico, CA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.04	-0.02	-0.08	-0.31
Cincinnati, OH-KY (OH Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.18	-0.35	-0.13	-0.74	-2.81

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Cincinnati, OH-KY (KY Portion)	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	-0.06	-0.12	-0.06	-0.26	-0.96
Cincinnati, OH-KY-IN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.25	-0.50	-0.21	-1.08	-4.04
Clark County; Las Vegas planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.24	-0.48	-0.19	-1.04	-3.91
Cleveland, OH	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.28	-0.59	-0.25	-1.29	-4.78
Cleveland, OH	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.11	-0.23	-0.11	-0.52	-1.90
Cleveland, OH	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-0.14	-0.30	-0.13	-0.66	-2.41
Cleveland-Akron-Lorain, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.30	-0.61	-0.26	-1.34	-4.97
Cleveland-Akron-Lorain, OH	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.27	-0.57	-0.24	-1.24	-4.60
Cochise County; Paul Spur/Douglas planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.03
Colorado Springs, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.10	-0.22	-0.12	-0.51	-1.80
Columbus, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.21	-0.42	-0.17	-0.92	-3.43
Columbus, OH	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.19	-0.39	-0.16	-0.85	-3.17
Cook County; Lyons Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.01	-0.03	-0.13
Cook County; Southeast Chicago, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.01	-0.05	-0.19
Coshocton County; Franklin Township, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Coso Junction, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Cuyahoga County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.11	-0.23	-0.11	-0.52	-1.91
Cuyahoga County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.09	-0.19	-0.09	-0.42	-1.55
Dallas-Fort Worth, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.87	-1.74	-0.71	-3.79	-14.18
Dallas-Fort Worth, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.85	-1.71	-0.69	-3.72	-13.95
Dane County; Madison sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.06	-0.12	-0.05	-0.26	-0.95
Delaware County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-0.05	-0.10	-0.05	-0.22	-0.81
Denver Metro/North Front Range, CO	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.65	-1.48	-0.78	-3.38	-12.00
Denver-Boulder, CO	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.51	-1.16	-0.62	-2.65	-9.39
Denver-Boulder-Greeley-Ft. Collins-Loveland, CO	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.65	-1.48	-0.78	-3.38	-11.99
Detroit, MI	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	-0.52	-1.06	-0.43	-2.31	-8.62
Detroit, MI	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.20	-0.40	-0.16	-0.86	-3.21
Detroit, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.02	-0.05	-0.02	-0.10	-0.38
Detroit-Ann Arbor, MI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.53	-1.06	-0.44	-2.31	-8.64

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Doña Ana County; Anthony, NM	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.02
Door County, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	0.00	0.00
Door County-Revised, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	-0.01	0.00	-0.01	-0.05
Douglas (Cochise County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01	-0.02
Dukes County, MA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	-0.01	-0.02
Duluth, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.03	-0.01	-0.06	-0.23
East Chicago, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	0.00	-0.02	-0.06
East Helena Area, MT	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	0.00
East Kern County, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	-0.01	-0.04
El Paso County, TX	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.07	-0.14	-0.06	-0.31	-1.15
El Paso, TX	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.01	-0.01	-0.03	-0.10
El Paso-Las Cruces, TX-NM	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.08	-0.16	-0.06	-0.35	-1.34
Eugene-Springfield, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.05	-0.02	-0.11	-0.41
Evangeline Parish (Partial), LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Fairbanks, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.01	-0.01	-0.01	-0.03	-0.11
Fairbanks, AK	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.01	-0.02	-0.01	-0.05	-0.20
Flathead County; Columbia Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.02
Flathead County; Kalispell and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.01	-0.03	-0.11
Flathead County; Whitefish and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.02
Fort Collins, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.03	-0.06	-0.03	-0.14	-0.49
Freehold, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	-0.02
Freestone and Anderson Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	0.00	-0.01	-0.05
Fremont County; Canon City Area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.01	-0.03	-0.11
Fresno, CA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.07	-0.13	-0.05	-0.29	-1.08
Gila County (part): Payson, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.02
Giles County, VA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Grant County, NM	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	0.00	-0.02	-0.07

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Grants Pass, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	0.00	-0.02	-0.06
Great Falls, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	-0.01
Greater Connecticut, CT	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-0.16	-0.32	-0.13	-0.70	-2.61
Greater Connecticut, CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.16	-0.32	-0.13	-0.70	-2.61
Greeley, CO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.07	-0.15	-0.08	-0.33	-1.19
Hancock County (part): Weirton, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	-0.01	-0.04
Hancock and Brooke Counties (Part); The city of Weirton, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.04
Harrisburg-Lebanon-Carlisle-York, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.12	-0.23	-0.09	-0.50	-1.88
Hartford-New Britain-Middletown, CT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.11	-0.22	-0.09	-0.48	-1.82
Hayden (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	0.00	0.00	-0.02
Hayden, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.03
Hayden, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	-0.02
Henderson-Webster Counties, KY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	-0.01
Hillsborough County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	-0.01	-0.03
Hillsborough-Polk County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	-0.01
Houston-Galveston-Brazoria, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.96	-2.02	-0.92	-4.49	-16.43
Houston-Galveston-Brazoria, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.93	-1.98	-0.90	-4.38	-16.04
Howard County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	-0.01	-0.02	-0.06
Humphreys County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	-0.01	0.00	-0.02	-0.06
Huntington, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	-0.01	-0.02	-0.09
Hutchinson County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.01	-0.01	-0.04	-0.12
Imperial County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-0.03	-0.05	-0.02	-0.11	-0.41
Imperial County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.02	-0.05	-0.02	-0.11	-0.41
Imperial County, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.02	-0.04	-0.02	-0.09	-0.33
Imperial County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	-0.02	-0.04	-0.02	-0.09	-0.33
Imperial Valley, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.02	-0.05	-0.02	-0.10	-0.39
Indian Wells, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	0.00	-0.02	-0.08
Indiana, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.03	-0.01	-0.06	-0.23

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Indianapolis, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	-0.01
Indianapolis, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.06	-0.12	-0.05	-0.27	-1.00
Inland Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.01	-0.03	-0.11
Inyo County; Owens Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00	-0.01
Jackson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.02	-0.01	-0.03	-0.13
Jackson County; Medford-Ashland (including White City), OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.04	-0.02	-0.08	-0.30
Jamestown, NY	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.02	-0.03	-0.01	-0.07	-0.28
Jefferson County, KY	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	-0.01
Jefferson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.01	-0.01	-0.03	-0.12
Jefferson County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Jefferson County; (part) Steubenville & Mingo Junction, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.01	-0.01	-0.03	-0.10
Johnstown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.03	-0.01	-0.07	-0.25
Josephine County; Grants Pass, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	0.00	-0.02	-0.06
Juneau; Mendenhall Valley area, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.03
Kern County (Eastern Kern), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.01	-0.02	-0.01	-0.04	-0.16
Kern County (Eastern Kern), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.01	-0.02	-0.01	-0.04	-0.16
King County; Kent, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.04
King County; Seattle, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.02
Klamath Falls, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.01	0.00	-0.02	-0.09
Klamath Falls, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	0.00	-0.02	-0.09
Klamath Falls, OR	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.01	-0.01	-0.03	-0.10
Knoxville, TN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.09	-0.18	-0.08	-0.40	-1.50
Knoxville-Sevierville-La Follette, TN	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.11	-0.22	-0.09	-0.49	-1.81
La Porte County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.01	-0.01	-0.03	-0.11
LaSalle County; Oglesby, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	0.00	-0.01	-0.05
Lake County (part); Lakeview, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Lake County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.05	-0.10	-0.04	-0.22	-0.81
Lake County, OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.02	-0.05	-0.02	-0.11	-0.40
Lake County; (part) Eastlake, Timberlake, Lakeline, Willoughby, Mentor, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	0.00	-0.02	-0.07

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Lake County; Cities of East Chicago, Hammond, Whiting, and Gary, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.03	-0.07	-0.03	-0.14	-0.54
Lake County; Polson, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Lake County; Ronan, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Lake Tahoe North Shore, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01	-0.02
Lake Tahoe South Shore, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	0.00	-0.02	-0.07
Lake Tahoe, NV	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	0.00	-0.01	-0.04
Lancaster, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.05	-0.11	-0.04	-0.24	-0.88
Lancaster, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.05	-0.11	-0.04	-0.24	-0.88
Lane County (part); Oakridge, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Lane County; Eugene/Springfield, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.05	-0.02	-0.11	-0.41
Las Vegas, NV	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.24	-0.48	-0.19	-1.04	-3.91
Las Vegas, NV	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.24	-0.48	-0.19	-1.04	-3.92
Laurel Area (Yellowstone County), MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	0.00	-0.01	-0.04
Lebanon County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-0.01	-0.03	-0.01	-0.06	-0.23
Lemont, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.02	-0.04	-0.02	-0.08	-0.31
Liberty-Clairton, PA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	0.00	-0.01	-0.04
Lincoln County; Libby and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Logan, UT-ID	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.03	-0.02	-0.08	-0.28
Longmont, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.03	-0.02	-0.07	-0.26
Lorain County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.01	0.00	-0.03	-0.10
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.08	-0.16	-0.06	-0.35	-1.33
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-0.08	-0.16	-0.06	-0.35	-1.33
Los Angeles-South Coast Air Basin, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-1.69	-3.33	-1.27	-7.16	-27.12
Los Angeles-South Coast Air Basin, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-1.69	-3.33	-1.27	-7.16	-27.11
Los Angeles-South Coast Air Basin, CA	CO (1971 8-hour)	Maintenance, Serious	100	0	-1.69	-3.33	-1.27	-7.17	-27.12
Los Angeles-South Coast Air Basin, CA	NO ₂ (1971 Annual)	Maintenance, Primary	100	0	-1.69	-3.33	-1.27	-7.17	-27.12
Los Angeles-South Coast Air Basin, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-1.69	-3.33	-1.27	-7.17	-27.12
Los Angeles-South Coast Air Basin, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-1.69	-3.33	-1.27	-7.17	-27.12

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Louisville, KY-IN (IN Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.03	-0.06	-0.02	-0.12	-0.45
Louisville, KY-IN (KY Portion)	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.10	-0.19	-0.07	-0.41	-1.57
Lowell, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.02	-0.01	-0.04	-0.17
Lucas County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.04	-0.08	-0.04	-0.17	-0.63
Madison County; Granite City Township and Nameoki Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.01	-0.06	-0.20
Manchester, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.02	-0.01	-0.05	-0.18
Manitowoc County, WI	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.01	-0.01	0.00	-0.03	-0.10
Marathon County: Rothschild Sub-city area, Rib Mountain, Weston, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.02	-0.03	-0.01	-0.07	-0.28
Maricopa and Pinal Counties; Phoenix planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.46	-0.90	-0.34	-1.93	-7.32
Marion County: Lawrence, Washington, and Warrant Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.05	-0.10	-0.04	-0.22	-0.83
Mariposa County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.03
Mariposa County, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.03
Marshall, WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.03	-0.02	-0.06	-0.20
Medford, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.02	-0.01	-0.05	-0.19
Memphis, TN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.13	-0.26	-0.11	-0.56	-2.10
Memphis, TN-MS-AR	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.16	-0.33	-0.14	-0.73	-2.72
Miami (Gila County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01	-0.03
Miami, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.03
Miami, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	-0.01	-0.03
Millinocket AQCR 109, ME	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.02	-0.04	-0.01	-0.08	-0.30
Milwaukee, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.16	-0.33	-0.14	-0.72	-2.65
Milwaukee, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.07	-0.15	-0.07	-0.33	-1.23
Milwaukee-Racine, WI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.14	-0.29	-0.12	-0.63	-2.35
Minneapolis-St. Paul, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.37	-0.76	-0.32	-1.66	-6.16
Minneapolis-St. Paul, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.36	-0.74	-0.31	-1.61	-5.98
Missoula, MT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.03	-0.01	-0.06	-0.22
Missoula, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.03	-0.01	-0.06	-0.22

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Modesto, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.03	-0.06	-0.03	-0.14	-0.52
Mohave County (part); Bullhead City, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.01	-0.03	-0.12
Mono Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Mono County; Mammoth Lake planning area, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.04
Morenci (Greenlee County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Morgan County, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.01	0.00	-0.02	-0.06
Morongo Band of Mission Indians, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	0.00	0.00	-0.01
Morongo Band of Mission Indians, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00	-0.01
Morristown, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01	-0.03
Muscatine County, IA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01	-0.03
Muscatine, IA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	0.00	-0.01	-0.05
Muskegon County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.02	-0.03	-0.01	-0.07	-0.27
Muskingum River, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	-0.01
Nashua, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.02	-0.01	-0.04	-0.15
Nassau County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	-0.01
Navarro County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	0.00	-0.01	-0.05
Nevada County (Western part), CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-0.01	-0.02	-0.01	-0.04	-0.14
Nevada County (Western part), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.01	-0.02	-0.01	-0.04	-0.14
New Haven County, CT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	0.00	-0.01	-0.04
New Haven-Meriden-Waterbury, CT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.09	-0.19	-0.08	-0.41	-1.52
New Madrid County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
New Manchester-Grant magisterial district in Hancock County, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01	-0.02
New York County, NY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.04	-0.08	-0.04	-0.19	-0.68
New York-N. New Jersey-Long Island, NY-NJ-CT	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-1.39	-2.80	-1.14	-6.08	-22.75
New York-N. New Jersey-Long Island, NY-NJ-CT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.78	-1.58	-0.66	-3.45	-12.86
New York-N. New Jersey-Long Island, NY-NJ-CT	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-1.42	-2.86	-1.17	-6.22	-23.27
New York-Northern New Jersey-Long Island, NY-NJ-CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-1.40	-2.83	-1.16	-6.16	-23.00
Nogales, AZ	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	0.00	-0.01	-0.04
Northern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.20	-0.42	-0.18	-0.92	-3.41

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Oakridge, OR	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Ogden, UT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.02	-0.01	-0.04	-0.14
Ogden, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.01	-0.04	-0.14
Olmsted County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	0.00	-0.02	-0.06
Olmsted County; City of Rochester, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.03	-0.01	-0.06	-0.22
Oneida County: Rhinelander Sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.01	-0.01	0.00	-0.03	-0.09
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Pekin, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.01	0.00	-0.02	-0.07
Penns Grove, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Peoria County: Hollis twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	0.00
Peoria, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.02	-0.01	-0.05	-0.17
Perth Amboy, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.01	0.00	-0.03	-0.09
Philadelphia-Camden County, PA-NJ	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.12	-0.25	-0.11	-0.56	-2.05
Philadelphia-Wilmington, PA-NJ-DE (NJ Portion)	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.12	-0.23	-0.09	-0.51	-1.90
Philadelphia-Wilmington, PA-NJ-DE (PA-DE Portion)	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.38	-0.78	-0.33	-1.71	-6.34
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.67	-1.34	-0.55	-2.92	-10.92
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.64	-1.28	-0.50	-2.77	-10.41
Phoenix, AZ	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.45	-0.88	-0.33	-1.88	-7.14
Phoenix-Mesa, AZ	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-0.46	-0.90	-0.34	-1.93	-7.33
Phoenix-Mesa, AZ	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.47	-0.91	-0.34	-1.96	-7.42
Pierce County; Tacoma, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Pima County; Ajo planning area, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Pima County; Rillito planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	0.00	-0.02	-0.06
Pinal County (part); West Pinal, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.02	-0.05	-0.02	-0.10	-0.37
Pitkin County; Aspen, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	0.00	-0.02	-0.07
Pittsburgh, PA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.03	-0.06	-0.02	-0.12	-0.45
Pittsburgh-Beaver Valley, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.24	-0.51	-0.23	-1.12	-4.12

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Pittsburgh-Beaver Valley, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.22	-0.47	-0.21	-1.03	-3.78
Plumas County, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00	0.00
Polk County, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	-0.01	-0.04
Portland, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.16	-0.33	-0.14	-0.72	-2.64
Power-Bannock Counties; Fort Hall Indian Reservation, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.02
Power-Bannock Counties; Portneuf Valley Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.06	-0.04	-0.14	-0.46
Provo, UT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.02	-0.04	-0.01	-0.08	-0.30
Provo, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.06	-0.13	-0.05	-0.28	-1.05
Prowers County; Lamar, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.03
Raleigh-Durham, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.19	-0.38	-0.15	-0.82	-3.09
Ramsey County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Reading, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.04	-0.08	-0.03	-0.18	-0.67
Reno, NV	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.03	-0.06	-0.02	-0.13	-0.47
Rhineland, WI	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.01	0.00	-0.01	-0.05
Riverside County (Coachella Valley), CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-0.06	-0.11	-0.04	-0.23	-0.88
Riverside County (Coachella Valley), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-0.06	-0.11	-0.04	-0.23	-0.88
Riverside County; Coachella Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.06	-0.12	-0.05	-0.26	-1.01
Riverside, Los Angeles, Orange, & San Bernardino Counties; South Coast Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-1.69	-3.31	-1.27	-7.13	-27.00
Rosebud County; Lame Deer, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Routt County (part); Steamboat Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.01	-0.03	-0.10
Rusk and Panola Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	-0.01	-0.03	-0.10
Sacramento County, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.14	-0.27	-0.10	-0.57	-2.17
Sacramento Metro, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.23	-0.46	-0.18	-0.99	-3.75
Sacramento Metro, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.23	-0.46	-0.18	-0.99	-3.75
Sacramento, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.16	-0.31	-0.12	-0.66	-2.50
Sacramento, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.23	-0.45	-0.17	-0.97	-3.66

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Salem, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.03	-0.06	-0.02	-0.12	-0.46
Salt Lake City, UT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.03	-0.06	-0.02	-0.12	-0.45
Salt Lake City, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.22	-0.44	-0.19	-0.97	-3.61
Salt Lake County, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.13	-0.26	-0.11	-0.57	-2.13
Salt Lake County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	-0.13	-0.26	-0.11	-0.57	-2.13
San Antonio, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.22	-0.45	-0.19	-0.98	-3.66
San Bernardino County, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.06	-0.11	-0.04	-0.24	-0.91
San Diego County, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.36	-0.71	-0.27	-1.53	-5.81
San Diego County, CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-0.36	-0.71	-0.27	-1.53	-5.80
San Diego, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.36	-0.71	-0.27	-1.53	-5.80
San Francisco Bay Area, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.74	-1.44	-0.55	-3.11	-11.77
San Francisco Bay Area, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.74	-1.44	-0.55	-3.10	-11.75
San Francisco Bay Area, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.74	-1.45	-0.55	-3.11	-11.79
San Francisco-Oakland-San Jose, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.69	-1.36	-0.52	-2.93	-11.11
San Joaquin Valley Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.45	-0.89	-0.35	-1.93	-7.24
San Joaquin Valley, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-0.45	-0.89	-0.35	-1.93	-7.24
San Joaquin Valley, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-0.45	-0.89	-0.35	-1.93	-7.24
San Joaquin Valley, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.45	-0.89	-0.35	-1.93	-7.24
San Joaquin Valley, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-0.45	-0.89	-0.35	-1.93	-7.24
San Luis Obispo (Eastern San Luis Obispo), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	-0.01	-0.03
San Luis Obispo (Eastern part), CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	-0.01	-0.03
San Manuel (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01	-0.03
San Miguel County; Telluride, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.02
Sanders County (part); Thompson Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Santa Cruz County; Nogales planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	0.00	-0.01	-0.04
Seaford, DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.03	-0.06	-0.02	-0.12	-0.47
Seattle-Tacoma, WA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.36	-0.74	-0.32	-1.64	-6.05
Sheboygan County, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.02	-0.01	-0.03	-0.13

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Sheridan County; City of Sheridan, WY	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	0.00	-0.01	-0.04
Shoreline Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.01	-0.03	-0.12
Shoshone County; City of Pinehurst, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Shoshone County; Pinehurst Expansion Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.03	-0.10
Silver Bow County; Butte, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	0.00	-0.02	-0.06
Somerville, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01	-0.02
Southern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.06	-0.13	-0.05	-0.28	-1.05
Southwest Indiana, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	-0.01
Spokane County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.04	-0.08	-0.03	-0.18	-0.66
Spokane, WA	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.04	-0.08	-0.03	-0.18	-0.66
Springfield, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.03	-0.01	-0.06	-0.21
St. Bernard Parish, LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.02	-0.05	-0.03	-0.12	-0.41
St. Clair, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.01	-0.01	-0.03	-0.10
St. Lawrence County, NY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	-0.02
St. Louis, MO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.09	-0.18	-0.08	-0.40	-1.47
St. Louis, MO-IL	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.31	-0.65	-0.28	-1.43	-5.28
St. Louis-St. Charles-Farmington, MO-IL	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.32	-0.66	-0.29	-1.45	-5.38
Steubenville, OH-WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.04	-0.02	-0.09	-0.30
Steubenville-Weirton, OH-WV	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.01	-0.03	-0.02	-0.07	-0.25
Stockton, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.04	-0.08	-0.03	-0.18	-0.67
Sullivan County, TN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	0.00	-0.01	-0.05
Sutter Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00
Syracuse, NY	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.05	-0.11	-0.04	-0.23	-0.86
Tacoma, WA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.06	-0.13	-0.06	-0.29	-1.06
Tazewell County: Groveland twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01	-0.03
Terre Haute, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.01	-0.01	-0.03	-0.12
Thurston County; Cities of Olympia, Tumwater, and Lacey, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.01	-0.05	-0.19
Titus County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Toms River, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	-0.01

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Tooele County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	0.00
Trenton, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.02	-0.01	-0.04	-0.13
Trona, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Tucson, AZ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.08	-0.16	-0.06	-0.36	-1.34
Tuolumne County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.01	0.00	-0.03	-0.09
Tuscan Buttes, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00
Tuscan Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	0.00	0.00
Uinta Basin, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.01	0.00	-0.02	-0.09
Union County; LaGrande, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.02
Upper Green River Basin Area, WY	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.01	-0.01	-0.03	-0.10
Utah County, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.06	-0.13	-0.05	-0.28	-1.06
Vancouver, WA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.04	-0.07	-0.03	-0.16	-0.61
Ventura County, CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-0.09	-0.17	-0.07	-0.37	-1.38
Ventura County, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.09	-0.17	-0.07	-0.37	-1.38
Vermillion County; Part of Clinton Township, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.03
Vigo County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.03	-0.01	-0.06	-0.23
Walla Walla County; Wallula, WA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00	-0.01
Waltham, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.01	0.00	-0.03	-0.10
Warren County, NJ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	-0.01	0.00	-0.01	-0.05
Warren County: Conewago Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01	-0.04
Warren County: Warren Boro, Pleasant Twp, Glade Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	-0.01	-0.01	-0.02	-0.08
Warren, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	-0.01	-0.03	-0.10
Washington, DC-MD-VA	Ozone (2008 8-hour)	Nonattainment (DC) Maintenance (MD, VA), Marginal	50	0	-0.57	-1.13	-0.44	-2.43	-9.18
Washington, DC-MD-VA	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.56	-1.11	-0.42	-2.38	-9.02
Washington, DC-MD-VA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.07	-0.15	-0.06	-0.31	-1.18
Washoe County; Reno planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.03	-0.06	-0.02	-0.13	-0.48
Wayne County, MI	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.01	-0.03	-0.10

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Wayne County: Boston, Center, Franklin, Wayne & Webster Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.01	-0.01	-0.03	-0.11
West Central Pinal, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.03
West Silver Valley, ID	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	-0.01	0.00	-0.01	-0.05
Whatcom County, WA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	-0.01
Winston-Salem, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.05	-0.10	-0.04	-0.22	-0.83
Worcester, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.05	-0.02	-0.10	-0.37
Yakima County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.03	-0.01	-0.06	-0.20
Yakima, WA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	0.00	-0.02	-0.07
Yuba City-Marysville, CA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.04	-0.01	-0.08	-0.30
Yuma, AZ	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.03	-0.01	-0.05	-0.21
Yuma, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.02	-0.04	-0.02	-0.08	-0.32

Notes:

^a Nonattainment or maintenance status as of 2/1/2024. Source: EPA, The Green Book Nonattainment Areas for Criteria Pollutants; <http://www.epa.gov/airquality/greenbook/>. "--" indicates that no severity classification has been established for the NAAQS pollutant.

^b Emissions thresholds in tons per year. Where the threshold differs by precursor pollutant, the smallest of the precursor thresholds is shown. These thresholds are provided for information only; a general conformity determination is not required for the Proposed Action. Source: 40 CFR 93.853.

^c Positive values are emissions increases; negative values are emissions decreases.

EPA = U.S. Environmental Protection Agency; NAAQS = National Ambient Air Quality Standard; CO = carbon monoxide; NO₂ = nitrogen dioxide; PM2.5 = particulate matter less than 2.5 microns in size; PM10 = particulate matter less than 10 microns in size; SO₂ = sulfur dioxide.

Table D-17. Changes in Emissions from U.S. Passenger Cars and Light Trucks by Nonattainment or Maintenance Area and Alternative, Direct and Indirect Impacts--1,3-Butadiene, 2035

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Ada County; Boise, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.02	-0.03	-0.06
Adams, Denver, and Boulder Counties; Denver Metropolitan area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.03	-0.08	-0.09	-0.14	-0.29
Ajo (Pima County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Albuquerque, NM	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.04	-0.05	-0.07	-0.15
Allegan County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.01
Allegheny County Air Basin: Hazelwood monitor, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01	-0.01
Allegheny County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	-0.01	-0.04	-0.05	-0.07	-0.15
Allegheny County; Liberty, Lincoln, Port Vue, Glassport, Clairton, PA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Allegheny, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.01	-0.01	-0.02
Allentown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.03	-0.03	-0.04	-0.09
Allentown-Bethlehem-Easton, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.01	-0.03	-0.03	-0.05	-0.11
Alton Township, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Amador County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	-0.01
Anchorage, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	-0.01	-0.01	-0.01	-0.02
Anchorage; Eagle River, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Anne Arundel County and Baltimore County, MD	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.02	-0.05	-0.06	-0.08	-0.18
Archuleta County; Pagosa Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Armstrong County; Madison, Mahoning, Boggs, Washington, Pine, PA	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Aroostock County; City of Presque Isle, ME	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Atlanta, GA	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-0.09	-0.27	-0.30	-0.44	-0.95
Atlanta, GA	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.07	-0.21	-0.23	-0.33	-0.72
Atlantic City, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	-0.01
Bakersfield, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.02	-0.03	-0.04	-0.08
Baltimore, MD	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	-0.04	-0.13	-0.14	-0.21	-0.46
Baltimore, MD	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.04	-0.13	-0.14	-0.21	-0.46
Baltimore, MD	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00
Baton Rouge, LA	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.01	-0.04	-0.05	-0.07	-0.15

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Beaver, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Benton County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	0.00
Berrien County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.01	-0.02	-0.04
Billings, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.01	-0.01	-0.02
Billings, MT	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	-0.01	-0.01
Birmingham, AL	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.02	-0.06	-0.07	-0.10	-0.22
Boise-Northern Ada County, ID	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.02	-0.02	-0.03	-0.06
Bonner County; The Sandpoint Area, ID	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Boston, MA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.03	-0.04	-0.06	-0.12
Boyd County (part), KY	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Brooke; Follansbee area, WV	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Brown County: Green Bay, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Burlington, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Butte County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.01	-0.01	-0.01	-0.03
Calaveras County, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	-0.01
Calaveras County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	-0.01
Campbell-Clermont Counties, KY-OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00
Canton-Massillon, OH	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.01	-0.02	-0.02	-0.03	-0.06
Central New Hampshire, NH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.01	-0.01	-0.01	-0.03
Central Steptoe Valley, NV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Charleston, WV	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	-0.01	-0.02	-0.02	-0.05
Charlotte, NC	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.07	-0.08	-0.12	-0.25
Charlotte-Rock Hill, NC-SC	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.04	-0.13	-0.15	-0.22	-0.47
Chicago, IL-IN-WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.11	-0.34	-0.37	-0.55	-1.18
Chicago-Naperville, IL-IN-WI	Ozone (2008 8-hour)	Maintenance, Serious	100	0	-0.11	-0.34	-0.38	-0.56	-1.21
Chico (Butte County), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.01	-0.01	-0.01	-0.03
Chico, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	-0.01	-0.01
Chico, CA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.01	-0.03
Cincinnati, OH-KY (OH Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.03	-0.08	-0.09	-0.13	-0.28

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Cincinnati, OH-KY (KY Portion)	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.02	-0.03	-0.07
Cincinnati, OH-KY-IN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.03	-0.10	-0.11	-0.17	-0.36
Clark County; Las Vegas planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.03	-0.10	-0.11	-0.17	-0.37
Cleveland, OH	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.04	-0.12	-0.13	-0.19	-0.40
Cleveland, OH	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.04	-0.05	-0.07	-0.15
Cleveland, OH	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-0.02	-0.06	-0.06	-0.09	-0.19
Cleveland-Akron-Lorain, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.04	-0.12	-0.13	-0.20	-0.42
Cleveland-Akron-Lorain, OH	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.04	-0.11	-0.12	-0.18	-0.39
Cochise County; Paul Spur/Douglas planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Colorado Springs, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.03	-0.03	-0.05	-0.10
Columbus, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.03	-0.09	-0.10	-0.14	-0.31
Columbus, OH	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.03	-0.08	-0.09	-0.13	-0.29
Cook County; Lyons Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.01
Cook County; Southeast Chicago, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.01	-0.02
Coshocton County; Franklin Township, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Coso Junction, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Cuyahoga County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.04	-0.05	-0.07	-0.15
Cuyahoga County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.03	-0.04	-0.06	-0.12
Dallas-Fort Worth, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.12	-0.38	-0.41	-0.61	-1.32
Dallas-Fort Worth, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.12	-0.37	-0.41	-0.60	-1.30
Dane County; Madison sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.02	-0.03	-0.04	-0.08
Delaware County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.02	-0.03	-0.06
Denver Metro/North Front Range, CO	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.06	-0.19	-0.21	-0.31	-0.67
Denver-Boulder, CO	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.05	-0.15	-0.16	-0.24	-0.51
Denver-Boulder-Greeley-Ft. Collins-Loveland, CO	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.06	-0.19	-0.21	-0.31	-0.67
Detroit, MI	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	-0.07	-0.23	-0.25	-0.37	-0.79
Detroit, MI	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.03	-0.08	-0.09	-0.14	-0.29
Detroit, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	-0.01	-0.02	-0.04
Detroit-Ann Arbor, MI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.07	-0.23	-0.25	-0.37	-0.79

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Doña Ana County; Anthony, NM	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Door County, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	0.00	0.00
Door County-Revised, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	0.00	0.00
Douglas (Cochise County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Dukes County, MA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	0.00	0.00
Duluth, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.01	-0.01	-0.02
East Chicago, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	-0.01
East Helena Area, MT	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	0.00
East Kern County, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00	0.00
El Paso County, TX	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.03	-0.03	-0.05	-0.10
El Paso, TX	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	-0.01
El Paso-Las Cruces, TX-NM	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.04	-0.04	-0.06	-0.14
Eugene-Springfield, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.01	-0.02	-0.03
Evangeline Parish (Partial), LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Fairbanks, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00	-0.01
Fairbanks, AK	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	-0.01	-0.01
Flathead County; Columbia Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Flathead County; Kalispell and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Flathead County; Whitefish and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Fort Collins, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.01	-0.01	-0.03
Freehold, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Freestone and Anderson Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Fremont County; Canon City Area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Fresno, CA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.01	-0.03	-0.03	-0.05	-0.10
Gila County (part); Payson, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Giles County, VA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Grant County, NM	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	-0.01

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Grants Pass, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	-0.01
Great Falls, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Greater Connecticut, CT	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-0.02	-0.07	-0.08	-0.11	-0.25
Greater Connecticut, CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.02	-0.07	-0.08	-0.11	-0.25
Greeley, CO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.02	-0.02	-0.03	-0.07
Hancock County (part): Weirton, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	0.00
Hancock and Brooke Counties (Part); The city of Weirton, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Harrisburg-Lebanon-Carlisle-York, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.05	-0.06	-0.08	-0.18
Hartford-New Britain-Middletown, CT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.05	-0.05	-0.08	-0.17
Hayden (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Hayden, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Hayden, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Henderson-Webster Counties, KY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Hillsborough County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00
Hillsborough-Polk County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00
Houston-Galveston-Brazoria, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.15	-0.46	-0.51	-0.77	-1.63
Houston-Galveston-Brazoria, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.15	-0.45	-0.50	-0.75	-1.59
Howard County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Humphreys County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	-0.01
Huntington, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	-0.01
Hutchinson County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Imperial County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.01	-0.02	-0.04
Imperial County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.01	-0.01	-0.02	-0.04
Imperial County, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.01	-0.01	-0.03
Imperial County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.01	-0.01	-0.03
Imperial Valley, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	-0.01	-0.01	-0.02	-0.04
Indian Wells, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Indiana, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	-0.01	-0.01

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Indianapolis, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Indianapolis, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.03	-0.03	-0.04	-0.09
Inland Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Inyo County; Owens Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00	0.00
Jackson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	-0.01	-0.01
Jackson County; Medford-Ashland (including White City), OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.01	-0.03
Jamestown, NY	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	-0.01	-0.01	-0.01	-0.02
Jefferson County, KY	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00
Jefferson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	-0.01	-0.01
Jefferson County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Jefferson County; (part) Steubenville & Mingo Junction, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	-0.01
Johnstown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.01	-0.02
Josephine County; Grants Pass, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Juneau; Mendenhall Valley area, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Kern County (Eastern Kern), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	-0.01	-0.01	-0.02
Kern County (Eastern Kern), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	-0.01	-0.01	-0.02
King County; Kent, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
King County; Seattle, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Klamath Falls, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	-0.01
Klamath Falls, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Klamath Falls, OR	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Knoxville, TN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.01	-0.04	-0.04	-0.06	-0.13
Knoxville-Sevierville-La Follette, TN	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.05	-0.05	-0.08	-0.16
La Porte County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	-0.01
LaSalle County; Oglesby, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Lake County (part); Lakeview, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Lake County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.02	-0.02	-0.04	-0.08
Lake County, OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.01	-0.01	-0.02	-0.04
Lake County; (part) Eastlake, Timberlake, Lakeline, Willoughby, Mentor, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	-0.01

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Lake County; Cities of East Chicago, Hammond, Whiting, and Gary, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.02	-0.02	-0.05
Lake County; Polson, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Lake County; Ronan, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Lake Tahoe North Shore, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Lake Tahoe South Shore, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	-0.01
Lake Tahoe, NV	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Lancaster, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.01	-0.02	-0.02	-0.04	-0.08
Lancaster, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.02	-0.04	-0.08
Lane County (part); Oakridge, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Lane County; Eugene/Springfield, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.02	-0.03
Las Vegas, NV	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.03	-0.10	-0.11	-0.17	-0.37
Las Vegas, NV	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.03	-0.10	-0.11	-0.17	-0.37
Laurel Area (Yellowstone County), MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	0.00	-0.01	-0.01
Lebanon County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.01	-0.02
Lemont, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.01	-0.01	-0.01	-0.03
Liberty-Clairton, PA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Lincoln County; Libby and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Logan, UT-ID	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.01	-0.02
Longmont, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	-0.01	-0.01
Lorain County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	-0.01
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.01	-0.04	-0.04	-0.06	-0.13
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-0.01	-0.04	-0.04	-0.06	-0.13
Los Angeles-South Coast Air Basin, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-0.25	-0.77	-0.84	-1.25	-2.71
Los Angeles-South Coast Air Basin, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-0.25	-0.77	-0.84	-1.25	-2.71
Los Angeles-South Coast Air Basin, CA	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.25	-0.77	-0.84	-1.25	-2.71
Los Angeles-South Coast Air Basin, CA	NO ₂ (1971 Annual)	Maintenance, Primary	100	0	-0.25	-0.77	-0.84	-1.25	-2.71
Los Angeles-South Coast Air Basin, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.25	-0.77	-0.84	-1.25	-2.71
Los Angeles-South Coast Air Basin, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-0.25	-0.77	-0.84	-1.25	-2.71

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Louisville, KY-IN (IN Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	-0.01	-0.01	-0.02	-0.04
Louisville, KY-IN (KY Portion)	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.05	-0.05	-0.07	-0.16
Lowell, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01	-0.02
Lucas County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.02	-0.02	-0.05
Madison County; Granite City Township and Nameoki Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.01
Manchester, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.01	-0.01	-0.02
Manitowoc County, WI	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	0.00	0.00	-0.01
Marathon County: Rothschild Sub-city area, Rib Mountain, Weston, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	-0.01	-0.01	-0.01	-0.03
Maricopa and Pinal Counties; Phoenix planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.07	-0.22	-0.24	-0.36	-0.77
Marion County: Lawrence, Washington, and Warrant Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.02	-0.02	-0.04	-0.08
Mariposa County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Mariposa County, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Marshall, WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00
Medford, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	-0.01	-0.02
Memphis, TN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.06	-0.06	-0.09	-0.19
Memphis, TN-MS-AR	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.02	-0.07	-0.08	-0.11	-0.25
Miami (Gila County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Miami, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Miami, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Millinocket AQCR 109, ME	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.01	-0.01	-0.03
Milwaukee, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.02	-0.06	-0.07	-0.11	-0.23
Milwaukee, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.03	-0.03	-0.05	-0.10
Milwaukee-Racine, WI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.02	-0.06	-0.06	-0.09	-0.20
Minneapolis-St. Paul, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.05	-0.16	-0.17	-0.25	-0.55
Minneapolis-St. Paul, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.05	-0.15	-0.17	-0.25	-0.53
Missoula, MT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	-0.01	-0.01
Missoula, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.01

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Modesto, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.01	-0.02	-0.05
Mohave County (part); Bullhead City, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Mono Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Mono County; Mammoth Lake planning area, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Morenci (Greenlee County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Morgan County, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	-0.01
Morongo Band of Mission Indians, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	0.00	0.00	0.00
Morongo Band of Mission Indians, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00	0.00
Morristown, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Muscatine County, IA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Muscatine, IA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Muskegon County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.01	-0.01	-0.02
Muskingum River, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Nashua, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01	-0.01
Nassau County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00
Navarro County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Nevada County (Western part), CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	-0.01	-0.01
Nevada County (Western part), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	-0.01	-0.01
New Haven County, CT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
New Haven-Meriden-Waterbury, CT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.04	-0.04	-0.06	-0.13
New Madrid County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
New Manchester-Grant magisterial district in Hancock County, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
New York County, NY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.02	-0.02	-0.02	-0.05
New York-N. New Jersey-Long Island, NY-NJ-CT	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.19	-0.60	-0.65	-0.97	-2.10
New York-N. New Jersey-Long Island, NY-NJ-CT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.11	-0.33	-0.36	-0.54	-1.16
New York-N. New Jersey-Long Island, NY-NJ-CT	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.20	-0.61	-0.67	-0.99	-2.14
New York-Northern New Jersey-Long Island, NY-NJ-CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.19	-0.60	-0.65	-0.97	-2.10
Nogales, AZ	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Northern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.03	-0.08	-0.09	-0.14	-0.29

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Oakridge, OR	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Ogden, UT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	-0.01	-0.01
Ogden, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.01
Olmsted County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Olmsted County; City of Rochester, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.01	-0.01	-0.02
Oneida County; Rhinelander Sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	-0.01
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Pekin, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	-0.01
Penns Grove, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Peoria County; Hollis twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	0.00
Peoria, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.01	-0.01	-0.02
Perth Amboy, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	-0.01
Philadelphia-Camden County, PA-NJ	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.05	-0.05	-0.08	-0.17
Philadelphia-Wilmington, PA-NJ-DE (NJ Portion)	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.02	-0.05	-0.06	-0.08	-0.18
Philadelphia-Wilmington, PA-NJ-DE (PA-DE Portion)	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.05	-0.16	-0.17	-0.26	-0.55
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.09	-0.29	-0.31	-0.46	-1.00
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.09	-0.29	-0.31	-0.46	-1.00
Phoenix, AZ	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.07	-0.21	-0.23	-0.35	-0.75
Phoenix-Mesa, AZ	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-0.07	-0.22	-0.24	-0.36	-0.77
Phoenix-Mesa, AZ	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.07	-0.22	-0.24	-0.36	-0.78
Pierce County; Tacoma, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Pima County; Ajo planning area, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Pima County; Rillito planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Pinal County (part); West Pinal, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	-0.01	-0.01	-0.02	-0.04
Pitkin County; Aspen, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Pittsburgh, PA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.01	-0.02	-0.04
Pittsburgh-Beaver Valley, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.03	-0.09	-0.10	-0.15	-0.33

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Pittsburgh-Beaver Valley, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.03	-0.09	-0.09	-0.14	-0.30
Plumas County, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00	0.00
Polk County, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	0.00
Portland, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.06	-0.07	-0.10	-0.21
Power-Bannock Counties; Fort Hall Indian Reservation, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Power-Bannock Counties; Portneuf Valley Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.01
Provo, UT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.00	-0.01	-0.01	-0.01	-0.03
Provo, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.01	-0.03	-0.03	-0.04	-0.10
Prowers County; Lamar, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Raleigh-Durham, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.03	-0.09	-0.09	-0.14	-0.30
Ramsey County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Reading, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.01	-0.02	-0.02	-0.03	-0.06
Reno, NV	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.01	-0.02	-0.04
Rhineland, WI	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00
Riverside County (Coachella Valley), CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-0.01	-0.03	-0.03	-0.04	-0.09
Riverside County (Coachella Valley), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-0.01	-0.03	-0.03	-0.04	-0.09
Riverside County; Coachella Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.01	-0.03	-0.03	-0.05	-0.10
Riverside, Los Angeles, Orange, & San Bernardino Counties; South Coast Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.25	-0.77	-0.84	-1.25	-2.69
Rosebud County; Lame Deer, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Routt County (part); Steamboat Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Rusk and Panola Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Sacramento County, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.06	-0.07	-0.10	-0.22
Sacramento Metro, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.03	-0.11	-0.12	-0.17	-0.37
Sacramento Metro, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.03	-0.11	-0.12	-0.17	-0.37
Sacramento, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.07	-0.08	-0.11	-0.25
Sacramento, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.03	-0.10	-0.11	-0.17	-0.36

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Salem, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.01	-0.02	-0.04
Salt Lake City, UT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.01	-0.02	-0.04
Salt Lake City, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.03	-0.09	-0.10	-0.14	-0.31
Salt Lake County, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.05	-0.06	-0.09	-0.18
Salt Lake County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	-0.02	-0.05	-0.06	-0.09	-0.18
San Antonio, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.03	-0.09	-0.10	-0.15	-0.33
San Bernardino County, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.03	-0.03	-0.04	-0.10
San Diego County, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.05	-0.17	-0.18	-0.27	-0.58
San Diego County, CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-0.05	-0.17	-0.18	-0.27	-0.58
San Diego, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.05	-0.17	-0.18	-0.27	-0.58
San Francisco Bay Area, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.11	-0.34	-0.37	-0.55	-1.19
San Francisco Bay Area, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.11	-0.34	-0.37	-0.55	-1.18
San Francisco Bay Area, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.11	-0.34	-0.37	-0.55	-1.19
San Francisco-Oakland-San Jose, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.10	-0.32	-0.35	-0.52	-1.12
San Joaquin Valley Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.06	-0.20	-0.22	-0.32	-0.69
San Joaquin Valley, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-0.06	-0.20	-0.22	-0.32	-0.69
San Joaquin Valley, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-0.06	-0.20	-0.22	-0.32	-0.69
San Joaquin Valley, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.06	-0.20	-0.22	-0.32	-0.69
San Joaquin Valley, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-0.06	-0.20	-0.22	-0.32	-0.69
San Luis Obispo (Eastern San Luis Obispo), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00
San Luis Obispo (Eastern part), CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00
San Manuel (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
San Miguel County; Telluride, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Sanders County (part); Thompson Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Santa Cruz County; Nogales planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Seaford, DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	-0.01	-0.01	-0.02	-0.05
Seattle-Tacoma, WA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.05	-0.14	-0.16	-0.23	-0.50
Sheboygan County, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.01

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Sheridan County; City of Sheridan, WY	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Shoreline Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Shoshone County; City of Pinehurst, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Shoshone County; Pinehurst Expansion Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Silver Bow County; Butte, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Somerville, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Southern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.03	-0.03	-0.04	-0.10
Southwest Indiana, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00
Spokane County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.02	-0.03	-0.06
Spokane, WA	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.01	-0.02	-0.02	-0.03	-0.06
Springfield, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.01	-0.01	-0.02
St. Bernard Parish, LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	-0.01
St. Clair, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	-0.01
St. Lawrence County, NY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
St. Louis, MO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.04	-0.04	-0.06	-0.13
St. Louis, MO-IL	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.04	-0.13	-0.15	-0.22	-0.47
St. Louis-St. Charles-Farmington, MO-IL	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.04	-0.14	-0.15	-0.22	-0.47
Steubenville, OH-WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	-0.01
Steubenville-Weirton, OH-WV	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	0.00	-0.01	-0.01	-0.02
Stockton, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.02	-0.02	-0.03	-0.06
Sullivan County, TN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Sutter Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00
Syracuse, NY	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.02	-0.03	-0.04	-0.08
Tacoma, WA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.03	-0.03	-0.04	-0.09
Tazewell County; Groveland twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Terre Haute, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	-0.01	-0.01
Thurston County; Cities of Olympia, Tumwater, and Lacey, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01	-0.01	-0.02
Titus County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Toms River, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Tooele County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	0.00
Trenton, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01	-0.01
Trona, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Tucson, AZ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.04	-0.04	-0.06	-0.13
Tuolumne County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	-0.01
Tuscan Buttes, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00
Tuscan Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	0.00	0.00
Uinta Basin, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	-0.01
Union County; LaGrande, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Upper Green River Basin Area, WY	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00
Utah County, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.03	-0.03	-0.05	-0.10
Vancouver, WA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.02	-0.02	-0.02	-0.05
Ventura County, CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-0.01	-0.04	-0.04	-0.06	-0.14
Ventura County, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.01	-0.04	-0.04	-0.06	-0.13
Vermillion County; Part of Clinton Township, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Vigo County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.01	-0.01	-0.02
Walla Walla County; Wallula, WA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00	0.00
Waltham, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	-0.01
Warren County, NJ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	0.00
Warren County: Conewago Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Warren County: Warren Boro, Pleasant Twp, Glade Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	0.00
Warren, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Washington, DC-MD-VA	Ozone (2008 8-hour)	Nonattainment (DC) Maintenance (MD, VA), Marginal	50	0	-0.08	-0.26	-0.28	-0.42	-0.90
Washington, DC-MD-VA	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.08	-0.26	-0.28	-0.42	-0.90
Washington, DC-MD-VA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.03	-0.04	-0.05	-0.11
Washoe County; Reno planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	-0.01	-0.01	-0.02	-0.04
Wayne County, MI	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.01

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Wayne County: Boston, Center, Franklin, Wayne & Webster Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01	-0.01
West Central Pinal, AZ	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
West Silver Valley, ID	PM _{2.5} (2012 Annual)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Whatcom County, WA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Winston-Salem, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.02	-0.03	-0.04	-0.08
Worcester, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.01	-0.02	-0.04
Yakima County, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.02
Yakima, WA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	-0.01
Yuba City-Marysville, CA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.01	-0.03
Yuma, AZ	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.01	-0.01	-0.01	-0.02
Yuma, AZ	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.01	-0.01	-0.03

Notes:

^a Nonattainment or maintenance status as of 2/1/2024. Source: EPA, The Green Book Nonattainment Areas for Criteria Pollutants; <http://www.epa.gov/airquality/greenbook/>. "--" indicates that no severity classification has been established for the NAAQS pollutant.

^b Emissions thresholds in tons per year. Where the threshold differs by precursor pollutant, the smallest of the precursor thresholds is shown. These thresholds are provided for information only; a general conformity determination is not required for the Proposed Action. Source: 40 CFR 93.853.

^c Positive values are emissions increases; negative values are emissions decreases.

EPA = U.S. Environmental Protection Agency; NAAQS = National Ambient Air Quality Standard; CO = carbon monoxide; NO₂ = nitrogen dioxide; PM_{2.5} = particulate matter less than 2.5 microns in size; PM₁₀ = particulate matter less than 10 microns in size; SO₂ = sulfur dioxide.

Table D-18. Changes in Emissions from U.S. Passenger Cars and Light Trucks by Nonattainment or Maintenance Area and Alternative, Direct and Indirect Impacts--1,3-Butadiene, 2050

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Ada County; Boise, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	0.00	-0.02	-0.08
Adams, Denver, and Boulder Counties; Denver Metropolitan area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.04	-0.01	-0.08	-0.34
Ajo (Pima County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Albuquerque, NM	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.02	0.00	-0.04	-0.17
Allegan County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	-0.02
Allegheny County Air Basin: Hazelwood monitor, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	-0.01
Allegheny County, PA	PM _{2.5} (2012 Annual)	Nonattainment, Moderate	100	0	-0.01	-0.02	0.00	-0.04	-0.18
Allegheny County; Liberty, Lincoln, Port Vue, Glassport, Clairton, PA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Allegheny, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	-0.02
Allentown, PA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	0.00	-0.03	-0.11
Allentown-Bethlehem-Easton, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.01	-0.01	0.00	-0.03	-0.13
Alton Township, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Amador County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	-0.01
Anchorage, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	-0.01	-0.03
Anchorage; Eagle River, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Anne Arundel County and Baltimore County, MD	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.02	0.00	-0.05	-0.21
Archuleta County; Pagosa Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Armstrong County; Madison, Mahoning, Boggs, Washington, Pine, PA	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Aroostock County; City of Presque Isle, ME	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Atlanta, GA	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-0.07	-0.12	-0.02	-0.27	-1.12
Atlanta, GA	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.05	-0.09	-0.01	-0.20	-0.85
Atlantic City, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	-0.01
Bakersfield, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.01	0.00	-0.02	-0.10
Baltimore, MD	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	-0.03	-0.06	-0.01	-0.13	-0.54
Baltimore, MD	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.03	-0.06	-0.01	-0.13	-0.54
Baltimore, MD	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00
Baton Rouge, LA	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.01	-0.02	0.00	-0.04	-0.17

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Beaver, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Benton County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	0.00
Berrien County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.04
Billings, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01	-0.03
Billings, MT	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	-0.01
Birmingham, AL	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.02	-0.03	0.00	-0.06	-0.26
Boise-Northern Ada County, ID	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	0.00	-0.02	-0.08
Bonner County; The Sandpoint Area, ID	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Boston, MA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.02	0.00	-0.03	-0.14
Boyd County (part), KY	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Brooke; Follansbee area, WV	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Brown County: Green Bay, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Burlington, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Butte County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	-0.01	-0.04
Calaveras County, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	-0.01
Calaveras County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	-0.01
Campbell-Clermont Counties, KY-OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	-0.01
Canton-Massillon, OH	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	-0.01	0.00	-0.02	-0.06
Central New Hampshire, NH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	-0.01	-0.04
Central Steptoe Valley, NV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Charleston, WV	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	-0.01	0.00	-0.01	-0.06
Charlotte, NC	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.03	0.00	-0.07	-0.29
Charlotte-Rock Hill, NC-SC	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.03	-0.06	-0.01	-0.13	-0.55
Chicago, IL-IN-WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.08	-0.15	-0.02	-0.33	-1.39
Chicago-Naperville, IL-IN-WI	Ozone (2008 8-hour)	Maintenance, Serious	100	0	-0.08	-0.15	-0.02	-0.34	-1.41
Chico (Butte County), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	-0.01	-0.04
Chico, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	-0.01
Chico, CA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.03
Cincinnati, OH-KY (OH Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.02	-0.04	-0.01	-0.08	-0.33

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Cincinnati, OH-KY (KY Portion)	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	0.00	-0.01	0.00	-0.02	-0.08
Cincinnati, OH-KY-IN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.03	-0.05	-0.01	-0.10	-0.43
Clark County; Las Vegas planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.03	-0.05	-0.01	-0.10	-0.44
Cleveland, OH	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.03	-0.05	-0.01	-0.11	-0.47
Cleveland, OH	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.02	0.00	-0.04	-0.17
Cleveland, OH	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-0.01	-0.02	0.00	-0.05	-0.23
Cleveland-Akron-Lorain, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.03	-0.05	-0.01	-0.12	-0.49
Cleveland-Akron-Lorain, OH	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.03	-0.05	-0.01	-0.11	-0.46
Cochise County; Paul Spur/Douglas planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Colorado Springs, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.01	0.00	-0.03	-0.12
Columbus, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.02	-0.04	-0.01	-0.09	-0.37
Columbus, OH	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.02	-0.04	-0.01	-0.08	-0.34
Cook County; Lyons Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Cook County; Southeast Chicago, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.02
Coshocton County; Franklin Township, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Coso Junction, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Cuyahoga County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	0.00	-0.04	-0.17
Cuyahoga County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.02	0.00	-0.03	-0.14
Dallas-Fort Worth, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.09	-0.17	-0.03	-0.37	-1.55
Dallas-Fort Worth, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.09	-0.16	-0.03	-0.37	-1.52
Dane County; Madison sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.01	0.00	-0.02	-0.10
Delaware County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	-0.01	0.00	-0.02	-0.07
Denver Metro/North Front Range, CO	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.05	-0.08	-0.01	-0.19	-0.78
Denver-Boulder, CO	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.04	-0.06	-0.01	-0.14	-0.60
Denver-Boulder-Greeley-Ft. Collins-Loveland, CO	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.05	-0.08	-0.01	-0.19	-0.78
Detroit, MI	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	-0.05	-0.10	-0.02	-0.22	-0.93
Detroit, MI	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.04	-0.01	-0.08	-0.34
Detroit, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	-0.01	-0.04
Detroit-Ann Arbor, MI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.05	-0.10	-0.02	-0.22	-0.93

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Doña Ana County; Anthony, NM	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Door County, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	0.00	0.00
Door County-Revised, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	0.00	-0.01
Douglas (Cochise County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Dukes County, MA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	0.00	0.00
Duluth, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	-0.01	-0.02
East Chicago, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	-0.01
East Helena Area, MT	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	0.00
East Kern County, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00	0.00
El Paso County, TX	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.01	0.00	-0.03	-0.12
El Paso, TX	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	-0.01
El Paso-Las Cruces, TX-NM	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.02	0.00	-0.04	-0.16
Eugene-Springfield, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01	-0.04
Evangeline Parish (Partial), LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Fairbanks, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00	-0.01
Fairbanks, AK	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00	-0.02
Flathead County; Columbia Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Flathead County; Kalispell and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Flathead County; Whitefish and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Fort Collins, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	-0.01	-0.04
Freehold, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Freestone and Anderson Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Fremont County; Canon City Area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Fresno, CA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.01	-0.01	0.00	-0.03	-0.12
Gila County (part): Payson, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Giles County, VA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Grant County, NM	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	-0.01

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Grants Pass, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	-0.01
Great Falls, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Greater Connecticut, CT	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-0.02	-0.03	0.00	-0.07	-0.29
Greater Connecticut, CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.02	-0.03	0.00	-0.07	-0.29
Greeley, CO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	0.00	-0.02	-0.08
Hancock County (part): Weirton, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	0.00
Hancock and Brooke Counties (Part); The city of Weirton, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Harrisburg-Lebanon-Carlisle-York, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	0.00	-0.05	-0.21
Hartford-New Britain-Middletown, CT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.02	0.00	-0.05	-0.20
Hayden (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Hayden, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Hayden, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Henderson-Webster Counties, KY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Hillsborough County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00
Hillsborough-Polk County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00
Houston-Galveston-Brazoria, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.10	-0.20	-0.06	-0.47	-1.85
Houston-Galveston-Brazoria, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.10	-0.20	-0.05	-0.46	-1.80
Howard County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Humphreys County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	-0.01
Huntington, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	-0.01
Hutchinson County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Imperial County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.04
Imperial County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	-0.01	-0.04
Imperial County, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.04
Imperial County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.04
Imperial Valley, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	-0.01	-0.04
Indian Wells, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Indiana, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	-0.02

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Indianapolis, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Indianapolis, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.01	0.00	-0.03	-0.11
Inland Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Inyo County; Owens Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00	0.00
Jackson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	-0.01
Jackson County; Medford-Ashland (including White City), OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.03
Jamestown, NY	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	-0.01	-0.03
Jefferson County, KY	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00
Jefferson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	-0.01
Jefferson County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Jefferson County; (part) Steubenville & Mingo Junction, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	-0.01
Johnstown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.02
Josephine County; Grants Pass, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Juneau; Mendenhall Valley area, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Kern County (Eastern Kern), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	0.00	0.00	-0.02
Kern County (Eastern Kern), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00	-0.02
King County; Kent, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
King County; Seattle, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Klamath Falls, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	-0.01
Klamath Falls, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Klamath Falls, OR	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Knoxville, TN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.01	-0.02	0.00	-0.04	-0.16
Knoxville-Sevierville-La Follette, TN	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	0.00	-0.05	-0.19
La Porte County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	-0.01
LaSalle County; Oglesby, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Lake County (part); Lakeview, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Lake County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.01	0.00	-0.02	-0.09
Lake County, OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	-0.01	-0.04
Lake County; (part) Eastlake, Timberlake, Lakeline, Willoughby, Mentor, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	-0.01

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Lake County; Cities of East Chicago, Hammond, Whiting, and Gary, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	0.00	-0.01	-0.06
Lake County; Polson, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Lake County; Ronan, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Lake Tahoe North Shore, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Lake Tahoe South Shore, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	-0.01
Lake Tahoe, NV	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Lancaster, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.01	-0.01	0.00	-0.02	-0.09
Lancaster, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	0.00	-0.02	-0.09
Lane County (part); Oakridge, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Lane County; Eugene/Springfield, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.04
Las Vegas, NV	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.03	-0.05	-0.01	-0.10	-0.44
Las Vegas, NV	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.03	-0.05	-0.01	-0.10	-0.44
Laurel Area (Yellowstone County), MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	0.00	0.00	-0.01
Lebanon County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.02
Lemont, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	-0.01	-0.03
Liberty-Clairton, PA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Lincoln County; Libby and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Logan, UT-ID	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.03
Longmont, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	-0.02
Lorain County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	-0.01
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.01	-0.02	0.00	-0.04	-0.15
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-0.01	-0.02	0.00	-0.04	-0.15
Los Angeles-South Coast Air Basin, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-0.19	-0.34	-0.05	-0.76	-3.18
Los Angeles-South Coast Air Basin, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-0.19	-0.34	-0.05	-0.76	-3.18
Los Angeles-South Coast Air Basin, CA	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.19	-0.34	-0.05	-0.76	-3.18
Los Angeles-South Coast Air Basin, CA	NO ₂ (1971 Annual)	Maintenance, Primary	100	0	-0.19	-0.34	-0.05	-0.76	-3.18
Los Angeles-South Coast Air Basin, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.19	-0.34	-0.05	-0.76	-3.18
Los Angeles-South Coast Air Basin, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-0.19	-0.34	-0.05	-0.76	-3.18

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Louisville, KY-IN (IN Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	0.00	-0.01	-0.05
Louisville, KY-IN (KY Portion)	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.02	0.00	-0.05	-0.19
Lowell, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	-0.02
Lucas County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	0.00	-0.01	-0.06
Madison County; Granite City Township and Nameoki Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Manchester, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	-0.02
Manitowoc County, WI	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	0.00	0.00	-0.01
Marathon County: Rothschild Sub-city area, Rib Mountain, Weston, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	-0.01	-0.03
Maricopa and Pinal Counties; Phoenix planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.05	-0.10	-0.02	-0.22	-0.90
Marion County: Lawrence, Washington, and Warrant Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.01	0.00	-0.02	-0.09
Mariposa County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Mariposa County, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Marshall, WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00
Medford, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	-0.02
Memphis, TN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.02	0.00	-0.05	-0.23
Memphis, TN-MS-AR	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.02	-0.03	0.00	-0.07	-0.29
Miami (Gila County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Miami, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Miami, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Millinocket AQCR 109, ME	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01	-0.04
Milwaukee, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.02	-0.03	0.00	-0.06	-0.27
Milwaukee, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.01	0.00	-0.03	-0.12
Milwaukee-Racine, WI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.01	-0.03	0.00	-0.06	-0.24
Minneapolis-St. Paul, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.04	-0.07	-0.01	-0.15	-0.64
Minneapolis-St. Paul, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.04	-0.07	-0.01	-0.15	-0.62
Missoula, MT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	-0.02
Missoula, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.02

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Modesto, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	0.00	-0.01	-0.06
Mohave County (part); Bullhead City, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Mono Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Mono County; Mammoth Lake planning area, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Morenci (Greenlee County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Morgan County, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	-0.01
Morongo Band of Mission Indians, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	0.00	0.00	0.00
Morongo Band of Mission Indians, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00	0.00
Morristown, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Muscatine County, IA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Muscatine, IA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	-0.01
Muskegon County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.03
Muskingum River, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Nashua, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	-0.02
Nassau County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00
Navarro County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Nevada County (Western part), CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00	-0.02
Nevada County (Western part), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00	-0.02
New Haven County, CT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
New Haven-Meriden-Waterbury, CT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.02	0.00	-0.04	-0.16
New Madrid County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
New Manchester-Grant magisterial district in Hancock County, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
New York County, NY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	0.00	-0.01	-0.06
New York-N. New Jersey-Long Island, NY-NJ-CT	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.15	-0.26	-0.04	-0.59	-2.46
New York-N. New Jersey-Long Island, NY-NJ-CT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.08	-0.15	-0.02	-0.33	-1.36
New York-N. New Jersey-Long Island, NY-NJ-CT	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.15	-0.27	-0.04	-0.60	-2.51
New York-Northern New Jersey-Long Island, NY-NJ-CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.15	-0.26	-0.04	-0.59	-2.46
Nogales, AZ	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Northern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.02	-0.04	-0.01	-0.08	-0.35

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Oakridge, OR	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Ogden, UT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	-0.01
Ogden, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Olmsted County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Olmsted County; City of Rochester, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01	-0.02
Oneida County: Rhinelander Sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	-0.01
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Pekin, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	-0.01
Penns Grove, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Peoria County: Hollis twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	0.00
Peoria, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	-0.02
Perth Amboy, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	-0.01
Philadelphia-Camden County, PA-NJ	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.02	0.00	-0.05	-0.19
Philadelphia-Wilmington, PA-NJ-DE (NJ Portion)	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.01	-0.02	0.00	-0.05	-0.21
Philadelphia-Wilmington, PA-NJ-DE (PA-DE Portion)	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.04	-0.07	-0.01	-0.16	-0.65
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.07	-0.13	-0.02	-0.28	-1.18
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.07	-0.13	-0.02	-0.28	-1.18
Phoenix, AZ	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.05	-0.09	-0.02	-0.21	-0.88
Phoenix-Mesa, AZ	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-0.05	-0.10	-0.02	-0.22	-0.90
Phoenix-Mesa, AZ	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.05	-0.10	-0.02	-0.22	-0.91
Pierce County; Tacoma, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Pima County; Ajo planning area, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Pima County; Rillito planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Pinal County (part); West Pinal, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	-0.01	-0.04
Pitkin County; Aspen, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Pittsburgh, PA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01	-0.05
Pittsburgh-Beaver Valley, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.02	-0.04	-0.01	-0.09	-0.39

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Pittsburgh-Beaver Valley, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.04	-0.01	-0.08	-0.35
Plumas County, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00	0.00
Polk County, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	0.00
Portland, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.03	0.00	-0.06	-0.25
Power-Bannock Counties; Fort Hall Indian Reservation, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Power-Bannock Counties; Portneuf Valley Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Provo, UT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.00	0.00	0.00	-0.01	-0.03
Provo, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.01	-0.01	0.00	-0.03	-0.11
Prowers County; Lamar, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Raleigh-Durham, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.04	-0.01	-0.09	-0.35
Ramsey County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Reading, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	-0.01	0.00	-0.02	-0.07
Reno, NV	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	0.00	-0.01	-0.05
Rhineland, WI	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00
Riverside County (Coachella Valley), CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-0.01	-0.01	0.00	-0.03	-0.11
Riverside County (Coachella Valley), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-0.01	-0.01	0.00	-0.03	-0.11
Riverside County; Coachella Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.01	-0.01	0.00	-0.03	-0.12
Riverside, Los Angeles, Orange, & San Bernardino Counties; South Coast Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.19	-0.34	-0.05	-0.76	-3.17
Rosebud County; Lame Deer, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Routt County (part); Steamboat Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Rusk and Panola Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Sacramento County, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.03	0.00	-0.06	-0.25
Sacramento Metro, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.03	-0.05	-0.01	-0.10	-0.44
Sacramento Metro, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.03	-0.05	-0.01	-0.10	-0.44
Sacramento, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.03	0.00	-0.07	-0.29
Sacramento, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.03	-0.05	-0.01	-0.10	-0.43

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Salem, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	0.00	-0.01	-0.05
Salt Lake City, UT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01	-0.05
Salt Lake City, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.02	-0.04	-0.01	-0.09	-0.37
Salt Lake County, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	0.00	-0.05	-0.22
Salt Lake County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	-0.01	-0.02	0.00	-0.05	-0.22
San Antonio, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.02	-0.04	-0.01	-0.09	-0.39
San Bernardino County, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.01	0.00	-0.02	-0.10
San Diego County, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.04	-0.07	-0.01	-0.16	-0.68
San Diego County, CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-0.04	-0.07	-0.01	-0.16	-0.68
San Diego, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.04	-0.07	-0.01	-0.16	-0.68
San Francisco Bay Area, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.08	-0.15	-0.02	-0.33	-1.39
San Francisco Bay Area, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.08	-0.15	-0.02	-0.33	-1.39
San Francisco Bay Area, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.08	-0.15	-0.02	-0.33	-1.39
San Francisco-Oakland-San Jose, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.08	-0.14	-0.02	-0.31	-1.31
San Joaquin Valley Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.05	-0.09	-0.01	-0.20	-0.81
San Joaquin Valley, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-0.05	-0.09	-0.01	-0.20	-0.81
San Joaquin Valley, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-0.05	-0.09	-0.01	-0.20	-0.81
San Joaquin Valley, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.05	-0.09	-0.01	-0.20	-0.81
San Joaquin Valley, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-0.05	-0.09	-0.01	-0.20	-0.81
San Luis Obispo (Eastern San Luis Obispo), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00
San Luis Obispo (Eastern part), CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00
San Manuel (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
San Miguel County; Telluride, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Sanders County (part); Thompson Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Santa Cruz County; Nogales planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Seaford, DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	-0.01	0.00	-0.01	-0.06
Seattle-Tacoma, WA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.04	-0.06	-0.01	-0.14	-0.59
Sheboygan County, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Sheridan County; City of Sheridan, WY	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Shoreline Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Shoshone County; City of Pinehurst, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Shoshone County; Pinehurst Expansion Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Silver Bow County; Butte, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Somerville, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Southern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.01	0.00	-0.03	-0.11
Southwest Indiana, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00
Spokane County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	0.00	-0.02	-0.07
Spokane, WA	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	-0.01	0.00	-0.02	-0.07
Springfield, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01	-0.02
St. Bernard Parish, LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	-0.01
St. Clair, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	-0.01
St. Lawrence County, NY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
St. Louis, MO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.02	0.00	-0.04	-0.15
St. Louis, MO-IL	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.03	-0.06	-0.01	-0.13	-0.55
St. Louis-St. Charles-Farmington, MO-IL	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.03	-0.06	-0.01	-0.13	-0.55
Steubenville, OH-WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	-0.01
Steubenville-Weirton, OH-WV	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	0.00	0.00	0.00	-0.02
Stockton, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	0.00	-0.02	-0.08
Sullivan County, TN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	-0.01
Sutter Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00
Syracuse, NY	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.01	0.00	-0.02	-0.10
Tacoma, WA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	0.00	-0.03	-0.10
Tazewell County: Groveland twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Terre Haute, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	-0.01
Thurston County; Cities of Olympia, Tumwater, and Lacey, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.02
Titus County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Toms River, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Tooele County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	0.00
Trenton, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	-0.02
Trona, CA	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Tucson, AZ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.02	0.00	-0.04	-0.15
Tuolumne County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	-0.01
Tuscan Buttes, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00
Tuscan Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	0.00	0.00
Uinta Basin, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	-0.01
Union County; LaGrande, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Upper Green River Basin Area, WY	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	-0.01
Utah County, UT	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	0.00	-0.03	-0.12
Vancouver, WA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	0.00	-0.02	-0.06
Ventura County, CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-0.01	-0.02	0.00	-0.04	-0.16
Ventura County, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.01	-0.02	0.00	-0.04	-0.16
Vermillion County; Part of Clinton Township, IN	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Vigo County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01	-0.03
Walla Walla County; Wallula, WA	PM ₁₀ (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00	0.00
Waltham, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	-0.01
Warren County, NJ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	-0.01
Warren County: Conewago Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Warren County: Warren Boro, Pleasant Twp, Glade Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	0.00
Warren, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Washington, DC-MD-VA	Ozone (2008 8-hour)	Nonattainment (DC) Maintenance (MD, VA), Marginal	50	0	-0.06	-0.11	-0.02	-0.25	-1.06
Washington, DC-MD-VA	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.06	-0.11	-0.02	-0.25	-1.06
Washington, DC-MD-VA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.01	0.00	-0.03	-0.13
Washoe County; Reno planning area, NV	PM ₁₀ (1987 24-hour)	Maintenance, Serious	100	0	0.00	-0.01	0.00	-0.01	-0.05
Wayne County, MI	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Wayne County: Boston, Center, Franklin, Wayne & Webster Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	-0.01
West Central Pinal, AZ	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
West Silver Valley, ID	PM _{2.5} (2012 Annual)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Whatcom County, WA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Winston-Salem, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.01	0.00	-0.02	-0.10
Worcester, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01	-0.04
Yakima County, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.02
Yakima, WA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	-0.01
Yuba City-Marysville, CA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.03
Yuma, AZ	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	-0.01	-0.02
Yuma, AZ	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.04

Notes:
^a Nonattainment or maintenance status as of 2/1/2024. Source: EPA, The Green Book Nonattainment Areas for Criteria Pollutants; <http://www.epa.gov/airquality/greenbook/>. "--" indicates that no severity classification has been established for the NAAQS pollutant.
^b Emissions thresholds in tons per year. Where the threshold differs by precursor pollutant, the smallest of the precursor thresholds is shown. These thresholds are provided for information only; a general conformity determination is not required for the Proposed Action. Source: 40 CFR 93.853.
^c Positive values are emissions increases; negative values are emissions decreases.
EPA = U.S. Environmental Protection Agency; NAAQS = National Ambient Air Quality Standard; CO = carbon monoxide; NO₂ = nitrogen dioxide; PM_{2.5} = particulate matter less than 2.5 microns in size; PM₁₀ = particulate matter less than 10 microns in size; SO₂ = sulfur dioxide.

Table D-19. Changes in Emissions from U.S. Passenger Cars and Light Trucks by Nonattainment or Maintenance Area and Alternative, Direct and Indirect Impacts--Diesel Particulate Matter (DPM), 2035

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Ada County; Boise, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.03	-0.08	-0.11	-0.17	-0.34
Adams, Denver, and Boulder Counties; Denver Metropolitan area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.53	-1.45	-1.98	-3.13	-6.34
Ajo (Pima County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Albuquerque, NM	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.01	-0.02	-0.03
Allegan County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01	-0.01	-0.02
Allegheny County Air Basin: Hazelwood monitor, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.02	-0.02	-0.04	-0.08
Allegheny County, PA	PM _{2.5} (2012 Annual)	Nonattainment, Moderate	100	0	-0.12	-0.33	-0.45	-0.72	-1.45
Allegheny County; Liberty, Lincoln, Port Vue, Glassport, Clairton, PA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.02	-0.03	-0.06
Allegheny, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.08	-0.23	-0.32	-0.51	-1.02
Allentown, PA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	-0.03	-0.08	-0.11	-0.18	-0.36
Allentown-Bethlehem-Easton, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.03	-0.08	-0.11	-0.18	-0.36
Alton Township, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.97	-2.68	-3.66	-5.80	-11.73
Amador County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00
Anchorage, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.02	-0.04	-0.06	-0.10	-0.20
Anchorage; Eagle River, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.04	-0.06	-0.10	-0.20
Anne Arundel County and Baltimore County, MD	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Archuleta County; Pagosa Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.14	-0.39	-0.54	-0.85	-1.72
Armstrong County; Madison, Mahoning, Boggs, Washington, Pine, PA	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	-0.05	-0.13	-0.17	-0.27	-0.55
Aroostock County; City of Presque Isle, ME	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Atlanta, GA	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-0.01	-0.04	-0.05	-0.09	-0.17
Atlanta, GA	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.01	-0.04	-0.05	-0.08	-0.16
Atlantic City, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Bakersfield, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.18	-0.49	-0.67	-1.07	-2.16
Baltimore, MD	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	-0.12	-0.34	-0.46	-0.73	-1.47
Baltimore, MD	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.12	-0.33	-0.46	-0.72	-1.46
Baltimore, MD	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.01	-0.02	-0.04
Baton Rouge, LA	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-3.33	-9.20	-12.56	-19.88	-40.24

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Beaver, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	-0.01	-0.01
Benton County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	0.00
Berrien County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.01	-0.02	-0.04
Billings, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.80	-2.20	-3.00	-4.76	-9.63
Billings, MT	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.80	-2.20	-3.00	-4.76	-9.63
Birmingham, AL	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.25	-0.69	-0.94	-1.49	-3.02
Boise-Northern Ada County, ID	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.03	-0.08	-0.11	-0.17	-0.34
Bonner County; The Sandpoint Area, ID	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Boston, MA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.02	-0.03	-0.05
Boyd County (part), KY	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.98	-2.70	-3.69	-5.84	-11.83
Brooke; Follansbee area, WV	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01	-0.01	-0.02
Brown County: Green Bay, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Burlington, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Butte County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	-0.01	-0.01
Calaveras County, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00
Calaveras County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00
Campbell-Clermont Counties, KY-OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00
Canton-Massillon, OH	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.65	-1.79	-2.45	-3.87	-7.83
Central New Hampshire, NH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00
Central Steptoe Valley, NV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Charleston, WV	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.05	-0.12	-0.17	-0.27	-0.55
Charlotte, NC	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Charlotte-Rock Hill, NC-SC	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	-0.01	-0.01	-0.01	-0.02
Chicago, IL-IN-WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-9.65	-26.65	-36.39	-57.60	-116.60
Chicago-Naperville, IL-IN-WI	Ozone (2008 8-hour)	Maintenance, Serious	100	0	-4.90	-13.52	-18.47	-29.23	-59.17
Chico (Butte County), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	-0.01	-0.01
Chico, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00
Chico, CA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.01
Cincinnati, OH-KY (OH Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.01	-0.02	-0.02	-0.04	-0.07

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Cincinnati, OH-KY (KY Portion)	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	-0.16	-0.45	-0.62	-0.98	-1.98
Cincinnati, OH-KY-IN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.18	-0.49	-0.67	-1.05	-2.13
Clark County; Las Vegas planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.20	-0.55	-0.76	-1.20	-2.43
Cleveland, OH	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.42	-1.15	-1.57	-2.48	-5.03
Cleveland, OH	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	-0.01
Cleveland, OH	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	0.00	-0.01	-0.01	-0.02
Cleveland-Akron-Lorain, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.42	-1.17	-1.60	-2.53	-5.12
Cleveland-Akron-Lorain, OH	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.42	-1.15	-1.57	-2.48	-5.03
Cochise County; Paul Spur/Douglas planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Colorado Springs, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.04	-0.12	-0.16	-0.26	-0.52
Columbus, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.04	-0.10	-0.14	-0.22	-0.44
Columbus, OH	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.04	-0.10	-0.13	-0.21	-0.43
Cook County; Lyons Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01	-0.01	-0.02
Cook County; Southeast Chicago, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-2.73	-7.55	-10.31	-16.31	-33.02
Coshocton County; Franklin Township, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.01	-0.02	-0.03
Coso Junction, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.14	-0.40	-0.54	-0.86	-1.74
Cuyahoga County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Cuyahoga County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Dallas-Fort Worth, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.25	-0.70	-0.95	-1.50	-3.04
Dallas-Fort Worth, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.25	-0.70	-0.95	-1.50	-3.04
Dane County; Madison sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Delaware County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-4.00	-11.04	-15.08	-23.86	-48.31
Denver Metro/North Front Range, CO	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-1.44	-3.98	-5.44	-8.60	-17.41
Denver-Boulder, CO	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.53	-1.47	-2.00	-3.17	-6.42
Denver-Boulder-Greeley-Ft. Collins-Loveland, CO	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.77	-2.13	-2.91	-4.61	-9.34
Detroit, MI	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	-1.44	-3.97	-5.42	-8.58	-17.36
Detroit, MI	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.23	-0.64	-0.88	-1.39	-2.80
Detroit, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.22	-0.61	-0.83	-1.31	-2.65
Detroit-Ann Arbor, MI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-1.44	-3.97	-5.42	-8.58	-17.36

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Doña Ana County; Anthony, NM	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.42	-1.15	-1.58	-2.50	-5.05
Door County, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	0.00	0.00
Door County-Revised, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	0.00	0.00
Douglas (Cochise County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Dukes County, MA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	0.00	0.00
Duluth, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.06	-0.08	-0.12	-0.25
East Chicago, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-2.73	-7.54	-10.30	-16.30	-33.00
East Helena Area, MT	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	0.00
East Kern County, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.15	-0.40	-0.55	-0.87	-1.76
El Paso County, TX	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.42	-1.17	-1.59	-2.52	-5.10
El Paso, TX	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.42	-1.16	-1.58	-2.50	-5.06
El Paso-Las Cruces, TX-NM	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.84	-2.31	-3.15	-4.99	-10.11
Eugene-Springfield, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Evangeline Parish (Partial), LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Fairbanks, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.02	-0.05	-0.07	-0.12	-0.24
Fairbanks, AK	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.02	-0.05	-0.07	-0.12	-0.24
Flathead County; Columbia Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Flathead County; Kalispell and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Flathead County; Whitefish and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Fort Collins, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.02	-0.03	-0.05	-0.10
Freehold, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Freestone and Anderson Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.04	-0.05	-0.08	-0.16
Fremont County; Canon City Area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Fresno, CA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.08	-0.21	-0.29	-0.45	-0.91
Gila County (part): Payson, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Giles County, VA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Grant County, NM	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Grants Pass, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00
Great Falls, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.12	-0.34	-0.46	-0.73	-1.48
Greater Connecticut, CT	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00	-0.01
Greater Connecticut, CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	0.00	0.00	0.00	0.00	-0.01
Greeley, CO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-1.41	-3.90	-5.32	-8.43	-17.06
Hancock County (part): Weirton, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.04	-0.10	-0.14	-0.22	-0.45
Hancock and Brooke Counties (Part); The city of Weirton, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.04	-0.10	-0.14	-0.22	-0.45
Harrisburg-Lebanon-Carlisle-York, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Hartford-New Britain-Middletown, CT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.01	-0.01	-0.02
Hayden (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Hayden, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Hayden, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Henderson-Webster Counties, KY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	-0.02	-0.03	-0.05
Hillsborough County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.03	-0.03	-0.06	-0.11
Hillsborough-Polk County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.03	-0.03	-0.06	-0.11
Houston-Galveston-Brazoria, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-10.25	-28.30	-38.65	-61.17	-123.84
Houston-Galveston-Brazoria, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-10.24	-28.27	-38.61	-61.11	-123.72
Howard County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.43	-1.19	-1.63	-2.58	-5.22
Humphreys County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	0.00
Huntington, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Hutchinson County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.64	-1.77	-2.41	-3.82	-7.74
Imperial County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Imperial County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00
Imperial County, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Imperial County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Imperial Valley, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00	0.00
Indian Wells, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.14	-0.39	-0.53	-0.83	-1.69
Indiana, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.14	-0.38	-0.52	-0.82	-1.66

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Indianapolis, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Indianapolis, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.01	-0.01	-0.01	-0.02
Inland Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Inyo County; Owens Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.02	-0.05	-0.06	-0.10	-0.21
Jackson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00
Jackson County; Medford-Ashland (including White City), OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Jamestown, NY	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.41	-1.12	-1.53	-2.42	-4.90
Jefferson County, KY	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00
Jefferson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00
Jefferson County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01	-0.01	-0.02
Jefferson County; (part) Steubenville & Mingo Junction, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.04	-0.10	-0.14	-0.22	-0.45
Johnstown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.08	-0.23	-0.32	-0.50	-1.02
Josephine County; Grants Pass, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Juneau; Mendenhall Valley area, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Kern County (Eastern Kern), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-3.56	-9.82	-13.41	-21.23	-42.98
Kern County (Eastern Kern), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-3.56	-9.82	-13.41	-21.23	-42.98
King County; Kent, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
King County; Seattle, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Klamath Falls, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	-0.01	-0.01
Klamath Falls, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.01
Klamath Falls, OR	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.01
Knoxville, TN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	0.00	0.00	-0.01
Knoxville-Sevierville-La Follette, TN	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.01
La Porte County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
LaSalle County; Oglesby, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.02	-0.03
Lake County (part); Lakeview, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Lake County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-2.74	-7.57	-10.34	-16.36	-33.12
Lake County, OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	-0.01
Lake County; (part) Eastlake, Timberlake, Lakeline, Willoughby, Mentor, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Lake County; Cities of East Chicago, Hammond, Whiting, and Gary, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-2.74	-7.56	-10.32	-16.34	-33.08
Lake County; Polson, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Lake County; Ronan, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Lake Tahoe North Shore, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Lake Tahoe South Shore, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00
Lake Tahoe, NV	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Lancaster, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	-0.01	-0.01	-0.02	-0.04
Lancaster, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.02	-0.04
Lane County (part); Oakridge, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Lane County; Eugene/Springfield, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Las Vegas, NV	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.20	-0.55	-0.76	-1.20	-2.43
Las Vegas, NV	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.20	-0.56	-0.76	-1.20	-2.43
Laurel Area (Yellowstone County), MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	-0.80	-2.20	-3.00	-4.76	-9.63
Lebanon County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Lemont, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-2.08	-5.74	-7.84	-12.41	-25.12
Liberty-Clairton, PA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.01	-0.02	-0.03	-0.06
Lincoln County; Libby and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Logan, UT-ID	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Longmont, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.15	-0.41	-0.56	-0.89	-1.81
Lorain County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-3.55	-9.81	-13.39	-21.20	-42.92
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-3.55	-9.81	-13.39	-21.20	-42.92
Los Angeles-South Coast Air Basin, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-3.66	-10.09	-13.78	-21.81	-44.16
Los Angeles-South Coast Air Basin, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-3.66	-10.09	-13.78	-21.81	-44.15
Los Angeles-South Coast Air Basin, CA	CO (1971 8-hour)	Maintenance, Serious	100	0	-3.65	-10.09	-13.78	-21.80	-44.14
Los Angeles-South Coast Air Basin, CA	NO ₂ (1971 Annual)	Maintenance, Primary	100	0	-3.65	-10.09	-13.78	-21.80	-44.14
Los Angeles-South Coast Air Basin, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-3.66	-10.09	-13.78	-21.81	-44.15
Los Angeles-South Coast Air Basin, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-3.66	-10.09	-13.78	-21.81	-44.15

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Louisville, KY-IN (IN Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	-0.01	-0.01	-0.02
Louisville, KY-IN (KY Portion)	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Lowell, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Lucas County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-1.19	-3.30	-4.50	-7.12	-14.42
Madison County; Granite City Township and Nameoki Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.98	-2.69	-3.68	-5.82	-11.78
Manchester, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Manitowoc County, WI	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	0.00	0.00	0.00
Marathon County: Rothschild Sub-city area, Rib Mountain, Weston, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	0.00
Maricopa and Pinal Counties; Phoenix planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00	0.00
Marion County: Lawrence, Washington, and Warrant Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.01	-0.01	-0.02
Mariposa County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.04	-0.05	-0.09	-0.17
Mariposa County, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.04	-0.05	-0.09	-0.17
Marshall, WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.03	-0.08	-0.11	-0.18	-0.36
Medford, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00
Memphis, TN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.39	-1.07	-1.46	-2.31	-4.68
Memphis, TN-MS-AR	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.39	-1.07	-1.47	-2.32	-4.70
Miami (Gila County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Miami, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Miami, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Millinocket AQCR 109, ME	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Milwaukee, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Milwaukee, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Milwaukee-Racine, WI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	0.00	0.00	0.00	0.00
Minneapolis-St. Paul, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.89	-2.45	-3.34	-5.29	-10.70
Minneapolis-St. Paul, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.89	-2.45	-3.34	-5.29	-10.70
Missoula, MT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00
Missoula, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Modesto, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.05	-0.14	-0.20	-0.31	-0.63
Mohave County (part); Bullhead City, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.01	-0.03
Mono Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.04	-0.05	-0.09	-0.17
Mono County; Mammoth Lake planning area, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.04	-0.05	-0.09	-0.17
Morenci (Greenlee County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Morgan County, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00
Morongo Band of Mission Indians, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	0.00	0.00	0.00
Morongo Band of Mission Indians, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00	0.00
Morristown, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Muscatine County, IA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Muscatine, IA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Muskegon County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.01
Muskingum River, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.03	-0.05	-0.07	-0.15
Nashua, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Nassau County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00
Navarro County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.02	-0.05	-0.07	-0.11	-0.21
Nevada County (Western part), CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00	0.00
Nevada County (Western part), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00	0.00
New Haven County, CT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
New Haven-Meriden-Waterbury, CT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
New Madrid County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
New Manchester-Grant magisterial district in Hancock County, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.04	-0.12	-0.16	-0.25	-0.51
New York County, NY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
New York-N. New Jersey-Long Island, NY-NJ-CT	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.83	-2.30	-3.14	-4.97	-10.05
New York-N. New Jersey-Long Island, NY-NJ-CT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.74	-2.04	-2.78	-4.41	-8.92
New York-N. New Jersey-Long Island, NY-NJ-CT	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.83	-2.28	-3.12	-4.94	-9.99
New York-Northern New Jersey-Long Island, NY-NJ-CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.83	-2.30	-3.15	-4.98	-10.08
Nogales, AZ	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Northern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.54	-1.50	-2.05	-3.24	-6.56

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Oakridge, OR	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Ogden, UT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00
Ogden, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Olmsted County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Olmsted County; City of Rochester, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Oneida County; Rhinelander Sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	0.00
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Pekin, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00
Penns Grove, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Peoria County: Hollis twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	0.00
Peoria, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.02	-0.03	-0.05	-0.11
Perth Amboy, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.02	-0.02	-0.03	-0.07
Philadelphia-Camden County, PA-NJ	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-3.13	-8.64	-11.80	-18.67	-37.80
Philadelphia-Wilmington, PA-NJ-DE (NJ Portion)	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.61	-1.68	-2.29	-3.63	-7.34
Philadelphia-Wilmington, PA-NJ-DE (PA-DE Portion)	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-3.51	-9.68	-13.22	-20.92	-42.35
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-4.11	-11.36	-15.51	-24.55	-49.69
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-9.31	-25.70	-35.10	-55.55	-112.47
Phoenix, AZ	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00	0.00
Phoenix-Mesa, AZ	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Phoenix-Mesa, AZ	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Pierce County; Tacoma, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.03	-0.07	-0.10	-0.16	-0.32
Pima County; Ajo planning area, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Pima County; Rillito planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Pinal County (part); West Pinal, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00	-0.01
Pitkin County; Aspen, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.03	-0.09	-0.13	-0.20	-0.41
Pittsburgh, PA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.03	-0.04	-0.06	-0.13
Pittsburgh-Beaver Valley, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.37	-1.02	-1.40	-2.21	-4.47

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Pittsburgh-Beaver Valley, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.34	-0.95	-1.30	-2.05	-4.16
Plumas County, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00	0.00
Polk County, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	0.00
Portland, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.06	-0.17	-0.24	-0.38	-0.76
Power-Bannock Counties; Fort Hall Indian Reservation, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Power-Bannock Counties; Portneuf Valley Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Provo, UT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00
Provo, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.34	-0.94	-1.28	-2.03	-4.11
Prowers County; Lamar, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Raleigh-Durham, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00
Ramsey County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.87	-2.41	-3.28	-5.20	-10.53
Reading, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	-0.01	-0.01	-0.02
Reno, NV	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00
Rhineland, WI	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00
Riverside County (Coachella Valley), CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	0.00	0.00	0.00	0.00	0.00
Riverside County (Coachella Valley), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	0.00	0.00	0.00
Riverside County; Coachella Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00	0.00
Riverside, Los Angeles, Orange, & San Bernardino Counties; South Coast Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-3.66	-10.09	-13.78	-21.81	-44.15
Rosebud County; Lame Deer, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Routt County (part); Steamboat Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.47	-1.31	-1.79	-2.83	-5.73
Rusk and Panola Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.04	-0.12	-0.17	-0.26	-0.53
Sacramento County, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-4.84	-13.37	-18.26	-28.89	-58.50
Sacramento Metro, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-4.94	-13.65	-18.64	-29.51	-59.74
Sacramento Metro, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-4.94	-13.65	-18.64	-29.51	-59.74
Sacramento, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.34	-0.94	-1.29	-2.04	-4.12
Sacramento, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-4.94	-13.65	-18.64	-29.51	-59.74

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Salem, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Salt Lake City, UT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.54	-1.50	-2.05	-3.24	-6.56
Salt Lake City, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.54	-1.50	-2.05	-3.24	-6.56
Salt Lake County, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.54	-1.50	-2.05	-3.24	-6.56
Salt Lake County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	-0.54	-1.50	-2.05	-3.24	-6.56
San Antonio, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.08	-0.23	-0.31	-0.49	-0.98
San Bernardino County, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-3.55	-9.80	-13.39	-21.19	-42.91
San Diego County, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.01	-0.02	-0.03	-0.05	-0.09
San Diego County, CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-0.01	-0.02	-0.03	-0.05	-0.09
San Diego, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.02	-0.03	-0.05	-0.09
San Francisco Bay Area, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-5.07	-14.00	-19.12	-30.26	-61.25
San Francisco Bay Area, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-5.07	-14.00	-19.12	-30.26	-61.25
San Francisco Bay Area, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-5.07	-14.00	-19.12	-30.26	-61.25
San Francisco-Oakland-San Jose, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-5.12	-14.15	-19.32	-30.58	-61.90
San Joaquin Valley Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-8.54	-23.56	-32.18	-50.93	-103.11
San Joaquin Valley, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-8.54	-23.56	-32.18	-50.93	-103.11
San Joaquin Valley, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-8.54	-23.56	-32.18	-50.93	-103.11
San Joaquin Valley, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-8.54	-23.56	-32.18	-50.93	-103.11
San Joaquin Valley, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-8.54	-23.56	-32.18	-50.93	-103.11
San Luis Obispo (Eastern San Luis Obispo), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.20	-0.55	-0.75	-1.19	-2.42
San Luis Obispo (Eastern part), CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.20	-0.55	-0.75	-1.19	-2.42
San Manuel (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
San Miguel County; Telluride, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.05	-0.06	-0.10	-0.21
Sanders County (part); Thompson Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Santa Cruz County; Nogales planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Seaford, DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	0.00	0.00
Seattle-Tacoma, WA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.03	-0.07	-0.10	-0.16	-0.32
Sheboygan County, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Sheridan County; City of Sheridan, WY	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.02	-0.04
Shoreline Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Shoshone County; City of Pinehurst, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Shoshone County; Pinehurst Expansion Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Silver Bow County; Butte, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Somerville, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Southern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.34	-0.94	-1.28	-2.03	-4.11
Southwest Indiana, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.01	-0.01	-0.02	-0.05
Spokane County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.01
Spokane, WA	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	-0.01	-0.01
Springfield, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	-0.01
St. Bernard Parish, LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-1.18	-3.27	-4.47	-7.07	-14.31
St. Clair, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	-0.01
St. Lawrence County, NY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
St. Louis, MO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.99	-2.74	-3.74	-5.93	-12.00
St. Louis, MO-IL	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-1.99	-5.51	-7.52	-11.90	-24.10
St. Louis-St. Charles-Farmington, MO-IL	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-1.02	-2.82	-3.85	-6.09	-12.32
Steubenville, OH-WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.10	-0.29	-0.39	-0.62	-1.25
Steubenville-Weirton, OH-WV	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.09	-0.26	-0.35	-0.56	-1.12
Stockton, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.04	-0.06	-0.09	-0.19
Sullivan County, TN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Sutter Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00
Syracuse, NY	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00
Tacoma, WA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.03	-0.07	-0.10	-0.16	-0.32
Tazewell County: Groveland twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Terre Haute, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	-0.01
Thurston County; Cities of Olympia, Tumwater, and Lacey, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Titus County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Toms River, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Tooele County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	-0.34	-0.94	-1.28	-2.03	-4.11
Trenton, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Trona, CA	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	-0.14	-0.38	-0.51	-0.81	-1.64
Tucson, AZ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Tuolumne County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.04	-0.05	-0.09	-0.18
Tuscan Buttes, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00
Tuscan Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	0.00	0.00
Uinta Basin, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.14	-0.38	-0.52	-0.83	-1.67
Union County; LaGrande, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Upper Green River Basin Area, WY	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.23	-0.63	-0.86	-1.37	-2.77
Utah County, UT	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.40	-1.10	-1.50	-2.38	-4.82
Vancouver, WA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	-0.01
Ventura County, CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-3.55	-9.80	-13.39	-21.19	-42.89
Ventura County, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-3.55	-9.80	-13.39	-21.19	-42.89
Vermillion County; Part of Clinton Township, IN	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Vigo County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.01	-0.02	-0.03	-0.06
Walla Walla County; Wallula, WA	PM ₁₀ (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00	0.00
Waltham, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Warren County, NJ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	0.00
Warren County: Conewago Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.40	-1.11	-1.52	-2.40	-4.87
Warren County: Warren Boro, Pleasant Twp, Glade Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.42	-1.16	-1.58	-2.50	-5.06
Warren, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.42	-1.17	-1.60	-2.54	-5.13
Washington, DC-MD-VA	Ozone (2008 8-hour)	Nonattainment (DC) Maintenance (MD, VA), Marginal	50	0	0.00	-0.01	-0.01	-0.02	-0.03
Washington, DC-MD-VA	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	0.00	0.00	-0.01	-0.01	-0.01
Washington, DC-MD-VA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00
Washoe County; Reno planning area, NV	PM ₁₀ (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00	0.00
Wayne County, MI	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.22	-0.60	-0.82	-1.30	-2.63

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Wayne County: Boston, Center, Franklin, Wayne & Webster Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
West Central Pinal, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
West Silver Valley, ID	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Whatcom County, WA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.43	-1.19	-1.63	-2.57	-5.21
Winston-Salem, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00
Worcester, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Yakima County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Yakima, WA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Yuba City-Marysville, CA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Yuma, AZ	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00
Yuma, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00

Notes:
^a Nonattainment or maintenance status as of 2/1/2024. Source: EPA, The Green Book Nonattainment Areas for Criteria Pollutants; <http://www.epa.gov/airquality/greenbook/>. "--" indicates that no severity classification has been established for the NAAQS pollutant.
^b Emissions thresholds in tons per year. Where the threshold differs by precursor pollutant, the smallest of the precursor thresholds is shown. These thresholds are provided for information only; a general conformity determination is not required for the Proposed Action. Source: 40 CFR 93.853.
^c Positive values are emissions increases; negative values are emissions decreases.
 EPA = U.S. Environmental Protection Agency; NAAQS = National Ambient Air Quality Standard; CO = carbon monoxide; NO₂ = nitrogen dioxide; PM2.5 = particulate matter less than 2.5 microns in size; PM10 = particulate matter less than 10 microns in size; SO₂ = sulfur dioxide.

Table D-20. Changes in Emissions from U.S. Passenger Cars and Light Trucks by Nonattainment or Maintenance Area and Alternative, Direct and Indirect Impacts--Diesel Particulate Matter (DPM), 2050

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Ada County; Boise, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.03	-0.05	-0.06	-0.15	-0.42
Adams, Denver, and Boulder Counties; Denver Metropolitan area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.50	-0.98	-1.11	-2.67	-7.64
Ajo (Pima County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Albuquerque, NM	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.01	-0.01	-0.04
Allegan County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.02
Allegheny County Air Basin: Hazelwood monitor, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.01	-0.01	-0.03	-0.10
Allegheny County, PA	PM _{2.5} (2012 Annual)	Nonattainment, Moderate	100	0	-0.11	-0.22	-0.25	-0.61	-1.75
Allegheny County; Liberty, Lincoln, Port Vue, Glassport, Clairton, PA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.01	-0.03	-0.08
Allegheny, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.08	-0.16	-0.18	-0.43	-1.23
Allentown, PA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	-0.03	-0.05	-0.06	-0.15	-0.43
Allentown-Bethlehem-Easton, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.03	-0.05	-0.06	-0.15	-0.43
Alton Township, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.93	-1.81	-2.05	-4.94	-14.14
Amador County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00
Anchorage, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.02	-0.03	-0.03	-0.08	-0.24
Anchorage; Eagle River, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.03	-0.03	-0.08	-0.24
Anne Arundel County and Baltimore County, MD	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Archuleta County; Pagosa Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.14	-0.26	-0.30	-0.72	-2.07
Armstrong County; Madison, Mahoning, Boggs, Washington, Pine, PA	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	-0.04	-0.09	-0.10	-0.23	-0.66
Aroostock County; City of Presque Isle, ME	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Atlanta, GA	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-0.01	-0.03	-0.03	-0.07	-0.21
Atlanta, GA	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.01	-0.03	-0.03	-0.07	-0.20
Atlantic City, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Bakersfield, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.17	-0.34	-0.38	-0.92	-2.62
Baltimore, MD	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	-0.12	-0.23	-0.26	-0.62	-1.77
Baltimore, MD	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.12	-0.23	-0.26	-0.62	-1.76
Baltimore, MD	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.01	-0.02	-0.05
Baton Rouge, LA	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-3.19	-6.20	-7.03	-16.93	-48.48

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Beaver, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	-0.01	-0.02
Benton County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	0.00
Berrien County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.01	-0.02	-0.05
Billings, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.76	-1.48	-1.68	-4.05	-11.60
Billings, MT	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.76	-1.48	-1.68	-4.05	-11.60
Birmingham, AL	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.24	-0.47	-0.53	-1.27	-3.64
Boise-Northern Ada County, ID	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.03	-0.05	-0.06	-0.15	-0.42
Bonner County; The Sandpoint Area, ID	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Boston, MA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.01	-0.02	-0.06
Boyd County (part), KY	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.94	-1.82	-2.07	-4.98	-14.25
Brooke; Follansbee area, WV	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.02
Brown County: Green Bay, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Burlington, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Butte County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	-0.01
Calaveras County, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	-0.01
Calaveras County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	-0.01
Campbell-Clermont Counties, KY-OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00
Canton-Massillon, OH	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.62	-1.21	-1.37	-3.30	-9.44
Central New Hampshire, NH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00
Central Steptoe Valley, NV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Charleston, WV	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.04	-0.08	-0.10	-0.23	-0.66
Charlotte, NC	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Charlotte-Rock Hill, NC-SC	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	0.00	-0.01	-0.03
Chicago, IL-IN-WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-9.24	-17.97	-20.37	-49.06	-140.49
Chicago-Naperville, IL-IN-WI	Ozone (2008 8-hour)	Maintenance, Serious	100	0	-4.69	-9.12	-10.34	-24.90	-71.30
Chico (Butte County), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	-0.01
Chico, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00
Chico, CA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Cincinnati, OH-KY (OH Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.01	-0.01	-0.01	-0.03	-0.09

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Cincinnati, OH-KY (KY Portion)	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	-0.16	-0.31	-0.35	-0.83	-2.39
Cincinnati, OH-KY-IN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.17	-0.33	-0.37	-0.90	-2.57
Clark County; Las Vegas planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.19	-0.38	-0.43	-1.03	-2.96
Cleveland, OH	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.40	-0.78	-0.88	-2.12	-6.06
Cleveland, OH	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	-0.01
Cleveland, OH	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.02
Cleveland-Akron-Lorain, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.41	-0.79	-0.89	-2.15	-6.17
Cleveland-Akron-Lorain, OH	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.40	-0.77	-0.88	-2.12	-6.06
Cochise County; Paul Spur/Douglas planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Colorado Springs, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.04	-0.08	-0.09	-0.22	-0.63
Columbus, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.03	-0.07	-0.08	-0.18	-0.53
Columbus, OH	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.03	-0.07	-0.07	-0.18	-0.52
Cook County; Lyons Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.03
Cook County; Southeast Chicago, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-2.62	-5.09	-5.77	-13.89	-39.79
Coshocton County; Franklin Township, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.01	-0.01	-0.04
Coso Junction, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.14	-0.27	-0.30	-0.73	-2.09
Cuyahoga County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Cuyahoga County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	-0.01
Dallas-Fort Worth, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.24	-0.47	-0.53	-1.28	-3.67
Dallas-Fort Worth, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.24	-0.47	-0.53	-1.28	-3.67
Dane County; Madison sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Delaware County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-3.83	-7.45	-8.44	-20.33	-58.20
Denver Metro/North Front Range, CO	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-1.38	-2.68	-3.04	-7.33	-20.99
Denver-Boulder, CO	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.51	-0.99	-1.12	-2.70	-7.74
Denver-Boulder-Greeley-Ft. Collins-Loveland, CO	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.74	-1.45	-1.64	-3.95	-11.32
Detroit, MI	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	-1.38	-2.68	-3.03	-7.31	-20.92
Detroit, MI	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.22	-0.43	-0.49	-1.18	-3.38
Detroit, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.21	-0.41	-0.46	-1.12	-3.20
Detroit-Ann Arbor, MI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-1.38	-2.68	-3.03	-7.31	-20.92

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Doña Ana County; Anthony, NM	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.40	-0.78	-0.88	-2.13	-6.09
Door County, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	0.00	0.00
Door County-Revised, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	0.00	0.00
Douglas (Cochise County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Dukes County, MA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	0.00	0.00
Duluth, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.04	-0.04	-0.11	-0.30
East Chicago, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-2.61	-5.09	-5.76	-13.88	-39.76
East Helena Area, MT	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	0.00
East Kern County, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.14	-0.27	-0.31	-0.74	-2.12
El Paso County, TX	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.40	-0.79	-0.89	-2.15	-6.15
El Paso, TX	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.40	-0.78	-0.88	-2.13	-6.09
El Paso-Las Cruces, TX-NM	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.80	-1.56	-1.76	-4.25	-12.18
Eugene-Springfield, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Evangeline Parish (Partial), LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	-0.01
Fairbanks, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.02	-0.04	-0.04	-0.10	-0.29
Fairbanks, AK	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.02	-0.04	-0.04	-0.10	-0.29
Flathead County; Columbia Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Flathead County; Kalispell and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Flathead County; Whitefish and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Fort Collins, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.02	-0.02	-0.04	-0.13
Freehold, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Freestone and Anderson Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.03	-0.03	-0.07	-0.20
Fremont County; Canon City Area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Fresno, CA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.07	-0.14	-0.16	-0.39	-1.12
Gila County (part): Payson, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Giles County, VA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Grant County, NM	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Grants Pass, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00
Great Falls, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.12	-0.23	-0.26	-0.62	-1.79
Greater Connecticut, CT	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00	-0.01
Greater Connecticut, CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	0.00	0.00	0.00	0.00	-0.01
Greeley, CO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-1.35	-2.63	-2.98	-7.18	-20.55
Hancock County (part): Weirton, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.04	-0.07	-0.08	-0.19	-0.54
Hancock and Brooke Counties (Part); The city of Weirton, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.04	-0.07	-0.08	-0.19	-0.54
Harrisburg-Lebanon-Carlisle-York, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Hartford-New Britain-Middletown, CT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	-0.01	-0.03
Hayden (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Hayden, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Hayden, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Henderson-Webster Counties, KY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	-0.01	-0.02	-0.07
Hillsborough County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.02	-0.02	-0.05	-0.13
Hillsborough-Polk County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.02	-0.02	-0.05	-0.13
Houston-Galveston-Brazoria, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-9.81	-19.09	-21.63	-52.11	-149.21
Houston-Galveston-Brazoria, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-9.80	-19.07	-21.61	-52.05	-149.06
Howard County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.41	-0.80	-0.91	-2.20	-6.29
Humphreys County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	0.00
Huntington, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Hutchinson County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.61	-1.19	-1.35	-3.25	-9.32
Imperial County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Imperial County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00
Imperial County, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Imperial County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Imperial Valley, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00	0.00
Indian Wells, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.13	-0.26	-0.29	-0.71	-2.03
Indiana, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.13	-0.26	-0.29	-0.70	-2.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Indianapolis, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Indianapolis, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	-0.01	-0.03
Inland Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Inyo County; Owens Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.02	-0.03	-0.04	-0.09	-0.25
Jackson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	-0.01
Jackson County; Medford-Ashland (including White City), OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Jamestown, NY	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.39	-0.76	-0.86	-2.06	-5.90
Jefferson County, KY	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00
Jefferson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00
Jefferson County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.02
Jefferson County; (part) Steubenville & Mingo Junction, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.04	-0.07	-0.08	-0.19	-0.54
Johnstown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.08	-0.16	-0.18	-0.43	-1.23
Josephine County; Grants Pass, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Juneau; Mendenhall Valley area, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Kern County (Eastern Kern), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-3.40	-6.62	-7.50	-18.08	-51.77
Kern County (Eastern Kern), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-3.40	-6.62	-7.50	-18.08	-51.77
King County; Kent, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
King County; Seattle, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Klamath Falls, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	-0.01	-0.02
Klamath Falls, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.02
Klamath Falls, OR	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.02
Knoxville, TN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	0.00	0.00	-0.01
Knoxville-Sevierville-La Follette, TN	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.02
La Porte County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
LaSalle County; Oglesby, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.02	-0.04
Lake County (part); Lakeview, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Lake County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-2.62	-5.10	-5.78	-13.93	-39.90
Lake County, OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	-0.01
Lake County; (part) Eastlake, Timberlake, Lakeline, Willoughby, Mentor, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Lake County; Cities of East Chicago, Hammond, Whiting, and Gary, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-2.62	-5.10	-5.78	-13.92	-39.85
Lake County; Polson, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Lake County; Ronan, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Lake Tahoe North Shore, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Lake Tahoe South Shore, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00
Lake Tahoe, NV	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Lancaster, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	-0.01	-0.01	-0.02	-0.05
Lancaster, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.02	-0.05
Lane County (part); Oakridge, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Lane County; Eugene/Springfield, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Las Vegas, NV	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.19	-0.38	-0.43	-1.03	-2.96
Las Vegas, NV	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.19	-0.38	-0.43	-1.03	-2.96
Laurel Area (Yellowstone County), MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	-0.76	-1.48	-1.68	-4.05	-11.60
Lebanon County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Lemont, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-1.99	-3.87	-4.39	-10.57	-30.27
Liberty-Clairton, PA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.01	-0.01	-0.03	-0.08
Lincoln County; Libby and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Logan, UT-ID	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Longmont, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.14	-0.28	-0.32	-0.76	-2.18
Lorain County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-3.40	-6.61	-7.49	-18.05	-51.70
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-3.40	-6.61	-7.49	-18.05	-51.70
Los Angeles-South Coast Air Basin, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-3.50	-6.81	-7.72	-18.59	-53.22
Los Angeles-South Coast Air Basin, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-3.50	-6.81	-7.72	-18.59	-53.22
Los Angeles-South Coast Air Basin, CA	CO (1971 8-hour)	Maintenance, Serious	100	0	-3.50	-6.81	-7.71	-18.58	-53.20
Los Angeles-South Coast Air Basin, CA	NO ₂ (1971 Annual)	Maintenance, Primary	100	0	-3.50	-6.81	-7.71	-18.58	-53.20
Los Angeles-South Coast Air Basin, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-3.50	-6.81	-7.72	-18.59	-53.22
Los Angeles-South Coast Air Basin, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-3.50	-6.81	-7.72	-18.59	-53.22

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Louisville, KY-IN (IN Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	0.00	-0.01	-0.02
Louisville, KY-IN (KY Portion)	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Lowell, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Lucas County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-1.14	-2.22	-2.52	-6.07	-17.38
Madison County; Granite City Township and Nameoki Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.93	-1.82	-2.06	-4.96	-14.20
Manchester, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Manitowoc County, WI	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	0.00	0.00	0.00
Marathon County: Rothschild Sub-city area, Rib Mountain, Weston, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	0.00
Maricopa and Pinal Counties; Phoenix planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00	0.00
Marion County: Lawrence, Washington, and Warrant Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01	-0.02
Mariposa County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.03	-0.03	-0.07	-0.21
Mariposa County, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.03	-0.03	-0.07	-0.21
Marshall, WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.03	-0.05	-0.06	-0.15	-0.43
Medford, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00
Memphis, TN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.37	-0.72	-0.82	-1.97	-5.64
Memphis, TN-MS-AR	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.37	-0.72	-0.82	-1.98	-5.66
Miami (Gila County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Miami, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Miami, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Millinocket AQCR 109, ME	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Milwaukee, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Milwaukee, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Milwaukee-Racine, WI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	0.00	0.00	0.00	0.00
Minneapolis-St. Paul, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.85	-1.65	-1.87	-4.50	-12.89
Minneapolis-St. Paul, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.85	-1.65	-1.87	-4.50	-12.89
Missoula, MT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00
Missoula, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Modesto, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.05	-0.10	-0.11	-0.27	-0.77
Mohave County (part); Bullhead City, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01	-0.01	-0.04
Mono Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.03	-0.03	-0.07	-0.21
Mono County; Mammoth Lake planning area, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.03	-0.03	-0.07	-0.21
Morenci (Greenlee County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Morgan County, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00
Morongo Band of Mission Indians, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	0.00	0.00	0.00
Morongo Band of Mission Indians, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00	0.00
Morristown, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Muscatine County, IA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Muscatine, IA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Muskegon County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.02
Muskingum River, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.02	-0.03	-0.06	-0.17
Nashua, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Nassau County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00
Navarro County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.02	-0.03	-0.04	-0.09	-0.26
Nevada County (Western part), CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00	0.00
Nevada County (Western part), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00	0.00
New Haven County, CT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
New Haven-Meriden-Waterbury, CT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
New Madrid County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
New Manchester-Grant magisterial district in Hancock County, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.04	-0.08	-0.09	-0.21	-0.61
New York County, NY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
New York-N. New Jersey-Long Island, NY-NJ-CT	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.80	-1.55	-1.76	-4.23	-12.12
New York-N. New Jersey-Long Island, NY-NJ-CT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.71	-1.38	-1.56	-3.75	-10.75
New York-N. New Jersey-Long Island, NY-NJ-CT	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.79	-1.54	-1.75	-4.21	-12.04
New York-Northern New Jersey-Long Island, NY-NJ-CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.80	-1.55	-1.76	-4.24	-12.15
Nogales, AZ	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Northern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.52	-1.01	-1.15	-2.76	-7.90

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Oakridge, OR	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Ogden, UT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00
Ogden, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Olmsted County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Olmsted County; City of Rochester, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Oneida County: Rhinelander Sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	0.00
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Pekin, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00
Penns Grove, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Peoria County: Hollis twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	0.00
Peoria, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.02	-0.02	-0.05	-0.13
Perth Amboy, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.01	-0.01	-0.03	-0.08
Philadelphia-Camden County, PA-NJ	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-3.00	-5.83	-6.60	-15.91	-45.55
Philadelphia-Wilmington, PA-NJ-DE (NJ Portion)	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.58	-1.13	-1.28	-3.09	-8.85
Philadelphia-Wilmington, PA-NJ-DE (PA-DE Portion)	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-3.36	-6.53	-7.40	-17.82	-51.03
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-3.94	-7.66	-8.68	-20.91	-59.88
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-8.91	-17.33	-19.64	-47.32	-135.51
Phoenix, AZ	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00	0.00
Phoenix-Mesa, AZ	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Phoenix-Mesa, AZ	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Pierce County; Tacoma, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.03	-0.05	-0.06	-0.13	-0.38
Pima County; Ajo planning area, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Pima County; Rillito planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Pinal County (part); West Pinal, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00	-0.01
Pitkin County; Aspen, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.03	-0.06	-0.07	-0.17	-0.50
Pittsburgh, PA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.02	-0.02	-0.05	-0.15
Pittsburgh-Beaver Valley, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.35	-0.69	-0.78	-1.88	-5.39

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Pittsburgh-Beaver Valley, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.33	-0.64	-0.73	-1.75	-5.01
Plumas County, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00	0.00
Polk County, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	0.00
Portland, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.06	-0.12	-0.13	-0.32	-0.92
Power-Bannock Counties; Fort Hall Indian Reservation, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Power-Bannock Counties; Portneuf Valley Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Provo, UT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00
Provo, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.33	-0.63	-0.72	-1.73	-4.95
Prowers County; Lamar, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Raleigh-Durham, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00
Ramsey County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.83	-1.62	-1.84	-4.43	-12.68
Reading, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	-0.01	-0.02
Reno, NV	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00
Rhineland, WI	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00
Riverside County (Coachella Valley), CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	0.00	0.00	0.00	0.00	0.00
Riverside County (Coachella Valley), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	0.00	0.00	0.00
Riverside County; Coachella Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00	0.00
Riverside, Los Angeles, Orange, & San Bernardino Counties; South Coast Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-3.50	-6.81	-7.72	-18.59	-53.22
Rosebud County; Lame Deer, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Routt County (part); Steamboat Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.45	-0.88	-1.00	-2.41	-6.90
Rusk and Panola Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.04	-0.08	-0.09	-0.22	-0.64
Sacramento County, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-4.63	-9.02	-10.22	-24.61	-70.48
Sacramento Metro, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-4.73	-9.21	-10.43	-25.13	-71.96
Sacramento Metro, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-4.73	-9.21	-10.43	-25.13	-71.96
Sacramento, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.33	-0.64	-0.72	-1.74	-4.97
Sacramento, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-4.73	-9.21	-10.43	-25.13	-71.96

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Salem, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Salt Lake City, UT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.52	-1.01	-1.15	-2.76	-7.90
Salt Lake City, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.52	-1.01	-1.15	-2.76	-7.90
Salt Lake County, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.52	-1.01	-1.15	-2.76	-7.90
Salt Lake County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	-0.52	-1.01	-1.15	-2.76	-7.90
San Antonio, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.08	-0.15	-0.17	-0.41	-1.19
San Bernardino County, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-3.40	-6.61	-7.49	-18.05	-51.68
San Diego County, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.01	-0.01	-0.02	-0.04	-0.11
San Diego County, CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-0.01	-0.01	-0.02	-0.04	-0.11
San Diego, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.01	-0.02	-0.04	-0.11
San Francisco Bay Area, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-4.85	-9.44	-10.70	-25.78	-73.81
San Francisco Bay Area, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-4.85	-9.44	-10.70	-25.78	-73.81
San Francisco Bay Area, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-4.85	-9.44	-10.70	-25.78	-73.81
San Francisco-Oakland-San Jose, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-4.91	-9.54	-10.82	-26.06	-74.61
San Joaquin Valley Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-8.17	-15.89	-18.01	-43.39	-124.24
San Joaquin Valley, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-8.17	-15.89	-18.01	-43.39	-124.24
San Joaquin Valley, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-8.17	-15.89	-18.01	-43.39	-124.24
San Joaquin Valley, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-8.17	-15.89	-18.01	-43.39	-124.24
San Joaquin Valley, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-8.17	-15.89	-18.01	-43.39	-124.24
San Luis Obispo (Eastern San Luis Obispo), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.19	-0.37	-0.42	-1.02	-2.91
San Luis Obispo (Eastern part), CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.19	-0.37	-0.42	-1.02	-2.91
San Manuel (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
San Miguel County; Telluride, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.03	-0.04	-0.09	-0.25
Sanders County (part); Thompson Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Santa Cruz County; Nogales planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Seaford, DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	0.00	0.00
Seattle-Tacoma, WA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.03	-0.05	-0.06	-0.13	-0.38
Sheboygan County, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Sheridan County; City of Sheridan, WY	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.02	-0.06
Shoreline Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Shoshone County; City of Pinehurst, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Shoshone County; Pinehurst Expansion Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Silver Bow County; Butte, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Somerville, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Southern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.33	-0.63	-0.72	-1.73	-4.95
Southwest Indiana, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.01	-0.01	-0.02	-0.06
Spokane County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.02
Spokane, WA	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	-0.01	-0.02
Springfield, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	-0.01
St. Bernard Parish, LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-1.13	-2.21	-2.50	-6.02	-17.25
St. Clair, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	-0.01
St. Lawrence County, NY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
St. Louis, MO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.95	-1.85	-2.10	-5.05	-14.45
St. Louis, MO-IL	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-1.91	-3.71	-4.21	-10.14	-29.03
St. Louis-St. Charles-Farmington, MO-IL	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.98	-1.90	-2.15	-5.18	-14.84
Steubenville, OH-WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.10	-0.19	-0.22	-0.53	-1.51
Steubenville-Weirton, OH-WV	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.09	-0.17	-0.20	-0.47	-1.35
Stockton, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.03	-0.03	-0.08	-0.23
Sullivan County, TN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Sutter Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	-0.01
Syracuse, NY	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00
Tacoma, WA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.03	-0.05	-0.06	-0.13	-0.38
Tazewell County: Groveland twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Terre Haute, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	-0.01
Thurston County; Cities of Olympia, Tumwater, and Lacey, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Titus County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	-0.01
Toms River, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Tooele County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	-0.33	-0.63	-0.72	-1.73	-4.95
Trenton, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Trona, CA	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	-0.13	-0.25	-0.29	-0.69	-1.98
Tucson, AZ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Tuolumne County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.03	-0.03	-0.07	-0.21
Tuscan Buttes, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00
Tuscan Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	0.00	0.00
Uinta Basin, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.13	-0.26	-0.29	-0.70	-2.02
Union County; LaGrande, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Upper Green River Basin Area, WY	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.22	-0.43	-0.48	-1.16	-3.33
Utah County, UT	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.38	-0.74	-0.84	-2.03	-5.80
Vancouver, WA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	-0.01
Ventura County, CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-3.40	-6.61	-7.49	-18.05	-51.68
Ventura County, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-3.40	-6.61	-7.49	-18.05	-51.68
Vermillion County; Part of Clinton Township, IN	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Vigo County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.01	-0.03	-0.08
Walla Walla County; Wallula, WA	PM ₁₀ (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00	0.00
Waltham, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Warren County, NJ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	0.00
Warren County: Conewago Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.39	-0.75	-0.85	-2.05	-5.87
Warren County: Warren Boro, Pleasant Twp, Glade Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.40	-0.78	-0.89	-2.14	-6.12
Warren, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.41	-0.80	-0.90	-2.17	-6.22
Washington, DC-MD-VA	Ozone (2008 8-hour)	Nonattainment (DC) Maintenance (MD, VA), Marginal	50	0	0.00	-0.01	-0.01	-0.02	-0.04
Washington, DC-MD-VA	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	0.00	0.00	0.00	-0.01	-0.02
Washington, DC-MD-VA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00
Washoe County; Reno planning area, NV	PM ₁₀ (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00	0.00
Wayne County, MI	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.21	-0.41	-0.46	-1.11	-3.17

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Wayne County: Boston, Center, Franklin, Wayne & Webster Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
West Central Pinal, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
West Silver Valley, ID	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Whatcom County, WA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.41	-0.80	-0.91	-2.19	-6.27
Winston-Salem, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00
Worcester, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Yakima County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Yakima, WA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Yuba City-Marysville, CA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Yuma, AZ	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00
Yuma, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00

Notes:
^a Nonattainment or maintenance status as of 2/1/2024. Source: EPA, The Green Book Nonattainment Areas for Criteria Pollutants; <http://www.epa.gov/airquality/greenbook/>. "--" indicates that no severity classification has been established for the NAAQS pollutant.
^b Emissions thresholds in tons per year. Where the threshold differs by precursor pollutant, the smallest of the precursor thresholds is shown. These thresholds are provided for information only; a general conformity determination is not required for the Proposed Action. Source: 40 CFR 93.853.
^c Positive values are emissions increases; negative values are emissions decreases.
 EPA = U.S. Environmental Protection Agency; NAAQS = National Ambient Air Quality Standard; CO = carbon monoxide; NO₂ = nitrogen dioxide; PM2.5 = particulate matter less than 2.5 microns in size; PM10 = particulate matter less than 10 microns in size; SO₂ = sulfur dioxide.

Table D-21. Changes in Emissions from U.S. Passenger Cars and Light Trucks by Nonattainment or Maintenance Area and Alternative, Direct and Indirect Impacts--Formaldehyde, 2035

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Ada County; Boise, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.03	-0.03	-0.04	-0.09
Adams, Denver, and Boulder Counties; Denver Metropolitan area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.05	-0.16	-0.18	-0.27	-0.56
Ajo (Pima County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Albuquerque, NM	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.06	-0.07	-0.10	-0.20
Allegan County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.01	-0.01	-0.03
Allegheny County Air Basin: Hazelwood monitor, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.01	-0.01	-0.03
Allegheny County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	-0.03	-0.10	-0.11	-0.16	-0.33
Allegheny County; Liberty, Lincoln, Port Vue, Glassport, Clairton, PA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.01
Allegheny, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.04	-0.04	-0.06	-0.13
Allentown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.04	-0.04	-0.06	-0.13
Allentown-Bethlehem-Easton, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.01	-0.04	-0.05	-0.07	-0.15
Alton Township, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Amador County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	-0.01	-0.01
Anchorage, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	-0.01	-0.01	-0.01	-0.03
Anchorage; Eagle River, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Anne Arundel County and Baltimore County, MD	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.02	-0.07	-0.08	-0.12	-0.25
Archuleta County; Pagosa Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Armstrong County; Madison, Mahoning, Boggs, Washington, Pine, PA	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	-0.01	-0.03	-0.03	-0.05	-0.10
Aroostock County; City of Presque Isle, ME	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Atlanta, GA	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-0.16	-0.47	-0.53	-0.78	-1.62
Atlanta, GA	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.12	-0.37	-0.42	-0.62	-1.28
Atlantic City, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	-0.01
Bakersfield, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.06	-0.07	-0.11	-0.22
Baltimore, MD	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	-0.06	-0.19	-0.21	-0.31	-0.65
Baltimore, MD	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.06	-0.19	-0.21	-0.31	-0.65
Baltimore, MD	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00
Baton Rouge, LA	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.05	-0.15	-0.18	-0.27	-0.54

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Beaver, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	-0.01
Benton County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	-0.01
Berrien County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.02	-0.03	-0.04	-0.08
Billings, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.01	-0.01	-0.02
Billings, MT	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00
Birmingham, AL	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.04	-0.12	-0.14	-0.21	-0.43
Boise-Northern Ada County, ID	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.03	-0.03	-0.04	-0.09
Bonner County; The Sandpoint Area, ID	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Boston, MA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.05	-0.05	-0.08	-0.17
Boyd County (part), KY	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.01	-0.02	-0.04
Brooke; Follansbee area, WV	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Brown County: Green Bay, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Burlington, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Butte County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.01	-0.02	-0.02	-0.05
Calaveras County, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	-0.01	-0.01
Calaveras County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	-0.01	-0.01
Campbell-Clermont Counties, KY-OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	-0.01
Canton-Massillon, OH	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.01	-0.03	-0.04	-0.06	-0.12
Central New Hampshire, NH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.01	-0.01	-0.02	-0.04
Central Steptoe Valley, NV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Charleston, WV	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.04	-0.13	-0.15	-0.23	-0.47
Charlotte, NC	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.03	-0.10	-0.11	-0.17	-0.35
Charlotte-Rock Hill, NC-SC	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.07	-0.20	-0.22	-0.33	-0.69
Chicago, IL-IN-WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.16	-0.49	-0.54	-0.79	-1.66
Chicago-Naperville, IL-IN-WI	Ozone (2008 8-hour)	Maintenance, Serious	100	0	-0.16	-0.49	-0.54	-0.80	-1.68
Chico (Butte County), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.01	-0.02	-0.02	-0.05
Chico, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.01	-0.01	-0.02
Chico, CA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.02	-0.05
Cincinnati, OH-KY (OH Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.04	-0.11	-0.13	-0.19	-0.39
Cincinnati, OH-KY (KY Portion)	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	-0.01	-0.03	-0.03	-0.05	-0.10

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Cincinnati, OH-KY-IN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.05	-0.15	-0.17	-0.24	-0.51
Clark County; Las Vegas planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.05	-0.15	-0.17	-0.24	-0.52
Cleveland, OH	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.06	-0.17	-0.19	-0.27	-0.58
Cleveland, OH	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.06	-0.07	-0.10	-0.21
Cleveland, OH	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-0.03	-0.08	-0.09	-0.13	-0.27
Cleveland-Akron-Lorain, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.06	-0.19	-0.21	-0.30	-0.64
Cleveland-Akron-Lorain, OH	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.05	-0.16	-0.18	-0.26	-0.56
Cochise County; Paul Spur/Douglas planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Colorado Springs, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.04	-0.04	-0.06	-0.14
Columbus, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.04	-0.13	-0.15	-0.22	-0.46
Columbus, OH	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.04	-0.12	-0.14	-0.20	-0.42
Cook County; Lyons Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01	-0.01	-0.02
Cook County; Southeast Chicago, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.01	-0.02
Coshocton County; Franklin Township, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Coso Junction, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.03	-0.03	-0.05	-0.11
Cuyahoga County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.06	-0.07	-0.10	-0.21
Cuyahoga County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.02	-0.05	-0.05	-0.08	-0.17
Dallas-Fort Worth, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.33	-0.99	-1.13	-1.68	-3.46
Dallas-Fort Worth, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.32	-0.98	-1.12	-1.67	-3.43
Dane County; Madison sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.03	-0.04	-0.06	-0.12
Delaware County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-0.01	-0.03	-0.04	-0.05	-0.11
Denver Metro/North Front Range, CO	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.11	-0.32	-0.36	-0.53	-1.10
Denver-Boulder, CO	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.08	-0.25	-0.28	-0.42	-0.87
Denver-Boulder-Greeley-Ft. Collins-Loveland, CO	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.11	-0.32	-0.35	-0.52	-1.09
Detroit, MI	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	-0.12	-0.37	-0.41	-0.60	-1.26
Detroit, MI	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.05	-0.14	-0.16	-0.23	-0.49
Detroit, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.03	-0.04	-0.06	-0.12
Detroit-Ann Arbor, MI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.12	-0.37	-0.41	-0.60	-1.26
Doña Ana County; Anthony, NM	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.02	-0.02	-0.03	-0.06

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Door County, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	0.00	0.00
Door County-Revised, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	0.00	-0.01
Douglas (Cochise County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Dukes County, MA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	0.00	0.00
Duluth, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.01	-0.01	-0.02
East Chicago, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	-0.01
East Helena Area, MT	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	0.00
East Kern County, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.01	-0.03	-0.04	-0.06	-0.11
El Paso County, TX	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.02	-0.06	-0.07	-0.10	-0.21
El Paso, TX	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.02	-0.02	-0.04	-0.07
El Paso-Las Cruces, TX-NM	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.03	-0.09	-0.10	-0.15	-0.31
Eugene-Springfield, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.02	-0.02	-0.05
Evangeline Parish (Partial), LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Fairbanks, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00	-0.01
Fairbanks, AK	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	-0.01	-0.01	-0.02
Flathead County; Columbia Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Flathead County; Kalispell and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Flathead County; Whitefish and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Fort Collins, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.01	-0.02	-0.04
Freehold, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Freestone and Anderson Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.03	-0.03	-0.05	-0.10
Fremont County; Canon City Area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.01
Fresno, CA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.01	-0.04	-0.05	-0.07	-0.15
Gila County (part): Payson, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Giles County, VA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Grant County, NM	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	-0.01
Grants Pass, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	-0.01
Great Falls, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Greater Connecticut, CT	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-0.03	-0.10	-0.11	-0.16	-0.35
Greater Connecticut, CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.03	-0.10	-0.11	-0.16	-0.35
Greeley, CO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.07	-0.09	-0.13	-0.26
Hancock County (part): Weirton, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	-0.01
Hancock and Brooke Counties (Part); The city of Weirton, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Harrisburg-Lebanon-Carlisle-York, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.08	-0.08	-0.12	-0.26
Hartford-New Britain-Middletown, CT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.07	-0.08	-0.11	-0.24
Hayden (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Hayden, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Hayden, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Henderson-Webster Counties, KY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	-0.01	-0.01
Hillsborough County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00
Hillsborough-Polk County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00
Houston-Galveston-Brazoria, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.27	-0.80	-0.91	-1.35	-2.80
Houston-Galveston-Brazoria, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.25	-0.76	-0.86	-1.28	-2.65
Howard County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.02	-0.05	-0.06	-0.10	-0.19
Humphreys County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	-0.01
Huntington, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	-0.01
Hutchinson County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.02	-0.05	-0.06	-0.09	-0.17
Imperial County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.02	-0.02	-0.03	-0.05
Imperial County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.02	-0.02	-0.03	-0.05
Imperial County, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.01	-0.02	-0.04
Imperial County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.01	-0.02	-0.04
Imperial Valley, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	-0.01	-0.02	-0.02	-0.05
Indian Wells, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.03	-0.04	-0.06	-0.12
Indiana, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.03	-0.09	-0.10	-0.15	-0.31
Indianapolis, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Indianapolis, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.02	-0.05	-0.05	-0.08	-0.16
Inland Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.01
Inyo County; Owens Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Jackson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.01	-0.01	-0.02
Jackson County; Medford-Ashland (including White City), OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.02	-0.04
Jamestown, NY	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.01	-0.04	-0.05	-0.07	-0.15
Jefferson County, KY	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00
Jefferson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.01	-0.01	-0.02
Jefferson County, OH	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Jefferson County; (part) Steubenville & Mingo Junction, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.01	-0.01	-0.02
Johnstown, PA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.06	-0.07	-0.11	-0.22
Josephine County; Grants Pass, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Juneau; Mendenhall Valley area, AK	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Kern County (Eastern Kern), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.02	-0.05	-0.05	-0.08	-0.17
Kern County (Eastern Kern), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.02	-0.05	-0.05	-0.08	-0.17
King County; Kent, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
King County; Seattle, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Klamath Falls, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	-0.01
Klamath Falls, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Klamath Falls, OR	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.01
Knoxville, TN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.02	-0.05	-0.06	-0.09	-0.19
Knoxville-Sevierville-La Follette, TN	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.07	-0.08	-0.11	-0.24
La Porte County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01	-0.01
LaSalle County; Oglesby, IL	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Lake County (part); Lakeview, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Lake County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.03	-0.03	-0.05	-0.11
Lake County, OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.02	-0.02	-0.03	-0.05
Lake County; (part) Eastlake, Timbertlake, Lakeline, Willoughby, Mentor, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	-0.01
Lake County; Cities of East Chicago, Hammond, Whiting, and Gary, IN	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.02	-0.03	-0.07
Lake County; Polson, MT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Lake County; Ronan, MT	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Lake Tahoe North Shore, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Lake Tahoe South Shore, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	-0.01
Lake Tahoe, NV	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	-0.01
Lancaster, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.01	-0.04	-0.04	-0.06	-0.12
Lancaster, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.04	-0.04	-0.06	-0.12
Lane County (part); Oakridge, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Lane County; Eugene/Springfield, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.02	-0.02	-0.05
Las Vegas, NV	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.05	-0.15	-0.17	-0.24	-0.52
Las Vegas, NV	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.05	-0.15	-0.17	-0.25	-0.52
Laurel Area (Yellowstone County), MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Lebanon County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.01	-0.03
Lemont, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.01	-0.01	-0.02	-0.04
Liberty-Clairton, PA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.01
Lincoln County; Libby and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Logan, UT-ID	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.01	-0.03
Longmont, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.05	-0.06	-0.09	-0.17
Lorain County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01	-0.01
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.03	-0.10	-0.11	-0.17	-0.35
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-0.03	-0.10	-0.11	-0.17	-0.35
Los Angeles-South Coast Air Basin, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-0.41	-1.25	-1.39	-2.04	-4.27
Los Angeles-South Coast Air Basin, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-0.41	-1.24	-1.39	-2.04	-4.27
Los Angeles-South Coast Air Basin, CA	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.41	-1.24	-1.39	-2.04	-4.27
Los Angeles-South Coast Air Basin, CA	NO ₂ (1971 Annual)	Maintenance, Primary	100	0	-0.41	-1.24	-1.39	-2.04	-4.27
Los Angeles-South Coast Air Basin, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.41	-1.25	-1.39	-2.04	-4.27
Los Angeles-South Coast Air Basin, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-0.41	-1.25	-1.39	-2.04	-4.27
Louisville, KY-IN (IN Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.01	-0.02	-0.02	-0.03	-0.06
Louisville, KY-IN (KY Portion)	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.02	-0.07	-0.07	-0.11	-0.23
Lowell, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.01	-0.01	-0.02
Lucas County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.03	-0.03	-0.04	-0.09

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Madison County; Granite City Township and Nameoki Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01	-0.01	-0.02
Manchester, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.01	-0.01	-0.02
Manitowoc County, WI	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	0.00	-0.01	-0.01
Marathon County: Rothschild Sub-city area, Rib Mountain, Weston, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	-0.01	-0.01	-0.02	-0.04
Maricopa and Pinal Counties; Phoenix planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.10	-0.30	-0.33	-0.49	-1.03
Marion County: Lawrence, Washington, and Warrant Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.04	-0.04	-0.06	-0.13
Mariposa County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Mariposa County, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Marshall, WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.02	-0.05	-0.06	-0.08	-0.17
Medford, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.01	-0.01	-0.02
Memphis, TN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.03	-0.08	-0.09	-0.13	-0.28
Memphis, TN-MS-AR	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.03	-0.10	-0.12	-0.17	-0.36
Miami (Gila County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Miami, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Miami, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Millinocket AQCR 109, ME	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.01	-0.02	-0.04
Milwaukee, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.03	-0.09	-0.10	-0.15	-0.32
Milwaukee, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.04	-0.05	-0.07	-0.15
Milwaukee-Racine, WI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.03	-0.08	-0.09	-0.13	-0.28
Minneapolis-St. Paul, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.08	-0.23	-0.25	-0.37	-0.78
Minneapolis-St. Paul, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.07	-0.22	-0.24	-0.36	-0.75
Missoula, MT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.01	-0.01	-0.02
Missoula, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.01	-0.02
Modesto, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.02	-0.02	-0.03	-0.07
Mohave County (part); Bullhead City, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.01	-0.02
Mono Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Mono County; Mammoth Lake planning area, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Morenci (Greenlee County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Morgan County, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	-0.01
Morongo Band of Mission Indians, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	0.00	0.00	0.00
Morongo Band of Mission Indians, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00	0.00
Morristown, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Muscatine County, IA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Muscatine, IA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	-0.01
Muskegon County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.01	-0.02	-0.04
Muskingum River, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	-0.01	-0.01
Nashua, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.01	-0.01	-0.02
Nassau County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00
Navarro County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.03	-0.04	-0.06	-0.12
Nevada County (Western part), CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.00	-0.01	-0.01	-0.01	-0.02
Nevada County (Western part), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	-0.01	-0.01	-0.01	-0.02
New Haven County, CT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
New Haven-Meriden-Waterbury, CT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.05	-0.06	-0.09	-0.19
New Madrid County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
New Manchester-Grant magisterial district in Hancock County, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	-0.01
New York County, NY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.02	-0.02	-0.03	-0.07
New York-N. New Jersey-Long Island, NY-NJ-CT	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.29	-0.88	-0.98	-1.43	-3.01
New York-N. New Jersey-Long Island, NY-NJ-CT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.16	-0.49	-0.54	-0.79	-1.67
New York-N. New Jersey-Long Island, NY-NJ-CT	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.30	-0.90	-1.00	-1.46	-3.07
New York-Northern New Jersey-Long Island, NY-NJ-CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.29	-0.88	-0.98	-1.43	-3.02
Nogales, AZ	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Northern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.05	-0.16	-0.18	-0.26	-0.54
Oakridge, OR	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Ogden, UT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.01	-0.01	-0.02
Ogden, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.01	-0.02
Olmsted County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Olmsted County; City of Rochester, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.01	-0.01	-0.03

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Oneida County: Rhinelander Sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	-0.01	-0.01
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Pekin, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	-0.01	-0.01
Penns Grove, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Peoria County: Hollis twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	0.00
Peoria, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.01	-0.01	-0.02
Perth Amboy, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01	-0.01
Philadelphia-Camden County, PA-NJ	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.07	-0.08	-0.12	-0.26
Philadelphia-Wilmington, PA-NJ-DE (NJ Portion)	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.03	-0.08	-0.08	-0.12	-0.26
Philadelphia-Wilmington, PA-NJ-DE (PA-DE Portion)	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	-0.08	-0.24	-0.26	-0.39	-0.81
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.14	-0.42	-0.47	-0.69	-1.45
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.14	-0.43	-0.47	-0.69	-1.46
Phoenix, AZ	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.10	-0.29	-0.32	-0.47	-1.00
Phoenix-Mesa, AZ	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-0.10	-0.30	-0.33	-0.49	-1.03
Phoenix-Mesa, AZ	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.10	-0.31	-0.34	-0.49	-1.04
Pierce County; Tacoma, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Pima County; Ajo planning area, AZ	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Pima County; Rillito planning area, AZ	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Pinal County (part); West Pinal, AZ	PM ₁₀ (1987 24-hour)	Nonattainment, Serious	70	0	-0.01	-0.02	-0.02	-0.02	-0.05
Pitkin County; Aspen, CO	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.02	-0.03	-0.06
Pittsburgh, PA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.02	-0.02	-0.03	-0.07
Pittsburgh-Beaver Valley, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.10	-0.31	-0.35	-0.53	-1.08
Pittsburgh-Beaver Valley, PA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	-0.09	-0.28	-0.32	-0.48	-0.97
Plumas County, CA	PM _{2.5} (2012 Annual)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00	0.00
Polk County, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	0.00
Portland, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.03	-0.09	-0.10	-0.14	-0.30
Power-Bannock Counties; Fort Hall Indian Reservation, ID	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Power-Bannock Counties; Portneuf Valley Area, ID	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01	-0.01	-0.02

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Provo, UT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.00	-0.01	-0.01	-0.02	-0.04
Provo, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.02	-0.05	-0.06	-0.09	-0.19
Prowers County; Lamar, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Raleigh-Durham, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.04	-0.12	-0.14	-0.20	-0.42
Ramsey County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Reading, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.01	-0.03	-0.03	-0.05	-0.10
Reno, NV	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.02	-0.02	-0.03	-0.06
Rhineland, WI	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	-0.01
Riverside County (Coachella Valley), CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-0.01	-0.04	-0.04	-0.06	-0.13
Riverside County (Coachella Valley), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-0.01	-0.04	-0.04	-0.06	-0.13
Riverside County; Coachella Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.01	-0.04	-0.05	-0.07	-0.15
Riverside, Los Angeles, Orange, & San Bernardino Counties; South Coast Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.41	-1.24	-1.38	-2.03	-4.26
Rosebud County; Lame Deer, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Routt County (part); Steamboat Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.02	-0.03	-0.07
Rusk and Panola Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.03	-0.10	-0.12	-0.18	-0.35
Sacramento County, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.07	-0.20	-0.23	-0.35	-0.71
Sacramento Metro, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.09	-0.27	-0.30	-0.45	-0.93
Sacramento Metro, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.09	-0.27	-0.30	-0.45	-0.93
Sacramento, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.04	-0.11	-0.12	-0.17	-0.36
Sacramento, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.09	-0.26	-0.30	-0.45	-0.92
Salem, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.02	-0.02	-0.03	-0.06
Salt Lake City, UT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.05	-0.06	-0.09	-0.19
Salt Lake City, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.05	-0.16	-0.18	-0.27	-0.56
Salt Lake County, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.04	-0.11	-0.13	-0.19	-0.40
Salt Lake County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	-0.04	-0.11	-0.13	-0.19	-0.40
San Antonio, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.05	-0.16	-0.18	-0.27	-0.56
San Bernardino County, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.03	-0.08	-0.10	-0.14	-0.29
San Diego County, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.08	-0.24	-0.26	-0.39	-0.82

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
San Diego County, CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-0.08	-0.24	-0.26	-0.39	-0.82
San Diego, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.08	-0.24	-0.26	-0.39	-0.82
San Francisco Bay Area, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.20	-0.60	-0.67	-0.99	-2.06
San Francisco Bay Area, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.20	-0.60	-0.67	-0.99	-2.06
San Francisco Bay Area, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.20	-0.60	-0.67	-0.99	-2.06
San Francisco-Oakland-San Jose, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.19	-0.57	-0.64	-0.94	-1.96
San Joaquin Valley Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.15	-0.44	-0.50	-0.74	-1.53
San Joaquin Valley, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-0.15	-0.44	-0.50	-0.74	-1.53
San Joaquin Valley, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-0.15	-0.44	-0.50	-0.74	-1.53
San Joaquin Valley, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.15	-0.44	-0.50	-0.74	-1.53
San Joaquin Valley, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-0.15	-0.44	-0.50	-0.74	-1.53
San Luis Obispo (Eastern San Luis Obispo), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.03	-0.04	-0.06	-0.12
San Luis Obispo (Eastern part), CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.03	-0.04	-0.06	-0.12
San Manuel (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
San Miguel County; Telluride, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Sanders County (part); Thompson Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Santa Cruz County; Nogales planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Seaford, DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.01	-0.02	-0.02	-0.03	-0.07
Seattle-Tacoma, WA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.07	-0.21	-0.23	-0.33	-0.70
Sheboygan County, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01	-0.01	-0.02
Sheridan County; City of Sheridan, WY	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Shoreline Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.02
Shoshone County; City of Pinehurst, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Shoshone County; Pinehurst Expansion Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Silver Bow County; Butte, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Somerville, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Southern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.02	-0.05	-0.06	-0.09	-0.19
Southwest Indiana, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.01	-0.01	-0.02
Spokane County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.03	-0.04	-0.08

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Spokane, WA	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.01	-0.02	-0.03	-0.04	-0.08
Springfield, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.01	-0.01	-0.03
St. Bernard Parish, LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.02	-0.07	-0.09	-0.13	-0.27
St. Clair, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	-0.01	-0.01	-0.02
St. Lawrence County, NY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
St. Louis, MO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.05	-0.06	-0.09	-0.19
St. Louis, MO-IL	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.06	-0.19	-0.21	-0.30	-0.64
St. Louis-St. Charles-Farmington, MO-IL	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.06	-0.19	-0.21	-0.31	-0.66
Steubenville, OH-WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.03	-0.04	-0.06	-0.11
Steubenville-Weirton, OH-WV	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.01	-0.05	-0.05	-0.08	-0.16
Stockton, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.03	-0.03	-0.04	-0.09
Sullivan County, TN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	-0.01
Sutter Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00
Syracuse, NY	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.04	-0.05	-0.07	-0.15
Tacoma, WA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.04	-0.04	-0.06	-0.12
Tazewell County: Groveland twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	-0.01
Terre Haute, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.01	-0.01	-0.01	-0.02
Thurston County; Cities of Olympia, Tumwater, and Lacey, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.01	-0.02
Titus County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Toms River, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Tooele County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	0.00	-0.01	-0.02	-0.03	-0.05
Trenton, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.01	-0.01	-0.02
Trona, CA	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.03	-0.03	-0.05	-0.11
Tucson, AZ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.05	-0.06	-0.08	-0.17
Tuolumne County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	-0.01	-0.01
Tuscan Buttes, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00
Tuscan Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	0.00	0.00
Uinta Basin, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.01	-0.01	-0.02	-0.03
Union County; LaGrande, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Upper Green River Basin Area, WY	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.02	-0.02	-0.03	-0.06
Utah County, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.06	-0.06	-0.10	-0.20
Vancouver, WA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.02	-0.02	-0.04	-0.08
Ventura County, CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-0.03	-0.10	-0.11	-0.17	-0.34
Ventura County, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.03	-0.10	-0.11	-0.17	-0.34
Vermillion County; Part of Clinton Township, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Vigo County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.02	-0.02	-0.05
Walla Walla County; Wallula, WA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00	0.00
Waltham, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01	-0.01
Warren County, NJ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	-0.01
Warren County: Conewago Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.02	-0.03	-0.04	-0.09
Warren County: Warren Boro, Pleasant Twp, Glade Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.01	-0.02	-0.03	-0.04	-0.09
Warren, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.03	-0.03	-0.05	-0.09
Washington, DC-MD-VA	Ozone (2008 8-hour)	Nonattainment (DC) Maintenance (MD, VA), Marginal	50	0	-0.12	-0.37	-0.41	-0.60	-1.27
Washington, DC-MD-VA	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.12	-0.37	-0.41	-0.60	-1.26
Washington, DC-MD-VA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.05	-0.05	-0.08	-0.16
Washoe County; Reno planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.01	-0.02	-0.02	-0.03	-0.06
Wayne County, MI	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.03	-0.04	-0.09
Wayne County: Boston, Center, Franklin, Wayne & Webster Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01	-0.02
West Central Pinal, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
West Silver Valley, ID	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Whatcom County, WA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	-0.01	-0.01	-0.02
Winston-Salem, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.03	-0.04	-0.05	-0.12
Worcester, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.02	-0.02	-0.05
Yakima County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.01	-0.02
Yakima, WA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	-0.01
Yuba City-Marysville, CA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.02	-0.04
Yuma, AZ	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.01	-0.01	-0.01	-0.03

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Yuma, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.01	-0.02	-0.04

Notes:

^a Nonattainment or maintenance status as of 2/1/2024. Source: EPA, The Green Book Nonattainment Areas for Criteria Pollutants; <http://www.epa.gov/airquality/greenbook/>. "--" indicates that no severity classification has been established for the NAAQS pollutant.

^b Emissions thresholds in tons per year. Where the threshold differs by precursor pollutant, the smallest of the precursor thresholds is shown. These thresholds are provided for information only; a general conformity determination is not required for the Proposed Action. Source: 40 CFR 93.853.

^c Positive values are emissions increases; negative values are emissions decreases.

EPA = U.S. Environmental Protection Agency; NAAQS = National Ambient Air Quality Standard; CO = carbon monoxide; NO₂ = nitrogen dioxide; PM2.5 = particulate matter less than 2.5 microns in size; PM10 = particulate matter less than 10 microns in size; SO₂ = sulfur dioxide.

Table D-22. Changes in Emissions from U.S. Passenger Cars and Light Trucks by Nonattainment or Maintenance Area and Alternative, Direct and Indirect Impacts--Formaldehyde, 2050

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Ada County; Boise, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	0.00	-0.03	-0.12
Adams, Denver, and Boulder Counties; Denver Metropolitan area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.04	-0.08	-0.03	-0.18	-0.69
Ajo (Pima County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Albuquerque, NM	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.03	-0.01	-0.07	-0.27
Allegan County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.03
Allegheny County Air Basin: Hazelwood monitor, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01	-0.03
Allegheny County, PA	PM _{2.5} (2012 Annual)	Nonattainment, Moderate	100	0	-0.02	-0.05	-0.02	-0.11	-0.40
Allegheny County; Liberty, Lincoln, Port Vue, Glassport, Clairton, PA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Allegheny, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.02	-0.01	-0.04	-0.14
Allentown, PA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.01	-0.04	-0.17
Allentown-Bethlehem-Easton, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.01	-0.02	-0.01	-0.05	-0.20
Alton Township, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Amador County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	-0.01
Anchorage, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	-0.01	-0.04
Anchorage; Eagle River, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Anne Arundel County and Baltimore County, MD	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.02	-0.04	-0.01	-0.08	-0.33
Archuleta County; Pagosa Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Armstrong County; Madison, Mahoning, Boggs, Washington, Pine, PA	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	-0.01	-0.01	-0.03	-0.10
Aroostock County; City of Presque Isle, ME	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Atlanta, GA	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-0.12	-0.23	-0.08	-0.52	-2.03
Atlanta, GA	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.09	-0.18	-0.06	-0.41	-1.59
Atlantic City, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	-0.01
Bakersfield, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.03	-0.01	-0.07	-0.26
Baltimore, MD	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	-0.05	-0.10	-0.03	-0.21	-0.84
Baltimore, MD	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.05	-0.10	-0.03	-0.21	-0.85
Baltimore, MD	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	0.00
Baton Rouge, LA	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.03	-0.07	-0.04	-0.17	-0.60

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Beaver, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	-0.01
Benton County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	-0.01
Berrien County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.01	0.00	-0.03	-0.09
Billings, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01	-0.02
Billings, MT	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00
Birmingham, AL	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.03	-0.06	-0.02	-0.14	-0.53
Boise-Northern Ada County, ID	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.01	0.00	-0.03	-0.12
Bonner County; The Sandpoint Area, ID	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Boston, MA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.03	-0.01	-0.06	-0.22
Boyd County (part), KY	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01	-0.04
Brooke; Follansbee area, WV	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Brown County: Green Bay, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Burlington, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Butte County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.01	0.00	-0.02	-0.06
Calaveras County, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	-0.01
Calaveras County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	-0.01
Campbell-Clermont Counties, KY-OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	-0.01
Canton-Massillon, OH	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.01	-0.02	-0.01	-0.04	-0.14
Central New Hampshire, NH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.01	0.00	-0.01	-0.06
Central Steptoe Valley, NV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Charleston, WV	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.02	-0.06	-0.04	-0.14	-0.49
Charlotte, NC	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.03	-0.05	-0.01	-0.11	-0.46
Charlotte-Rock Hill, NC-SC	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.05	-0.10	-0.03	-0.23	-0.89
Chicago, IL-IN-WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.13	-0.25	-0.07	-0.54	-2.16
Chicago-Naperville, IL-IN-WI	Ozone (2008 8-hour)	Maintenance, Serious	100	0	-0.13	-0.25	-0.07	-0.55	-2.19
Chico (Butte County), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.01	0.00	-0.02	-0.06
Chico, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	-0.01	-0.02
Chico, CA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	0.00	-0.01	-0.06
Cincinnati, OH-KY (OH Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.03	-0.06	-0.02	-0.13	-0.51

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Cincinnati, OH-KY (KY Portion)	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	0.00	-0.03	-0.13
Cincinnati, OH-KY-IN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.04	-0.08	-0.02	-0.17	-0.67
Clark County; Las Vegas planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.04	-0.08	-0.02	-0.17	-0.68
Cleveland, OH	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.05	-0.09	-0.02	-0.19	-0.75
Cleveland, OH	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.03	-0.01	-0.07	-0.27
Cleveland, OH	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-0.02	-0.04	-0.01	-0.09	-0.36
Cleveland-Akron-Lorain, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.05	-0.09	-0.03	-0.21	-0.82
Cleveland-Akron-Lorain, OH	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.04	-0.08	-0.02	-0.18	-0.72
Cochise County; Paul Spur/Douglas planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Colorado Springs, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.02	-0.01	-0.05	-0.18
Columbus, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.04	-0.07	-0.02	-0.15	-0.59
Columbus, OH	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.03	-0.06	-0.02	-0.14	-0.55
Cook County; Lyons Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.02
Cook County; Southeast Chicago, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.03
Coshocton County; Franklin Township, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Coso Junction, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.03	-0.11
Cuyahoga County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.03	-0.01	-0.07	-0.27
Cuyahoga County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.03	-0.01	-0.06	-0.22
Dallas-Fort Worth, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.22	-0.47	-0.22	-1.09	-4.02
Dallas-Fort Worth, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.21	-0.47	-0.21	-1.08	-3.98
Dane County; Madison sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.02	0.00	-0.04	-0.15
Delaware County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.01	-0.04	-0.14
Denver Metro/North Front Range, CO	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.08	-0.16	-0.05	-0.36	-1.39
Denver-Boulder, CO	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.06	-0.13	-0.04	-0.28	-1.09
Denver-Boulder-Greeley-Ft. Collins-Loveland, CO	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.08	-0.16	-0.05	-0.35	-1.38
Detroit, MI	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	-0.09	-0.18	-0.06	-0.41	-1.59
Detroit, MI	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.04	-0.07	-0.02	-0.16	-0.62
Detroit, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.02	-0.01	-0.04	-0.14
Detroit-Ann Arbor, MI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.09	-0.18	-0.06	-0.41	-1.60

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Doña Ana County; Anthony, NM	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.01	-0.02	-0.06
Door County, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	0.00	0.00
Door County-Revised, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	0.00	-0.01
Douglas (Cochise County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Dukes County, MA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	0.00	0.00
Duluth, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	-0.01	-0.03
East Chicago, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	-0.01
East Helena Area, MT	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	0.00
East Kern County, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	-0.01	-0.01	-0.03	-0.11
El Paso County, TX	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.03	-0.01	-0.07	-0.25
El Paso, TX	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.01	-0.02	-0.08
El Paso-Las Cruces, TX-NM	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.02	-0.04	-0.02	-0.10	-0.37
Eugene-Springfield, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	0.00	-0.02	-0.07
Evangeline Parish (Partial), LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Fairbanks, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00	-0.02
Fairbanks, AK	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	-0.01	-0.03
Flathead County; Columbia Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Flathead County; Kalispell and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Flathead County; Whitefish and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Fort Collins, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	0.00	-0.01	-0.06
Freehold, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Freestone and Anderson Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	-0.01	-0.03	-0.10
Fremont County; Canon City Area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.02
Fresno, CA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.01	-0.02	-0.01	-0.05	-0.20
Gila County (part): Payson, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Giles County, VA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Grant County, NM	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	-0.01

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Grants Pass, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	-0.01
Great Falls, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Greater Connecticut, CT	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-0.03	-0.05	-0.01	-0.11	-0.45
Greater Connecticut, CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.03	-0.05	-0.01	-0.11	-0.45
Greeley, CO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.03	-0.02	-0.08	-0.29
Hancock County (part): Weirton, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	-0.01
Hancock and Brooke Counties (Part); The city of Weirton, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Harrisburg-Lebanon-Carlisle-York, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.04	-0.01	-0.08	-0.33
Hartford-New Britain-Middletown, CT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.04	-0.01	-0.08	-0.31
Hayden (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Hayden, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Hayden, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Henderson-Webster Counties, KY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	-0.01
Hillsborough County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	-0.01
Hillsborough-Polk County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00
Houston-Galveston-Brazoria, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.19	-0.39	-0.16	-0.89	-3.34
Houston-Galveston-Brazoria, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.18	-0.37	-0.15	-0.84	-3.18
Howard County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.02	-0.02	-0.06	-0.19
Humphreys County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	-0.01
Huntington, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	-0.01
Hutchinson County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.02	-0.02	-0.05	-0.17
Imperial County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	0.00	-0.02	-0.07
Imperial County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.01	0.00	-0.02	-0.07
Imperial County, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	0.00	-0.01	-0.06
Imperial County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.00	-0.01	0.00	-0.01	-0.06
Imperial Valley, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	-0.01	0.00	-0.02	-0.07
Indian Wells, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.01	-0.04	-0.12
Indiana, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.04	-0.03	-0.09	-0.31

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Indianapolis, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Indianapolis, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.02	-0.01	-0.05	-0.20
Inland Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.02
Inyo County; Owens Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00	0.00
Jackson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	-0.01	-0.02
Jackson County; Medford-Ashland (including White City), OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	0.00	-0.01	-0.05
Jamestown, NY	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.01	-0.02	-0.01	-0.05	-0.16
Jefferson County, KY	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00
Jefferson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	-0.01	-0.02
Jefferson County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Jefferson County; (part) Steubenville & Mingo Junction, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01	-0.02
Johnstown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.03	-0.02	-0.07	-0.22
Josephine County; Grants Pass, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Juneau; Mendenhall Valley area, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Kern County (Eastern Kern), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.01	-0.02	-0.01	-0.05	-0.17
Kern County (Eastern Kern), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.01	-0.02	-0.01	-0.05	-0.17
King County; Kent, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
King County; Seattle, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Klamath Falls, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	-0.02
Klamath Falls, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.02
Klamath Falls, OR	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	-0.02
Knoxville, TN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.01	-0.03	-0.01	-0.06	-0.24
Knoxville-Sevierville-La Follette, TN	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.03	-0.01	-0.08	-0.31
La Porte County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01	-0.02
LaSalle County; Oglesby, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Lake County (part); Lakeview, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Lake County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.02	0.00	-0.04	-0.14
Lake County, OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.01	0.00	-0.02	-0.07
Lake County; (part) Eastlake, Timberlake, Lakeline, Willoughby, Mentor, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	-0.01

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Lake County; Cities of East Chicago, Hammond, Whiting, and Gary, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	0.00	-0.02	-0.09
Lake County; Polson, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Lake County; Ronan, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Lake Tahoe North Shore, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Lake Tahoe South Shore, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00	-0.01
Lake Tahoe, NV	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	-0.01
Lancaster, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.01	-0.02	-0.01	-0.04	-0.16
Lancaster, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.01	-0.04	-0.16
Lane County (part); Oakridge, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Lane County; Eugene/Springfield, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	0.00	-0.02	-0.07
Las Vegas, NV	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.04	-0.08	-0.02	-0.17	-0.68
Las Vegas, NV	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.04	-0.08	-0.02	-0.17	-0.68
Laurel Area (Yellowstone County), MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Lebanon County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.04
Lemont, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.01	0.00	-0.01	-0.05
Liberty-Clairton, PA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Lincoln County; Libby and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Logan, UT-ID	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.04
Longmont, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.02	-0.01	-0.05	-0.18
Lorain County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	-0.02
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.02	-0.05	-0.02	-0.11	-0.40
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-0.02	-0.05	-0.02	-0.11	-0.40
Los Angeles-South Coast Air Basin, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-0.32	-0.62	-0.19	-1.39	-5.45
Los Angeles-South Coast Air Basin, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-0.32	-0.62	-0.19	-1.39	-5.45
Los Angeles-South Coast Air Basin, CA	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.32	-0.62	-0.19	-1.39	-5.45
Los Angeles-South Coast Air Basin, CA	NO ₂ (1971 Annual)	Maintenance, Primary	100	0	-0.32	-0.62	-0.19	-1.39	-5.45
Los Angeles-South Coast Air Basin, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.32	-0.62	-0.19	-1.39	-5.45
Los Angeles-South Coast Air Basin, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-0.32	-0.62	-0.19	-1.39	-5.45

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Louisville, KY-IN (IN Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	-0.01	0.00	-0.02	-0.08
Louisville, KY-IN (KY Portion)	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.02	-0.03	-0.01	-0.07	-0.30
Lowell, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01	-0.03
Lucas County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.01	0.00	-0.03	-0.11
Madison County; Granite City Township and Nameoki Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.02
Manchester, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01	-0.03
Manitowoc County, WI	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	0.00	0.00	-0.02
Marathon County: Rothschild Sub-city area, Rib Mountain, Weston, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	-0.01	0.00	-0.01	-0.05
Maricopa and Pinal Counties; Phoenix planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.08	-0.15	-0.04	-0.34	-1.35
Marion County: Lawrence, Washington, and Warrant Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.02	-0.01	-0.04	-0.16
Mariposa County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Mariposa County, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Marshall, WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.02	-0.01	-0.05	-0.17
Medford, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	-0.01	-0.03
Memphis, TN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.04	-0.01	-0.09	-0.36
Memphis, TN-MS-AR	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.03	-0.05	-0.01	-0.12	-0.46
Miami (Gila County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	-0.01
Miami, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Miami, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	-0.01
Millinocket AQCR 109, ME	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	0.00	-0.01	-0.06
Milwaukee, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.03	-0.05	-0.01	-0.10	-0.42
Milwaukee, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.02	-0.01	-0.05	-0.19
Milwaukee-Racine, WI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.02	-0.04	-0.01	-0.09	-0.37
Minneapolis-St. Paul, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.06	-0.12	-0.03	-0.25	-1.01
Minneapolis-St. Paul, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.06	-0.11	-0.03	-0.25	-0.98
Missoula, MT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	-0.01	-0.02
Missoula, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.03

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Modesto, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.01	0.00	-0.02	-0.09
Mohave County (part); Bullhead City, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.04
Mono Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Mono County; Mammoth Lake planning area, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Morenci (Greenlee County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	0.00
Morgan County, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	-0.01
Morongo Band of Mission Indians, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	0.00	0.00	0.00
Morongo Band of Mission Indians, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00	0.00
Morristown, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	-0.01
Muscatine County, IA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	-0.01
Muscatine, IA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	-0.01
Muskegon County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	0.00	-0.01	-0.05
Muskingum River, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	-0.01
Nashua, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01	-0.03
Nassau County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	0.00
Navarro County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.02	-0.01	-0.04	-0.12
Nevada County (Western part), CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	-0.01	-0.03
Nevada County (Western part), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	-0.01	-0.03
New Haven County, CT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
New Haven-Meriden-Waterbury, CT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.03	-0.01	-0.06	-0.24
New Madrid County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
New Manchester-Grant magisterial district in Hancock County, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	-0.01
New York County, NY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.01	0.00	-0.02	-0.10
New York-N. New Jersey-Long Island, NY-NJ-CT	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.24	-0.44	-0.12	-0.98	-3.91
New York-N. New Jersey-Long Island, NY-NJ-CT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.13	-0.25	-0.07	-0.55	-2.17
New York-N. New Jersey-Long Island, NY-NJ-CT	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.24	-0.45	-0.12	-1.00	-3.99
New York-Northern New Jersey-Long Island, NY-NJ-CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.24	-0.45	-0.12	-0.98	-3.91
Nogales, AZ	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Northern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.04	-0.08	-0.03	-0.18	-0.67

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Oakridge, OR	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Ogden, UT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	-0.01	-0.02
Ogden, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.02
Olmsted County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Olmsted County; City of Rochester, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01	-0.04
Oneida County: Rhinelander Sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	-0.01
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Pekin, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	-0.01
Penns Grove, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Peoria County: Hollis twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	0.00
Peoria, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01	-0.03
Perth Amboy, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	-0.02
Philadelphia-Camden County, PA-NJ	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.04	-0.01	-0.08	-0.33
Philadelphia-Wilmington, PA-NJ-DE (NJ Portion)	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.02	-0.04	-0.01	-0.08	-0.34
Philadelphia-Wilmington, PA-NJ-DE (PA-DE Portion)	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.06	-0.12	-0.03	-0.26	-1.05
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.11	-0.21	-0.06	-0.47	-1.88
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.11	-0.22	-0.06	-0.48	-1.89
Phoenix, AZ	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.08	-0.15	-0.04	-0.33	-1.32
Phoenix-Mesa, AZ	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-0.08	-0.15	-0.04	-0.34	-1.35
Phoenix-Mesa, AZ	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.08	-0.16	-0.04	-0.34	-1.37
Pierce County; Tacoma, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Pima County; Ajo planning area, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Pima County; Rillito planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Pinal County (part); West Pinal, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	-0.01	0.00	-0.02	-0.07
Pitkin County; Aspen, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.02	-0.06
Pittsburgh, PA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	0.00	-0.02	-0.08
Pittsburgh-Beaver Valley, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.06	-0.15	-0.07	-0.34	-1.22

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Pittsburgh-Beaver Valley, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.06	-0.13	-0.07	-0.31	-1.10
Plumas County, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00	0.00
Polk County, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	-0.01
Portland, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.04	-0.01	-0.10	-0.39
Power-Bannock Counties; Fort Hall Indian Reservation, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Power-Bannock Counties; Portneuf Valley Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.02
Provo, UT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.00	-0.01	0.00	-0.01	-0.05
Provo, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.01	-0.03	-0.01	-0.06	-0.23
Prowers County; Lamar, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Raleigh-Durham, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.03	-0.06	-0.02	-0.14	-0.55
Ramsey County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Reading, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.01	-0.01	0.00	-0.03	-0.12
Reno, NV	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	0.00	-0.02	-0.08
Rhineland, WI	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	-0.01
Riverside County (Coachella Valley), CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-0.01	-0.02	-0.01	-0.04	-0.17
Riverside County (Coachella Valley), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-0.01	-0.02	-0.01	-0.04	-0.17
Riverside County; Coachella Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.01	-0.02	-0.01	-0.05	-0.19
Riverside, Los Angeles, Orange, & San Bernardino Counties; South Coast Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.32	-0.62	-0.19	-1.38	-5.43
Rosebud County; Lame Deer, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Routt County (part); Steamboat Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.02	-0.07
Rusk and Panola Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.02	-0.04	-0.03	-0.11	-0.35
Sacramento County, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.04	-0.10	-0.05	-0.22	-0.81
Sacramento Metro, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.06	-0.13	-0.06	-0.29	-1.09
Sacramento Metro, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.06	-0.13	-0.06	-0.29	-1.09
Sacramento, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.03	-0.05	-0.02	-0.12	-0.47
Sacramento, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.06	-0.13	-0.06	-0.29	-1.07

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Salem, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	0.00	-0.02	-0.07
Salt Lake City, UT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.03	-0.01	-0.06	-0.21
Salt Lake City, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.04	-0.08	-0.03	-0.18	-0.70
Salt Lake County, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.03	-0.06	-0.02	-0.13	-0.47
Salt Lake County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	-0.03	-0.06	-0.02	-0.13	-0.47
San Antonio, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.04	-0.08	-0.03	-0.18	-0.70
San Bernardino County, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.02	-0.04	-0.02	-0.09	-0.32
San Diego County, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.06	-0.12	-0.03	-0.27	-1.07
San Diego County, CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-0.06	-0.12	-0.03	-0.27	-1.07
San Diego, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.06	-0.12	-0.03	-0.27	-1.07
San Francisco Bay Area, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.15	-0.30	-0.10	-0.66	-2.57
San Francisco Bay Area, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.15	-0.30	-0.10	-0.66	-2.56
San Francisco Bay Area, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.15	-0.30	-0.10	-0.66	-2.57
San Francisco-Oakland-San Jose, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.14	-0.28	-0.10	-0.63	-2.44
San Joaquin Valley Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.10	-0.21	-0.09	-0.49	-1.83
San Joaquin Valley, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-0.10	-0.21	-0.09	-0.49	-1.83
San Joaquin Valley, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-0.10	-0.21	-0.09	-0.49	-1.83
San Joaquin Valley, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.10	-0.21	-0.09	-0.49	-1.83
San Joaquin Valley, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-0.10	-0.21	-0.09	-0.49	-1.83
San Luis Obispo (Eastern San Luis Obispo), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.01	-0.01	-0.04	-0.12
San Luis Obispo (Eastern part), CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.01	-0.01	-0.04	-0.12
San Manuel (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	-0.01
San Miguel County; Telluride, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Sanders County (part); Thompson Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Santa Cruz County; Nogales planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Seaford, DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.01	-0.01	0.00	-0.02	-0.09
Seattle-Tacoma, WA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.06	-0.11	-0.03	-0.23	-0.93
Sheboygan County, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.02

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Sheridan County; City of Sheridan, WY	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Shoreline Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.02
Shoshone County; City of Pinehurst, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Shoshone County; Pinehurst Expansion Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Silver Bow County; Butte, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Somerville, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00
Southern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.03	-0.01	-0.06	-0.23
Southwest Indiana, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00	-0.02
Spokane County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	0.00	-0.03	-0.10
Spokane, WA	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.01	-0.01	0.00	-0.03	-0.10
Springfield, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01	-0.04
St. Bernard Parish, LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.03	-0.02	-0.08	-0.27
St. Clair, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	-0.01	-0.02
St. Lawrence County, NY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
St. Louis, MO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.03	-0.01	-0.06	-0.24
St. Louis, MO-IL	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.05	-0.09	-0.03	-0.21	-0.82
St. Louis-St. Charles-Farmington, MO-IL	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.05	-0.10	-0.03	-0.22	-0.86
Steubenville, OH-WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.01	-0.01	-0.03	-0.11
Steubenville-Weirton, OH-WV	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.01	-0.02	-0.01	-0.05	-0.17
Stockton, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.01	0.00	-0.03	-0.12
Sullivan County, TN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	-0.01
Sutter Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00
Syracuse, NY	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.02	-0.01	-0.05	-0.19
Tacoma, WA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	0.00	-0.04	-0.16
Tazewell County: Groveland twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00	-0.01
Terre Haute, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	-0.01	-0.02
Thurston County; Cities of Olympia, Tumwater, and Lacey, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.03
Titus County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00	0.00
Toms River, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Tooele County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	0.00	-0.01	0.00	-0.02	-0.05
Trenton, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01	-0.02
Trona, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.01	-0.03	-0.10
Tucson, AZ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.03	-0.01	-0.06	-0.23
Tuolumne County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	-0.02
Tuscan Buttes, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00	0.00
Tuscan Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	0.00	0.00
Uinta Basin, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	-0.01	-0.04
Union County; LaGrande, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Upper Green River Basin Area, WY	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.01	0.00	-0.02	-0.06
Utah County, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.03	-0.01	-0.06	-0.24
Vancouver, WA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.01	0.00	-0.02	-0.10
Ventura County, CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-0.02	-0.05	-0.02	-0.11	-0.40
Ventura County, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.02	-0.05	-0.02	-0.11	-0.40
Vermillion County; Part of Clinton Township, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	-0.01
Vigo County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	0.00	-0.02	-0.06
Walla Walla County; Wallula, WA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00	0.00
Waltham, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	-0.02
Warren County, NJ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00	-0.01
Warren County: Conewago Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.01	-0.03	-0.09
Warren County: Warren Boro, Pleasant Twp, Glade Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	-0.01	-0.01	-0.03	-0.09
Warren, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	-0.01	-0.03	-0.09
Washington, DC-MD-VA	Ozone (2008 8-hour)	Nonattainment (DC) Maintenance (MD, VA), Marginal	50	0	-0.10	-0.19	-0.05	-0.42	-1.66
Washington, DC-MD-VA	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.10	-0.19	-0.05	-0.41	-1.65
Washington, DC-MD-VA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.02	-0.01	-0.05	-0.21
Washoe County; Reno planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	-0.01	0.00	-0.02	-0.08
Wayne County, MI	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.03	-0.09

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c					
				No-Action	PC2LT002	PC1LT3	PC2LT4	PC3LT5	PC6LT8
Wayne County: Boston, Center, Franklin, Wayne & Webster Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01	-0.02
West Central Pinal, AZ	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
West Silver Valley, ID	PM _{2.5} (2012 Annual)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00	0.00
Whatcom County, WA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	-0.01	-0.02
Winston-Salem, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.02	0.00	-0.04	-0.15
Worcester, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	0.00	-0.02	-0.07
Yakima County, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01	-0.03
Yakima, WA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00	-0.01
Yuba City-Marysville, CA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	0.00	-0.01	-0.06
Yuma, AZ	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	-0.01	-0.04
Yuma, AZ	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	0.00	-0.01	-0.06

Notes:
^a Nonattainment or maintenance status as of 2/1/2024. Source: EPA, The Green Book Nonattainment Areas for Criteria Pollutants; <http://www.epa.gov/airquality/greenbook/>. "--" indicates that no severity classification has been established for the NAAQS pollutant.
^b Emissions thresholds in tons per year. Where the threshold differs by precursor pollutant, the smallest of the precursor thresholds is shown. These thresholds are provided for information only; a general conformity determination is not required for the Proposed Action. Source: 40 CFR 93.853.
^c Positive values are emissions increases; negative values are emissions decreases.
 EPA = U.S. Environmental Protection Agency; NAAQS = National Ambient Air Quality Standard; CO = carbon monoxide; NO₂ = nitrogen dioxide; PM_{2.5} = particulate matter less than 2.5 microns in size; PM₁₀ = particulate matter less than 10 microns in size; SO₂ = sulfur dioxide.

Table D-23. Changes in Emissions from U.S. Heavy-Duty Pickup Trucks and Vans by Nonattainment or Maintenance Area and Alternative, Direct and Indirect Impacts--Particulate Matter (PM2.5), 2035

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Ada County; Boise, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.02	-0.09
Adams, Denver, and Boulder Counties; Denver Metropolitan area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.06	-0.12	-0.40
Ajo (Pima County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Albuquerque, NM	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.03	-0.05	-0.20
Allegan County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01
Allegheny County Air Basin: Hazelwood monitor, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01
Allegheny County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	-0.01	-0.03	-0.05	-0.20
Allegheny County; Liberty, Lincoln, Port Vue, Glassport, Clairton, PA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Allegheny, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.01	-0.03
Allentown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	-0.02	-0.03	-0.12
Allentown-Bethlehem-Easton, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	-0.02	-0.04	-0.13
Alton Township, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	-0.02	-0.03
Amador County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Anchorage, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	-0.01	-0.01	-0.05
Anchorage; Eagle River, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Anne Arundel County and Baltimore County, MD	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.02	-0.09	-0.18	-0.69
Archuleta County; Pagosa Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01	-0.01
Armstrong County: Madison, Mahoning, Boggs, Washington, Pine, PA	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	0.00	0.00
Aroostock County; City of Presque Isle, ME	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Atlanta, GA	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-0.07	-0.27	-0.56	-2.13
Atlanta, GA	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.06	-0.25	-0.51	-1.96
Atlantic City, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01
Bakersfield, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.03	-0.10
Baltimore, MD	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	-0.04	-0.16	-0.33	-1.26
Baltimore, MD	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.04	-0.16	-0.33	-1.27
Baltimore, MD	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Baton Rouge, LA	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	-0.08	-0.17	-0.41

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Beaver, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Benton County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Berrien County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.01	-0.04
Billings, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.02	-0.04	-0.09
Billings, MT	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.01	-0.03	-0.04
Birmingham, AL	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.01	-0.04	-0.09	-0.33
Boise-Northern Ada County, ID	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.02	-0.09
Bonner County; The Sandpoint Area, ID	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Boston, MA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.02	-0.05	-0.18
Boyd County (part), KY	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.03	-0.05
Brooke; Follansbee area, WV	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Brown County: Green Bay, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Burlington, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01
Butte County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	-0.01	-0.03
Calaveras County, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Calaveras County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Campbell-Clermont Counties, KY-OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Canton-Massillon, OH	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	-0.01	-0.03	-0.08
Central New Hampshire, NH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.01	-0.04
Central Steptoe Valley, NV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Charleston, WV	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	-0.01	-0.02	-0.09
Charlotte, NC	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.05	-0.10	-0.39
Charlotte-Rock Hill, NC-SC	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.02	-0.07	-0.15	-0.58
Chicago, IL-IN-WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.05	-0.34	-0.74	-2.21
Chicago-Naperville, IL-IN-WI	Ozone (2008 8-hour)	Maintenance, Serious	100	0	-0.05	-0.29	-0.62	-2.04
Chico (Butte County), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	-0.01	-0.03
Chico, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	-0.01
Chico, CA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01	-0.02
Cincinnati, OH-KY (OH Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.01	-0.05	-0.10	-0.37
Cincinnati, OH-KY (KY Portion)	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.02	-0.06

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Cincinnati, OH-KY-IN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.01	-0.06	-0.13	-0.47
Clark County; Las Vegas planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.01	-0.05	-0.10	-0.39
Cleveland, OH	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.07	-0.14	-0.49
Cleveland, OH	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.03	-0.05	-0.20
Cleveland, OH	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-0.01	-0.03	-0.06	-0.24
Cleveland-Akron-Lorain, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.01	-0.07	-0.14	-0.50
Cleveland-Akron-Lorain, OH	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.01	-0.06	-0.13	-0.45
Cochise County; Paul Spur/Douglas planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Colorado Springs, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.02	-0.08
Columbus, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.01	-0.06	-0.12	-0.44
Columbus, OH	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.01	-0.05	-0.11	-0.42
Cook County; Lyons Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01	-0.02
Cook County; Southeast Chicago, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.03	-0.08	-0.12
Coshocton County; Franklin Township, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Coso Junction, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Cuyahoga County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.03	-0.05	-0.20
Cuyahoga County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.02	-0.04	-0.17
Dallas-Fort Worth, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.06	-0.25	-0.50	-1.90
Dallas-Fort Worth, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.06	-0.24	-0.50	-1.89
Dane County; Madison sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.02	-0.04	-0.14
Delaware County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	-0.06	-0.15	-0.26
Denver Metro/North Front Range, CO	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.03	-0.14	-0.28	-0.99
Denver-Boulder, CO	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.02	-0.10	-0.20	-0.73
Denver-Boulder-Greeley-Ft. Collins-Loveland, CO	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.03	-0.13	-0.26	-0.96
Detroit, MI	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	-0.04	-0.20	-0.41	-1.47
Detroit, MI	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.07	-0.14	-0.52
Detroit, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	-0.02	-0.06
Detroit-Ann Arbor, MI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.04	-0.20	-0.41	-1.47
Doña Ana County; Anthony, NM	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.01	-0.02

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Door County, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	0.00
Door County-Revised, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	-0.01
Douglas (Cochise County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Dukes County, MA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	0.00
Duluth, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.01	-0.02
East Chicago, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.03	-0.07	-0.10
East Helena Area, MT	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
East Kern County, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	-0.01	-0.01
El Paso County, TX	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.02	-0.04	-0.11
El Paso, TX	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.02	-0.03
El Paso-Las Cruces, TX-NM	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.03	-0.06	-0.16
Eugene-Springfield, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.01	-0.03
Evangeline Parish (Partial), LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Fairbanks, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	-0.01
Fairbanks, AK	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	-0.01	-0.02
Flathead County; Columbia Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Flathead County; Kalispell and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Flathead County; Whitefish and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Fort Collins, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.01	-0.03
Freehold, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Freestone and Anderson Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Fremont County; Canon City Area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Fresno, CA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.00	-0.01	-0.02	-0.09
Gila County (part): Payson, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Giles County, VA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Grant County, NM	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01
Grants Pass, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Great Falls, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Greater Connecticut, CT	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-0.01	-0.04	-0.07	-0.28
Greater Connecticut, CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.01	-0.04	-0.07	-0.28
Greeley, CO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.03	-0.08	-0.20
Hancock County (part): Weirton, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Hancock and Brooke Counties (Part); The city of Weirton, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Harrisburg-Lebanon-Carlisle-York, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.03	-0.06	-0.23
Hartford-New Britain-Middletown, CT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.03	-0.05	-0.20
Hayden (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	0.00	0.00
Hayden, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Hayden, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Henderson-Webster Counties, KY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Hillsborough County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Hillsborough-Polk County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Houston-Galveston-Brazoria, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.03	-0.31	-0.68	-1.86
Houston-Galveston-Brazoria, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.03	-0.31	-0.67	-1.83
Howard County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	-0.01	-0.02
Humphreys County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Huntington, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Hutchinson County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	-0.02	-0.03
Imperial County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01	-0.03
Imperial County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	-0.01	-0.03
Imperial County, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01	-0.03
Imperial County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01	-0.03
Imperial Valley, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	-0.01	-0.03
Indian Wells, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01	-0.01
Indiana, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.01	-0.02
Indianapolis, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Indianapolis, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.02	-0.05	-0.18
Inland Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Inyo County; Owens Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00
Jackson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	-0.02
Jackson County; Medford-Ashland (including White City), OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01	-0.02
Jamestown, NY	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	-0.01	-0.02	-0.04
Jefferson County, KY	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Jefferson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	-0.01
Jefferson County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Jefferson County; (part) Steubenville & Mingo Junction, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01
Johnstown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01	-0.02
Josephine County; Grants Pass, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Juneau; Mendenhall Valley area, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Kern County (Eastern Kern), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	-0.05	-0.11	-0.17
Kern County (Eastern Kern), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	-0.05	-0.11	-0.17
King County; Kent, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
King County; Seattle, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Klamath Falls, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	-0.01
Klamath Falls, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Klamath Falls, OR	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01
Knoxville, TN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	-0.02	-0.04	-0.15
Knoxville-Sevierville-La Follette, TN	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.04	-0.17
La Porte County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01
LaSalle County; Oglesby, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Lake County (part); Lakeview, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Lake County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.04	-0.09	-0.17
Lake County, OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.01	-0.03
Lake County; (part) Eastlake, Timberlake, Lakeline, Willoughby, Mentor, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01
Lake County; Cities of East Chicago, Hammond, Whiting, and Gary, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.04	-0.08	-0.15
Lake County; Polson, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Lake County; Ronan, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Lake Tahoe North Shore, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Lake Tahoe South Shore, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Lake Tahoe, NV	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Lancaster, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	-0.01	-0.03	-0.10
Lancaster, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.03	-0.10
Lane County (part); Oakridge, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Lane County; Eugene/Springfield, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01	-0.03
Las Vegas, NV	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.05	-0.10	-0.39
Las Vegas, NV	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.01	-0.05	-0.10	-0.39
Laurel Area (Yellowstone County), MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	-0.01	-0.03	-0.04
Lebanon County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.02
Lemont, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.03	-0.07	-0.11
Liberty-Clairton, PA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Lincoln County; Libby and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Logan, UT-ID	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01	-0.03
Longmont, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.01	-0.02
Lorain County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	-0.06	-0.13	-0.24
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	0.00	-0.06	-0.13	-0.24
Los Angeles-South Coast Air Basin, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-0.06	-0.32	-0.66	-2.28
Los Angeles-South Coast Air Basin, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-0.06	-0.32	-0.66	-2.28
Los Angeles-South Coast Air Basin, CA	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.06	-0.32	-0.66	-2.28
Los Angeles-South Coast Air Basin, CA	NO ₂ (1971 Annual)	Maintenance, Primary	100	0	-0.06	-0.32	-0.66	-2.28
Los Angeles-South Coast Air Basin, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.06	-0.32	-0.66	-2.28
Los Angeles-South Coast Air Basin, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-0.06	-0.32	-0.66	-2.28
Louisville, KY-IN (IN Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	-0.01	-0.04
Louisville, KY-IN (KY Portion)	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.02	-0.05	-0.18
Lowell, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.02

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Lucas County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.02	-0.05	-0.11
Madison County; Granite City Township and Nameoki Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.03	-0.05
Manchester, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.02
Manitowoc County, WI	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	0.00	-0.01
Marathon County: Rothschild Sub-city area, Rib Mountain, Weston, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	-0.01	-0.03
Maricopa and Pinal Counties; Phoenix planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.05	-0.19	-0.38	-1.45
Marion County: Lawrence, Washington, and Warrant Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.02	-0.04	-0.15
Mariposa County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Mariposa County, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Marshall, WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Medford, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	-0.01
Memphis, TN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.03	-0.06	-0.21
Memphis, TN-MS-AR	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.01	-0.04	-0.07	-0.25
Miami (Gila County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Miami, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Miami, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Millinocket AQCR 109, ME	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.01	-0.04
Milwaukee, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.03	-0.06	-0.25
Milwaukee, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.03	-0.10
Milwaukee-Racine, WI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.01	-0.03	-0.06	-0.22
Minneapolis-St. Paul, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.11	-0.23	-0.80
Minneapolis-St. Paul, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.02	-0.11	-0.22	-0.79
Missoula, MT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.01	-0.03
Missoula, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01	-0.03
Modesto, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.01	-0.04
Mohave County (part); Bullhead City, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Mono Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Mono County; Mammoth Lake planning area, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Morenci (Greenlee County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Morgan County, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Morongo Band of Mission Indians, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	0.00	0.00
Morongo Band of Mission Indians, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00
Morristown, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Muscatine County, IA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Muscatine, IA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	-0.01
Muskegon County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01	-0.02
Muskingum River, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Nashua, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01
Nassau County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Navarro County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Nevada County (Western part), CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	-0.01
Nevada County (Western part), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	-0.01
New Haven County, CT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
New Haven-Meriden-Waterbury, CT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.02	-0.04	-0.14
New Madrid County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
New Manchester-Grant magisterial district in Hancock County, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
New York County, NY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.02	-0.03	-0.12
New York-N. New Jersey-Long Island, NY-NJ-CT	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.08	-0.33	-0.68	-2.55
New York-N. New Jersey-Long Island, NY-NJ-CT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.04	-0.19	-0.39	-1.45
New York-N. New Jersey-Long Island, NY-NJ-CT	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.08	-0.34	-0.70	-2.65
New York-Northern New Jersey-Long Island, NY-NJ-CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.08	-0.33	-0.68	-2.55
Nogales, AZ	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Northern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.02	-0.08	-0.17	-0.62
Oakridge, OR	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Ogden, UT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.01	-0.03
Ogden, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01	-0.03

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Olmsted County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Olmsted County; City of Rochester, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.01	-0.02
Oneida County: Rhinelander Sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	-0.01
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Pekin, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	-0.01
Penns Grove, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Peoria County: Hollis twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Peoria, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.01	-0.02
Perth Amboy, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01
Philadelphia-Camden County, PA-NJ	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.06	-0.14	-0.30
Philadelphia-Wilmington, PA-NJ-DE (NJ Portion)	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.01	-0.07	-0.15	-0.52
Philadelphia-Wilmington, PA-NJ-DE (PA-DE Portion)	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.13	-0.28	-0.79
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.04	-0.24	-0.50	-1.61
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.03	-0.31	-0.67	-1.85
Phoenix, AZ	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.04	-0.18	-0.37	-1.43
Phoenix-Mesa, AZ	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-0.05	-0.19	-0.38	-1.45
Phoenix-Mesa, AZ	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.05	-0.19	-0.38	-1.46
Pierce County; Tacoma, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Pima County; Ajo planning area, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Pima County; Rillito planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01
Pinal County (part); West Pinal, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	-0.01	-0.03
Pitkin County; Aspen, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01	-0.02
Pittsburgh, PA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.01	-0.05
Pittsburgh-Beaver Valley, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.01	-0.06	-0.12	-0.43
Pittsburgh-Beaver Valley, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.05	-0.11	-0.39
Plumas County, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00
Polk County, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Portland, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.04	-0.08	-0.29

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Power-Bannock Counties; Fort Hall Indian Reservation, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Power-Bannock Counties; Portneuf Valley Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Provo, UT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.00	0.00	-0.01	-0.03
Provo, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	0.00	-0.02	-0.03	-0.11
Prowers County; Lamar, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Raleigh-Durham, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.06	-0.12	-0.44
Ramsey County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.02	-0.03
Reading, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	-0.01	-0.02	-0.07
Reno, NV	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.01	-0.05
Rhineland, WI	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Riverside County (Coachella Valley), CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	0.00	-0.01	-0.01	-0.05
Riverside County (Coachella Valley), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	0.00	-0.01	-0.01	-0.05
Riverside County; Coachella Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	-0.01	-0.02	-0.06
Riverside, Los Angeles, Orange, & San Bernardino Counties; South Coast Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.06	-0.32	-0.66	-2.27
Rosebud County; Lame Deer, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Routt County (part); Steamboat Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.02	-0.04
Rusk and Panola Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Sacramento County, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.12	-0.27	-0.67
Sacramento Metro, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.02	-0.17	-0.37	-1.05
Sacramento Metro, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.02	-0.17	-0.37	-1.05
Sacramento, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.08	-0.16	-0.58
Sacramento, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.02	-0.17	-0.36	-1.03
Salem, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.01	-0.05
Salt Lake City, UT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.02	-0.04	-0.11
Salt Lake City, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.02	-0.08	-0.17	-0.64
Salt Lake County, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.06	-0.13	-0.46
Salt Lake County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	-0.01	-0.06	-0.13	-0.46
San Antonio, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.06	-0.12	-0.45

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
San Bernardino County, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.05	-0.12	-0.21
San Diego County, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.01	-0.06	-0.11	-0.43
San Diego County, CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-0.01	-0.06	-0.11	-0.43
San Diego, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.06	-0.11	-0.43
San Francisco Bay Area, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.02	-0.19	-0.40	-1.18
San Francisco Bay Area, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.02	-0.19	-0.40	-1.18
San Francisco Bay Area, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.02	-0.19	-0.40	-1.18
San Francisco-Oakland-San Jose, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.18	-0.39	-1.14
San Joaquin Valley Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.01	-0.18	-0.41	-0.95
San Joaquin Valley, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-0.01	-0.18	-0.41	-0.95
San Joaquin Valley, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-0.01	-0.18	-0.41	-0.95
San Joaquin Valley, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.01	-0.18	-0.41	-0.95
San Joaquin Valley, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-0.01	-0.18	-0.41	-0.95
San Luis Obispo (Eastern San Luis Obispo), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	-0.01	-0.01
San Luis Obispo (Eastern part), CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	-0.01	-0.01
San Manuel (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
San Miguel County; Telluride, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Sanders County (part); Thompson Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Santa Cruz County; Nogales planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Seaford, DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	-0.01	-0.01	-0.05
Seattle-Tacoma, WA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.01	-0.06	-0.12	-0.47
Sheboygan County, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01
Sheridan County; City of Sheridan, WY	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Shoreline Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Shoshone County; City of Pinehurst, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Shoshone County; Pinehurst Expansion Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Silver Bow County; Butte, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Somerville, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Southern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.02	-0.03	-0.11

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Southwest Indiana, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Spokane County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.02	-0.08
Spokane, WA	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	-0.01	-0.02	-0.08
Springfield, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.02	-0.08
St. Bernard Parish, LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.02	-0.04	-0.06
St. Clair, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	-0.01
St. Lawrence County, NY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
St. Louis, MO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.10	-0.21	-0.76
St. Louis, MO-IL	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.04	-0.21	-0.44	-1.56
St. Louis-St. Charles-Farmington, MO-IL	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.05	-0.20	-0.42	-1.55
Steubenville, OH-WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.01	-0.01
Steubenville-Weirton, OH-WV	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	0.00	-0.01	-0.02
Stockton, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.01	-0.04
Sullivan County, TN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Sutter Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Syracuse, NY	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.02	-0.09
Tacoma, WA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.02	-0.07
Tazewell County: Groveland twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01
Terre Haute, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	-0.01
Thurston County; Cities of Olympia, Tumwater, and Lacey, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01	-0.02
Titus County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Toms River, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Tooele County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	0.00	0.00	-0.01	-0.01
Trenton, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.01	-0.02
Trona, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01
Tucson, AZ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.02	-0.04	-0.15
Tuolumne County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	-0.01
Tuscan Buttes, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Tuscan Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Uinta Basin, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.01	-0.01	-0.03
Union County; LaGrande, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Upper Green River Basin Area, WY	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	-0.01	-0.02
Utah County, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.02	-0.04	-0.12
Vancouver, WA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.01	-0.04
Ventura County, CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.00	-0.06	-0.13	-0.23
Ventura County, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	-0.06	-0.13	-0.23
Vermillion County; Part of Clinton Township, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Vigo County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.01	-0.03
Walla Walla County; Wallula, WA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00
Waltham, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01
Warren County, NJ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Warren County: Conewago Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.01	-0.02
Warren County: Warren Boro, Pleasant Twp, Glade Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	-0.01	-0.01	-0.02
Warren, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	-0.01	-0.02
Washington, DC-MD-VA	Ozone (2008 8-hour)	Nonattainment (DC) Maintenance (MD, VA), Marginal	50	0	-0.03	-0.11	-0.22	-0.83
Washington, DC-MD-VA	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.03	-0.11	-0.22	-0.83
Washington, DC-MD-VA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.02	-0.03	-0.12
Washoe County; Reno planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	-0.01	-0.01	-0.05
Wayne County, MI	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01	-0.02
Wayne County: Boston, Center, Franklin, Wayne & Webster Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01
West Central Pinal, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
West Silver Valley, ID	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Whatcom County, WA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	-0.01	-0.02
Winston-Salem, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.02	-0.08
Worcester, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.01	-0.03
Yakima County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.02
Yakima, WA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Yuba City-Marysville, CA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01	-0.02
Yuma, AZ	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	-0.01	-0.02
Yuma, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01	-0.04

Notes:

^a Nonattainment or maintenance status as of 2/1/2024. Source: EPA, The Green Book Nonattainment Areas for Criteria Pollutants; <http://www.epa.gov/airquality/greenbook/>. "--" indicates that no severity classification has been established for the NAAQS pollutant.

^b Emissions thresholds in tons per year. Where the threshold differs by precursor pollutant, the smallest of the precursor thresholds is shown. These thresholds are provided for information only; a general conformity determination is not required for the Proposed Action. Source: 40 CFR 93.853.

^c Positive values are emissions increases; negative values are emissions decreases.

EPA = U.S. Environmental Protection Agency; NAAQS = National Ambient Air Quality Standard; CO = carbon monoxide; NO₂ = nitrogen dioxide; PM2.5 = particulate matter less than 2.5 microns in size; PM10 = particulate matter less than 10 microns in size; SO₂ = sulfur dioxide.

Table D-24. Changes in Emissions from U.S. Heavy-Duty Pickup Trucks and Vans by Nonattainment or Maintenance Area and Alternative, Direct and Indirect Impacts--Particulate Matter (PM2.5), 2050

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Ada County; Boise, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.10	-0.15	-0.37
Adams, Denver, and Boulder Counties; Denver Metropolitan area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.39	-0.58	-1.39
Ajo (Pima County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Albuquerque, NM	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.23	-0.33	-0.82
Allegan County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.02	-0.02	-0.06
Allegheny County Air Basin: Hazelwood monitor, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.02	-0.02	-0.06
Allegheny County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	-0.01	-0.21	-0.30	-0.74
Allegheny County; Liberty, Lincoln, Port Vue, Glassport, Clairton, PA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Allegheny, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.02	-0.03	-0.06
Allentown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.14	-0.20	-0.50
Allentown-Bethlehem-Easton, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.01	-0.15	-0.22	-0.54
Alton Township, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.06	0.05	0.22
Amador County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.01	-0.01	-0.02
Anchorage, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	-0.05	-0.08	-0.19
Anchorage; Eagle River, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Anne Arundel County and Baltimore County, MD	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.05	-0.78	-1.13	-2.81
Archuleta County; Pagosa Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.01	0.00	0.03
Armstrong County; Madison, Mahoning, Boggs, Washington, Pine, PA	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	0.00	0.01
Aroostock County; City of Presque Isle, ME	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Atlanta, GA	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-0.15	-2.38	-3.44	-8.57
Atlanta, GA	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.14	-2.19	-3.17	-7.89
Atlantic City, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.01	-0.03
Bakersfield, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.09	-0.14	-0.33
Baltimore, MD	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	-0.09	-1.41	-2.04	-5.09
Baltimore, MD	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.09	-1.42	-2.05	-5.11
Baltimore, MD	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	-0.01
Baton Rouge, LA	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.01	-0.06	-0.23	-0.17

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Beaver, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	-0.01
Benton County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	-0.01
Berrien County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.05	-0.07	-0.16
Billings, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.01	-0.03	0.04
Billings, MT	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.01	0.06	0.06	0.25
Birmingham, AL	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.02	-0.35	-0.51	-1.25
Boise-Northern Ada County, ID	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.10	-0.15	-0.37
Bonner County; The Sandpoint Area, ID	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Boston, MA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.21	-0.30	-0.74
Boyd County (part), KY	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.01	0.08	0.07	0.32
Brooke; Follansbee area, WV	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Brown County: Green Bay, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01
Burlington, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.01	-0.03
Butte County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.03	-0.04	-0.10
Calaveras County, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	-0.01	-0.02
Calaveras County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	-0.01	-0.02
Campbell-Clermont Counties, KY-OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.01	-0.01
Canton-Massillon, OH	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	-0.03	-0.06	-0.09
Central New Hampshire, NH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.04	-0.06	-0.16
Central Steptoe Valley, NV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01
Charleston, WV	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.01	-0.09	-0.13	-0.33
Charlotte, NC	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.03	-0.44	-0.63	-1.58
Charlotte-Rock Hill, NC-SC	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.04	-0.65	-0.93	-2.33
Chicago, IL-IN-WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.06	-1.38	-2.38	-4.84
Chicago-Naperville, IL-IN-WI	Ozone (2008 8-hour)	Maintenance, Serious	100	0	-0.10	-1.74	-2.71	-6.20
Chico (Butte County), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.03	-0.04	-0.10
Chico, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.02	-0.04
Chico, CA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	0.00	-0.03	-0.04	-0.10
Cincinnati, OH-KY (OH Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.03	-0.41	-0.60	-1.49
Cincinnati, OH-KY (KY Portion)	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	0.00	-0.05	-0.08	-0.19

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Cincinnati, OH-KY-IN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.03	-0.51	-0.74	-1.82
Clark County; Las Vegas planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.03	-0.44	-0.64	-1.58
Cleveland, OH	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.03	-0.49	-0.73	-1.76
Cleveland, OH	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.23	-0.33	-0.82
Cleveland, OH	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-0.02	-0.27	-0.39	-0.98
Cleveland-Akron-Lorain, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.03	-0.50	-0.75	-1.81
Cleveland-Akron-Lorain, OH	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.03	-0.45	-0.67	-1.61
Cochise County; Paul Spur/Douglas planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01
Colorado Springs, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.09	-0.13	-0.32
Columbus, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.03	-0.49	-0.71	-1.77
Columbus, OH	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.03	-0.47	-0.68	-1.68
Cook County; Lyons Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.02	-0.03	-0.08
Cook County; Southeast Chicago, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.15	0.12	0.58
Coshocton County; Franklin Township, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Coso Junction, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.01	0.01	0.04
Cuyahoga County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.23	-0.33	-0.83
Cuyahoga County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.19	-0.27	-0.67
Dallas-Fort Worth, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.13	-2.10	-3.04	-7.54
Dallas-Fort Worth, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.13	-2.08	-3.02	-7.49
Dane County; Madison sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.16	-0.22	-0.56
Delaware County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.03	0.26	0.18	0.99
Denver Metro/North Front Range, CO	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.06	-0.95	-1.43	-3.39
Denver-Boulder, CO	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.05	-0.75	-1.11	-2.70
Denver-Boulder-Greeley-Ft. Collins-Loveland, CO	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.06	-1.01	-1.48	-3.61
Detroit, MI	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	-0.09	-1.46	-2.17	-5.23
Detroit, MI	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.03	-0.55	-0.81	-1.99
Detroit, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.04	-0.07	-0.14
Detroit-Ann Arbor, MI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.09	-1.46	-2.18	-5.24
Doña Ana County; Anthony, NM	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.04	0.03	0.14

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Door County, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	0.00
Door County-Revised, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	-0.01	-0.01	-0.02
Douglas (Cochise County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01
Dukes County, MA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	-0.01
Duluth, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.02	-0.03	-0.07
East Chicago, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.02	0.18	0.15	0.67
East Helena Area, MT	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
East Kern County, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.01	0.00	0.03
El Paso County, TX	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.06	-0.11	-0.22
El Paso, TX	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.03	0.02	0.11
El Paso-Las Cruces, TX-NM	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.06	-0.13	-0.20
Eugene-Springfield, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.04	-0.06	-0.15
Evangeline Parish (Partial), LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Fairbanks, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	-0.02	-0.02	-0.06
Fairbanks, AK	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	0.00	-0.03	-0.04	-0.10
Flathead County; Columbia Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Flathead County; Kalispell and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.02	-0.03	-0.07
Flathead County; Whitefish and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Fort Collins, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.04	-0.06	-0.14
Freehold, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01
Freestone and Anderson Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	-0.01
Fremont County; Canon City Area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.03
Fresno, CA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.01	-0.10	-0.15	-0.38
Gila County (part): Payson, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01	-0.01
Giles County, VA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Grant County, NM	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.01	-0.03
Grants Pass, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.01	-0.02

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Great Falls, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.01	0.01	0.03
Greater Connecticut, CT	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-0.02	-0.31	-0.45	-1.12
Greater Connecticut, CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.02	-0.31	-0.45	-1.12
Greeley, CO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.05	-0.14	-0.17
Hancock County (part): Weirton, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.01
Hancock and Brooke Counties (Part); The city of Weirton, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.01
Harrisburg-Lebanon-Carlisle-York, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.26	-0.37	-0.93
Hartford-New Britain-Middletown, CT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.23	-0.33	-0.81
Hayden (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	0.00	-0.01
Hayden, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01
Hayden, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	-0.01
Henderson-Webster Counties, KY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Hillsborough County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	-0.01
Hillsborough-Polk County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Houston-Galveston-Brazoria, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.02	-0.80	-1.61	-2.71
Houston-Galveston-Brazoria, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.02	-0.76	-1.55	-2.57
Howard County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.04	0.03	0.13
Humphreys County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	-0.01
Huntington, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	-0.01	-0.02
Hutchinson County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.04	0.04	0.17
Imperial County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.04	-0.05	-0.13
Imperial County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.04	-0.05	-0.13
Imperial County, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.03	-0.04	-0.11
Imperial County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.00	-0.03	-0.04	-0.11
Imperial Valley, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	-0.03	-0.05	-0.12
Indian Wells, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.01
Indiana, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	-0.02	-0.03
Indianapolis, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Indianapolis, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.20	-0.29	-0.73
Inland Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.03

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Inyo County; Owens Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00
Jackson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.02	-0.03	-0.07
Jackson County; Medford-Ashland (including White City), OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.03	-0.04	-0.10
Jamestown, NY	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.01	0.00	0.05
Jefferson County, KY	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Jefferson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.01	-0.01	-0.03
Jefferson County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Jefferson County; (part) Steubenville & Mingo Junction, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.01	-0.01
Johnstown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.03	-0.05
Josephine County; Grants Pass, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01	-0.02
Juneau; Mendenhall Valley area, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Kern County (Eastern Kern), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.03	0.26	0.22	1.00
Kern County (Eastern Kern), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.03	0.26	0.22	1.00
King County; Kent, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01	-0.01
King County; Seattle, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Klamath Falls, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.01	-0.04
Klamath Falls, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.04
Klamath Falls, OR	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.02	-0.04
Knoxville, TN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.01	-0.17	-0.24	-0.60
Knoxville-Sevierville-La Follette, TN	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.19	-0.27	-0.67
La Porte County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.02	-0.04
LaSalle County; Oglesby, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.02
Lake County (part); Lakeview, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Lake County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.01	0.09	0.03	0.38
Lake County, OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.04	-0.05	-0.13
Lake County; (part) Eastlake, Timberlake, Lakeline, Willoughby, Mentor, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.01	-0.02
Lake County; Cities of East Chicago, Hammond, Whiting, and Gary, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.12	0.08	0.48
Lake County; Polson, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Lake County; Ronan, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Lake Tahoe North Shore, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01
Lake Tahoe South Shore, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.01	-0.02
Lake Tahoe, NV	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.01	-0.02
Lancaster, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.01	-0.11	-0.16	-0.39
Lancaster, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.11	-0.16	-0.39
Lane County (part); Oakridge, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Lane County; Eugene/Springfield, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.04	-0.06	-0.15
Las Vegas, NV	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.03	-0.44	-0.64	-1.58
Las Vegas, NV	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.03	-0.44	-0.64	-1.58
Laurel Area (Yellowstone County), MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.01	0.06	0.05	0.24
Lebanon County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	-0.02	-0.03	-0.07
Lemont, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.01	0.13	0.09	0.49
Liberty-Clairton, PA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01
Lincoln County; Libby and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Logan, UT-ID	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	-0.04	-0.05	-0.13
Longmont, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.01	0.00
Lorain County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.01	-0.03
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.02	0.18	0.11	0.72
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	0.02	0.18	0.11	0.72
Los Angeles-South Coast Air Basin, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-0.12	-2.11	-3.21	-7.53
Los Angeles-South Coast Air Basin, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-0.12	-2.11	-3.20	-7.53
Los Angeles-South Coast Air Basin, CA	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.12	-2.11	-3.21	-7.53
Los Angeles-South Coast Air Basin, CA	NO ₂ (1971 Annual)	Maintenance, Primary	100	0	-0.12	-2.11	-3.21	-7.53
Los Angeles-South Coast Air Basin, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.12	-2.11	-3.21	-7.53
Los Angeles-South Coast Air Basin, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-0.12	-2.11	-3.21	-7.53
Louisville, KY-IN (IN Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	-0.04	-0.06	-0.15
Louisville, KY-IN (KY Portion)	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.20	-0.29	-0.73
Lowell, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.02	-0.03	-0.06

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Lucas County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.01	0.04	0.00	0.15
Madison County; Granite City Township and Nameoki Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.04	0.03	0.16
Manchester, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.02	-0.02	-0.06
Manitowoc County, WI	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	-0.01	-0.01	-0.04
Marathon County: Rothschild Sub-city area, Rib Mountain, Weston, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	-0.03	-0.04	-0.11
Maricopa and Pinal Counties; Phoenix planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.10	-1.63	-2.36	-5.88
Marion County: Lawrence, Washington, and Warrant Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.17	-0.24	-0.60
Mariposa County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01
Mariposa County, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01
Marshall, WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Medford, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.02	-0.02	-0.06
Memphis, TN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.19	-0.29	-0.67
Memphis, TN-MS-AR	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.01	-0.24	-0.36	-0.84
Miami (Gila County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.01	-0.02
Miami, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01	-0.02
Miami, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.01	-0.02
Millinocket AQCR 109, ME	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.04	-0.06	-0.16
Milwaukee, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.02	-0.28	-0.40	-1.00
Milwaukee, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.11	-0.16	-0.40
Milwaukee-Racine, WI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.02	-0.25	-0.36	-0.89
Minneapolis-St. Paul, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.05	-0.80	-1.19	-2.86
Minneapolis-St. Paul, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.05	-0.78	-1.16	-2.80
Missoula, MT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.04	-0.06	-0.14
Missoula, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.04	-0.06	-0.15
Modesto, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.04	-0.06	-0.16
Mohave County (part); Bullhead City, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.02	-0.02	-0.05
Mono Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Mono County; Mammoth Lake planning area, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.02
Morenci (Greenlee County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Morgan County, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.01	-0.01
Morongo Band of Mission Indians, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	0.00	0.00
Morongo Band of Mission Indians, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00
Morristown, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.01	-0.02
Muscatine County, IA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.01	-0.01
Muscatine, IA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	-0.01	-0.02
Muskegon County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.02	-0.03	-0.08
Muskingum River, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Nashua, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.02	-0.05
Nassau County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Navarro County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Nevada County (Western part), CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.00	-0.01	-0.02	-0.04
Nevada County (Western part), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	-0.01	-0.02	-0.04
New Haven County, CT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01	-0.02
New Haven-Meriden-Waterbury, CT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.15	-0.22	-0.56
New Madrid County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
New Manchester-Grant magisterial district in Hancock County, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.01
New York County, NY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.13	-0.19	-0.48
New York-N. New Jersey-Long Island, NY-NJ-CT	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.17	-2.77	-4.04	-9.97
New York-N. New Jersey-Long Island, NY-NJ-CT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.09	-1.54	-2.26	-5.54
New York-N. New Jersey-Long Island, NY-NJ-CT	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.18	-2.88	-4.19	-10.36
New York-Northern New Jersey-Long Island, NY-NJ-CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.17	-2.78	-4.04	-9.97
Nogales, AZ	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Northern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.04	-0.65	-0.95	-2.32
Oakridge, OR	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Ogden, UT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.04	-0.05	-0.13
Ogden, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.04	-0.05	-0.13

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Olmsted County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.02
Olmsted County; City of Rochester, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.02	-0.03	-0.08
Oneida County: Rhinelander Sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	-0.01	-0.02	-0.04
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Pekin, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.01	-0.02	-0.05
Penns Grove, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Peoria County: Hollis twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Peoria, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.03	-0.04	-0.10
Perth Amboy, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.02	-0.02	-0.05
Philadelphia-Camden County, PA-NJ	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.02	0.09	-0.02	0.38
Philadelphia-Wilmington, PA-NJ-DE (NJ Portion)	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.03	-0.50	-0.75	-1.79
Philadelphia-Wilmington, PA-NJ-DE (PA-DE Portion)	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.41	-0.76	-1.43
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.07	-1.25	-2.00	-4.44
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.02	-0.81	-1.61	-2.75
Phoenix, AZ	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.10	-1.61	-2.33	-5.80
Phoenix-Mesa, AZ	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-0.10	-1.64	-2.36	-5.89
Phoenix-Mesa, AZ	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.10	-1.64	-2.38	-5.91
Pierce County; Tacoma, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.01
Pima County; Ajo planning area, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Pima County; Rillito planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.01	-0.03
Pinal County (part); West Pinal, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	-0.03	-0.05	-0.11
Pitkin County; Aspen, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.02	-0.02	-0.06
Pittsburgh, PA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.06	-0.08	-0.20
Pittsburgh-Beaver Valley, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.03	-0.43	-0.65	-1.56
Pittsburgh-Beaver Valley, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.39	-0.59	-1.41
Plumas County, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00
Polk County, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Portland, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.33	-0.48	-1.18

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Power-Bannock Counties; Fort Hall Indian Reservation, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01
Power-Bannock Counties; Portneuf Valley Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.02	-0.02	-0.06
Provo, UT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.00	-0.03	-0.05	-0.12
Provo, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.01	-0.10	-0.16	-0.37
Prowers County; Lamar, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01	-0.02
Raleigh-Durham, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.03	-0.50	-0.72	-1.79
Ramsey County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.06	0.05	0.24
Reading, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	-0.07	-0.11	-0.26
Reno, NV	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.06	-0.08	-0.20
Rhineland, WI	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.01	-0.01	-0.02
Riverside County (Coachella Valley), CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	0.00	-0.06	-0.08	-0.21
Riverside County (Coachella Valley), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	0.00	-0.06	-0.08	-0.21
Riverside County; Coachella Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	-0.07	-0.10	-0.24
Riverside, Los Angeles, Orange, & San Bernardino Counties; South Coast Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.12	-2.10	-3.19	-7.50
Rosebud County; Lame Deer, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Routt County (part); Steamboat Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.02	0.01	0.09
Rusk and Panola Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.01
Sacramento County, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	-0.12	-0.39	-0.34
Sacramento Metro, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.02	-0.54	-1.00	-1.87
Sacramento Metro, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.02	-0.54	-1.00	-1.87
Sacramento, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.04	-0.61	-0.90	-2.20
Sacramento, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.02	-0.53	-0.98	-1.81
Salem, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.06	-0.09	-0.23
Salt Lake City, UT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.07	-0.12	-0.25
Salt Lake City, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.04	-0.67	-0.99	-2.42
Salt Lake County, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.03	-0.46	-0.68	-1.65
Salt Lake County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	-0.03	-0.46	-0.68	-1.65
San Antonio, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.03	-0.50	-0.73	-1.81

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
San Bernardino County, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.02	0.22	0.16	0.86
San Diego County, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.03	-0.49	-0.70	-1.75
San Diego County, CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-0.03	-0.49	-0.70	-1.75
San Diego, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.03	-0.49	-0.70	-1.75
San Francisco Bay Area, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.03	-0.69	-1.22	-2.41
San Francisco Bay Area, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.03	-0.69	-1.22	-2.40
San Francisco Bay Area, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.03	-0.69	-1.23	-2.42
San Francisco-Oakland-San Jose, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.03	-0.64	-1.15	-2.23
San Joaquin Valley Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.02	-0.02	-0.40	0.05
San Joaquin Valley, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	0.02	-0.02	-0.40	0.05
San Joaquin Valley, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	0.02	-0.02	-0.40	0.05
San Joaquin Valley, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	0.02	-0.02	-0.40	0.05
San Joaquin Valley, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	0.02	-0.02	-0.40	0.05
San Luis Obispo (Eastern San Luis Obispo), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.02	0.01	0.06
San Luis Obispo (Eastern part), CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.02	0.01	0.06
San Manuel (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01
San Miguel County; Telluride, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01	-0.02
Sanders County (part); Thompson Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Santa Cruz County; Nogales planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01
Seaford, DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	-0.06	-0.08	-0.20
Seattle-Tacoma, WA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.03	-0.52	-0.76	-1.88
Sheboygan County, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.02	-0.04
Sheridan County; City of Sheridan, WY	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.03
Shoreline Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.04
Shoshone County; City of Pinehurst, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Shoshone County; Pinehurst Expansion Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01	-0.01
Silver Bow County; Butte, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.03
Somerville, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01
Southern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.10	-0.16	-0.37

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Southwest Indiana, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Spokane County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.09	-0.13	-0.33
Spokane, WA	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.01	-0.09	-0.13	-0.33
Springfield, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.09	-0.13	-0.32
St. Bernard Parish, LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.08	0.07	0.32
St. Clair, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	-0.02	-0.04
St. Lawrence County, NY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	-0.01
St. Louis, MO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.05	-0.76	-1.13	-2.72
St. Louis, MO-IL	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.09	-1.56	-2.32	-5.59
St. Louis-St. Charles-Farmington, MO-IL	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.10	-1.64	-2.40	-5.88
Steubenville, OH-WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.01
Steubenville-Weirton, OH-WV	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	-0.01	-0.01	-0.02
Stockton, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.05	-0.07	-0.18
Sullivan County, TN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	-0.01
Sutter Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Syracuse, NY	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.11	-0.15	-0.38
Tacoma, WA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	-0.07	-0.10	-0.26
Tazewell County: Groveland twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.01	-0.02
Terre Haute, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.01	-0.02	-0.05
Thurston County; Cities of Olympia, Tumwater, and Lacey, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.03	-0.04	-0.10
Titus County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Toms River, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Tooele County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	0.00	0.02	0.01	0.06
Trenton, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.03	-0.04	-0.10
Trona, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.01	0.01	0.04
Tucson, AZ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.17	-0.24	-0.61
Tuolumne County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.01	-0.01	-0.03
Tuscan Buttes, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Tuscan Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Uinta Basin, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.02	-0.04	-0.07
Union County; LaGrande, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Upper Green River Basin Area, WY	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.01	-0.01	-0.02
Utah County, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.10	-0.15	-0.35
Vancouver, WA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.05	-0.07	-0.17
Ventura County, CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.02	0.19	0.11	0.73
Ventura County, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.02	0.19	0.11	0.73
Vermillion County; Part of Clinton Township, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Vigo County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.03	-0.04	-0.10
Walla Walla County; Wallula, WA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00
Waltham, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.01	-0.04
Warren County, NJ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	-0.01	-0.01
Warren County: Conewago Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.03	0.03	0.12
Warren County: Warren Boro, Pleasant Twp, Glade Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.03	0.03	0.12
Warren, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.03	0.02	0.11
Washington, DC-MD-VA	Ozone (2008 8-hour)	Nonattainment (DC) Maintenance (MD, VA), Marginal	50	0	-0.06	-0.93	-1.34	-3.35
Washington, DC-MD-VA	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.06	-0.93	-1.35	-3.35
Washington, DC-MD-VA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.14	-0.20	-0.49
Washoe County; Reno planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	-0.06	-0.08	-0.20
Wayne County, MI	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01	0.01
Wayne County: Boston, Center, Franklin, Wayne & Webster Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.02	-0.05
West Central Pinal, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01
West Silver Valley, ID	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Whatcom County, WA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.04	0.03	0.13
Winston-Salem, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.09	-0.14	-0.34
Worcester, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.03	-0.05	-0.12
Yakima County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.02	-0.03	-0.08
Yakima, WA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.01	-0.03

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Yuba City-Marysville, CA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	-0.03	-0.04	-0.09
Yuma, AZ	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.03	-0.04	-0.10
Yuma, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.04	-0.06	-0.15

Notes:

^a Nonattainment or maintenance status as of 2/1/2024. Source: EPA, The Green Book Nonattainment Areas for Criteria Pollutants; <http://www.epa.gov/airquality/greenbook/>. "--" indicates that no severity classification has been established for the NAAQS pollutant.

^b Emissions thresholds in tons per year. Where the threshold differs by precursor pollutant, the smallest of the precursor thresholds is shown. These thresholds are provided for information only; a general conformity determination is not required for the Proposed Action. Source: 40 CFR 93.853.

^c Positive values are emissions increases; negative values are emissions decreases.

EPA = U.S. Environmental Protection Agency; NAAQS = National Ambient Air Quality Standard; CO = carbon monoxide; NO₂ = nitrogen dioxide; PM2.5 = particulate matter less than 2.5 microns in size; PM10 = particulate matter less than 10 microns in size; SO₂ = sulfur dioxide.

Table D-25. Changes in Emissions from U.S. Heavy-Duty Pickup Trucks and Vans by Nonattainment or Maintenance Area and Alternative, Direct and Indirect Impacts--Sulfur Oxides (SO₂), 2035

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Ada County; Boise, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.04
Adams, Denver, and Boulder Counties; Denver Metropolitan area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.08	0.14	0.57
Ajo (Pima County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Albuquerque, NM	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.03	-0.09
Allegan County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Allegheny County Air Basin: Hazelwood monitor, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.02
Allegheny County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.01	0.02	0.04	0.18
Allegheny County; Liberty, Lincoln, Port Vue, Glassport, Clairton, PA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.01	0.02
Allegheny, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.03	0.05	0.21
Allentown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.02	-0.05
Allentown-Bethlehem-Easton, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	-0.01	-0.02	-0.06
Alton Township, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.21	1.01	1.91	7.25
Amador County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Anchorage, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	-0.01
Anchorage; Eagle River, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Anne Arundel County and Baltimore County, MD	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.05	-0.09	-0.30
Archuleta County; Pagosa Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.01	0.02	0.06
Armstrong County; Madison, Mahoning, Boggs, Washington, Pine, PA	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.01	0.01	0.05
Aroostock County; City of Presque Isle, ME	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Atlanta, GA	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-0.02	-0.14	-0.29	-0.92
Atlanta, GA	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.02	-0.13	-0.27	-0.84
Atlantic City, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Bakersfield, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.01	0.02	0.09
Baltimore, MD	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	0.00	-0.04	-0.08	-0.21
Baltimore, MD	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	0.00	-0.04	-0.09	-0.22
Baltimore, MD	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.01
Baton Rouge, LA	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.10	0.49	0.92	3.51
Beaver, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.01
Benton County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Berrien County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01	-0.02

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Billings, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.12	0.58	1.08	4.13
Billings, MT	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.12	0.58	1.09	4.15
Birmingham, AL	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.01	0.02	0.03	0.15
Boise-Northern Ada County, ID	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.01	-0.04
Bonner County; The Sandpoint Area, ID	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Boston, MA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.02	-0.08
Boyd County (part), KY	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.03	0.13	0.24	0.91
Brooke; Follansbee area, WV	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.01	0.01	0.05
Brown County: Green Bay, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Burlington, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Butte County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	-0.01
Calaveras County, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Calaveras County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Campbell-Clermont Counties, KY-OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Canton-Massillon, OH	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.02	0.09	0.17	0.63
Central New Hampshire, NH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.01	-0.02
Central Steptoe Valley, NV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Charleston, WV	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	-0.01	-0.01	-0.03
Charlotte, NC	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.03	-0.05	-0.17
Charlotte-Rock Hill, NC-SC	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.01	-0.04	-0.08	-0.25
Chicago, IL-IN-WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.26	1.22	2.29	8.87
Chicago-Naperville, IL-IN-WI	Ozone (2008 8-hour)	Maintenance, Serious	100	0	0.12	0.55	1.02	4.03
Chico (Butte County), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	-0.01
Chico, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Chico, CA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Cincinnati, OH-KY (OH Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	-0.02	-0.05	-0.16
Cincinnati, OH-KY (KY Portion)	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	0.03	0.17	0.32	1.22
Cincinnati, OH-KY-IN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.03	0.14	0.26	1.04
Clark County; Las Vegas planning area, NV	PM ₁₀ (1987 24-hour)	Maintenance, Serious	100	0	0.00	-0.03	-0.05	-0.17
Cleveland, OH	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.01	0.05	0.10	0.41
Cleveland, OH	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.02	-0.05
Cleveland, OH	PM _{2.5} (2012 Annual)	Maintenance, Moderate	100	0	0.00	-0.01	-0.02	-0.06

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Cleveland-Akron-Lorain, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.01	0.06	0.10	0.43
Cleveland-Akron-Lorain, OH	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.01	0.06	0.10	0.42
Cochise County; Paul Spur/Douglas planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Colorado Springs, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.01	-0.03
Columbus, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	-0.02	-0.05	-0.14
Columbus, OH	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	-0.02	-0.05	-0.15
Cook County; Lyons Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Cook County; Southeast Chicago, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.05	0.27	0.50	1.92
Coshocton County; Franklin Township, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.01
Coso Junction, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.02	0.03	0.12
Cuyahoga County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.02	-0.05
Cuyahoga County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.02	-0.06
Dallas-Fort Worth, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.01	-0.11	-0.22	-0.69
Dallas-Fort Worth, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.11	-0.22	-0.69
Dane County; Madison sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.02	-0.06
Delaware County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.10	0.51	0.96	3.65
Denver Metro/North Front Range, CO	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.05	0.24	0.44	1.76
Denver-Boulder, CO	CO (1971 8-hour)	Maintenance, Serious	100	0	0.01	0.05	0.10	0.43
Denver-Boulder-Greeley-Ft. Collins-Loveland, CO	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.01	0.04	0.08	0.37
Detroit, MI	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	0.15	0.70	1.32	5.12
Detroit, MI	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.02	0.10	0.18	0.74
Detroit, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.03	0.13	0.25	0.94
Detroit-Ann Arbor, MI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.15	0.70	1.32	5.12
Doña Ana County; Anthony, NM	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.06	0.10	0.39
Door County, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	0.00
Door County-Revised, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	0.00
Douglas (Cochise County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Dukes County, MA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	0.00
Duluth, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.01	0.03	0.10
East Chicago, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.05	0.27	0.51	1.93
East Helena Area, MT	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
East Kern County, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.02	0.03	0.12
El Paso County, TX	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.05	0.09	0.36
El Paso, TX	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.01	0.05	0.10	0.39
El Paso-Las Cruces, TX-NM	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.02	0.10	0.19	0.74
Eugene-Springfield, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01
Evangeline Parish (Partial), LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Fairbanks, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.01	0.01	0.04
Fairbanks, AK	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.01	0.03
Flathead County; Columbia Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Flathead County; Kalispell and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Flathead County; Whitefish and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Fort Collins, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	-0.01
Freehold, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Freestone and Anderson Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.01	0.01	0.05
Fremont County; Canon City Area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Fresno, CA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.00	-0.01	-0.01	-0.04
Gila County (part): Payson, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Giles County, VA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Grant County, NM	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Grants Pass, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Great Falls, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.01	0.02	0.08
Greater Connecticut, CT	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.00	-0.02	-0.04	-0.12
Greater Connecticut, CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	0.00	-0.02	-0.04	-0.12
Greeley, CO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.06	0.29	0.54	2.08
Hancock County (part): Weirton, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.02	0.03	0.12
Hancock and Brooke Counties (Part); The city of Weirton, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.02	0.03	0.12
Harrisburg-Lebanon-Carlisle-York, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	-0.02	-0.03	-0.10
Hartford-New Britain-Middletown, CT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.03	-0.09
Hayden (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	0.00	0.00
Hayden, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Hayden, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Henderson-Webster Counties, KY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Hillsborough County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.01
Hillsborough-Polk County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.01

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Houston-Galveston-Brazoria, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.81	3.96	7.45	28.44
Houston-Galveston-Brazoria, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.81	3.96	7.45	28.45
Howard County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.11	0.53	1.00	3.79
Humphreys County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Huntington, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Hutchinson County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.03	0.13	0.24	0.93
Imperial County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01
Imperial County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	-0.01
Imperial County, CA	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01
Imperial County, CA	PM _{2.5} (2012 Annual)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01
Imperial Valley, CA	PM ₁₀ (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	-0.01
Indian Wells, CA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.02	0.03	0.12
Indiana, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.01	0.03	0.10
Indianapolis, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Indianapolis, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.01	-0.02	-0.08
Inland Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Inyo County; Owens Valley planning area, CA	PM ₁₀ (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00
Jackson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	-0.01
Jackson County; Medford-Ashland (including White City), OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Jamestown, NY	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.04	0.21	0.40	1.53
Jefferson County, KY	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Jefferson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Jefferson County, OH	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.01	0.01	0.05
Jefferson County; (part) Steubenville & Mingo Junction, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.02	0.03	0.11
Johnstown, PA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.01	0.02	0.06
Josephine County; Grants Pass, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Juneau; Mendenhall Valley area, AK	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Kern County (Eastern Kern), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.25	1.24	2.33	8.85
Kern County (Eastern Kern), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.25	1.24	2.33	8.85
King County; Kent, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
King County; Seattle, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Klamath Falls, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Klamath Falls, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Klamath Falls, OR	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Knoxville, TN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	-0.01	-0.02	-0.06
Knoxville-Sevierville-La Follette, TN	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.02	-0.07
La Porte County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
LaSalle County; Oglesby, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Lake County (part); Lakeview, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Lake County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.05	0.26	0.50	1.90
Lake County, OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Lake County; (part) Eastlake, Timberlake, Lakeline, Willoughby, Mentor, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Lake County; Cities of East Chicago, Hammond, Whiting, and Gary, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.05	0.27	0.50	1.91
Lake County; Polson, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Lake County; Ronan, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Lake Tahoe North Shore, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Lake Tahoe South Shore, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Lake Tahoe, NV	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Lancaster, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	-0.01	-0.01	-0.04
Lancaster, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.04
Lane County (part); Oakridge, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Lane County; Eugene/Springfield, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Las Vegas, NV	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.03	-0.05	-0.17
Las Vegas, NV	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	-0.03	-0.05	-0.17
Laurel Area (Yellowstone County), MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.12	0.58	1.09	4.15
Lebanon County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Lemont, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.08	0.40	0.75	2.87
Liberty-Clairton, PA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.01	0.02
Lincoln County; Libby and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Logan, UT-ID	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Longmont, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.01	0.01	0.05
Lorain County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.25	1.23	2.32	8.82
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	0.25	1.23	2.32	8.82

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Los Angeles-South Coast Air Basin, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	0.23	1.10	2.05	7.98
Los Angeles-South Coast Air Basin, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	0.23	1.10	2.05	7.98
Los Angeles-South Coast Air Basin, CA	CO (1971 8-hour)	Maintenance, Serious	100	0	0.23	1.10	2.05	7.98
Los Angeles-South Coast Air Basin, CA	NO ₂ (1971 Annual)	Maintenance, Primary	100	0	0.23	1.10	2.05	7.98
Los Angeles-South Coast Air Basin, CA	PM _{2.5} (2006 24-hour)	Nonattainment, Serious	70	0	0.23	1.10	2.05	7.98
Los Angeles-South Coast Air Basin, CA	PM _{2.5} (2012 Annual)	Nonattainment, Serious	70	0	0.23	1.10	2.05	7.98
Louisville, KY-IN (IN Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	-0.01	-0.02
Louisville, KY-IN (KY Portion)	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.02	-0.08
Lowell, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01
Lucas County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.11	0.54	1.02	3.90
Madison County; Granite City Township and Nameoki Township, IL	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.21	1.01	1.91	7.25
Manchester, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01
Manitowoc County, WI	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	0.00	0.00
Marathon County: Rothschild Sub-city area, Rib Mountain, Weston, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	-0.01
Maricopa and Pinal Counties; Phoenix planning area, AZ	PM ₁₀ (1987 24-hour)	Nonattainment, Serious	70	0	-0.01	-0.10	-0.20	-0.63
Marion County: Lawrence, Washington, and Warrant Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.02	-0.06
Mariposa County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Mariposa County, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Marshall, WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.01	0.03	0.05	0.19
Medford, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	-0.01
Memphis, TN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.01	0.02	0.05	0.19
Memphis, TN-MS-AR	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.01	0.02	0.04	0.17
Miami (Gila County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Miami, AZ	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Miami, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Millinocket AQCR 109, ME	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.01	-0.02
Milwaukee, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.02	-0.03	-0.11
Milwaukee, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.01	-0.04
Milwaukee-Racine, WI	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	-0.02	-0.03	-0.10
Minneapolis-St. Paul, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.10	0.45	0.85	3.30

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Minneapolis-St. Paul, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.10	0.46	0.85	3.30
Missoula, MT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	-0.01
Missoula, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Modesto, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	-0.01
Mohave County (part); Bullhead City, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Mono Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Mono County; Mammoth Lake planning area, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Morenci (Greenlee County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Morgan County, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Morongo Band of Mission Indians, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	0.00	0.00
Morongo Band of Mission Indians, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00
Morristown, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Muscatine County, IA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Muscatine, IA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Muskegon County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01
Muskingum River, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.01	0.03
Nashua, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01
Nassau County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Navarro County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.01	0.01	0.04
Nevada County (Western part), CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00
Nevada County (Western part), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00
New Haven County, CT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
New Haven-Meriden-Waterbury, CT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.02	-0.06
New Madrid County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
New Manchester-Grant magisterial district in Hancock County, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.02	0.03	0.12
New York County, NY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.02	-0.05
New York-N. New Jersey-Long Island, NY-NJ-CT	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.01	-0.13	-0.26	-0.76
New York-N. New Jersey-Long Island, NY-NJ-CT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.00	-0.05	-0.11	-0.30
New York-N. New Jersey-Long Island, NY-NJ-CT	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.01	-0.13	-0.27	-0.81
New York-Northern New Jersey-Long Island, NY-NJ-CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.01	-0.13	-0.26	-0.76
Nogales, AZ	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Northern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.09	0.40	0.76	2.93
Oakridge, OR	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Ogden, UT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	-0.01
Ogden, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Olmsted County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Olmsted County; City of Rochester, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01
Oneida County: Rhinelander Sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Pekin, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Penns Grove, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Peoria County: Hollis twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Peoria, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Perth Amboy, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01
Philadelphia-Camden County, PA-NJ	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.04	0.17	0.33	1.25
Philadelphia-Wilmington, PA-NJ-DE (NJ Portion)	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	0.00	-0.01	0.00
Philadelphia-Wilmington, PA-NJ-DE (PA-DE Portion)	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.09	0.44	0.83	3.21
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.09	0.42	0.78	3.07
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	0.32	1.56	2.93	11.27
Phoenix, AZ	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.01	-0.10	-0.19	-0.62
Phoenix-Mesa, AZ	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.10	-0.20	-0.63
Phoenix-Mesa, AZ	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.10	-0.20	-0.63
Pierce County; Tacoma, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.01	0.03
Pima County; Ajo planning area, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Pima County; Rillito planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Pinal County (part); West Pinal, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	-0.01
Pitkin County; Aspen, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Pittsburgh, PA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Pittsburgh-Beaver Valley, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.01	0.05	0.09	0.37
Pittsburgh-Beaver Valley, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.01	0.05	0.09	0.37
Plumas County, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00
Polk County, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Portland, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.02	-0.04	-0.11

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Power-Bannock Counties; Fort Hall Indian Reservation, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Power-Bannock Counties; Portneuf Valley Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Provo, UT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.00	0.00	0.00	-0.01
Provo, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	0.07	0.34	0.64	2.46
Prowers County; Lamar, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Raleigh-Durham, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.03	-0.06	-0.19
Ramsey County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.10	0.51	0.95	3.63
Reading, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	-0.01	-0.02
Reno, NV	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.01	-0.02
Rhineland, WI	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Riverside County (Coachella Valley), CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	0.00	0.00	-0.01	-0.02
Riverside County (Coachella Valley), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	-0.01	-0.02
Riverside County; Coachella Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	-0.01	-0.03
Riverside, Los Angeles, Orange, & San Bernardino Counties; South Coast Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.23	1.10	2.05	7.98
Rosebud County; Lame Deer, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Routt County (part); Steamboat Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.11	0.20	0.77
Rusk and Panola Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.01
Sacramento County, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.37	1.82	3.43	13.07
Sacramento Metro, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.37	1.80	3.37	12.91
Sacramento Metro, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.37	1.80	3.37	12.91
Sacramento, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.01	0.03	0.05	0.25
Sacramento, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.37	1.80	3.38	12.91
Salem, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.01	-0.02
Salt Lake City, UT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.09	0.44	0.83	3.15
Salt Lake City, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	0.09	0.40	0.75	2.92
Salt Lake County, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.09	0.42	0.78	3.00
Salt Lake County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	0.09	0.42	0.78	3.00
San Antonio, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.01	0.05	0.09	0.39
San Bernardino County, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.25	1.23	2.32	8.83
San Diego County, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	-0.03	-0.06	-0.19
San Diego County, CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	0.00	-0.03	-0.06	-0.19

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
San Diego, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.03	-0.06	-0.19
San Francisco Bay Area, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.37	1.79	3.36	12.85
San Francisco Bay Area, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.37	1.79	3.36	12.85
San Francisco Bay Area, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.37	1.79	3.36	12.85
San Francisco-Oakland-San Jose, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.37	1.79	3.36	12.87
San Joaquin Valley Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.63	3.09	5.82	22.18
San Joaquin Valley, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	0.63	3.09	5.82	22.18
San Joaquin Valley, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	0.63	3.09	5.82	22.18
San Joaquin Valley, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	0.63	3.09	5.82	22.18
San Joaquin Valley, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	0.63	3.09	5.82	22.18
San Luis Obispo (Eastern San Luis Obispo), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.03	0.14	0.27	1.01
San Luis Obispo (Eastern part), CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.03	0.14	0.27	1.01
San Manuel (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
San Miguel County; Telluride, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.03	0.06	0.24
Sanders County (part); Thompson Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Santa Cruz County; Nogales planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Seaford, DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	-0.01	-0.02
Seattle-Tacoma, WA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.00	-0.03	-0.06	-0.18
Sheboygan County, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Sheridan County; City of Sheridan, WY	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Shoreline Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Shoshone County; City of Pinehurst, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Shoshone County; Pinehurst Expansion Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Silver Bow County; Butte, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Somerville, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Southern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.07	0.34	0.64	2.46
Southwest Indiana, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Spokane County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.03
Spokane, WA	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	-0.01	-0.01	-0.03
Springfield, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.01	-0.03
St. Bernard Parish, LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.09	0.43	0.82	3.10
St. Clair, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
St. Lawrence County, NY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
St. Louis, MO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.20	0.96	1.81	6.94
St. Louis, MO-IL	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.40	1.94	3.63	13.94
St. Louis-St. Charles-Farmington, MO-IL	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.19	0.92	1.71	6.64
Steubenville, OH-WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.01	0.05	0.10	0.39
Steubenville-Weirton, OH-WV	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.01	0.06	0.11	0.42
Stockton, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.01	-0.02
Sullivan County, TN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Sutter Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Syracuse, NY	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.01	-0.04
Tacoma, WA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Tazewell County: Groveland twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Terre Haute, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Thurston County; Cities of Olympia, Tumwater, and Lacey, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Titus County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Toms River, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Tooele County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	0.07	0.35	0.66	2.50
Trenton, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01
Trona, CA	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.02	0.03	0.12
Tucson, AZ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.02	-0.06
Tuolumne County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Tuscan Buttes, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Tuscan Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	0.00
Uinta Basin, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.02	0.04	0.14
Union County; LaGrande, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Upper Green River Basin Area, WY	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.05	0.25	0.47	1.79
Utah County, UT	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.07	0.34	0.64	2.46
Vancouver, WA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.01	-0.02
Ventura County, CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.25	1.24	2.33	8.86
Ventura County, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.25	1.24	2.33	8.86
Vermillion County; Part of Clinton Township, IN	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Vigo County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01
Walla Walla County; Wallula, WA	PM ₁₀ (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Waltham, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Warren County, NJ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Warren County: Conewago Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.04	0.21	0.39	1.50
Warren County: Warren Boro, Pleasant Twp, Glade Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.04	0.21	0.39	1.50
Warren, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.04	0.21	0.39	1.50
Washington, DC-MD-VA	Ozone (2008 8-hour)	Nonattainment (DC) Maintenance (MD, VA), Marginal	50	0	-0.01	-0.06	-0.11	-0.36
Washington, DC-MD-VA	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.01	-0.06	-0.11	-0.36
Washington, DC-MD-VA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.02	-0.05
Washoe County; Reno planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	-0.01	-0.02
Wayne County, MI	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.03	0.13	0.25	0.96
Wayne County: Boston, Center, Franklin, Wayne & Webster Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01
West Central Pinal, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
West Silver Valley, ID	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Whatcom County, WA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.10	0.50	0.93	3.55
Winston-Salem, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.01	-0.04
Worcester, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01
Yakima County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Yakima, WA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Yuba City-Marysville, CA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Yuma, AZ	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	-0.01
Yuma, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.02

Notes:

^a Nonattainment or maintenance status as of 2/1/2024. Source: EPA, The Green Book Nonattainment Areas for Criteria Pollutants; <http://www.epa.gov/airquality/greenbook/>. "--" indicates that no severity classification has been established for the NAAQS pollutant.

^b Emissions thresholds in tons per year. Where the threshold differs by precursor pollutant, the smallest of the precursor thresholds is shown. These thresholds are provided for information only; a general conformity determination is not required for the Proposed Action. Source: 40 CFR 93.853.

^c Positive values are emissions increases; negative values are emissions decreases.

EPA = U.S. Environmental Protection Agency; NAAQS = National Ambient Air Quality Standard; CO = carbon monoxide; NO₂ = nitrogen dioxide; PM2.5 = particulate matter less than 2.5 microns in size; PM10 = particulate matter less than 10 microns in size; SO₂ = sulfur dioxide.

Table D-26. Changes in Emissions from U.S. Heavy-Duty Pickup Trucks and Vans by Nonattainment or Maintenance Area and Alternative, Direct and Indirect Impacts--Sulfur Oxides (SO₂), 2050

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Ada County; Boise, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.03	-0.05	-0.10
Adams, Denver, and Boulder Counties; Denver Metropolitan area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.04	0.59	0.78	2.04
Ajo (Pima County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Albuquerque, NM	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.07	-0.10	-0.23
Allegan County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01
Allegheny County Air Basin: Hazelwood monitor, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.02	0.02	0.06
Allegheny County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.01	0.19	0.24	0.65
Allegheny County; Liberty, Lincoln, Port Vue, Glassport, Clairton, PA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.02	0.03	0.07
Allegheny, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.21	0.28	0.71
Allentown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	-0.04	-0.06	-0.14
Allentown-Bethlehem-Easton, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	-0.04	-0.07	-0.15
Alton Township, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.45	7.15	9.55	24.42
Amador County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	-0.01
Anchorage, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	-0.01	-0.01	-0.03
Anchorage; Eagle River, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.01	0.01	0.02
Anne Arundel County and Baltimore County, MD	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.24	-0.35	-0.79
Archuleta County; Pagosa Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.06	0.09	0.22
Armstrong County: Madison, Mahoning, Boggs, Washington, Pine, PA	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.05	0.06	0.16
Aroostock County; City of Presque Isle, ME	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Atlanta, GA	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-0.04	-0.72	-1.07	-2.42
Atlanta, GA	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.03	-0.66	-0.98	-2.23
Atlantic City, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01
Bakersfield, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.01	0.09	0.12	0.32
Baltimore, MD	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	0.00	-0.10	-0.20	-0.32
Baltimore, MD	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	0.00	-0.11	-0.21	-0.34
Baltimore, MD	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.01	0.01	0.03
Baton Rouge, LA	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.22	3.48	4.64	11.90

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Beaver, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.01	0.01	0.02
Benton County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Berrien County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.02	-0.05
Billings, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.26	4.07	5.43	13.90
Billings, MT	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.26	4.09	5.46	13.96
Birmingham, AL	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.01	0.17	0.22	0.60
Boise-Northern Ada County, ID	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.03	-0.05	-0.10
Bonner County; The Sandpoint Area, ID	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Boston, MA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.06	-0.09	-0.20
Boyd County (part), KY	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.06	0.90	1.20	3.07
Brooke; Follansbee area, WV	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.05	0.07	0.18
Brown County: Green Bay, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Burlington, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01
Butte County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.01	-0.01	-0.03
Calaveras County, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Calaveras County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Campbell-Clermont Counties, KY-OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Canton-Massillon, OH	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.04	0.63	0.84	2.15
Central New Hampshire, NH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.01	-0.02	-0.04
Central Steptoe Valley, NV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Charleston, WV	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	-0.03	-0.04	-0.09
Charlotte, NC	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.13	-0.20	-0.45
Charlotte-Rock Hill, NC-SC	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.01	-0.20	-0.29	-0.66
Chicago, IL-IN-WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.57	8.89	11.79	30.42
Chicago-Naperville, IL-IN-WI	Ozone (2008 8-hour)	Maintenance, Serious	100	0	0.27	4.13	5.42	14.14
Chico (Butte County), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.01	-0.01	-0.03
Chico, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.01	-0.01
Chico, CA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.03
Cincinnati, OH-KY (OH Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.01	-0.12	-0.18	-0.42
Cincinnati, OH-KY (KY Portion)	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	0.08	1.20	1.60	4.11

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Cincinnati, OH-KY-IN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.07	1.07	1.40	3.66
Clark County; Las Vegas planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.01	-0.13	-0.20	-0.44
Cleveland, OH	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.03	0.44	0.57	1.52
Cleveland, OH	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.03	-0.05	-0.11
Cleveland, OH	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	-0.04	-0.07	-0.14
Cleveland-Akron-Lorain, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.03	0.46	0.59	1.59
Cleveland-Akron-Lorain, OH	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.03	0.45	0.58	1.56
Cochise County; Paul Spur/Douglas planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Colorado Springs, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.03	-0.04	-0.09
Columbus, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	-0.10	-0.16	-0.34
Columbus, OH	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.01	-0.11	-0.17	-0.37
Cook County; Lyons Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.02
Cook County; Southeast Chicago, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.12	1.89	2.53	6.47
Coshocton County; Franklin Township, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.01	0.01	0.02
Coso Junction, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.12	0.16	0.42
Cuyahoga County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.03	-0.05	-0.11
Cuyahoga County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.04	-0.06	-0.13
Dallas-Fort Worth, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.02	-0.52	-0.79	-1.74
Dallas-Fort Worth, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.02	-0.52	-0.78	-1.73
Dane County; Madison sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.05	-0.07	-0.16
Delaware County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.23	3.61	4.82	12.32
Denver Metro/North Front Range, CO	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.12	1.81	2.38	6.22
Denver-Boulder, CO	CO (1971 8-hour)	Maintenance, Serious	100	0	0.03	0.49	0.61	1.67
Denver-Boulder-Greeley-Ft. Collins-Loveland, CO	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.03	0.44	0.54	1.53
Detroit, MI	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	0.33	5.17	6.84	17.69
Detroit, MI	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.05	0.78	1.01	2.66
Detroit, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.06	0.93	1.24	3.18
Detroit-Ann Arbor, MI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.33	5.17	6.84	17.69
Doña Ana County; Anthony, NM	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.02	0.39	0.52	1.33

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Door County, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	0.00
Door County-Revised, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	-0.01
Douglas (Cochise County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Dukes County, MA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	0.00
Duluth, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.01	0.10	0.13	0.34
East Chicago, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.12	1.90	2.54	6.49
East Helena Area, MT	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
East Kern County, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.01	0.12	0.16	0.42
El Paso County, TX	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.02	0.36	0.48	1.23
El Paso, TX	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.02	0.39	0.52	1.32
El Paso-Las Cruces, TX-NM	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.05	0.74	0.98	2.52
Eugene-Springfield, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.02	-0.04
Evangeline Parish (Partial), LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.01	0.01
Fairbanks, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.04	0.05	0.12
Fairbanks, AK	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	0.00	0.03	0.04	0.11
Flathead County; Columbia Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Flathead County; Kalispell and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.02
Flathead County; Whitefish and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Fort Collins, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.01	-0.03
Freehold, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Freestone and Anderson Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.05	0.06	0.16
Fremont County; Canon City Area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Fresno, CA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.00	-0.03	-0.04	-0.09
Gila County (part): Payson, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Giles County, VA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Grant County, NM	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01
Grants Pass, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Great Falls, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.07	0.10	0.26
Greater Connecticut, CT	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.00	-0.09	-0.14	-0.31
Greater Connecticut, CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	0.00	-0.09	-0.14	-0.31
Greeley, CO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.13	2.07	2.75	7.06
Hancock County (part): Weirton, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.01	0.11	0.15	0.39
Hancock and Brooke Counties (Part); The city of Weirton, WV	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.11	0.15	0.39
Harrisburg-Lebanon-Carlisle-York, PA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	0.00	-0.08	-0.11	-0.26
Hartford-New Britain-Middletown, CT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.07	-0.10	-0.23
Hayden (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	0.00	0.00
Hayden, AZ	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Hayden, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Henderson-Webster Counties, KY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.01	0.02
Hillsborough County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.01	0.01	0.03
Hillsborough-Polk County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.01	0.01	0.03
Houston-Galveston-Brazoria, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	1.77	28.15	37.53	96.18
Houston-Galveston-Brazoria, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	1.77	28.16	37.55	96.22
Howard County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.23	3.73	4.99	12.75
Humphreys County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Huntington, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	-0.01
Hutchinson County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.06	0.92	1.22	3.13
Imperial County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.02	-0.04
Imperial County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.01	-0.02	-0.04
Imperial County, CA	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.01	-0.03
Imperial County, CA	PM _{2.5} (2012 Annual)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.01	-0.03
Imperial Valley, CA	PM ₁₀ (1987 24-hour)	Maintenance, Serious	100	0	0.00	-0.01	-0.02	-0.03
Indian Wells, CA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.12	0.16	0.41
Indiana, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.10	0.14	0.36
Indianapolis, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Indianapolis, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.06	-0.09	-0.21
Inland Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Inyo County; Owens Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00
Jackson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.01	-0.01	-0.02
Jackson County; Medford-Ashland (including White City), OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.03
Jamestown, NY	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.09	1.51	2.01	5.15
Jefferson County, KY	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Jefferson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	-0.01
Jefferson County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.05	0.07	0.17
Jefferson County; (part) Steubenville & Mingo Junction, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.01	0.11	0.15	0.39
Johnstown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.06	0.08	0.21
Josephine County; Grants Pass, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Juneau; Mendenhall Valley area, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Kern County (Eastern Kern), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.55	8.72	11.65	29.80
Kern County (Eastern Kern), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.55	8.72	11.65	29.80
King County; Kent, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
King County; Seattle, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Klamath Falls, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	-0.01
Klamath Falls, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Klamath Falls, OR	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01
Knoxville, TN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	-0.05	-0.08	-0.17
Knoxville-Sevierville-La Follette, TN	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	-0.05	-0.07	-0.17
La Porte County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01
LaSalle County; Oglesby, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Lake County (part); Lakeview, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Lake County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.12	1.88	2.50	6.42
Lake County, OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.01
Lake County; (part) Eastlake, Timberlake, Lakeline, Willoughby, Mentor, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01
Lake County; Cities of East Chicago, Hammond, Whiting, and Gary, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.12	1.89	2.52	6.45
Lake County; Polson, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Lake County; Ronan, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Lake Tahoe North Shore, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Lake Tahoe South Shore, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Lake Tahoe, NV	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Lancaster, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	-0.03	-0.05	-0.11
Lancaster, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	-0.03	-0.05	-0.11
Lane County (part); Oakridge, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Lane County; Eugene/Springfield, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.02	-0.04
Las Vegas, NV	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.13	-0.20	-0.44
Las Vegas, NV	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.01	-0.13	-0.20	-0.44
Laurel Area (Yellowstone County), MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.26	4.09	5.46	13.96
Lebanon County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.02
Lemont, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.18	2.83	3.78	9.68
Liberty-Clairton, PA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.02	0.03	0.07
Lincoln County; Libby and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Logan, UT-ID	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.02	-0.03
Longmont, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.05	0.07	0.19
Lorain County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.55	8.70	11.62	29.72
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	0.55	8.70	11.62	29.72
Los Angeles-South Coast Air Basin, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	0.51	8.05	10.64	27.52
Los Angeles-South Coast Air Basin, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	0.51	8.05	10.64	27.52
Los Angeles-South Coast Air Basin, CA	CO (1971 8-hour)	Maintenance, Serious	100	0	0.51	8.05	10.64	27.52
Los Angeles-South Coast Air Basin, CA	NO ₂ (1971 Annual)	Maintenance, Primary	100	0	0.51	8.05	10.64	27.52
Los Angeles-South Coast Air Basin, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	0.51	8.05	10.64	27.52
Los Angeles-South Coast Air Basin, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	0.51	8.05	10.64	27.52
Louisville, KY-IN (IN Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	-0.01	-0.02	-0.04
Louisville, KY-IN (KY Portion)	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.06	-0.09	-0.21
Lowell, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.01	-0.02

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Lucas County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.24	3.85	5.14	13.16
Madison County; Granite City Township and Nameoki Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.45	7.14	9.54	24.40
Manchester, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.01	-0.02
Manitowoc County, WI	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	0.00	-0.01
Marathon County: Rothschild Sub-city area, Rib Mountain, Weston, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	-0.01	-0.01	-0.03
Maricopa and Pinal Counties; Phoenix planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.02	-0.49	-0.73	-1.66
Marion County: Lawrence, Washington, and Warrant Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.05	-0.07	-0.17
Mariposa County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Mariposa County, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Marshall, WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.01	0.19	0.25	0.65
Medford, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.01	-0.02
Memphis, TN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.01	0.20	0.26	0.70
Memphis, TN-MS-AR	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.01	0.19	0.24	0.65
Miami (Gila County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01
Miami, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Miami, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Millinocket AQCR 109, ME	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.02	-0.04
Milwaukee, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.08	-0.12	-0.28
Milwaukee, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.03	-0.05	-0.11
Milwaukee-Racine, WI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	-0.08	-0.11	-0.25
Minneapolis-St. Paul, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.21	3.31	4.39	11.33
Minneapolis-St. Paul, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.21	3.32	4.40	11.35
Missoula, MT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.02	-0.04
Missoula, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.02	-0.04
Modesto, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.02	-0.04
Mohave County (part); Bullhead City, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Mono Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Mono County; Mammoth Lake planning area, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Morenci (Greenlee County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Morgan County, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Morongo Band of Mission Indians, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	0.00	0.00
Morongo Band of Mission Indians, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00
Morristown, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01
Muscatine County, IA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Muscatine, IA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	-0.01
Muskegon County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.01	-0.02
Muskingum River, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.03	0.04	0.11
Nashua, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.01	-0.01
Nassau County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Navarro County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.04	0.06	0.15
Nevada County (Western part), CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	-0.01	-0.01
Nevada County (Western part), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	-0.01	-0.01
New Haven County, CT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
New Haven-Meriden-Waterbury, CT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.05	-0.07	-0.16
New Madrid County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
New Manchester-Grant magisterial district in Hancock County, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.01	0.12	0.16	0.42
New York County, NY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.04	-0.06	-0.14
New York-N. New Jersey-Long Island, NY-NJ-CT	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.02	-0.53	-0.84	-1.78
New York-N. New Jersey-Long Island, NY-NJ-CT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.00	-0.17	-0.30	-0.55
New York-N. New Jersey-Long Island, NY-NJ-CT	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.02	-0.57	-0.89	-1.90
New York-Northern New Jersey-Long Island, NY-NJ-CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.02	-0.54	-0.84	-1.78
Nogales, AZ	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Northern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.19	2.94	3.89	10.04
Oakridge, OR	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Ogden, UT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.02	-0.04
Ogden, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.02	-0.04

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Olmsted County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Olmsted County; City of Rochester, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.01	-0.02
Oneida County: Rhinelander Sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	-0.01
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Pekin, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.01	-0.01
Penns Grove, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Peoria County: Hollis twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Peoria, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Perth Amboy, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.01	-0.01
Philadelphia-Camden County, PA-NJ	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.08	1.25	1.66	4.27
Philadelphia-Wilmington, PA-NJ-DE (NJ Portion)	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	0.04	0.03	0.16
Philadelphia-Wilmington, PA-NJ-DE (PA-DE Portion)	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.20	3.22	4.27	11.02
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.20	3.15	4.14	10.79
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	0.71	11.23	14.93	38.38
Phoenix, AZ	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.02	-0.49	-0.72	-1.64
Phoenix-Mesa, AZ	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-0.02	-0.49	-0.73	-1.66
Phoenix-Mesa, AZ	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.03	-0.50	-0.74	-1.67
Pierce County; Tacoma, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.03	0.03	0.09
Pima County; Ajo planning area, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Pima County; Rillito planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01
Pinal County (part); West Pinal, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	-0.01	-0.01	-0.03
Pitkin County; Aspen, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.01
Pittsburgh, PA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.02
Pittsburgh-Beaver Valley, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.03	0.40	0.52	1.39
Pittsburgh-Beaver Valley, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.03	0.39	0.51	1.35
Plumas County, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00
Polk County, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Portland, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.09	-0.13	-0.29

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Power-Bannock Counties; Fort Hall Indian Reservation, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Power-Bannock Counties; Portneuf Valley Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01	-0.02
Provo, UT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.00	-0.01	-0.01	-0.03
Provo, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	0.15	2.43	3.24	8.31
Prowers County; Lamar, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Raleigh-Durham, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.15	-0.22	-0.51
Ramsey County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.22	3.57	4.77	12.21
Reading, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	-0.02	-0.03	-0.06
Reno, NV	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.02	-0.03	-0.06
Rhineland, WI	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	-0.01
Riverside County (Coachella Valley), CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	0.00	-0.02	-0.03	-0.06
Riverside County (Coachella Valley), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	0.00	-0.02	-0.03	-0.06
Riverside County; Coachella Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	-0.02	-0.03	-0.07
Riverside, Los Angeles, Orange, & San Bernardino Counties; South Coast Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.51	8.05	10.64	27.53
Rosebud County; Lame Deer, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Routt County (part); Steamboat Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.05	0.76	1.01	2.58
Rusk and Panola Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.01	0.02	0.05
Sacramento County, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.81	12.92	17.23	44.14
Sacramento Metro, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.81	12.79	17.04	43.71
Sacramento Metro, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.81	12.79	17.04	43.71
Sacramento, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.02	0.30	0.37	1.02
Sacramento, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.81	12.80	17.05	43.72
Salem, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.02	-0.03	-0.06
Salt Lake City, UT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.20	3.11	4.15	10.62
Salt Lake City, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	0.19	2.93	3.88	10.01
Salt Lake County, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.19	2.99	3.97	10.23
Salt Lake County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	0.19	2.99	3.97	10.23
San Antonio, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.03	0.43	0.55	1.46

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
San Bernardino County, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.55	8.71	11.63	29.76
San Diego County, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.01	-0.15	-0.22	-0.49
San Diego County, CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-0.01	-0.15	-0.22	-0.49
San Diego, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.15	-0.22	-0.49
San Francisco Bay Area, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.80	12.75	16.98	43.55
San Francisco Bay Area, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.80	12.75	16.98	43.55
San Francisco Bay Area, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.80	12.74	16.97	43.55
San Francisco-Oakland-San Jose, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.80	12.76	17.00	43.60
San Joaquin Valley Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	1.38	21.92	29.24	74.87
San Joaquin Valley, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	1.38	21.92	29.24	74.87
San Joaquin Valley, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	1.38	21.92	29.24	74.87
San Joaquin Valley, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	1.38	21.92	29.24	74.87
San Joaquin Valley, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	1.38	21.92	29.24	74.87
San Luis Obispo (Eastern San Luis Obispo), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.06	0.99	1.33	3.40
San Luis Obispo (Eastern part), CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.06	0.99	1.33	3.40
San Manuel (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
San Miguel County; Telluride, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.23	0.31	0.80
Sanders County (part); Thompson Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Santa Cruz County; Nogales planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Seaford, DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	-0.02	-0.03	-0.06
Seattle-Tacoma, WA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.01	-0.13	-0.20	-0.45
Sheboygan County, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01	-0.01
Sheridan County; City of Sheridan, WY	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Shoreline Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Shoshone County; City of Pinehurst, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Shoshone County; Pinehurst Expansion Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Silver Bow County; Butte, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Somerville, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Southern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.15	2.43	3.24	8.31

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Southwest Indiana, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.01
Spokane County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.03	-0.04	-0.09
Spokane, WA	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	-0.03	-0.04	-0.09
Springfield, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.03	-0.04	-0.09
St. Bernard Parish, LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.19	3.06	4.08	10.45
St. Clair, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	-0.01
St. Lawrence County, NY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
St. Louis, MO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.44	6.90	9.18	23.59
St. Louis, MO-IL	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.88	13.87	18.45	47.41
St. Louis-St. Charles-Farmington, MO-IL	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.43	6.68	8.84	22.83
Steubenville, OH-WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.02	0.39	0.52	1.32
Steubenville-Weirton, OH-WV	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.03	0.41	0.55	1.41
Stockton, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.02	-0.05
Sullivan County, TN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Sutter Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Syracuse, NY	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.03	-0.05	-0.11
Tacoma, WA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.01
Tazewell County: Groveland twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01
Terre Haute, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.01	-0.01
Thurston County; Cities of Olympia, Tumwater, and Lacey, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.03
Titus County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Toms River, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Tooele County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	0.15	2.47	3.30	8.43
Trenton, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.01	-0.03
Trona, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.12	0.16	0.42
Tucson, AZ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.05	-0.08	-0.17
Tuolumne County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	-0.01
Tuscan Buttes, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Tuscan Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Uinta Basin, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.01	0.14	0.18	0.47
Union County; LaGrande, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Upper Green River Basin Area, WY	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.11	1.77	2.36	6.04
Utah County, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.15	2.43	3.24	8.31
Vancouver, WA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.02	-0.04
Ventura County, CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.55	8.74	11.67	29.86
Ventura County, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.55	8.74	11.67	29.86
Vermillion County; Part of Clinton Township, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Vigo County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.01	-0.01
Walla Walla County; Wallula, WA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00
Waltham, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01
Warren County, NJ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Warren County: Conewago Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.09	1.48	1.97	5.04
Warren County: Warren Boro, Pleasant Twp, Glade Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.09	1.47	1.97	5.04
Warren, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.09	1.47	1.97	5.04
Washington, DC-MD-VA	Ozone (2008 8-hour)	Nonattainment (DC) Maintenance (MD, VA), Marginal	50	0	-0.01	-0.28	-0.42	-0.94
Washington, DC-MD-VA	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.01	-0.28	-0.42	-0.94
Washington, DC-MD-VA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.04	-0.06	-0.14
Washoe County; Reno planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	-0.02	-0.03	-0.06
Wayne County, MI	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.06	0.94	1.26	3.22
Wayne County: Boston, Center, Franklin, Wayne & Webster Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.01	-0.01
West Central Pinal, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
West Silver Valley, ID	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Whatcom County, WA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.22	3.50	4.67	11.94
Winston-Salem, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.03	-0.04	-0.10
Worcester, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.01	-0.03
Yakima County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.02
Yakima, WA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Yuba City-Marysville, CA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.03
Yuma, AZ	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.01	-0.01	-0.03
Yuma, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.02	-0.04

Notes:

^a Nonattainment or maintenance status as of 2/1/2024. Source: EPA, The Green Book Nonattainment Areas for Criteria Pollutants; <http://www.epa.gov/airquality/greenbook/>. "--" indicates that no severity classification has been established for the NAAQS pollutant.

^b Emissions thresholds in tons per year. Where the threshold differs by precursor pollutant, the smallest of the precursor thresholds is shown. These thresholds are provided for information only; a general conformity determination is not required for the Proposed Action. Source: 40 CFR 93.853.

^c Positive values are emissions increases; negative values are emissions decreases.

EPA = U.S. Environmental Protection Agency; NAAQS = National Ambient Air Quality Standard; CO = carbon monoxide; NO₂ = nitrogen dioxide; PM2.5 = particulate matter less than 2.5 microns in size; PM10 = particulate matter less than 10 microns in size; SO₂ = sulfur dioxide.

Table D-27. Changes in Emissions from U.S. Heavy-Duty Pickup Trucks and Vans by Nonattainment or Maintenance Area and Alternative, Direct and Indirect Impacts--Nitrogen Oxides (NOx), 2035

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Ada County; Boise, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.05	-0.12	-0.49
Adams, Denver, and Boulder Counties; Denver Metropolitan area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.05	-0.37	-0.85	-2.56
Ajo (Pima County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Albuquerque, NM	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.03	-0.12	-0.26	-1.07
Allegan County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.02	-0.08
Allegheny County Air Basin: Hazelwood monitor, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.03	-0.09
Allegheny County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	-0.03	-0.17	-0.38	-1.22
Allegheny County; Liberty, Lincoln, Port Vue, Glassport, Clairton, PA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.03
Allegheny, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.06	-0.15	-0.29
Allentown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.07	-0.16	-0.66
Allentown-Bethlehem-Easton, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.02	-0.08	-0.17	-0.71
Alton Township, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	-0.13	-0.32	-0.47
Amador County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	-0.01	-0.02
Anchorage, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.01	-0.03	-0.07	-0.25
Anchorage; Eagle River, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.02
Anne Arundel County and Baltimore County, MD	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.12	-0.38	-0.85	-3.62
Archuleta County; Pagosa Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.02	-0.19	-0.46	-0.69
Armstrong County; Madison, Mahoning, Boggs, Washington, Pine, PA	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	-0.03	-0.07	-0.11
Aroostock County; City of Presque Isle, ME	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Atlanta, GA	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-0.36	-1.20	-2.66	-11.17
Atlanta, GA	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.33	-1.10	-2.45	-10.28
Atlantic City, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.01	-0.04
Bakersfield, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.06	-0.13	-0.50
Baltimore, MD	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	-0.21	-0.71	-1.57	-6.62
Baltimore, MD	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.21	-0.71	-1.58	-6.65
Baltimore, MD	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	-0.01
Baton Rouge, LA	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.02	-0.47	-1.10	-2.57
Beaver, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	-0.01
Benton County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	-0.01
Berrien County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.03	-0.06	-0.23

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Billings, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.10	-0.23	-0.51
Billings, MT	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.01	-0.07	-0.17	-0.26
Birmingham, AL	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.05	-0.21	-0.48	-1.81
Boise-Northern Ada County, ID	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.05	-0.12	-0.49
Bonner County; The Sandpoint Area, ID	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Boston, MA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.03	-0.10	-0.23	-0.96
Boyd County (part), KY	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.01	-0.07	-0.18	-0.26
Brooke; Follansbee area, WV	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Brown County: Green Bay, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01
Burlington, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.01	-0.04
Butte County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.02	-0.04	-0.15
Calaveras County, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	-0.01	-0.02
Calaveras County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	-0.01	-0.02
Campbell-Clermont Counties, KY-OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	-0.02
Canton-Massillon, OH	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.01	-0.06	-0.14	-0.42
Central New Hampshire, NH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.02	-0.05	-0.20
Central Steptoe Valley, NV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Charleston, WV	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.01	-0.11	-0.27	-0.68
Charlotte, NC	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.07	-0.22	-0.48	-2.04
Charlotte-Rock Hill, NC-SC	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.10	-0.32	-0.71	-3.00
Chicago, IL-IN-WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.27	-1.48	-3.37	-11.23
Chicago-Naperville, IL-IN-WI	Ozone (2008 8-hour)	Maintenance, Serious	100	0	-0.29	-1.27	-2.86	-10.54
Chico (Butte County), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.02	-0.04	-0.15
Chico, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.01	-0.05
Chico, CA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	0.00	-0.02	-0.04	-0.15
Cincinnati, OH-KY (OH Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.06	-0.21	-0.46	-1.94
Cincinnati, OH-KY (KY Portion)	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	-0.01	-0.04	-0.09	-0.33
Cincinnati, OH-KY-IN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.08	-0.27	-0.60	-2.47
Clark County; Las Vegas planning area, NV	PM ₁₀ (1987 24-hour)	Maintenance, Serious	100	0	-0.07	-0.22	-0.48	-2.04
Cleveland, OH	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.08	-0.29	-0.64	-2.55
Cleveland, OH	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.03	-0.11	-0.25	-1.07
Cleveland, OH	PM _{2.5} (2012 Annual)	Maintenance, Moderate	100	0	-0.04	-0.13	-0.30	-1.27

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Cleveland-Akron-Lorain, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.08	-0.30	-0.68	-2.64
Cleveland-Akron-Lorain, OH	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.07	-0.27	-0.59	-2.35
Cochise County; Paul Spur/Douglas planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01
Colorado Springs, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.05	-0.11	-0.42
Columbus, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.07	-0.25	-0.55	-2.32
Columbus, OH	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.07	-0.24	-0.53	-2.20
Cook County; Lyons Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.03	-0.11
Cook County; Southeast Chicago, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.12	-0.29	-0.52
Coshocton County; Franklin Township, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Coso Junction, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.03
Cuyahoga County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.03	-0.11	-0.25	-1.07
Cuyahoga County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.03	-0.09	-0.21	-0.87
Dallas-Fort Worth, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.31	-1.20	-2.68	-10.39
Dallas-Fort Worth, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.30	-1.19	-2.66	-10.31
Dane County; Madison sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.02	-0.08	-0.17	-0.72
Delaware County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.01	-0.29	-0.68	-1.26
Denver Metro/North Front Range, CO	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.14	-0.74	-1.67	-5.66
Denver-Boulder, CO	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.10	-0.57	-1.29	-4.30
Denver-Boulder-Greeley-Ft. Collins-Loveland, CO	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.14	-0.71	-1.61	-5.55
Detroit, MI	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	-0.22	-0.94	-2.11	-7.90
Detroit, MI	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.08	-0.31	-0.69	-2.74
Detroit, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.05	-0.12	-0.36
Detroit-Ann Arbor, MI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.22	-0.94	-2.11	-7.91
Doña Ana County; Anthony, NM	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.03	-0.07	-0.10
Door County, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	0.00
Door County-Revised, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	0.00	-0.01	-0.03
Douglas (Cochise County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01
Dukes County, MA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	-0.01
Duluth, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.02	-0.04	-0.11
East Chicago, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.01	-0.11	-0.26	-0.40
East Helena Area, MT	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
East Kern County, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	-0.01	-0.02	-0.04
El Paso County, TX	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.08	-0.18	-0.57
El Paso, TX	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.03	-0.07	-0.13
El Paso-Las Cruces, TX-NM	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.02	-0.12	-0.28	-0.81
Eugene-Springfield, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.02	-0.04	-0.18
Evangeline Parish (Partial), LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Fairbanks, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	-0.01	-0.03	-0.08
Fairbanks, AK	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	0.00	-0.02	-0.04	-0.13
Flathead County; Columbia Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Flathead County; Kalispell and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.02	-0.07
Flathead County; Whitefish and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Fort Collins, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.02	-0.04	-0.18
Freehold, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01
Freestone and Anderson Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.02	-0.04	-0.07
Fremont County; Canon City Area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01	-0.04
Fresno, CA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.02	-0.05	-0.11	-0.48
Gila County (part): Payson, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.02
Giles County, VA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Grant County, NM	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.01	-0.04
Grants Pass, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	-0.02
Great Falls, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.02	-0.04
Greater Connecticut, CT	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-0.05	-0.15	-0.34	-1.45
Greater Connecticut, CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.05	-0.15	-0.34	-1.45
Greeley, CO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.27	-0.64	-1.42
Hancock County (part): Weirton, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	-0.01	-0.02	-0.03
Hancock and Brooke Counties (Part); The city of Weirton, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.02	-0.03
Harrisburg-Lebanon-Carlisle-York, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.04	-0.13	-0.29	-1.21
Hartford-New Britain-Middletown, CT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.03	-0.11	-0.25	-1.06
Hayden (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	0.00	-0.01
Hayden, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.02
Hayden, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	-0.01
Henderson-Webster Counties, KY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	-0.01	-0.02
Hillsborough County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	-0.02
Hillsborough-Polk County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Houston-Galveston-Brazoria, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.17	-1.57	-3.61	-10.18
Houston-Galveston-Brazoria, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.17	-1.54	-3.55	-9.99
Howard County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	-0.06	-0.14	-0.21
Humphreys County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	-0.01
Huntington, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.01	-0.03
Hutchinson County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	-0.08	-0.19	-0.28
Imperial County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.02	-0.04	-0.17
Imperial County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.02	-0.04	-0.17
Imperial County, CA	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.03	-0.13
Imperial County, CA	PM _{2.5} (2012 Annual)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.03	-0.13
Imperial Valley, CA	PM ₁₀ (1987 24-hour)	Maintenance, Serious	100	0	-0.01	-0.02	-0.04	-0.16
Indian Wells, CA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.02	-0.06
Indiana, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	-0.10	-0.25	-0.42
Indianapolis, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Indianapolis, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.03	-0.10	-0.23	-0.95
Inland Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01	-0.04
Inyo County; Owens Valley planning area, CA	PM ₁₀ (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	-0.01
Jackson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.01	-0.02	-0.09
Jackson County; Medford-Ashland (including White City), OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.03	-0.12
Jamestown, NY	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	-0.08	-0.18	-0.33
Jefferson County, KY	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Jefferson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.01	-0.04
Jefferson County, OH	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Jefferson County; (part) Steubenville & Mingo Junction, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.02	-0.06
Johnstown, PA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	0.00	-0.07	-0.17	-0.31
Josephine County; Grants Pass, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.02
Juneau; Mendenhall Valley area, AK	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Kern County (Eastern Kern), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.02	-0.26	-0.61	-0.96
Kern County (Eastern Kern), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.02	-0.26	-0.61	-0.96
King County; Kent, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.02
King County; Seattle, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Klamath Falls, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.01	-0.04
Klamath Falls, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01	-0.04
Klamath Falls, OR	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.01	-0.05

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Knoxville, TN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.02	-0.09	-0.20	-0.80
Knoxville-Sevierville-La Follette, TN	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.03	-0.10	-0.22	-0.89
La Porte County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.01	-0.05
LaSalle County; Oglesby, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01	-0.03
Lake County (part); Lakeview, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Lake County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.15	-0.35	-0.78
Lake County, OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.02	-0.04	-0.17
Lake County; (part) Eastlake, Timberlake, Lakeline, Willoughby, Mentor, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.01	-0.03
Lake County; Cities of East Chicago, Hammond, Whiting, and Gary, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.14	-0.32	-0.64
Lake County; Polson, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Lake County; Ronan, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Lake Tahoe North Shore, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01
Lake Tahoe South Shore, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.01	-0.02
Lake Tahoe, NV	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.02
Lancaster, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.02	-0.06	-0.13	-0.52
Lancaster, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.06	-0.13	-0.52
Lane County (part); Oakridge, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Lane County; Eugene/Springfield, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.04	-0.18
Las Vegas, NV	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.07	-0.22	-0.48	-2.04
Las Vegas, NV	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.07	-0.22	-0.48	-2.04
Laurel Area (Yellowstone County), MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.01	-0.07	-0.17	-0.26
Lebanon County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	-0.01	-0.02	-0.10
Lemont, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.01	-0.14	-0.32	-0.57
Liberty-Clairton, PA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.01	-0.03
Lincoln County; Libby and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Logan, UT-ID	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.04	-0.16
Longmont, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.01	-0.12	-0.29	-0.47
Lorain County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.01	-0.04
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.01	-0.30	-0.71	-1.34
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	0.01	-0.30	-0.71	-1.34

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Los Angeles-South Coast Air Basin, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-0.34	-1.45	-3.27	-12.06
Los Angeles-South Coast Air Basin, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-0.34	-1.45	-3.27	-12.06
Los Angeles-South Coast Air Basin, CA	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.34	-1.45	-3.27	-12.06
Los Angeles-South Coast Air Basin, CA	NO ₂ (1971 Annual)	Maintenance, Primary	100	0	-0.34	-1.45	-3.27	-12.06
Los Angeles-South Coast Air Basin, CA	PM _{2.5} (2006 24-hour)	Nonattainment, Serious	70	0	-0.34	-1.45	-3.27	-12.06
Los Angeles-South Coast Air Basin, CA	PM _{2.5} (2012 Annual)	Nonattainment, Serious	70	0	-0.34	-1.45	-3.27	-12.06
Louisville, KY-IN (IN Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.01	-0.02	-0.05	-0.20
Louisville, KY-IN (KY Portion)	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.03	-0.10	-0.22	-0.95
Lowell, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.02	-0.08
Lucas County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.15	-0.36	-0.73
Madison County; Granite City Township and Nameoki Township, IL	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.01	-0.14	-0.34	-0.55
Manchester, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.02	-0.08
Manitowoc County, WI	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	-0.01	-0.05
Marathon County: Rothschild Sub-city area, Rib Mountain, Weston, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	-0.02	-0.03	-0.14
Maricopa and Pinal Counties; Phoenix planning area, AZ	PM ₁₀ (1987 24-hour)	Nonattainment, Serious	70	0	-0.25	-0.80	-1.78	-7.56
Marion County: Lawrence, Washington, and Warrant Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.03	-0.08	-0.19	-0.78
Mariposa County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01
Mariposa County, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01
Marshall, WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.02	-0.06	-0.09
Medford, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.02	-0.07
Memphis, TN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.03	-0.12	-0.27	-1.06
Memphis, TN-MS-AR	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.04	-0.15	-0.33	-1.29
Miami (Gila County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.02
Miami, AZ	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.02
Miami, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	-0.02
Millinocket AQCR 109, ME	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.02	-0.05	-0.21
Milwaukee, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.04	-0.14	-0.30	-1.29
Milwaukee, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.02	-0.06	-0.12	-0.52
Milwaukee-Racine, WI	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.04	-0.12	-0.27	-1.16
Minneapolis-St. Paul, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.12	-0.54	-1.21	-4.41

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Minneapolis-St. Paul, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.12	-0.53	-1.19	-4.33
Missoula, MT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.02	-0.04	-0.17
Missoula, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.04	-0.18
Modesto, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.02	-0.05	-0.20
Mohave County (part); Bullhead City, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.02	-0.06
Mono Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01
Mono County; Mammoth Lake planning area, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.02
Morenci (Greenlee County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Morgan County, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	-0.02
Morongo Band of Mission Indians, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	0.00	0.00
Morongo Band of Mission Indians, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00
Morristown, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.01	-0.03
Muscatine County, IA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.02
Muscatine, IA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.01	-0.03
Muskegon County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.03	-0.11
Muskingum River, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.01	-0.02
Nashua, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.02	-0.07
Nassau County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Navarro County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.02	-0.05	-0.07
Nevada County (Western part), CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.00	-0.01	-0.01	-0.06
Nevada County (Western part), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	-0.01	-0.01	-0.06
New Haven County, CT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.02
New Haven-Meriden-Waterbury, CT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.08	-0.17	-0.72
New Madrid County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
New Manchester-Grant magisterial district in Hancock County, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.02	-0.03
New York County, NY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.02	-0.07	-0.15	-0.63
New York-N. New Jersey-Long Island, NY-NJ-CT	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.42	-1.47	-3.28	-13.42
New York-N. New Jersey-Long Island, NY-NJ-CT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.23	-0.86	-1.91	-7.66
New York-N. New Jersey-Long Island, NY-NJ-CT	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.44	-1.52	-3.39	-13.92
New York-Northern New Jersey-Long Island, NY-NJ-CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.42	-1.47	-3.28	-13.43
Nogales, AZ	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Northern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.10	-0.39	-0.88	-3.35
Oakridge, OR	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Ogden, UT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.02	-0.04	-0.17
Ogden, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.04	-0.17
Olmsted County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01	-0.03
Olmsted County; City of Rochester, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.03	-0.11
Oneida County: Rhinelander Sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	-0.01	-0.01	-0.05
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Pekin, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.01	-0.01	-0.06
Penns Grove, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Peoria County: Hollis twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Peoria, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.03	-0.13
Perth Amboy, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.02	-0.07
Philadelphia-Camden County, PA-NJ	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.24	-0.56	-1.35
Philadelphia-Wilmington, PA-NJ-DE (NJ Portion)	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.08	-0.30	-0.67	-2.67
Philadelphia-Wilmington, PA-NJ-DE (PA-DE Portion)	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.09	-0.57	-1.31	-4.08
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.22	-1.04	-2.35	-8.32
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.18	-1.45	-3.33	-9.76
Phoenix, AZ	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.24	-0.79	-1.76	-7.46
Phoenix-Mesa, AZ	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-0.25	-0.81	-1.79	-7.59
Phoenix-Mesa, AZ	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.25	-0.81	-1.79	-7.63
Pierce County; Tacoma, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01	-0.02
Pima County; Ajo planning area, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Pima County; Rillito planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01	-0.04
Pinal County (part); West Pinal, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	-0.02	-0.04	-0.15
Pitkin County; Aspen, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.05	-0.11	-0.22
Pittsburgh, PA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.03	-0.07	-0.28
Pittsburgh-Beaver Valley, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.05	-0.44	-1.01	-2.90
Pittsburgh-Beaver Valley, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.05	-0.40	-0.92	-2.64
Plumas County, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00
Polk County, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Portland, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.05	-0.16	-0.37	-1.54

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Power-Bannock Counties; Fort Hall Indian Reservation, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01
Power-Bannock Counties; Portneuf Valley Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.02	-0.07
Provo, UT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.00	-0.02	-0.04	-0.15
Provo, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.02	-0.08	-0.17	-0.61
Prowers County; Lamar, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Raleigh-Durham, NC	CO (1971 8-hour)	Maintenance, Moderate ≤ 12.7ppm	100	0	-0.08	-0.25	-0.55	-2.32
Ramsey County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	-0.10	-0.24	-0.36
Reading, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.01	-0.04	-0.09	-0.35
Reno, NV	CO (1971 8-hour)	Maintenance, Moderate ≤ 12.7ppm	100	0	-0.01	-0.03	-0.06	-0.25
Rhineland, WI	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.01	-0.02
Riverside County (Coachella Valley), CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-0.01	-0.03	-0.06	-0.27
Riverside County (Coachella Valley), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-0.01	-0.03	-0.06	-0.27
Riverside County; Coachella Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.01	-0.03	-0.07	-0.31
Riverside, Los Angeles, Orange, & San Bernardino Counties; South Coast Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.33	-1.45	-3.26	-12.02
Rosebud County; Lame Deer, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Routt County (part); Steamboat Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.09	-0.21	-0.36
Rusk and Panola Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.04	-0.10	-0.15
Sacramento County, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.05	-0.52	-1.20	-3.32
Sacramento Metro, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.12	-0.73	-1.67	-5.30
Sacramento Metro, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.12	-0.73	-1.67	-5.30
Sacramento, CA	CO (1971 8-hour)	Maintenance, Moderate ≤ 12.7ppm	100	0	-0.09	-0.39	-0.88	-3.23
Sacramento, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.11	-0.72	-1.65	-5.21
Salem, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.03	-0.07	-0.29
Salt Lake City, UT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.11	-0.25	-0.68
Salt Lake City, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.10	-0.40	-0.90	-3.45
Salt Lake County, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.07	-0.30	-0.68	-2.50
Salt Lake County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	-0.07	-0.30	-0.68	-2.50
San Antonio, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.07	-0.28	-0.62	-2.45
San Bernardino County, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	-0.28	-0.67	-1.17
San Diego County, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.07	-0.24	-0.54	-2.28
San Diego County, CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-0.07	-0.24	-0.54	-2.27

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
San Diego, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.07	-0.24	-0.54	-2.27
San Francisco Bay Area, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.14	-0.80	-1.83	-5.99
San Francisco Bay Area, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.14	-0.80	-1.83	-5.99
San Francisco Bay Area, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.14	-0.80	-1.83	-6.00
San Francisco-Oakland-San Jose, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.13	-0.78	-1.77	-5.75
San Joaquin Valley Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.06	-0.78	-1.80	-4.71
San Joaquin Valley, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-0.06	-0.78	-1.80	-4.71
San Joaquin Valley, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-0.06	-0.78	-1.80	-4.71
San Joaquin Valley, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.06	-0.78	-1.80	-4.71
San Joaquin Valley, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-0.06	-0.78	-1.80	-4.71
San Luis Obispo (Eastern San Luis Obispo), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.01	-0.03	-0.06
San Luis Obispo (Eastern part), CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.01	-0.03	-0.06
San Manuel (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01
San Miguel County; Telluride, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.04
Sanders County (part); Thompson Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Santa Cruz County; Nogales planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01
Seaford, DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.01	-0.03	-0.06	-0.26
Seattle-Tacoma, WA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.08	-0.26	-0.58	-2.44
Sheboygan County, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.01	-0.05
Sheridan County; City of Sheridan, WY	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01	-0.03
Shoreline Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.05
Shoshone County; City of Pinehurst, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Shoshone County; Pinehurst Expansion Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.02
Silver Bow County; Butte, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01	-0.04
Somerville, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01
Southern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.02	-0.08	-0.17	-0.61
Southwest Indiana, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.01	-0.01	-0.02
Spokane County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.04	-0.10	-0.42
Spokane, WA	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.01	-0.04	-0.10	-0.41
Springfield, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.04	-0.10	-0.41
St. Bernard Parish, LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	-0.15	-0.35	-0.55
St. Clair, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	-0.01	-0.06
St. Lawrence County, NY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	-0.01

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
St. Louis, MO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.11	-0.54	-1.22	-4.28
St. Louis, MO-IL	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.23	-1.11	-2.52	-8.81
St. Louis-St. Charles-Farmington, MO-IL	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.24	-0.98	-2.21	-8.41
Steubenville, OH-WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.05	-0.11	-0.19
Steubenville-Weirton, OH-WV	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	-0.03	-0.07	-0.15
Stockton, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.03	-0.06	-0.23
Sullivan County, TN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	-0.01
Sutter Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Syracuse, NY	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.05	-0.12	-0.50
Tacoma, WA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.04	-0.09	-0.35
Tazewell County: Groveland twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.01	-0.03
Terre Haute, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.01	-0.02	-0.07
Thurston County; Cities of Olympia, Tumwater, and Lacey, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.03	-0.13
Titus County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Toms River, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Tooele County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	0.00	-0.02	-0.04	-0.06
Trenton, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.03	-0.13
Trona, CA	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.01	-0.02
Tucson, AZ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.08	-0.18	-0.77
Tuolumne County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	-0.01	-0.04
Tuscan Buttes, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Tuscan Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	0.00
Uinta Basin, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.09	-0.22	-0.41
Union County; LaGrande, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Upper Green River Basin Area, WY	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.07	-0.17	-0.30
Utah County, UT	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.11	-0.25	-0.74
Vancouver, WA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.02	-0.05	-0.22
Ventura County, CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.01	-0.30	-0.70	-1.31
Ventura County, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.01	-0.30	-0.70	-1.31
Vermillion County; Part of Clinton Township, IN	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Vigo County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.02	-0.05	-0.16
Walla Walla County; Wallula, WA	PM ₁₀ (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Waltham, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.01	-0.05
Warren County, NJ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	-0.02
Warren County: Conewago Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.01	-0.06	-0.15	-0.22
Warren County: Warren Boro, Pleasant Twp, Glade Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	-0.06	-0.15	-0.23
Warren, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.06	-0.15	-0.23
Washington, DC-MD-VA	Ozone (2008 8-hour)	Nonattainment (DC) Maintenance (MD, VA), Marginal	50	0	-0.14	-0.46	-1.02	-4.34
Washington, DC-MD-VA	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.14	-0.46	-1.02	-4.34
Washington, DC-MD-VA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.07	-0.15	-0.64
Washoe County; Reno planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.01	-0.03	-0.06	-0.25
Wayne County, MI	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.03	-0.07	-0.15
Wayne County: Boston, Center, Franklin, Wayne & Webster Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.01	-0.06
West Central Pinal, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01
West Silver Valley, ID	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Whatcom County, WA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	-0.16	-0.39	-0.57
Winston-Salem, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.05	-0.10	-0.44
Worcester, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.02	-0.03	-0.15
Yakima County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.02	-0.10
Yakima, WA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.01	-0.03
Yuba City-Marysville, CA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	-0.02	-0.03	-0.13
Yuma, AZ	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.01	-0.03	-0.12
Yuma, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.02	-0.04	-0.19

Notes:

^a Nonattainment or maintenance status as of 2/1/2024. Source: EPA, The Green Book Nonattainment Areas for Criteria Pollutants; <http://www.epa.gov/airquality/greenbook/>. "--" indicates that no severity classification has been established for the NAAQS pollutant.

^b Emissions thresholds in tons per year. Where the threshold differs by precursor pollutant, the smallest of the precursor thresholds is shown. These thresholds are provided for information only; a general conformity determination is not required for the Proposed Action. Source: 40 CFR 93.853.

^c Positive values are emissions increases; negative values are emissions decreases.

EPA = U.S. Environmental Protection Agency; NAAQS = National Ambient Air Quality Standard; CO = carbon monoxide; NO₂ = nitrogen dioxide; PM2.5 = particulate matter less than 2.5 microns in size; PM10 = particulate matter less than 10 microns in size; SO₂ = sulfur dioxide.

Table D-28. Changes in Emissions from U.S. Heavy-Duty Pickup Trucks and Vans by Nonattainment or Maintenance Area and Alternative, Direct and Indirect Impacts--Nitrogen Oxides (NOx), 2050

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Ada County; Boise, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.03	-0.56	-0.81	-2.00
Adams, Denver, and Boulder Counties; Denver Metropolitan area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.07	-1.66	-2.92	-5.63
Ajo (Pima County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01
Albuquerque, NM	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.08	-1.24	-1.80	-4.42
Allegan County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.08	-0.12	-0.28
Allegheny County Air Basin: Hazelwood monitor, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.07	-0.12	-0.25
Allegheny County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	-0.04	-0.93	-1.53	-3.20
Allegheny County; Liberty, Lincoln, Port Vue, Glassport, Clairton, PA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.02	0.00
Allegheny, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.02	0.09	-0.04	0.41
Allentown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.05	-0.76	-1.10	-2.69
Allentown-Bethlehem-Easton, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.05	-0.81	-1.18	-2.89
Alton Township, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.07	0.59	0.41	2.34
Amador County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.03	-0.04	-0.10
Anchorage, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.02	-0.28	-0.41	-0.98
Anchorage; Eagle River, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.02	-0.04
Anne Arundel County and Baltimore County, MD	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.27	-4.31	-6.20	-15.37
Archuleta County; Pagosa Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.10	0.82	0.54	3.25
Armstrong County; Madison, Mahoning, Boggs, Washington, Pine, PA	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.02	0.13	0.09	0.53
Aroostock County; City of Presque Isle, ME	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.02	-0.04
Atlanta, GA	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-0.82	-13.08	-18.88	-46.60
Atlanta, GA	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.76	-12.03	-17.37	-42.87
Atlantic City, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.05	-0.06	-0.16
Bakersfield, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.03	-0.56	-0.82	-1.97
Baltimore, MD	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	-0.49	-7.77	-11.21	-27.72
Baltimore, MD	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.49	-7.81	-11.27	-27.86
Baltimore, MD	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.02	-0.02	-0.06
Baton Rouge, LA	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.06	-0.27	-1.47	-0.42

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Beaver, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	-0.01	-0.02
Benton County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	-0.01	-0.02	-0.05
Berrien County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.23	-0.35	-0.82
Billings, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.02	-0.01	-0.25	0.10
Billings, MT	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.04	0.31	0.21	1.22
Birmingham, AL	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.11	-1.84	-2.77	-6.50
Boise-Northern Ada County, ID	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.03	-0.56	-0.81	-2.00
Bonner County; The Sandpoint Area, ID	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.02
Boston, MA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.07	-1.14	-1.64	-4.07
Boyd County (part), KY	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.04	0.32	0.22	1.29
Brooke; Follansbee area, WV	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.01	0.00	0.02
Brown County: Green Bay, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.02	-0.04
Burlington, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.05	-0.07	-0.17
Butte County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.14	-0.21	-0.48
Calaveras County, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.03	-0.04	-0.09
Calaveras County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.03	-0.04	-0.09
Campbell-Clermont Counties, KY-OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.02	-0.03	-0.08
Canton-Massillon, OH	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.01	-0.24	-0.45	-0.82
Central New Hampshire, NH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.02	-0.24	-0.35	-0.87
Central Steptoe Valley, NV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.02	-0.03	-0.06
Charleston, WV	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	-0.22	-0.55	-0.68
Charlotte, NC	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.15	-2.42	-3.49	-8.64
Charlotte-Rock Hill, NC-SC	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.23	-3.57	-5.13	-12.72
Chicago, IL-IN-WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.48	-9.32	-14.96	-32.44
Chicago-Naperville, IL-IN-WI	Ozone (2008 8-hour)	Maintenance, Serious	100	0	-0.60	-10.42	-15.80	-36.74
Chico (Butte County), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.14	-0.21	-0.48
Chico, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.06	-0.09	-0.23
Chico, CA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.13	-0.20	-0.46
Cincinnati, OH-KY (OH Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.14	-2.26	-3.27	-8.05
Cincinnati, OH-KY (KY Portion)	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	-0.02	-0.31	-0.47	-1.07

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Cincinnati, OH-KY-IN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.17	-2.80	-4.07	-9.95
Clark County; Las Vegas planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.15	-2.44	-3.51	-8.71
Cleveland, OH	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.17	-2.78	-4.10	-9.89
Cleveland, OH	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.08	-1.26	-1.82	-4.51
Cleveland, OH	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-0.09	-1.49	-2.15	-5.33
Cleveland-Akron-Lorain, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.17	-2.82	-4.18	-9.99
Cleveland-Akron-Lorain, OH	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.16	-2.55	-3.77	-9.06
Cochise County; Paul Spur/Douglas planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.02	-0.05
Colorado Springs, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.03	-0.47	-0.69	-1.66
Columbus, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.17	-2.69	-3.89	-9.59
Columbus, OH	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.16	-2.56	-3.71	-9.13
Cook County; Lyons Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.13	-0.18	-0.45
Cook County; Southeast Chicago, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.04	0.31	0.09	1.30
Coshocton County; Franklin Township, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Coso Junction, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.02	0.01	0.09
Cuyahoga County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.08	-1.27	-1.82	-4.52
Cuyahoga County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.07	-1.03	-1.49	-3.68
Dallas-Fort Worth, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.66	-11.01	-16.35	-39.00
Dallas-Fort Worth, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.66	-10.92	-16.22	-38.69
Dane County; Madison sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.05	-0.86	-1.23	-3.05
Delaware County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.10	0.62	0.07	2.64
Denver Metro/North Front Range, CO	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.25	-4.82	-7.67	-16.82
Denver-Boulder, CO	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.19	-3.58	-5.74	-12.45
Denver-Boulder-Greeley-Ft. Collins-Loveland, CO	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.27	-4.94	-7.75	-17.28
Detroit, MI	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	-0.47	-7.98	-12.02	-28.18
Detroit, MI	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.19	-3.04	-4.46	-10.79
Detroit, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.22	-0.39	-0.73
Detroit-Ann Arbor, MI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.47	-8.00	-12.04	-28.24
Doña Ana County; Anthony, NM	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.12	0.08	0.47

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Door County, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	0.00
Door County-Revised, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	-0.04	-0.05	-0.13
Douglas (Cochise County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.02	-0.04
Dukes County, MA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	-0.02	-0.03	-0.06
Duluth, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.08	-0.15	-0.29
East Chicago, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.05	0.46	0.30	1.81
East Helena Area, MT	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	-0.01
East Kern County, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	-0.01	0.02
El Paso County, TX	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.02	-0.42	-0.70	-1.44
El Paso, TX	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.01	0.08	0.02	0.34
El Paso-Las Cruces, TX-NM	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.02	-0.49	-0.88	-1.64
Eugene-Springfield, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.22	-0.32	-0.80
Evangeline Parish (Partial), LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Fairbanks, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	-0.06	-0.11	-0.20
Fairbanks, AK	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.01	-0.14	-0.22	-0.47
Flathead County; Columbia Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.02	-0.02	-0.06
Flathead County; Kalispell and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.11	-0.15	-0.38
Flathead County; Whitefish and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.02	-0.02	-0.06
Fort Collins, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.21	-0.31	-0.75
Freehold, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.02	-0.04
Freestone and Anderson Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.05	0.02	0.20
Fremont County; Canon City Area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.05	-0.07	-0.17
Fresno, CA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.04	-0.59	-0.84	-2.09
Gila County (part): Payson, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.02	-0.03	-0.08
Giles County, VA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Grant County, NM	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.05	-0.07	-0.16
Grants Pass, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.03	-0.04	-0.09

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Great Falls, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.04	0.02	0.16
Greater Connecticut, CT	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-0.11	-1.72	-2.47	-6.12
Greater Connecticut, CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.11	-1.72	-2.47	-6.12
Greeley, CO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.05	0.01	-0.64	0.39
Hancock County (part): Weirton, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.02	0.01	0.09
Hancock and Brooke Counties (Part); The city of Weirton, WV	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.02	0.01	0.09
Harrisburg-Lebanon-Carlisle-York, PA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	-0.09	-1.40	-2.03	-5.00
Hartford-New Britain-Middletown, CT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.08	-1.24	-1.79	-4.43
Hayden (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	-0.01	-0.01	-0.04
Hayden, AZ	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.02	-0.02	-0.06
Hayden, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	-0.01	-0.04
Henderson-Webster Counties, KY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.02	0.01	0.06
Hillsborough County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.02	-0.02	-0.06
Hillsborough-Polk County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Houston-Galveston-Brazoria, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.16	-5.38	-10.34	-17.85
Houston-Galveston-Brazoria, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.15	-5.21	-10.07	-17.23
Howard County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.03	0.27	0.19	1.07
Humphreys County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	-0.02	-0.02	-0.06
Huntington, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.03	-0.05	-0.11
Hutchinson County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.04	0.33	0.21	1.31
Imperial County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.20	-0.29	-0.71
Imperial County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.20	-0.29	-0.71
Imperial County, CA	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.16	-0.23	-0.58
Imperial County, CA	PM _{2.5} (2012 Annual)	Nonattainment, Moderate	100	0	-0.01	-0.16	-0.23	-0.58
Imperial Valley, CA	PM ₁₀ (1987 24-hour)	Maintenance, Serious	100	0	-0.01	-0.19	-0.27	-0.68
Indian Wells, CA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.02	-0.05	-0.08
Indiana, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.04	0.31	0.13	1.26
Indianapolis, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.01	-0.02
Indianapolis, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.07	-1.11	-1.60	-3.96
Inland Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	0.00	-0.05	-0.07	-0.18

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Inyo County; Owens Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	-0.01	-0.01
Jackson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.11	-0.15	-0.38
Jackson County; Medford-Ashland (including White City), OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.15	-0.22	-0.54
Jamestown, NY	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.03	0.18	0.04	0.76
Jefferson County, KY	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.01	-0.01
Jefferson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.05	-0.07	-0.16
Jefferson County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.01
Jefferson County; (part) Steubenville & Mingo Junction, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.04	-0.02
Johnstown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.02	0.15	0.01	0.62
Josephine County; Grants Pass, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.03	-0.04	-0.09
Juneau; Mendenhall Valley area, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.02	-0.03	-0.07
Kern County (Eastern Kern), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.12	1.01	0.63	4.04
Kern County (Eastern Kern), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.12	1.01	0.63	4.04
King County; Kent, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.02	-0.03	-0.07
King County; Seattle, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.02	-0.05
Klamath Falls, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.05	-0.08	-0.19
Klamath Falls, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.05	-0.08	-0.19
Klamath Falls, OR	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.06	-0.09	-0.22
Knoxville, TN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.06	-0.90	-1.32	-3.20
Knoxville-Sevierville-La Follette, TN	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.06	-0.99	-1.45	-3.50
La Porte County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.06	-0.09	-0.21
LaSalle County; Oglesby, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.04	-0.05	-0.13
Lake County (part); Lakeview, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Lake County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.03	0.01	-0.35	0.22
Lake County, OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.20	-0.29	-0.72
Lake County; (part) Eastlake, Timberlake, Lakeline, Willoughby, Mentor, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.03	-0.05	-0.12
Lake County; Cities of East Chicago, Hammond, Whiting, and Gary, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.04	0.17	-0.11	0.80
Lake County; Polson, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Lake County; Ronan, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Lake Tahoe North Shore, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.02	-0.02	-0.06
Lake Tahoe South Shore, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.03	-0.04	-0.10
Lake Tahoe, NV	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.02	-0.04	-0.09
Lancaster, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.04	-0.59	-0.86	-2.09
Lancaster, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.04	-0.59	-0.86	-2.09
Lane County (part); Oakridge, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Lane County; Eugene/Springfield, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.22	-0.32	-0.80
Las Vegas, NV	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.15	-2.44	-3.51	-8.71
Las Vegas, NV	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.15	-2.45	-3.52	-8.72
Laurel Area (Yellowstone County), MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.04	0.30	0.19	1.19
Lebanon County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-0.01	-0.11	-0.16	-0.41
Lemont, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.05	0.37	0.13	1.53
Liberty-Clairton, PA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.02	0.00
Lincoln County; Libby and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01	-0.02
Logan, UT-ID	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.19	-0.28	-0.69
Longmont, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.06	0.45	0.25	1.79
Lorain County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.04	-0.06	-0.16
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.10	0.60	0.03	2.59
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	0.10	0.60	0.03	2.59
Los Angeles-South Coast Air Basin, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-0.69	-11.96	-18.14	-42.20
Los Angeles-South Coast Air Basin, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-0.69	-11.96	-18.13	-42.17
Los Angeles-South Coast Air Basin, CA	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.69	-11.97	-18.14	-42.20
Los Angeles-South Coast Air Basin, CA	NO ₂ (1971 Annual)	Maintenance, Primary	100	0	-0.69	-11.97	-18.14	-42.20
Los Angeles-South Coast Air Basin, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.69	-11.97	-18.14	-42.20
Los Angeles-South Coast Air Basin, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-0.69	-11.97	-18.14	-42.20
Louisville, KY-IN (IN Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.01	-0.22	-0.33	-0.79
Louisville, KY-IN (KY Portion)	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.07	-1.12	-1.62	-4.01
Lowell, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.10	-0.14	-0.34

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Lucas County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.04	0.20	-0.12	0.94
Madison County; Granite City Township and Nameoki Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.06	0.51	0.28	2.04
Manchester, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.10	-0.14	-0.34
Manitowoc County, WI	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	-0.06	-0.08	-0.20
Marathon County: Rothschild Sub-city area, Rib Mountain, Weston, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.01	-0.17	-0.25	-0.61
Maricopa and Pinal Counties; Phoenix planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.57	-9.01	-12.97	-32.14
Marion County: Lawrence, Washington, and Warrant Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.06	-0.92	-1.32	-3.27
Mariposa County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.02	-0.04
Mariposa County, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.02	-0.04
Marshall, WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.01	0.09	0.06	0.37
Medford, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.09	-0.13	-0.33
Memphis, TN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.07	-1.13	-1.67	-4.00
Memphis, TN-MS-AR	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.08	-1.39	-2.05	-4.91
Miami (Gila County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.03	-0.04	-0.10
Miami, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.02	-0.04	-0.09
Miami, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.03	-0.04	-0.09
Millinocket AQCR 109, ME	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.02	-0.24	-0.35	-0.85
Milwaukee, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.10	-1.53	-2.20	-5.46
Milwaukee, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.04	-0.62	-0.89	-2.21
Milwaukee-Racine, WI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.09	-1.37	-1.97	-4.89
Minneapolis-St. Paul, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.24	-4.26	-6.51	-15.01
Minneapolis-St. Paul, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.24	-4.16	-6.36	-14.65
Missoula, MT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.21	-0.31	-0.76
Missoula, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.22	-0.32	-0.78
Modesto, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.24	-0.35	-0.87
Mohave County (part); Bullhead City, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.08	-0.12	-0.28
Mono Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01	-0.01

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Mono County; Mammoth Lake planning area, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.03	-0.05	-0.12
Morenci (Greenlee County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.01	-0.02
Morgan County, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.02	-0.03	-0.07
Morongo Band of Mission Indians, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	-0.01	-0.01
Morongo Band of Mission Indians, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	-0.01	-0.01
Morristown, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.03	-0.04	-0.11
Muscatine County, IA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.02	-0.03	-0.08
Muscatine, IA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.04	-0.05	-0.13
Muskegon County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.12	-0.18	-0.43
Muskingum River, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.01	0.01	0.05
Nashua, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.08	-0.12	-0.29
Nassau County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.01	-0.02
Navarro County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.08	0.05	0.32
Nevada County (Western part), CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.00	-0.07	-0.10	-0.24
Nevada County (Western part), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	-0.07	-0.10	-0.24
New Haven County, CT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.02	-0.03	-0.08
New Haven-Meriden-Waterbury, CT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.05	-0.85	-1.23	-3.05
New Madrid County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
New Manchester-Grant magisterial district in Hancock County, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.03	0.02	0.13
New York County, NY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.05	-0.74	-1.07	-2.65
New York-N. New Jersey-Long Island, NY-NJ-CT	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.95	-15.26	-22.21	-54.29
New York-N. New Jersey-Long Island, NY-NJ-CT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.52	-8.48	-12.43	-30.11
New York-N. New Jersey-Long Island, NY-NJ-CT	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.99	-15.87	-23.08	-56.46
New York-Northern New Jersey-Long Island, NY-NJ-CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.95	-15.26	-22.22	-54.31
Nogales, AZ	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	-0.02	-0.03	-0.06
Northern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.21	-3.48	-5.20	-12.31
Oakridge, OR	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Ogden, UT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.20	-0.29	-0.72
Ogden, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.20	-0.29	-0.72

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Olmsted County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.03	-0.05	-0.12
Olmsted County; City of Rochester, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.12	-0.18	-0.43
Oneida County: Rhinelander Sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	-0.06	-0.09	-0.21
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Pekin, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.07	-0.10	-0.25
Penns Grove, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Peoria County: Hollis twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	-0.01
Peoria, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.15	-0.22	-0.53
Perth Amboy, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.08	-0.12	-0.29
Philadelphia-Camden County, PA-NJ	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.02	-0.28	-0.92	-0.74
Philadelphia-Wilmington, PA-NJ-DE (NJ Portion)	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.18	-2.92	-4.30	-10.37
Philadelphia-Wilmington, PA-NJ-DE (PA-DE Portion)	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.13	-2.90	-4.93	-9.96
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.43	-7.68	-11.90	-26.97
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.22	-5.84	-10.63	-19.68
Phoenix, AZ	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.56	-8.89	-12.79	-31.72
Phoenix-Mesa, AZ	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-0.57	-9.03	-12.99	-32.21
Phoenix-Mesa, AZ	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.57	-9.07	-13.05	-32.36
Pierce County; Tacoma, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.01	0.01	0.06
Pima County; Ajo planning area, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Pima County; Rillito planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.04	-0.06	-0.16
Pinal County (part); West Pinal, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.01	-0.17	-0.25	-0.62
Pitkin County; Aspen, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.07	-0.03	0.31
Pittsburgh, PA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.29	-0.44	-1.04
Pittsburgh-Beaver Valley, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.06	-1.64	-3.06	-5.48
Pittsburgh-Beaver Valley, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.05	-1.48	-2.77	-4.94
Plumas County, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	0.00	0.00	0.00	-0.01
Polk County, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	-0.01	-0.01	-0.02
Portland, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.11	-1.81	-2.61	-6.43

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Power-Bannock Counties; Fort Hall Indian Reservation, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.01	-0.03
Power-Bannock Counties; Portneuf Valley Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.09	-0.13	-0.33
Provo, UT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.01	-0.18	-0.27	-0.66
Provo, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.03	-0.57	-0.89	-2.02
Prowers County; Lamar, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.02	-0.03	-0.08
Raleigh-Durham, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.17	-2.75	-3.95	-9.80
Ramsey County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.05	0.46	0.31	1.81
Reading, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.02	-0.39	-0.57	-1.39
Reno, NV	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.31	-0.44	-1.10
Rhineland, WI	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.03	-0.04	-0.11
Riverside County (Coachella Valley), CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-0.02	-0.32	-0.46	-1.14
Riverside County (Coachella Valley), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-0.02	-0.32	-0.46	-1.14
Riverside County; Coachella Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.02	-0.37	-0.53	-1.32
Riverside, Los Angeles, Orange, & San Bernardino Counties; South Coast Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.69	-11.92	-18.07	-42.04
Rosebud County; Lame Deer, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01
Routt County (part); Steamboat Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.03	0.25	0.09	1.01
Rusk and Panola Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.02	0.18	0.12	0.72
Sacramento County, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.04	-1.62	-3.23	-5.31
Sacramento Metro, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.19	-3.96	-6.60	-13.65
Sacramento Metro, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.19	-3.96	-6.59	-13.64
Sacramento, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.19	-3.21	-4.87	-11.31
Sacramento, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.18	-3.87	-6.47	-13.34
Salem, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.35	-0.50	-1.23
Salt Lake City, UT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.30	-0.63	-0.98
Salt Lake City, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.22	-3.63	-5.42	-12.85
Salt Lake County, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.14	-2.46	-3.73	-8.66
Salt Lake County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	-0.14	-2.46	-3.73	-8.67
San Antonio, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.16	-2.68	-3.94	-9.51

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
San Bernardino County, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.11	0.81	0.33	3.34
San Diego County, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.17	-2.68	-3.86	-9.55
San Diego County, CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-0.17	-2.67	-3.86	-9.54
San Diego, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.17	-2.67	-3.86	-9.53
San Francisco Bay Area, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.24	-4.81	-7.81	-16.69
San Francisco Bay Area, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.24	-4.80	-7.80	-16.66
San Francisco Bay Area, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.24	-4.82	-7.83	-16.72
San Francisco-Oakland-San Jose, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.22	-4.53	-7.42	-15.71
San Joaquin Valley Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.01	-1.73	-3.99	-5.40
San Joaquin Valley, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-0.01	-1.73	-3.99	-5.40
San Joaquin Valley, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-0.01	-1.73	-3.99	-5.40
San Joaquin Valley, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.01	-1.73	-3.99	-5.40
San Joaquin Valley, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-0.01	-1.73	-3.99	-5.40
San Luis Obispo (Eastern San Luis Obispo), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.01	0.05	0.02	0.18
San Luis Obispo (Eastern part), CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.01	0.05	0.02	0.18
San Manuel (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.02	-0.02	-0.05
San Miguel County; Telluride, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.02	-0.04	-0.06
Sanders County (part); Thompson Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Santa Cruz County; Nogales planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.02	-0.03	-0.06
Seaford, DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.02	-0.31	-0.45	-1.11
Seattle-Tacoma, WA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.18	-2.88	-4.15	-10.26
Sheboygan County, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.06	-0.09	-0.22
Sheridan County; City of Sheridan, WY	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.04	-0.06	-0.14
Shoreline Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	0.00	-0.06	-0.08	-0.20
Shoshone County; City of Pinehurst, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Shoshone County; Pinehurst Expansion Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.02	-0.03	-0.08
Silver Bow County; Butte, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.05	-0.07	-0.16
Somerville, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.02	-0.05
Southern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.03	-0.57	-0.89	-2.02

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Southwest Indiana, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.02	0.01	0.06
Spokane County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.03	-0.50	-0.72	-1.79
Spokane, WA	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.03	-0.50	-0.72	-1.78
Springfield, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.03	-0.49	-0.70	-1.74
St. Bernard Parish, LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.07	0.60	0.37	2.38
St. Clair, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.06	-0.08	-0.20
St. Lawrence County, NY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	-0.01	-0.03
St. Louis, MO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.22	-3.92	-6.09	-13.76
St. Louis, MO-IL	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.44	-7.97	-12.43	-27.94
St. Louis-St. Charles-Farmington, MO-IL	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.52	-8.71	-13.02	-30.80
Steubenville, OH-WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.02	0.16	0.08	0.63
Steubenville-Weirton, OH-WV	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.01	0.02	-0.04	0.12
Stockton, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.28	-0.40	-0.99
Sullivan County, TN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.02	-0.02	-0.06
Sutter Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.01	0.00	0.02
Syracuse, NY	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.04	-0.58	-0.84	-2.07
Tacoma, WA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.39	-0.57	-1.38
Tazewell County: Groveland twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.03	-0.05	-0.11
Terre Haute, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.07	-0.11	-0.26
Thurston County; Cities of Olympia, Tumwater, and Lacey, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.16	-0.23	-0.56
Titus County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.01
Toms River, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01
Tooele County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	0.01	0.08	0.05	0.32
Trenton, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.15	-0.22	-0.55
Trona, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.03	0.02	0.10
Tucson, AZ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.06	-0.94	-1.35	-3.34
Tuolumne County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.04	-0.06	-0.16
Tuscan Buttes, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Tuscan Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Uinta Basin, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.03	0.17	-0.01	0.75
Union County; LaGrande, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.04
Upper Green River Basin Area, WY	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.03	0.19	0.06	0.79
Utah County, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.43	-0.79	-1.44
Vancouver, WA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.25	-0.37	-0.91
Ventura County, CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.10	0.61	0.04	2.60
Ventura County, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.10	0.61	0.04	2.61
Vermillion County; Part of Clinton Township, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.02
Vigo County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.12	-0.20	-0.42
Walla Walla County; Wallula, WA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	-0.01	-0.01
Waltham, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.06	-0.08	-0.20
Warren County, NJ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	-0.02	-0.03	-0.08
Warren County: Conewago Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.03	0.27	0.18	1.06
Warren County: Warren Boro, Pleasant Twp, Glade Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.03	0.26	0.17	1.02
Warren, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.03	0.25	0.16	1.01
Washington, DC-MD-VA	Ozone (2008 8-hour)	Nonattainment (DC) Maintenance (MD, VA), Marginal	50	0	-0.32	-5.13	-7.38	-18.28
Washington, DC-MD-VA	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.32	-5.13	-7.39	-18.30
Washington, DC-MD-VA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.05	-0.76	-1.09	-2.70
Washoe County; Reno planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.02	-0.31	-0.45	-1.11
Wayne County, MI	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.02	-0.05	0.11
Wayne County: Boston, Center, Franklin, Wayne & Webster Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.07	-0.11	-0.26
West Central Pinal, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.02	-0.04
West Silver Valley, ID	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	-0.01	-0.02	-0.04
Whatcom County, WA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.08	0.73	0.50	2.89
Winston-Salem, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.03	-0.52	-0.75	-1.87
Worcester, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.18	-0.26	-0.64
Yakima County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.12	-0.18	-0.43
Yakima, WA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.04	-0.06	-0.15

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Yuba City-Marysville, CA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.13	-0.20	-0.47
Yuma, AZ	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.15	-0.21	-0.53
Yuma, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.23	-0.33	-0.82

Notes:

^a Nonattainment or maintenance status as of 2/1/2024. Source: EPA, The Green Book Nonattainment Areas for Criteria Pollutants; <http://www.epa.gov/airquality/greenbook/>. "--" indicates that no severity classification has been established for the NAAQS pollutant.

^b Emissions thresholds in tons per year. Where the threshold differs by precursor pollutant, the smallest of the precursor thresholds is shown. These thresholds are provided for information only; a general conformity determination is not required for the Proposed Action. Source: 40 CFR 93.853.

^c Positive values are emissions increases; negative values are emissions decreases.

EPA = U.S. Environmental Protection Agency; NAAQS = National Ambient Air Quality Standard; CO = carbon monoxide; NO₂ = nitrogen dioxide; PM2.5 = particulate matter less than 2.5 microns in size; PM10 = particulate matter less than 10 microns in size; SO₂ = sulfur dioxide.

Table D-29. Changes in Emissions from U.S. Heavy-Duty Pickup Trucks and Vans by Nonattainment or Maintenance Area and Alternative, Direct and Indirect Impacts--Volatile Organic Compounds (VOCs), 2035

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Ada County; Boise, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.11	-0.79	-1.58	-5.19
Adams, Denver, and Boulder Counties; Denver Metropolitan area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.56	-3.98	-7.96	-25.98
Ajo (Pima County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01
Albuquerque, NM	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.17	-1.08	-2.17	-7.28
Allegan County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.05	-0.09	-0.32
Allegheny County Air Basin: Hazelwood monitor, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.02	-0.10	-0.21	-0.68
Allegheny County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	-0.20	-1.36	-2.72	-9.02
Allegheny County; Liberty, Lincoln, Port Vue, Glassport, Clairton, PA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.04	-0.08	-0.27
Allegheny, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.05	-0.40	-0.80	-2.58
Allentown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.10	-0.66	-1.32	-4.44
Allentown-Bethlehem-Easton, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.11	-0.68	-1.37	-4.61
Alton Township, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.03	-0.20	-0.40	-1.27
Amador County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.05	-0.10	-0.32
Anchorage, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.03	-0.17	-0.34	-1.19
Anchorage; Eagle River, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.02	-0.07
Anne Arundel County and Baltimore County, MD	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.32	-1.65	-3.31	-11.95
Archuleta County; Pagosa Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.07	-0.54	-1.09	-3.45
Armstrong County: Madison, Mahoning, Boggs, Washington, Pine, PA	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	-0.03	-0.21	-0.41	-1.30
Aroostock County; City of Presque Isle, ME	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01	-0.03
Atlanta, GA	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-1.24	-7.12	-14.26	-49.65
Atlanta, GA	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-1.12	-6.39	-12.80	-44.66
Atlantic City, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.03	-0.06	-0.21
Bakersfield, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.07	-0.43	-0.87	-2.93
Baltimore, MD	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	-0.62	-3.30	-6.61	-23.61
Baltimore, MD	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.62	-3.32	-6.65	-23.74
Baltimore, MD	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.02	-0.07
Baton Rouge, LA	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.45	-3.19	-6.37	-20.72

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Beaver, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.02	-0.03	-0.10
Benton County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	-0.02	-0.03	-0.11
Berrien County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.03	-0.22	-0.43	-1.45
Billings, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.12	-0.87	-1.75	-5.63
Billings, MT	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.04	-0.32	-0.64	-2.02
Birmingham, AL	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.26	-1.67	-3.35	-11.28
Boise-Northern Ada County, ID	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.11	-0.79	-1.58	-5.19
Bonner County; The Sandpoint Area, ID	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.02	-0.07
Boston, MA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.20	-1.38	-2.76	-9.10
Boyd County (part), KY	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.02	-0.15	-0.29	-0.93
Brooke; Follansbee area, WV	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.02	-0.06
Brown County: Green Bay, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.02	-0.06
Burlington, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.02	-0.03	-0.12
Butte County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.03	-0.21	-0.42	-1.37
Calaveras County, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.04	-0.08	-0.27
Calaveras County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.04	-0.08	-0.27
Campbell-Clermont Counties, KY-OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.02	-0.04	-0.13
Canton-Massillon, OH	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.09	-0.63	-1.26	-4.12
Central New Hampshire, NH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.02	-0.09	-0.18	-0.66
Central Steptoe Valley, NV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.01	-0.04
Charleston, WV	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.09	-0.62	-1.24	-4.11
Charlotte, NC	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.22	-1.26	-2.52	-8.81
Charlotte-Rock Hill, NC-SC	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.37	-2.22	-4.44	-15.25
Chicago, IL-IN-WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-1.16	-6.87	-13.76	-47.44
Chicago-Naperville, IL-IN-WI	Ozone (2008 8-hour)	Maintenance, Serious	100	0	-1.71	-11.18	-22.37	-74.70
Chico (Butte County), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.03	-0.21	-0.42	-1.37
Chico, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.07	-0.14	-0.47
Chico, CA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	-0.03	-0.20	-0.39	-1.29
Cincinnati, OH-KY (OH Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.18	-0.99	-1.99	-7.09
Cincinnati, OH-KY (KY Portion)	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	-0.13	-0.97	-1.93	-6.23

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Cincinnati, OH-KY-IN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.38	-2.46	-4.92	-16.53
Clark County; Las Vegas planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.26	-1.60	-3.20	-10.96
Cleveland, OH	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.47	-3.14	-6.29	-20.89
Cleveland, OH	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.26	-1.80	-3.61	-11.83
Cleveland, OH	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-0.29	-2.02	-4.04	-13.30
Cleveland-Akron-Lorain, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.49	-3.26	-6.53	-21.66
Cleveland-Akron-Lorain, OH	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.45	-3.01	-6.03	-19.98
Cochise County; Paul Spur/Douglas planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.02	-0.07
Colorado Springs, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.15	-1.11	-2.22	-7.20
Columbus, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.33	-2.05	-4.10	-13.89
Columbus, OH	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.30	-1.84	-3.67	-12.51
Cook County; Lyons Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.12	-0.24	-0.81
Cook County; Southeast Chicago, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.04	-0.29	-0.58	-1.89
Coshocton County; Franklin Township, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.02	-0.06
Coso Junction, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.07	-0.14	-0.45
Cuyahoga County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.26	-1.81	-3.61	-11.86
Cuyahoga County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.21	-1.47	-2.94	-9.66
Dallas-Fort Worth, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-1.26	-7.63	-15.28	-52.34
Dallas-Fort Worth, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-1.25	-7.57	-15.16	-51.94
Dane County; Madison sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.09	-0.50	-1.00	-3.47
Delaware County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-0.11	-0.77	-1.53	-5.01
Denver Metro/North Front Range, CO	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-1.30	-9.11	-18.23	-59.62
Denver-Boulder, CO	CO (1971 8-hour)	Maintenance, Serious	100	0	-1.03	-7.27	-14.54	-47.45
Denver-Boulder-Greeley-Ft. Collins-Loveland, CO	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-1.28	-8.96	-17.92	-58.62
Detroit, MI	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	-0.85	-4.93	-9.86	-34.20
Detroit, MI	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.32	-1.91	-3.83	-13.19
Detroit, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.04	-0.28	-0.55	-1.85
Detroit-Ann Arbor, MI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.85	-4.94	-9.89	-34.30
Doña Ana County; Anthony, NM	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.05	-0.10	-0.33

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Door County, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	0.00
Door County-Revised, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	-0.02	-0.04	-0.13
Douglas (Cochise County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.02	-0.06
Dukes County, MA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	-0.01	-0.03	-0.09
Duluth, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.03	-0.22	-0.44	-1.42
East Chicago, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.16	-0.32	-1.02
East Helena Area, MT	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	-0.01
East Kern County, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.01	-0.07	-0.15	-0.48
El Paso County, TX	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.07	-0.46	-0.92	-3.11
El Paso, TX	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.08	-0.16	-0.53
El Paso-Las Cruces, TX-NM	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.06	-0.34	-0.67	-2.39
Eugene-Springfield, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.12	-0.25	-0.85
Evangeline Parish (Partial), LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	-0.01	-0.04
Fairbanks, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.01	-0.07	-0.14	-0.48
Fairbanks, AK	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.02	-0.10	-0.19	-0.64
Flathead County; Columbia Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.02	-0.05	-0.15
Flathead County; Kalispell and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.14	-0.29	-0.93
Flathead County; Whitefish and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.02	-0.04	-0.15
Fort Collins, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.04	-0.29	-0.59	-1.92
Freehold, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.01	-0.04
Freestone and Anderson Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.11	-0.21	-0.68
Fremont County; Canon City Area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.05	-0.09	-0.31
Fresno, CA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.06	-0.34	-0.68	-2.36
Gila County (part): Payson, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.02	-0.06
Giles County, VA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Grant County, NM	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.02	-0.04	-0.13
Grants Pass, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.02	-0.04	-0.14

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Great Falls, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.03	-0.09
Greater Connecticut, CT	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-0.21	-1.31	-2.62	-8.88
Greater Connecticut, CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.21	-1.31	-2.62	-8.88
Greeley, CO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.23	-1.64	-3.28	-10.68
Hancock County (part): Weirton, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.01	-0.07	-0.14	-0.46
Hancock and Brooke Counties (Part); The city of Weirton, WV	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.06	-0.11	-0.35
Harrisburg-Lebanon-Cartisle-York, PA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	-0.15	-0.87	-1.74	-5.99
Hartford-New Britain-Middletown, CT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.15	-0.95	-1.89	-6.41
Hayden (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	-0.01	-0.03
Hayden, AZ	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.02	-0.06
Hayden, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.01	-0.03
Henderson-Webster Counties, KY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.06	-0.12	-0.37
Hillsborough County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.02	-0.05	-0.16
Hillsborough-Polk County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.01	-0.03
Houston-Galveston-Brazoria, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-1.92	-13.37	-26.75	-87.61
Houston-Galveston-Brazoria, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-1.88	-13.13	-26.26	-85.98
Howard County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.03	-0.25	-0.50	-1.59
Humphreys County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	-0.02	-0.03	-0.11
Huntington, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.02	-0.12	-0.24	-0.76
Hutchinson County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.05	-0.41	-0.83	-2.62
Imperial County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-0.04	-0.25	-0.50	-1.65
Imperial County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.04	-0.25	-0.50	-1.65
Imperial County, CA	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	-0.02	-0.15	-0.31	-1.03
Imperial County, CA	PM _{2.5} (2012 Annual)	Nonattainment, Moderate	100	0	-0.02	-0.15	-0.31	-1.03
Imperial Valley, CA	PM ₁₀ (1987 24-hour)	Maintenance, Serious	100	0	-0.04	-0.24	-0.48	-1.59
Indian Wells, CA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.10	-0.20	-0.65
Indiana, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.10	-0.77	-1.53	-4.89
Indianapolis, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.01	-0.02
Indianapolis, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.11	-0.61	-1.21	-4.23
Inland Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-0.01	-0.05	-0.09	-0.32

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Inyo County; Owens Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	-0.02	-0.05	-0.15
Jackson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.06	-0.12	-0.42
Jackson County; Medford-Ashland (including White City), OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.09	-0.19	-0.64
Jamestown, NY	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.08	-0.59	-1.18	-3.76
Jefferson County, KY	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.01	-0.02
Jefferson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.07	-0.13	-0.43
Jefferson County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.02	-0.04	-0.12
Jefferson County; (part) Steubenville & Mingo Junction, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.02	-0.13	-0.26	-0.85
Johnstown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.06	-0.46	-0.93	-2.97
Josephine County; Grants Pass, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.02	-0.04	-0.14
Juneau; Mendenhall Valley area, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.02	-0.06
Kern County (Eastern Kern), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.06	-0.48	-0.97	-3.09
Kern County (Eastern Kern), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.06	-0.48	-0.97	-3.09
King County; Kent, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.02	-0.03	-0.11
King County; Seattle, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.02	-0.07
Klamath Falls, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.02	-0.04	-0.16
Klamath Falls, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.02	-0.04	-0.16
Klamath Falls, OR	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.03	-0.05	-0.18
Knoxville, TN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.13	-0.87	-1.74	-5.82
Knoxville-Sevierville-La Follette, TN	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.14	-0.94	-1.88	-6.29
La Porte County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.03	-0.07	-0.23
LaSalle County; Oglesby, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.03	-0.05	-0.17
Lake County (part); Lakeview, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Lake County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.11	-0.76	-1.51	-4.95
Lake County, OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.02	-0.13	-0.26	-0.90
Lake County; (part) Eastlake, Timberlake, Lakeline, Willoughby, Mentor, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.02	-0.04	-0.15
Lake County; Cities of East Chicago, Hammond, Whiting, and Gary, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.08	-0.54	-1.08	-3.54
Lake County; Polson, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.01	-0.04

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Lake County; Ronan, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01	-0.02
Lake Tahoe North Shore, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.02	-0.05	-0.15
Lake Tahoe South Shore, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.03	-0.06	-0.18
Lake Tahoe, NV	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.03	-0.06	-0.20
Lancaster, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.09	-0.56	-1.13	-3.77
Lancaster, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.09	-0.56	-1.13	-3.77
Lane County (part); Oakridge, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Lane County; Eugene/Springfield, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.12	-0.25	-0.85
Las Vegas, NV	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.26	-1.60	-3.20	-10.96
Las Vegas, NV	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.26	-1.60	-3.21	-10.99
Laurel Area (Yellowstone County), MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	-0.04	-0.34	-0.67	-2.14
Lebanon County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-0.02	-0.15	-0.30	-0.99
Lemont, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.04	-0.30	-0.60	-1.96
Liberty-Clairton, PA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.04	-0.08	-0.27
Lincoln County; Libby and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01	-0.03
Logan, UT-ID	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.12	-0.25	-0.85
Longmont, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.10	-0.80	-1.59	-5.06
Lorain County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.04	-0.08	-0.26
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.11	-0.79	-1.59	-5.20
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-0.11	-0.79	-1.59	-5.20
Los Angeles-South Coast Air Basin, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-1.30	-7.62	-15.26	-52.79
Los Angeles-South Coast Air Basin, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-1.30	-7.62	-15.25	-52.77
Los Angeles-South Coast Air Basin, CA	CO (1971 8-hour)	Maintenance, Serious	100	0	-1.30	-7.62	-15.26	-52.79
Los Angeles-South Coast Air Basin, CA	NO ₂ (1971 Annual)	Maintenance, Primary	100	0	-1.30	-7.62	-15.26	-52.79
Los Angeles-South Coast Air Basin, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-1.30	-7.62	-15.26	-52.79
Los Angeles-South Coast Air Basin, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-1.30	-7.62	-15.26	-52.79
Louisville, KY-IN (IN Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.04	-0.30	-0.60	-1.97
Louisville, KY-IN (KY Portion)	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.08	-0.38	-0.76	-2.78
Lowell, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.09	-0.18	-0.60

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Lucas County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.11	-0.82	-1.63	-5.27
Madison County; Granite City Township and Nameoki Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.05	-0.37	-0.73	-2.35
Manchester, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.04	-0.09	-0.31
Manitowoc County, WI	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	-0.03	-0.05	-0.18
Marathon County: Rothschild Sub-city area, Rib Mountain, Weston, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.01	-0.08	-0.16	-0.57
Maricopa and Pinal Counties; Phoenix planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.77	-4.25	-8.52	-30.05
Marion County: Lawrence, Washington, and Warrant Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.09	-0.50	-1.01	-3.50
Mariposa County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.02	-0.04	-0.14
Mariposa County, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.02	-0.04	-0.14
Marshall, WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.03	-0.25	-0.49	-1.55
Medford, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.06	-0.11	-0.39
Memphis, TN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.14	-0.86	-1.73	-5.88
Memphis, TN-MS-AR	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.20	-1.25	-2.50	-8.42
Miami (Gila County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.02	-0.07
Miami, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.02	-0.06
Miami, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	-0.02	-0.07
Millinocket AQCR 109, ME	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.02	-0.13	-0.26	-0.90
Milwaukee, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.19	-1.17	-2.35	-7.95
Milwaukee, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.09	-0.60	-1.19	-3.99
Milwaukee-Racine, WI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.17	-1.04	-2.09	-7.09
Minneapolis-St. Paul, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.55	-3.39	-6.80	-23.13
Minneapolis-St. Paul, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.55	-3.37	-6.75	-22.96
Missoula, MT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.05	-0.38	-0.75	-2.45
Missoula, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.05	-0.39	-0.78	-2.53
Modesto, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.03	-0.16	-0.33	-1.11
Mohave County (part); Bullhead City, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.04	-0.08	-0.27
Mono Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.02	-0.08

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Mono County; Mammoth Lake planning area, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.03	-0.09
Morenci (Greenlee County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01
Morgan County, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.02	-0.03	-0.11
Morongo Band of Mission Indians, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	-0.01	-0.02	-0.06
Morongo Band of Mission Indians, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	-0.01	-0.02	-0.06
Morristown, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.02	-0.03	-0.12
Muscatine County, IA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.02	-0.05	-0.15
Muscatine, IA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.04	-0.08	-0.26
Muskegon County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.02	-0.11	-0.23	-0.76
Muskingum River, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.05	-0.10	-0.32
Nashua, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.04	-0.07	-0.26
Nassau County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.01	-0.02
Navarro County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.02	-0.13	-0.27	-0.85
Nevada County (Western part), CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-0.01	-0.05	-0.10	-0.35
Nevada County (Western part), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.01	-0.05	-0.10	-0.35
New Haven County, CT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.02	-0.05	-0.16
New Haven-Meriden-Waterbury, CT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.14	-0.92	-1.85	-6.14
New Madrid County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
New Manchester-Grant magisterial district in Hancock County, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.05	-0.09	-0.29
New York County, NY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.19	-1.38	-2.76	-8.99
New York-N. New Jersey-Long Island, NY-NJ-CT	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-2.70	-18.22	-36.45	-120.59
New York-N. New Jersey-Long Island, NY-NJ-CT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-1.76	-12.12	-24.25	-79.67
New York-N. New Jersey-Long Island, NY-NJ-CT	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-2.80	-18.86	-37.74	-124.87
New York-Northern New Jersey-Long Island, NY-NJ-CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-2.78	-18.85	-37.72	-124.61
Nogales, AZ	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.02	-0.06
Northern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.42	-2.56	-5.12	-17.48
Oakridge, OR	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Ogden, UT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.10	-0.21	-0.72
Ogden, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.10	-0.21	-0.72

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Olmsted County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.02	-0.04	-0.14
Olmsted County; City of Rochester, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.08	-0.15	-0.53
Oneida County: Rhinelander Sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.01	-0.05	-0.09	-0.32
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Pekin, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.05	-0.09	-0.31
Penns Grove, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Peoria County: Hollis twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	-0.01	-0.02
Peoria, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.02	-0.12	-0.24	-0.80
Perth Amboy, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.09	-0.18	-0.58
Philadelphia-Camden County, PA-NJ	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.18	-1.23	-2.46	-8.10
Philadelphia-Wilmington, PA-NJ-DE (NJ Portion)	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.29	-1.68	-3.36	-11.67
Philadelphia-Wilmington, PA-NJ-DE (PA-DE Portion)	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.53	-3.44	-6.88	-23.10
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-1.04	-6.41	-12.83	-43.60
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-1.00	-6.14	-12.29	-41.89
Phoenix, AZ	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.76	-4.20	-8.42	-29.67
Phoenix-Mesa, AZ	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-0.77	-4.27	-8.55	-30.16
Phoenix-Mesa, AZ	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.77	-4.29	-8.59	-30.28
Pierce County; Tacoma, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.02	-0.04	-0.13
Pima County; Ajo planning area, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Pima County; Rillito planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.03	-0.05	-0.18
Pinal County (part); West Pinal, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.01	-0.08	-0.15	-0.54
Pitkin County; Aspen, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.03	-0.19	-0.39	-1.26
Pittsburgh, PA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.05	-0.30	-0.60	-2.00
Pittsburgh-Beaver Valley, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.52	-3.60	-7.20	-23.65
Pittsburgh-Beaver Valley, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.47	-3.28	-6.56	-21.55
Plumas County, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	0.00	-0.01	-0.02	-0.06
Polk County, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	-0.01	-0.01	-0.05
Portland, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.20	-1.23	-2.46	-8.41

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Power-Bannock Counties; Fort Hall Indian Reservation, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.02	-0.06
Power-Bannock Counties; Portneuf Valley Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.03	-0.20	-0.41	-1.31
Provo, UT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.02	-0.11	-0.23	-0.79
Provo, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.07	-0.43	-0.85	-2.93
Prowers County; Lamar, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.02	-0.08
Raleigh-Durham, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.24	-1.34	-2.68	-9.43
Ramsey County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.10	-0.20	-0.63
Reading, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.05	-0.35	-0.70	-2.34
Reno, NV	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.04	-0.28	-0.57	-1.90
Rhineland, WI	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.02	-0.05	-0.15
Riverside County (Coachella Valley), CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-0.04	-0.23	-0.46	-1.56
Riverside County (Coachella Valley), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-0.04	-0.23	-0.46	-1.56
Riverside County; Coachella Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.04	-0.25	-0.50	-1.72
Riverside, Los Angeles, Orange, & San Bernardino Counties; South Coast Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-1.30	-7.60	-15.23	-52.68
Rosebud County; Lame Deer, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.02	-0.06
Routt County (part); Steamboat Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.09	-0.66	-1.32	-4.22
Rusk and Panola Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.04	-0.31	-0.62	-1.96
Sacramento County, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.31	-1.88	-3.76	-12.85
Sacramento Metro, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.52	-3.08	-6.16	-21.26
Sacramento Metro, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.52	-3.08	-6.16	-21.26
Sacramento, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.29	-1.58	-3.17	-11.24
Sacramento, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.51	-3.02	-6.04	-20.85
Salem, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.03	-0.19	-0.38	-1.33
Salt Lake City, UT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.07	-0.45	-0.90	-3.05
Salt Lake City, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.43	-2.63	-5.27	-18.00
Salt Lake County, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.28	-1.68	-3.37	-11.60
Salt Lake County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	-0.28	-1.68	-3.37	-11.61
San Antonio, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.34	-2.11	-4.23	-14.34

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
San Bernardino County, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.10	-0.70	-1.39	-4.53
San Diego County, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.43	-2.87	-5.75	-19.10
San Diego County, CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-0.43	-2.87	-5.74	-19.07
San Diego, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.43	-2.85	-5.71	-18.97
San Francisco Bay Area, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.70	-4.32	-8.65	-29.41
San Francisco Bay Area, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.70	-4.31	-8.63	-29.37
San Francisco Bay Area, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.70	-4.32	-8.65	-29.43
San Francisco-Oakland-San Jose, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.67	-4.11	-8.23	-27.98
San Joaquin Valley Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.54	-3.53	-7.06	-23.59
San Joaquin Valley, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-0.54	-3.53	-7.06	-23.59
San Joaquin Valley, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-0.54	-3.53	-7.06	-23.59
San Joaquin Valley, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.54	-3.53	-7.06	-23.59
San Joaquin Valley, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-0.54	-3.53	-7.06	-23.59
San Luis Obispo (Eastern San Luis Obispo), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.11	-0.21	-0.68
San Luis Obispo (Eastern part), CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.11	-0.21	-0.68
San Manuel (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.02	-0.06
San Miguel County; Telluride, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.14	-0.28	-0.89
Sanders County (part); Thompson Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Santa Cruz County; Nogales planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.02	-0.06
Seaford, DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.03	-0.17	-0.33	-1.16
Seattle-Tacoma, WA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.39	-2.53	-5.07	-17.02
Sheboygan County, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.06	-0.11	-0.37
Sheridan County; City of Sheridan, WY	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.03	-0.07	-0.22
Shoreline Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-0.01	-0.05	-0.10	-0.34
Shoshone County; City of Pinehurst, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Shoshone County; Pinehurst Expansion Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.02	-0.04	-0.14
Silver Bow County; Butte, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.02	-0.05	-0.17
Somerville, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.03	-0.09
Southern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.07	-0.43	-0.85	-2.93

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Southwest Indiana, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.04	-0.07	-0.24
Spokane County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.05	-0.32	-0.64	-2.19
Spokane, WA	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.05	-0.32	-0.63	-2.17
Springfield, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.04	-0.20	-0.40	-1.44
St. Bernard Parish, LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.06	-0.49	-0.98	-3.12
St. Clair, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.05	-0.10	-0.35
St. Lawrence County, NY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	-0.02	-0.05
St. Louis, MO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.38	-2.11	-4.22	-14.91
St. Louis, MO-IL	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.92	-5.42	-10.86	-37.53
St. Louis-St. Charles-Farmington, MO-IL	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.91	-5.30	-10.62	-36.81
Steubenville, OH-WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.04	-0.30	-0.60	-1.91
Steubenville-Weirton, OH-WV	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.05	-0.38	-0.77	-2.45
Stockton, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.03	-0.20	-0.40	-1.36
Sullivan County, TN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	-0.02	-0.08
Sutter Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.01	-0.01	-0.04
Syracuse, NY	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.09	-0.63	-1.26	-4.18
Tacoma, WA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.08	-0.54	-1.08	-3.54
Tazewell County: Groveland twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.02	-0.04	-0.14
Terre Haute, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.04	-0.09	-0.31
Thurston County; Cities of Olympia, Tumwater, and Lacey, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.07	-0.14	-0.48
Titus County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	-0.02	-0.06
Toms River, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01
Tooele County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	0.00	-0.01	-0.03	-0.09
Trenton, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.07	-0.15	-0.52
Trona, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.07	-0.13	-0.42
Tucson, AZ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.09	-0.53	-1.06	-3.66
Tuolumne County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.05	-0.11	-0.36
Tuscan Buttes, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	-0.01
Tuscan Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	-0.01

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Uinta Basin, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.18	-1.36	-2.72	-8.64
Union County; LaGrande, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.02	-0.05
Upper Green River Basin Area, WY	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.11	-0.84	-1.67	-5.33
Utah County, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.10	-0.65	-1.29	-4.31
Vancouver, WA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.03	-0.20	-0.41	-1.38
Ventura County, CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-0.10	-0.72	-1.44	-4.74
Ventura County, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.10	-0.72	-1.44	-4.73
Vermillion County; Part of Clinton Township, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.03	-0.09
Vigo County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.02	-0.14	-0.28	-0.95
Walla Walla County; Wallula, WA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	-0.01	-0.01	-0.04
Waltham, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.05	-0.10	-0.34
Warren County, NJ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	-0.01	-0.03	-0.09
Warren County: Conewago Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.05	-0.36	-0.71	-2.25
Warren County: Warren Boro, Pleasant Twp, Glade Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.06	-0.44	-0.88	-2.77
Warren, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.06	-0.47	-0.94	-2.97
Washington, DC-MD-VA	Ozone (2008 8-hour)	Nonattainment (DC) Maintenance (MD, VA), Marginal	50	0	-0.53	-3.12	-6.25	-21.54
Washington, DC-MD-VA	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.45	-2.55	-5.11	-17.93
Washington, DC-MD-VA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.06	-0.34	-0.69	-2.43
Washoe County; Reno planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.04	-0.29	-0.57	-1.92
Wayne County, MI	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.11	-0.21	-0.70
Wayne County: Boston, Center, Franklin, Wayne & Webster Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.03	-0.06	-0.21
West Central Pinal, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.01	-0.05
West Silver Valley, ID	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	-0.01	-0.02	-0.05
Whatcom County, WA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.10	-0.19	-0.61
Winston-Salem, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.04	-0.21	-0.43	-1.54
Worcester, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.11	-0.23	-0.78
Yakima County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.15	-0.30	-0.97
Yakima, WA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.05	-0.10	-0.33

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Yuba City-Marysville, CA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.03	-0.17	-0.34	-1.12
Yuma, AZ	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.02	-0.12	-0.24	-0.80
Yuma, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.03	-0.18	-0.36	-1.20

Notes:

^a Nonattainment or maintenance status as of 2/1/2024. Source: EPA, The Green Book Nonattainment Areas for Criteria Pollutants; <http://www.epa.gov/airquality/greenbook/>. "--" indicates that no severity classification has been established for the NAAQS pollutant.

^b Emissions thresholds in tons per year. Where the threshold differs by precursor pollutant, the smallest of the precursor thresholds is shown. These thresholds are provided for information only; a general conformity determination is not required for the Proposed Action. Source: 40 CFR 93.853.

^c Positive values are emissions increases; negative values are emissions decreases.

EPA = U.S. Environmental Protection Agency; NAAQS = National Ambient Air Quality Standard; CO = carbon monoxide; NO₂ = nitrogen dioxide; PM2.5 = particulate matter less than 2.5 microns in size; PM10 = particulate matter less than 10 microns in size; SO₂ = sulfur dioxide.

Table D-30. Changes in Emissions from U.S. Heavy-Duty Pickup Trucks and Vans by Nonattainment or Maintenance Area and Alternative, Direct and Indirect Impacts—Volatile Organic Compounds (VOCs), 2050

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Ada County; Boise, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.29	-4.69	-7.00	-16.76
Adams, Denver, and Boulder Counties; Denver Metropolitan area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.37	-22.80	-34.02	-80.69
Ajo (Pima County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.02	-0.05
Albuquerque, NM	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.48	-7.12	-10.63	-26.12
Allegan County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.03	-0.35	-0.53	-1.35
Allegheny County Air Basin: Hazelwood monitor, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.04	-0.63	-0.95	-2.29
Allegheny County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	-0.54	-8.37	-12.51	-30.22
Allegheny County; Liberty, Lincoln, Port Vue, Glassport, Clairton, PA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.23	-0.35	-0.81
Allegheny, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.12	-2.14	-3.19	-7.41
Allentown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.29	-4.34	-6.49	-15.95
Allentown-Bethlehem-Easton, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.31	-4.54	-6.78	-16.70
Alton Township, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.05	-0.97	-1.45	-3.27
Amador County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.02	-0.28	-0.41	-0.98
Anchorage, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.09	-1.30	-1.94	-4.88
Anchorage; Eagle River, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.08	-0.12	-0.29
Anne Arundel County and Baltimore County, MD	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-1.15	-14.46	-21.67	-56.23
Archuleta County; Pagosa Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.14	-2.68	-3.98	-9.02
Armstrong County; Madison, Mahoning, Boggs, Washington, Pine, PA	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	-0.05	-1.00	-1.49	-3.36
Aroostock County; City of Presque Isle, ME	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.04	-0.06	-0.15
Atlanta, GA	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-4.01	-54.15	-81.03	-205.17
Atlanta, GA	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-3.66	-49.05	-73.40	-186.18
Atlantic City, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.21	-0.32	-0.80
Bakersfield, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.21	-3.02	-4.52	-11.19
Baltimore, MD	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	-2.16	-27.65	-41.41	-106.73
Baltimore, MD	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-2.17	-27.81	-41.64	-107.31
Baltimore, MD	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.07	-0.11	-0.27
Baton Rouge, LA	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-1.07	-17.96	-26.79	-63.28

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Beaver, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.09	-0.14	-0.32
Benton County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.01	-0.10	-0.14	-0.35
Berrien County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.10	-1.42	-2.12	-5.21
Billings, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.28	-4.89	-7.29	-16.98
Billings, MT	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.08	-1.56	-2.32	-5.25
Birmingham, AL	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.75	-11.07	-16.54	-40.69
Boise-Northern Ada County, ID	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.29	-4.69	-7.00	-16.75
Bonner County; The Sandpoint Area, ID	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.07	-0.11	-0.26
Boston, MA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.53	-8.39	-12.52	-30.17
Boyd County (part), KY	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.04	-0.71	-1.06	-2.39
Brooke; Follansbee area, WV	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.05	-0.07	-0.16
Brown County: Green Bay, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.07	-0.10	-0.25
Burlington, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.16	-0.23	-0.61
Butte County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.08	-1.25	-1.86	-4.47
Calaveras County, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.24	-0.36	-0.85
Calaveras County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.24	-0.36	-0.85
Campbell-Clermont Counties, KY-OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.13	-0.19	-0.46
Canton-Massillon, OH	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.22	-3.61	-5.39	-12.79
Central New Hampshire, NH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.06	-0.81	-1.22	-3.16
Central Steptoe Valley, NV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.11	-0.17	-0.41
Charleston, WV	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.24	-3.79	-5.66	-13.66
Charlotte, NC	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.73	-9.71	-14.54	-36.92
Charlotte-Rock Hill, NC-SC	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-1.16	-16.11	-24.09	-60.41
Chicago, IL-IN-WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-3.65	-50.31	-75.25	-189.12
Chicago-Naperville, IL-IN-WI	Ozone (2008 8-hour)	Maintenance, Serious	100	0	-4.70	-71.29	-106.50	-259.68
Chico (Butte County), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.08	-1.25	-1.86	-4.47
Chico, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.03	-0.46	-0.68	-1.65
Chico, CA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	-0.07	-1.18	-1.76	-4.24
Cincinnati, OH-KY (OH Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.64	-8.23	-12.32	-31.68
Cincinnati, OH-KY (KY Portion)	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	-0.29	-5.22	-7.78	-18.12

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Cincinnati, OH-KY-IN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-1.09	-16.17	-24.17	-59.37
Clark County; Las Vegas planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.82	-11.50	-17.19	-42.93
Cleveland, OH	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-1.27	-19.56	-29.21	-70.79
Cleveland, OH	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.66	-10.61	-15.84	-37.85
Cleveland, OH	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-0.75	-12.02	-17.94	-42.99
Cleveland-Akron-Lorain, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-1.31	-20.24	-30.23	-73.22
Cleveland-Akron-Lorain, OH	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-1.19	-18.58	-27.74	-67.08
Cochise County; Paul Spur/Douglas planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.08	-0.11	-0.28
Colorado Springs, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.36	-6.19	-9.24	-21.65
Columbus, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.97	-13.97	-20.88	-51.72
Columbus, OH	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.89	-12.75	-19.06	-47.40
Cook County; Lyons Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.05	-0.78	-1.17	-2.85
Cook County; Southeast Chicago, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.10	-1.65	-2.47	-5.84
Coshocton County; Franklin Township, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.05	-0.07	-0.16
Coso Junction, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.34	-0.51	-1.15
Cuyahoga County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.66	-10.63	-15.87	-37.93
Cuyahoga County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.54	-8.66	-12.93	-30.91
Dallas-Fort Worth, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-3.88	-54.40	-81.36	-203.38
Dallas-Fort Worth, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-3.85	-53.99	-80.74	-201.85
Dane County; Madison sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.27	-3.71	-5.54	-13.96
Delaware County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-0.27	-4.42	-6.59	-15.67
Denver Metro/North Front Range, CO	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-3.21	-52.77	-78.75	-187.37
Denver-Boulder, CO	CO (1971 8-hour)	Maintenance, Serious	100	0	-2.52	-41.85	-62.45	-148.18
Denver-Boulder-Greeley-Ft. Collins-Loveland, CO	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-3.18	-52.18	-77.87	-185.36
Detroit, MI	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	-2.71	-36.87	-55.16	-139.22
Detroit, MI	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-1.01	-14.00	-20.95	-52.62
Detroit, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.12	-1.81	-2.70	-6.64
Detroit-Ann Arbor, MI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-2.71	-36.95	-55.28	-139.53
Doña Ana County; Anthony, NM	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.26	-0.39	-0.88

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Door County, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	-0.01
Door County-Revised, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	-0.01	-0.14	-0.21	-0.55
Douglas (Cochise County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.06	-0.10	-0.24
Dukes County, MA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.01	-0.09	-0.13	-0.33
Duluth, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.08	-1.32	-1.97	-4.64
East Chicago, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.04	-0.81	-1.21	-2.76
East Helena Area, MT	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	-0.01	-0.01	-0.04
East Kern County, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.02	-0.37	-0.55	-1.28
El Paso County, TX	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.21	-3.08	-4.60	-11.30
El Paso, TX	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.03	-0.46	-0.68	-1.61
El Paso-Las Cruces, TX-NM	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.21	-2.73	-4.08	-10.46
Eugene-Springfield, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.07	-0.96	-1.44	-3.62
Evangeline Parish (Partial), LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.03	-0.05	-0.11
Fairbanks, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.04	-0.55	-0.82	-2.02
Fairbanks, AK	PM _{2.5} (2006 24-hour)	Nonattainment, Serious	70	0	-0.06	-0.82	-1.23	-3.06
Flathead County; Columbia Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.16	-0.23	-0.55
Flathead County; Kalispell and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.06	-0.99	-1.47	-3.49
Flathead County; Whitefish and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.15	-0.23	-0.54
Fort Collins, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.11	-1.79	-2.67	-6.39
Freehold, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.04	-0.07	-0.17
Freestone and Anderson Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.03	-0.55	-0.82	-1.87
Fremont County; Canon City Area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.29	-0.44	-1.07
Fresno, CA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.19	-2.57	-3.84	-9.67
Gila County (part): Payson, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.08	-0.12	-0.31
Giles County, VA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Grant County, NM	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.16	-0.24	-0.61
Grants Pass, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.15	-0.22	-0.54

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Great Falls, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.08	-0.12	-0.27
Greater Connecticut, CT	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-0.62	-8.91	-13.31	-32.94
Greater Connecticut, CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.62	-8.91	-13.32	-32.96
Greeley, CO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.55	-9.24	-13.78	-32.53
Hancock County (part): Weirton, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.02	-0.37	-0.55	-1.25
Hancock and Brooke Counties (Part); The city of Weirton, WV	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.28	-0.42	-0.96
Harrisburg-Lebanon-Carlisle-York, PA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	-0.46	-6.33	-9.47	-23.79
Hartford-New Britain-Middletown, CT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.45	-6.46	-9.66	-23.91
Hayden (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	-0.04	-0.06	-0.14
Hayden, AZ	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.06	-0.09	-0.23
Hayden, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.04	-0.06	-0.14
Henderson-Webster Counties, KY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.29	-0.43	-0.97
Hillsborough County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.14	-0.21	-0.50
Hillsborough-Polk County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.02	-0.03	-0.08
Houston-Galveston-Brazoria, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-4.77	-77.92	-116.29	-277.16
Houston-Galveston-Brazoria, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-4.67	-76.43	-114.06	-271.78
Howard County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.06	-1.22	-1.81	-4.08
Humphreys County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.01	-0.10	-0.15	-0.37
Huntington, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.04	-0.65	-0.96	-2.22
Hutchinson County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.11	-2.07	-3.09	-6.98
Imperial County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-0.10	-1.51	-2.25	-5.42
Imperial County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.09	-1.51	-2.25	-5.41
Imperial County, CA	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	-0.07	-1.02	-1.53	-3.73
Imperial County, CA	PM _{2.5} (2012 Annual)	Nonattainment, Moderate	100	0	-0.07	-1.02	-1.53	-3.73
Imperial Valley, CA	PM ₁₀ (1987 24-hour)	Maintenance, Serious	100	0	-0.09	-1.46	-2.17	-5.22
Indian Wells, CA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.03	-0.56	-0.83	-1.96
Indiana, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.20	-3.88	-5.78	-13.20
Indianapolis, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.02	-0.03	-0.09
Indianapolis, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.34	-4.61	-6.90	-17.46
Inland Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-0.02	-0.30	-0.45	-1.09

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Inyo County; Owens Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.01	-0.11	-0.16	-0.38
Jackson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.03	-0.46	-0.69	-1.73
Jackson County; Medford-Ashland (including White City), OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.05	-0.70	-1.05	-2.62
Jamestown, NY	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.16	-3.02	-4.50	-10.35
Jefferson County, KY	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.02	-0.03	-0.07
Jefferson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.02	-0.39	-0.58	-1.39
Jefferson County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.10	-0.15	-0.34
Jefferson County; (part) Steubenville & Mingo Junction, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.04	-0.71	-1.06	-2.46
Johnstown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.13	-2.43	-3.62	-8.37
Josephine County; Grants Pass, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.15	-0.22	-0.54
Juneau; Mendenhall Valley area, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.09	-0.13	-0.33
Kern County (Eastern Kern), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.13	-2.45	-3.65	-8.37
Kern County (Eastern Kern), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.13	-2.45	-3.65	-8.38
King County; Kent, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.11	-0.16	-0.40
King County; Seattle, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.07	-0.10	-0.26
Klamath Falls, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.21	-0.32	-0.82
Klamath Falls, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.22	-0.32	-0.82
Klamath Falls, OR	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.02	-0.24	-0.37	-0.93
Knoxville, TN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.37	-5.59	-8.36	-20.42
Knoxville-Sevierville-La Follette, TN	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.40	-6.07	-9.07	-22.19
La Porte County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.02	-0.25	-0.38	-0.95
LaSalle County; Oglesby, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.18	-0.28	-0.69
Lake County (part); Lakeview, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.02
Lake County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.27	-4.39	-6.55	-15.58
Lake County, OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.07	-0.94	-1.40	-3.51
Lake County; (part) Eastlake, Timberlake, Lakeline, Willoughby, Mentor, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.16	-0.23	-0.59
Lake County; Cities of East Chicago, Hammond, Whiting, and Gary, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.19	-3.09	-4.61	-10.92
Lake County; Polson, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.04	-0.07	-0.15

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Lake County; Ronan, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.02	-0.03	-0.08
Lake Tahoe North Shore, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.13	-0.20	-0.48
Lake Tahoe South Shore, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.17	-0.26	-0.63
Lake Tahoe, NV	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.18	-0.28	-0.66
Lancaster, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.24	-3.63	-5.42	-13.25
Lancaster, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.24	-3.63	-5.42	-13.25
Lane County (part); Oakridge, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Lane County; Eugene/Springfield, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.07	-0.96	-1.44	-3.62
Las Vegas, NV	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.82	-11.50	-17.19	-42.93
Las Vegas, NV	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.82	-11.51	-17.21	-42.97
Laurel Area (Yellowstone County), MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	-0.08	-1.66	-2.47	-5.60
Lebanon County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-0.06	-0.90	-1.34	-3.23
Lemont, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.10	-1.72	-2.56	-6.07
Liberty-Clairton, PA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.23	-0.35	-0.81
Lincoln County; Libby and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.04	-0.06	-0.15
Logan, UT-ID	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.06	-0.90	-1.34	-3.35
Longmont, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.20	-3.96	-5.90	-13.41
Lorain County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.02	-0.26	-0.38	-0.94
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.28	-4.55	-6.79	-16.18
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-0.28	-4.55	-6.79	-16.18
Los Angeles-South Coast Air Basin, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-4.15	-56.83	-85.01	-214.21
Los Angeles-South Coast Air Basin, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-4.15	-56.81	-84.98	-214.13
Los Angeles-South Coast Air Basin, CA	CO (1971 8-hour)	Maintenance, Serious	100	0	-4.14	-56.68	-84.80	-213.73
Los Angeles-South Coast Air Basin, CA	NO ₂ (1971 Annual)	Maintenance, Primary	100	0	-4.14	-56.68	-84.80	-213.74
Los Angeles-South Coast Air Basin, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-4.15	-56.83	-85.01	-214.21
Los Angeles-South Coast Air Basin, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-4.15	-56.83	-85.01	-214.21
Louisville, KY-IN (IN Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.11	-1.79	-2.67	-6.41
Louisville, KY-IN (KY Portion)	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.29	-3.51	-5.25	-13.77
Lowell, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.04	-0.58	-0.86	-2.11

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Lucas County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.26	-4.47	-6.66	-15.60
Madison County; Granite City Township and Nameoki Township, IL	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.11	-1.93	-2.88	-6.64
Manchester, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.03	-0.36	-0.53	-1.37
Manitowoc County, WI	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.02	-0.21	-0.32	-0.81
Marathon County: Rothschild Sub-city area, Rib Mountain, Weston, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.05	-0.65	-0.97	-2.48
Maricopa and Pinal Counties; Phoenix planning area, AZ	PM ₁₀ (1987 24-hour)	Nonattainment, Serious	70	0	-2.60	-34.17	-51.15	-130.73
Marion County: Lawrence, Washington, and Warrant Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.28	-3.81	-5.71	-14.45
Mariposa County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.12	-0.18	-0.43
Mariposa County, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.12	-0.18	-0.43
Marshall, WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.06	-1.20	-1.79	-4.05
Medford, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.03	-0.43	-0.64	-1.59
Memphis, TN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.42	-5.97	-8.93	-22.16
Memphis, TN-MS-AR	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.56	-8.26	-12.34	-30.32
Miami (Gila County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.10	-0.15	-0.39
Miami, AZ	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.09	-0.14	-0.35
Miami, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.10	-0.14	-0.37
Millinocket AQCR 109, ME	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.07	-0.98	-1.47	-3.73
Milwaukee, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.55	-7.97	-11.91	-29.47
Milwaukee, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.25	-3.81	-5.69	-13.89
Milwaukee-Racine, WI	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.49	-7.11	-10.62	-26.29
Minneapolis-St. Paul, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-1.65	-23.56	-35.23	-87.56
Minneapolis-St. Paul, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-1.63	-23.30	-34.83	-86.49
Missoula, MT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.14	-2.31	-3.45	-8.14
Missoula, MT	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.14	-2.39	-3.56	-8.41
Modesto, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.08	-1.17	-1.74	-4.34
Mohave County (part); Bullhead City, AZ	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.03	-0.35	-0.52	-1.33
Mono Basin, CA	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.06	-0.09	-0.21

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Mono County; Mammoth Lake planning area, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.14	-0.20	-0.52
Morenci (Greenlee County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.02	-0.06
Morgan County, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.11	-0.17	-0.42
Morongo Band of Mission Indians, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	-0.05	-0.07	-0.17
Morongo Band of Mission Indians, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	-0.05	-0.07	-0.17
Morristown, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.13	-0.19	-0.49
Muscatine County, IA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.15	-0.22	-0.54
Muscatine, IA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.02	-0.25	-0.37	-0.90
Muskegon County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.05	-0.74	-1.11	-2.71
Muskingum River, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.24	-0.36	-0.82
Nashua, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.30	-0.45	-1.16
Nassau County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.02	-0.04	-0.09
Navarro County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.03	-0.65	-0.97	-2.19
Nevada County (Western part), CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-0.02	-0.34	-0.51	-1.27
Nevada County (Western part), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.02	-0.35	-0.52	-1.28
New Haven County, CT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.15	-0.23	-0.56
New Haven-Meriden-Waterbury, CT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.37	-5.75	-8.58	-20.80
New Madrid County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
New Manchester-Grant magisterial district in Hancock County, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.22	-0.33	-0.75
New York County, NY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.46	-7.80	-11.63	-27.47
New York-N. New Jersey-Long Island, NY-NJ-CT	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-7.11	-111.45	-166.42	-401.69
New York-N. New Jersey-Long Island, NY-NJ-CT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-4.46	-71.77	-107.13	-256.43
New York-N. New Jersey-Long Island, NY-NJ-CT	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-7.37	-115.46	-172.41	-416.21
New York-Northern New Jersey-Long Island, NY-NJ-CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-7.27	-114.54	-171.01	-412.05
Nogales, AZ	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.07	-0.11	-0.28
Northern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-1.27	-18.03	-26.97	-67.19
Oakridge, OR	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Ogden, UT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.06	-0.81	-1.21	-3.07
Ogden, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.06	-0.81	-1.21	-3.07

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Olmsted County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.16	-0.23	-0.58
Olmsted County; City of Rochester, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.04	-0.57	-0.85	-2.13
Oneida County: Rhinelander Sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.02	-0.32	-0.48	-1.18
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Pekin, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.02	-0.33	-0.49	-1.23
Penns Grove, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Peoria County: Hollis twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	-0.02	-0.03	-0.07
Peoria, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.06	-0.81	-1.21	-2.98
Perth Amboy, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.04	-0.55	-0.82	-2.00
Philadelphia-Camden County, PA-NJ	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.46	-7.39	-11.03	-26.51
Philadelphia-Wilmington, PA-NJ-DE (NJ Portion)	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.94	-12.67	-18.96	-47.96
Philadelphia-Wilmington, PA-NJ-DE (PA-DE Portion)	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-1.51	-22.48	-33.58	-82.37
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-3.09	-44.34	-66.29	-164.48
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-3.02	-42.88	-64.11	-159.58
Phoenix, AZ	CO (1971 8-hour)	Maintenance, Serious	100	0	-2.57	-33.73	-50.49	-129.04
Phoenix-Mesa, AZ	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-2.61	-34.24	-51.25	-130.99
Phoenix-Mesa, AZ	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-2.62	-34.40	-51.49	-131.61
Pierce County; Tacoma, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.10	-0.15	-0.35
Pima County; Ajo planning area, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.02	-0.05
Pima County; Rillito planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.19	-0.28	-0.72
Pinal County (part); West Pinal, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.05	-0.64	-0.96	-2.48
Pitkin County; Aspen, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.06	-1.09	-1.62	-3.83
Pittsburgh, PA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.13	-1.92	-2.87	-7.00
Pittsburgh-Beaver Valley, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-1.32	-21.26	-31.73	-75.88
Pittsburgh-Beaver Valley, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-1.20	-19.36	-28.90	-69.10
Plumas County, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	0.00	-0.04	-0.06	-0.15
Polk County, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	-0.04	-0.06	-0.15
Portland, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.62	-8.70	-13.01	-32.44

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Power-Bannock Counties; Fort Hall Indian Reservation, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.07	-0.10	-0.24
Power-Bannock Counties; Portneuf Valley Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.07	-1.16	-1.73	-4.06
Provo, UT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.06	-0.84	-1.26	-3.15
Provo, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.22	-3.06	-4.57	-11.42
Prowers County; Lamar, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.10	-0.16	-0.39
Raleigh-Durham, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.80	-10.59	-15.86	-40.45
Ramsey County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.49	-0.73	-1.64
Reading, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.15	-2.29	-3.43	-8.42
Reno, NV	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.13	-1.90	-2.83	-6.91
Rhineland, WI	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.17	-0.25	-0.61
Riverside County (Coachella Valley), CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-0.11	-1.59	-2.38	-5.90
Riverside County (Coachella Valley), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-0.11	-1.59	-2.38	-5.90
Riverside County; Coachella Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.12	-1.77	-2.64	-6.58
Riverside, Los Angeles, Orange, & San Bernardino Counties; South Coast Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-4.14	-56.69	-84.81	-213.68
Rosebud County; Lame Deer, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.06	-0.08	-0.19
Routt County (part); Steamboat Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.18	-3.36	-5.01	-11.45
Rusk and Panola Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.08	-1.51	-2.24	-5.05
Sacramento County, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.94	-13.29	-19.88	-49.62
Sacramento Metro, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-1.64	-22.61	-33.82	-85.06
Sacramento Metro, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-1.64	-22.61	-33.81	-85.06
Sacramento, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-1.00	-13.05	-19.53	-50.11
Sacramento, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-1.62	-22.23	-33.26	-83.66
Salem, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.11	-1.46	-2.19	-5.52
Salt Lake City, UT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.21	-3.03	-4.53	-11.18
Salt Lake City, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-1.32	-18.71	-27.97	-69.71
Salt Lake County, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.88	-12.22	-18.28	-45.85
Salt Lake County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	-0.88	-12.22	-18.28	-45.87
San Antonio, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-1.00	-14.41	-21.54	-53.34

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
San Bernardino County, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.22	-3.71	-5.53	-12.99
San Diego County, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-1.16	-17.92	-26.77	-64.92
San Diego County, CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-1.16	-17.90	-26.73	-64.82
San Diego, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-1.16	-17.82	-26.62	-64.58
San Francisco Bay Area, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-2.09	-29.89	-44.68	-110.98
San Francisco Bay Area, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-2.09	-29.85	-44.62	-110.83
San Francisco Bay Area, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-2.09	-29.93	-44.75	-111.15
San Francisco-Oakland-San Jose, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-1.99	-28.51	-42.62	-105.87
San Joaquin Valley Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-1.50	-22.68	-33.89	-82.76
San Joaquin Valley, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-1.50	-22.68	-33.89	-82.76
San Joaquin Valley, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-1.50	-22.69	-33.89	-82.76
San Joaquin Valley, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-1.50	-22.68	-33.89	-82.76
San Joaquin Valley, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-1.50	-22.68	-33.89	-82.76
San Luis Obispo (Eastern San Luis Obispo), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.03	-0.53	-0.79	-1.80
San Luis Obispo (Eastern part), CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.03	-0.53	-0.79	-1.80
San Manuel (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.06	-0.09	-0.22
San Miguel County; Telluride, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.04	-0.72	-1.07	-2.47
Sanders County (part); Thompson Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.02
Santa Cruz County; Nogales planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.08	-0.11	-0.28
Seaford, DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.09	-1.27	-1.90	-4.81
Seattle-Tacoma, WA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-1.12	-16.67	-24.91	-61.10
Sheboygan County, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.02	-0.36	-0.54	-1.33
Sheridan County; City of Sheridan, WY	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.27	-0.40	-0.99
Shoreline Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-0.02	-0.33	-0.50	-1.21
Shoshone County; City of Pinehurst, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Shoshone County; Pinehurst Expansion Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.13	-0.20	-0.48
Silver Bow County; Butte, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.19	-0.29	-0.73
Somerville, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.09	-0.13	-0.31
Southern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.22	-3.05	-4.57	-11.42

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Southwest Indiana, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.19	-0.28	-0.64
Spokane County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.17	-2.32	-3.47	-8.68
Spokane, WA	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.16	-2.30	-3.44	-8.62
Springfield, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.13	-1.72	-2.57	-6.63
St. Bernard Parish, LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.13	-2.45	-3.65	-8.31
St. Clair, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.02	-0.35	-0.52	-1.28
St. Lawrence County, NY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.06	-0.08	-0.20
St. Louis, MO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-1.30	-16.98	-25.41	-65.03
St. Louis, MO-IL	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-2.92	-40.08	-59.96	-151.00
St. Louis-St. Charles-Farmington, MO-IL	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-2.91	-39.67	-59.34	-149.80
Steubenville, OH-WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.08	-1.53	-2.27	-5.19
Steubenville-Weirton, OH-WV	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.11	-1.97	-2.94	-6.76
Stockton, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.10	-1.40	-2.09	-5.20
Sullivan County, TN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.08	-0.12	-0.31
Sutter Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.03	-0.05	-0.11
Syracuse, NY	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.25	-3.92	-5.85	-14.19
Tacoma, WA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.20	-3.25	-4.85	-11.63
Tazewell County: Groveland twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.15	-0.23	-0.56
Terre Haute, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.02	-0.34	-0.50	-1.27
Thurston County; Cities of Olympia, Tumwater, and Lacey, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.04	-0.57	-0.86	-2.20
Titus County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.05	-0.07	-0.15
Toms River, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.02	-0.05
Tooele County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	0.00	-0.07	-0.10	-0.23
Trenton, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.05	-0.59	-0.89	-2.26
Trona, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.02	-0.32	-0.47	-1.06
Tucson, AZ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.29	-4.02	-6.02	-15.17
Tuolumne County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.02	-0.33	-0.49	-1.18
Tuscan Buttes, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.01	-0.01	-0.03
Tuscan Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal (Rural Transport)	100	0	0.00	-0.01	-0.01	-0.03

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Uinta Basin, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.36	-6.91	-10.29	-23.47
Union County; LaGrande, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.06	-0.09	-0.23
Upper Green River Basin Area, WY	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.21	-4.06	-6.04	-13.76
Utah County, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.27	-4.11	-6.14	-14.97
Vancouver, WA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.09	-1.38	-2.06	-5.09
Ventura County, CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-0.26	-4.25	-6.35	-15.18
Ventura County, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.26	-4.25	-6.35	-15.17
Vermillion County; Part of Clinton Township, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.08	-0.13	-0.30
Vigo County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.06	-0.91	-1.36	-3.34
Walla Walla County; Wallula, WA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	-0.04	-0.05	-0.13
Waltham, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.33	-0.49	-1.21
Warren County, NJ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.01	-0.09	-0.14	-0.35
Warren County: Conewago Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.09	-1.75	-2.60	-5.86
Warren County: Warren Boro, Pleasant Twp, Glade Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.11	-2.19	-3.26	-7.37
Warren, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.12	-2.36	-3.52	-7.96
Washington, DC-MD-VA	Ozone (2008 8-hour)	Nonattainment (DC) Maintenance (MD, VA), Marginal	50	0	-1.65	-22.79	-34.09	-85.63
Washington, DC-MD-VA	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-1.51	-20.03	-29.98	-76.39
Washington, DC-MD-VA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.21	-2.79	-4.17	-10.71
Washoe County; Reno planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.13	-1.91	-2.85	-6.96
Wayne County, MI	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.04	-0.64	-0.96	-2.31
Wayne County: Boston, Center, Franklin, Wayne & Webster Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.02	-0.26	-0.38	-0.99
West Central Pinal, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.05	-0.07	-0.17
West Silver Valley, ID	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	-0.07	-0.10	-0.25
Whatcom County, WA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.02	-0.46	-0.69	-1.55
Winston-Salem, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.14	-1.82	-2.73	-7.04
Worcester, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.06	-0.83	-1.24	-3.11
Yakima County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.06	-0.94	-1.40	-3.37
Yakima, WA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.32	-0.48	-1.16

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Yuba City-Marysville, CA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.07	-1.03	-1.54	-3.73
Yuma, AZ	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.06	-0.82	-1.22	-3.01
Yuma, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.08	-1.23	-1.85	-4.55

Notes:

^a Nonattainment or maintenance status as of 2/1/2024. Source: EPA, The Green Book Nonattainment Areas for Criteria Pollutants; <http://www.epa.gov/airquality/greenbook/>. "—" indicates that no severity classification has been established for the NAAQS pollutant.

^b Emissions thresholds in tons per year. Where the threshold differs by precursor pollutant, the smallest of the precursor thresholds is shown. These thresholds are provided for information only; a general conformity determination is not required for the Proposed Action. Source: 40 CFR 93.853.

^c Positive values are emissions increases; negative values are emissions decreases.

EPA = U.S. Environmental Protection Agency; NAAQS = National Ambient Air Quality Standard; CO = carbon monoxide; NO₂ = nitrogen dioxide; PM2.5 = particulate matter less than 2.5 microns in size; PM10 = particulate matter less than 10 microns in size; SO₂ = sulfur dioxide.

Table D-31. Changes in Emissions from U.S. Heavy-Duty Pickup Trucks and Vans by Nonattainment or Maintenance Area and Alternative, Direct and Indirect Impacts--Carbon Monoxide (CO), 2035

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Ada County; Boise, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.32	-1.55	-3.11	-11.48
Adams, Denver, and Boulder Counties; Denver Metropolitan area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.30	-6.42	-12.91	-47.23
Ajo (Pima County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.02	-0.07
Albuquerque, NM	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.70	-3.43	-6.89	-25.40
Allegan County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.05	-0.25	-0.50	-1.83
Allegheny County Air Basin: Hazelwood monitor, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.05	-0.25	-0.49	-1.81
Allegheny County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	-0.66	-3.25	-6.53	-23.97
Allegheny County; Liberty, Lincoln, Port Vue, Glassport, Clairton, PA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.05	-0.11	-0.40
Allegheny, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.07	-0.35	-0.71	-2.50
Allentown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.43	-2.11	-4.23	-15.59
Allentown-Bethlehem-Easton, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.46	-2.26	-4.53	-16.70
Alton Township, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.02	0.04	0.04	0.41
Amador County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.02	-0.08	-0.15	-0.57
Anchorage, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.16	-0.78	-1.56	-5.72
Anchorage; Eagle River, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.04	-0.09	-0.31
Anne Arundel County and Baltimore County, MD	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-2.40	-11.75	-23.55	-86.92
Archuleta County; Pagosa Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.01	-0.03	0.42
Armstrong County; Madison, Mahoning, Boggs, Washington, Pine, PA	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	-0.01	0.08
Aroostock County; City of Presque Isle, ME	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.03	-0.05	-0.19
Atlanta, GA	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-7.36	-36.02	-72.22	-266.54
Atlanta, GA	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-6.77	-33.15	-66.47	-245.31
Atlantic City, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.03	-0.12	-0.25	-0.91
Bakersfield, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.31	-1.54	-3.09	-11.40
Baltimore, MD	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	-4.37	-21.38	-42.86	-158.16
Baltimore, MD	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-4.39	-21.49	-43.08	-158.98
Baltimore, MD	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.05	-0.09	-0.34
Baton Rouge, LA	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.92	-4.58	-9.25	-33.58

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Beaver, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.03	-0.06	-0.21
Benton County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.01	-0.03	-0.07	-0.26
Berrien County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.14	-0.69	-1.38	-5.08
Billings, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.16	-0.82	-1.65	-5.97
Billings, MT	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.01	-0.02	0.03
Birmingham, AL	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-1.11	-5.45	-10.94	-40.31
Boise-Northern Ada County, ID	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.32	-1.55	-3.11	-11.48
Bonner County; The Sandpoint Area, ID	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.02	-0.03	-0.13
Boston, MA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.64	-3.12	-6.26	-23.10
Boyd County (part), KY	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.01	0.01	0.00	0.13
Brooke; Follansbee area, WV	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Brown County: Green Bay, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.04	-0.07	-0.27
Burlington, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.03	-0.13	-0.26	-0.98
Butte County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.09	-0.44	-0.87	-3.22
Calaveras County, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.07	-0.14	-0.51
Calaveras County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.07	-0.14	-0.51
Campbell-Clermont Counties, KY-OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.06	-0.12	-0.44
Canton-Massillon, OH	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.20	-1.01	-2.04	-7.46
Central New Hampshire, NH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.13	-0.65	-1.31	-4.83
Central Steptoe Valley, NV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.03	-0.11
Charleston, WV	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.28	-1.41	-2.85	-10.30
Charlotte, NC	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-1.36	-6.63	-13.30	-49.08
Charlotte-Rock Hill, NC-SC	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-1.99	-9.74	-19.53	-72.07
Chicago, IL-IN-WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-6.33	-31.08	-62.37	-229.63
Chicago-Naperville, IL-IN-WI	Ozone (2008 8-hour)	Maintenance, Serious	100	0	-6.41	-31.41	-63.02	-232.26
Chico (Butte County), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.09	-0.44	-0.87	-3.22
Chico, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.03	-0.17	-0.34	-1.26
Chico, CA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	-0.08	-0.41	-0.83	-3.07
Cincinnati, OH-KY (OH Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-1.28	-6.24	-12.52	-46.21
Cincinnati, OH-KY (KY Portion)	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	-0.19	-0.95	-1.91	-7.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Cincinnati, OH-KY-IN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-1.60	-7.83	-15.71	-57.93
Clark County; Las Vegas planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-1.35	-6.61	-13.26	-48.93
Cleveland, OH	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-1.62	-7.94	-15.93	-58.76
Cleveland, OH	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.71	-3.46	-6.94	-25.62
Cleveland, OH	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-0.84	-4.10	-8.22	-30.35
Cleveland-Akron-Lorain, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-1.66	-8.15	-16.35	-60.24
Cleveland-Akron-Lorain, OH	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-1.49	-7.31	-14.67	-54.08
Cochise County; Paul Spur/Douglas planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.04	-0.08	-0.28
Colorado Springs, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.27	-1.32	-2.65	-9.74
Columbus, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-1.52	-7.44	-14.93	-55.07
Columbus, OH	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-1.45	-7.08	-14.20	-52.40
Cook County; Lyons Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.07	-0.35	-0.70	-2.58
Cook County; Southeast Chicago, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.08	-0.44	-0.90	-3.17
Coshocton County; Franklin Township, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.01	-0.03
Coso Junction, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.03	-0.08
Cuyahoga County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.71	-3.47	-6.96	-25.68
Cuyahoga County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.58	-2.83	-5.67	-20.92
Dallas-Fort Worth, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-6.51	-31.93	-64.05	-236.01
Dallas-Fort Worth, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-6.46	-31.69	-63.58	-234.25
Dane County; Madison sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.48	-2.34	-4.70	-17.34
Delaware County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-0.24	-1.23	-2.52	-8.90
Denver Metro/North Front Range, CO	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-3.20	-15.77	-31.69	-116.33
Denver-Boulder, CO	CO (1971 8-hour)	Maintenance, Serious	100	0	-2.40	-11.84	-23.79	-87.27
Denver-Boulder-Greeley-Ft. Collins-Loveland, CO	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-3.19	-15.72	-31.57	-115.95
Detroit, MI	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	-4.85	-23.77	-47.68	-175.72
Detroit, MI	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-1.76	-8.60	-17.25	-63.64
Detroit, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.18	-0.88	-1.77	-6.52
Detroit-Ann Arbor, MI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-4.86	-23.82	-47.78	-176.08
Doña Ana County; Anthony, NM	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.03	-0.09

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Door County, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	-0.01
Door County-Revised, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	-0.02	-0.10	-0.20	-0.74
Douglas (Cochise County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.03	-0.06	-0.23
Dukes County, MA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.01	-0.05	-0.10	-0.35
Duluth, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.06	-0.29	-0.58	-2.13
East Chicago, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.04	-0.10	-0.23
East Helena Area, MT	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	-0.01	-0.01	-0.04
East Kern County, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.01	-0.07	-0.15	-0.53
El Paso County, TX	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.31	-1.50	-3.01	-11.07
El Paso, TX	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.11	-0.23	-0.84
El Paso-Las Cruces, TX-NM	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.41	-2.00	-4.01	-14.77
Eugene-Springfield, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.12	-0.59	-1.17	-4.33
Evangeline Parish (Partial), LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Fairbanks, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.04	-0.18	-0.36	-1.34
Fairbanks, AK	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.07	-0.33	-0.66	-2.43
Flathead County; Columbia Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.04	-0.08	-0.29
Flathead County; Kalispell and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.05	-0.24	-0.48	-1.78
Flathead County; Whitefish and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.04	-0.08	-0.28
Fort Collins, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.12	-0.57	-1.13	-4.18
Freehold, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.03	-0.07	-0.25
Freestone and Anderson Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.04	-0.09	-0.28
Fremont County; Canon City Area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.03	-0.13	-0.26	-0.95
Fresno, CA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.32	-1.57	-3.14	-11.61
Gila County (part): Payson, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.05	-0.10	-0.38
Giles County, VA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	-0.01
Grant County, NM	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.03	-0.12	-0.25	-0.92
Grants Pass, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.06	-0.13	-0.48

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Great Falls, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.01	-0.03
Greater Connecticut, CT	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-0.96	-4.70	-9.43	-34.79
Greater Connecticut, CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.96	-4.71	-9.44	-34.82
Greeley, CO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.45	-2.30	-4.65	-16.70
Hancock County (part): Weirton, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	-0.02	-0.04	-0.12
Hancock and Brooke Counties (Part); The city of Weirton, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.02	-0.04	-0.11
Harrisburg-Lebanon-Cartisle-York, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.80	-3.89	-7.81	-28.81
Hartford-New Britain-Middletown, CT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.70	-3.42	-6.85	-25.29
Hayden (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	-0.01	-0.03	-0.06	-0.22
Hayden, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.05	-0.10	-0.37
Hayden, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.03	-0.06	-0.22
Henderson-Webster Counties, KY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.02	-0.04	-0.13
Hillsborough County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.05	-0.10	-0.36
Hillsborough-Polk County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.01	-0.02	-0.06
Houston-Galveston-Brazoria, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-4.85	-23.99	-48.25	-176.65
Houston-Galveston-Brazoria, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-4.74	-23.43	-47.13	-172.55
Howard County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.01	0.01	0.13
Humphreys County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.01	-0.04	-0.09	-0.33
Huntington, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.02	-0.08	-0.17	-0.62
Hutchinson County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.02	-0.06	-0.07
Imperial County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-0.11	-0.55	-1.09	-4.03
Imperial County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.11	-0.54	-1.09	-4.03
Imperial County, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.09	-0.43	-0.85	-3.15
Imperial County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	-0.09	-0.43	-0.85	-3.15
Imperial Valley, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.11	-0.52	-1.03	-3.82
Indian Wells, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.03	-0.13	-0.27	-0.99
Indiana, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.04	-0.26	-0.55	-1.71
Indianapolis, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.02	-0.03	-0.11
Indianapolis, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.63	-3.06	-6.14	-22.65
Inland Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-0.03	-0.14	-0.28	-1.05

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Inyo County; Owens Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.01	-0.03	-0.05	-0.20
Jackson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.06	-0.29	-0.59	-2.17
Jackson County; Medford-Ashland (including White City), OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.08	-0.40	-0.80	-2.96
Jamestown, NY	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.06	-0.30	-0.61	-2.10
Jefferson County, KY	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.01	-0.02	-0.07
Jefferson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.03	-0.13	-0.26	-0.94
Jefferson County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.02	-0.07
Jefferson County; (part) Steubenville & Mingo Junction, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.02	-0.10	-0.21	-0.74
Johnstown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.06	-0.31	-0.63	-2.15
Josephine County; Grants Pass, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.06	-0.13	-0.47
Juneau; Mendenhall Valley area, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.04	-0.07	-0.27
Kern County (Eastern Kern), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.03	-0.22	-0.49	-1.35
Kern County (Eastern Kern), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.03	-0.22	-0.49	-1.35
King County; Kent, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.06	-0.11	-0.41
King County; Seattle, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.04	-0.07	-0.26
Klamath Falls, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.03	-0.12	-0.25	-0.91
Klamath Falls, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.03	-0.12	-0.25	-0.92
Klamath Falls, OR	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.03	-0.14	-0.28	-1.05
Knoxville, TN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.52	-2.53	-5.08	-18.74
Knoxville-Sevierville-La Follette, TN	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.57	-2.79	-5.60	-20.63
La Porte County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.03	-0.16	-0.32	-1.18
LaSalle County; Oglesby, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.10	-0.20	-0.72
Lake County (part); Lakeview, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Lake County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.26	-1.28	-2.57	-9.35
Lake County, OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.11	-0.55	-1.11	-4.10
Lake County; (part) Eastlake, Timberlake, Lakeline, Willoughby, Mentor, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.02	-0.10	-0.19	-0.71
Lake County; Cities of East Chicago, Hammond, Whiting, and Gary, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.16	-0.83	-1.68	-6.04
Lake County; Polson, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01	-0.04

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Lake County; Ronan, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.02
Lake Tahoe North Shore, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.05	-0.09	-0.35
Lake Tahoe South Shore, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.07	-0.14	-0.54
Lake Tahoe, NV	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.07	-0.14	-0.51
Lancaster, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.34	-1.65	-3.31	-12.22
Lancaster, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.34	-1.65	-3.31	-12.21
Lane County (part); Oakridge, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Lane County; Eugene/Springfield, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.12	-0.59	-1.17	-4.34
Las Vegas, NV	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-1.35	-6.61	-13.26	-48.93
Las Vegas, NV	CO (1971 8-hour)	Maintenance, Serious	100	0	-1.35	-6.62	-13.28	-49.01
Laurel Area (Yellowstone County), MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	-0.03	-0.07	-0.14
Lebanon County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-0.06	-0.31	-0.63	-2.32
Lemont, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.09	-0.45	-0.92	-3.26
Liberty-Clairton, PA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.05	-0.11	-0.40
Lincoln County; Libby and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.05
Logan, UT-ID	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.11	-0.53	-1.05	-3.89
Longmont, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.14	-0.32	-0.82
Lorain County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.02	-0.12	-0.24	-0.88
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.27	-1.41	-2.87	-10.13
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-0.27	-1.41	-2.87	-10.13
Los Angeles-South Coast Air Basin, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-7.32	-35.93	-72.08	-265.53
Los Angeles-South Coast Air Basin, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-7.32	-35.91	-72.05	-265.40
Los Angeles-South Coast Air Basin, CA	CO (1971 8-hour)	Maintenance, Serious	100	0	-7.32	-35.93	-72.09	-265.56
Los Angeles-South Coast Air Basin, CA	NO ₂ (1971 Annual)	Maintenance, Primary	100	0	-7.32	-35.93	-72.09	-265.57
Los Angeles-South Coast Air Basin, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-7.32	-35.93	-72.08	-265.53
Los Angeles-South Coast Air Basin, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-7.32	-35.93	-72.08	-265.53
Louisville, KY-IN (IN Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.13	-0.63	-1.26	-4.65
Louisville, KY-IN (KY Portion)	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.63	-3.08	-6.17	-22.76
Lowell, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.05	-0.26	-0.53	-1.95

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Lucas County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.18	-0.91	-1.85	-6.61
Madison County; Granite City Township and Nameoki Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.03	-0.21	-0.45	-1.40
Manchester, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.05	-0.25	-0.51	-1.88
Manitowoc County, WI	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.03	-0.15	-0.30	-1.10
Marathon County: Rothschild Sub-city area, Rib Mountain, Weston, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.10	-0.47	-0.94	-3.48
Maricopa and Pinal Counties; Phoenix planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-5.02	-24.55	-49.23	-181.68
Marion County: Lawrence, Washington, and Warrant Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.52	-2.53	-5.07	-18.71
Mariposa County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.03	-0.07	-0.24
Mariposa County, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.03	-0.07	-0.24
Marshall, WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.02	-0.04	-0.08
Medford, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.05	-0.24	-0.48	-1.79
Memphis, TN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.67	-3.27	-6.55	-24.16
Memphis, TN-MS-AR	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.82	-4.00	-8.01	-29.55
Miami (Gila County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.06	-0.13	-0.47
Miami, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.06	-0.11	-0.42
Miami, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.06	-0.12	-0.45
Millinocket AQCR 109, ME	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.13	-0.66	-1.33	-4.89
Milwaukee, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.85	-4.18	-8.38	-30.94
Milwaukee, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.35	-1.70	-3.40	-12.56
Milwaukee-Racine, WI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.77	-3.75	-7.53	-27.78
Minneapolis-St. Paul, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-2.65	-12.99	-26.07	-96.04
Minneapolis-St. Paul, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-2.60	-12.74	-25.55	-94.14
Missoula, MT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.11	-0.55	-1.10	-4.05
Missoula, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.12	-0.56	-1.13	-4.17
Modesto, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.13	-0.66	-1.32	-4.88
Mohave County (part); Bullhead City, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.04	-0.19	-0.39	-1.44
Mono Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.02	-0.04	-0.16

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Mono County; Mammoth Lake planning area, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.06	-0.11	-0.41
Morenci (Greenlee County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.02	-0.07
Morgan County, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.06	-0.11	-0.41
Morongo Band of Mission Indians, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	-0.01	-0.02	-0.08
Morongo Band of Mission Indians, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	-0.01	-0.02	-0.08
Morristown, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.08	-0.17	-0.62
Muscatine County, IA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.05	-0.11	-0.41
Muscatine, IA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.02	-0.09	-0.19	-0.70
Muskegon County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.07	-0.33	-0.67	-2.47
Muskingum River, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	-0.02	-0.06
Nashua, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.04	-0.22	-0.44	-1.61
Nassau County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.01	-0.03	-0.10
Navarro County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	-0.02	-0.01
Nevada County (Western part), CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-0.04	-0.18	-0.37	-1.35
Nevada County (Western part), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.04	-0.18	-0.37	-1.36
New Haven County, CT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.06	-0.13	-0.47
New Haven-Meriden-Waterbury, CT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.48	-2.33	-4.68	-17.27
New Madrid County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
New Manchester-Grant magisterial district in Hancock County, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.01	-0.02
New York County, NY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.42	-2.03	-4.08	-15.04
New York-N. New Jersey-Long Island, NY-NJ-CT	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-8.72	-42.69	-85.59	-315.82
New York-N. New Jersey-Long Island, NY-NJ-CT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-4.91	-24.05	-48.21	-177.90
New York-N. New Jersey-Long Island, NY-NJ-CT	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-9.05	-44.33	-88.88	-327.96
New York-Northern New Jersey-Long Island, NY-NJ-CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-8.72	-42.71	-85.64	-315.99
Nogales, AZ	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.04	-0.08	-0.30
Northern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-2.07	-10.18	-20.42	-75.20
Oakridge, OR	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.02
Ogden, UT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.11	-0.55	-1.10	-4.05
Ogden, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.11	-0.55	-1.10	-4.05

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Olmsted County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.09	-0.18	-0.68
Olmsted County; City of Rochester, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.07	-0.34	-0.67	-2.48
Oneida County: Rhinelander Sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.03	-0.16	-0.33	-1.21
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Pekin, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.04	-0.19	-0.38	-1.39
Penns Grove, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Peoria County: Hollis twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	-0.01	-0.01	-0.05
Peoria, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.08	-0.41	-0.82	-3.02
Perth Amboy, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.05	-0.23	-0.46	-1.69
Philadelphia-Camden County, PA-NJ	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.52	-2.61	-5.25	-19.13
Philadelphia-Wilmington, PA-NJ-DE (NJ Portion)	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-1.70	-8.34	-16.73	-61.72
Philadelphia-Wilmington, PA-NJ-DE (PA-DE Portion)	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-2.16	-10.63	-21.35	-78.38
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-4.90	-24.06	-48.28	-177.75
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-4.85	-23.93	-48.11	-176.42
Phoenix, AZ	CO (1971 8-hour)	Maintenance, Serious	100	0	-4.95	-24.23	-48.57	-179.26
Phoenix-Mesa, AZ	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-5.03	-24.64	-49.39	-182.29
Phoenix-Mesa, AZ	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-5.06	-24.75	-49.62	-183.14
Pierce County; Tacoma, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.04
Pima County; Ajo planning area, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.02	-0.06
Pima County; Rillito planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.03	-0.12	-0.25	-0.92
Pinal County (part); West Pinal, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.10	-0.47	-0.94	-3.47
Pitkin County; Aspen, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.05	-0.27	-0.55	-1.99
Pittsburgh, PA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.18	-0.86	-1.72	-6.35
Pittsburgh-Beaver Valley, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-1.40	-6.94	-13.98	-51.01
Pittsburgh-Beaver Valley, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-1.27	-6.30	-12.70	-46.34
Plumas County, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	0.00	-0.01	-0.01	-0.04
Polk County, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	-0.02	-0.03	-0.11
Portland, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-1.01	-4.95	-9.92	-36.61

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Power-Bannock Counties; Fort Hall Indian Reservation, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.02	-0.04	-0.14
Power-Bannock Counties; Portneuf Valley Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.05	-0.24	-0.49	-1.79
Provo, UT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.10	-0.50	-0.99	-3.67
Provo, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.36	-1.78	-3.57	-13.15
Prowers County; Lamar, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.05	-0.10	-0.36
Raleigh-Durham, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-1.54	-7.52	-15.09	-55.68
Ramsey County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.02	0.02	0.22
Reading, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.23	-1.11	-2.23	-8.22
Reno, NV	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.17	-0.81	-1.63	-6.02
Rhineland, WI	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.02	-0.08	-0.16	-0.58
Riverside County (Coachella Valley), CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-0.18	-0.88	-1.77	-6.53
Riverside County (Coachella Valley), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-0.18	-0.88	-1.77	-6.53
Riverside County; Coachella Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.21	-1.01	-2.03	-7.51
Riverside, Los Angeles, Orange, & San Bernardino Counties; South Coast Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-7.30	-35.81	-71.84	-264.64
Rosebud County; Lame Deer, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01	-0.03
Routt County (part); Steamboat Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.05	-0.26	-0.54	-1.86
Rusk and Panola Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.01	0.16
Sacramento County, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.54	-7.62	-15.34	-56.06
Sacramento Metro, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-2.85	-14.04	-28.22	-103.57
Sacramento Metro, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-2.85	-14.04	-28.22	-103.56
Sacramento, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-1.96	-9.62	-19.29	-71.09
Sacramento, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-2.79	-13.76	-27.65	-101.49
Salem, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.19	-0.93	-1.86	-6.85
Salt Lake City, UT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.30	-1.52	-3.06	-11.12
Salt Lake City, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-2.14	-10.51	-21.08	-77.64
Salt Lake County, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.51	-7.42	-14.89	-54.78
Salt Lake County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	-1.51	-7.42	-14.90	-54.81
San Antonio, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-1.56	-7.65	-15.34	-56.56

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
San Bernardino County, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.16	-0.87	-1.79	-6.15
San Diego County, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-1.50	-7.36	-14.76	-54.47
San Diego County, CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-1.50	-7.35	-14.74	-54.39
San Diego, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-1.50	-7.34	-14.72	-54.34
San Francisco Bay Area, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-3.32	-16.33	-32.79	-120.47
San Francisco Bay Area, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-3.31	-16.30	-32.74	-120.29
San Francisco Bay Area, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-3.32	-16.35	-32.85	-120.67
San Francisco-Oakland-San Jose, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-3.15	-15.53	-31.21	-114.61
San Joaquin Valley Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-2.02	-10.03	-20.21	-73.64
San Joaquin Valley, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-2.02	-10.03	-20.21	-73.64
San Joaquin Valley, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-2.02	-10.03	-20.21	-73.64
San Joaquin Valley, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-2.02	-10.03	-20.21	-73.64
San Joaquin Valley, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-2.02	-10.03	-20.21	-73.64
San Luis Obispo (Eastern San Luis Obispo), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.04	-0.09	-0.29
San Luis Obispo (Eastern part), CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.04	-0.09	-0.29
San Manuel (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.05	-0.09	-0.35
San Miguel County; Telluride, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.09	-0.18	-0.65
Sanders County (part); Thompson Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Santa Cruz County; Nogales planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.04	-0.08	-0.31
Seaford, DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.17	-0.85	-1.71	-6.31
Seattle-Tacoma, WA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-1.61	-7.88	-15.80	-58.30
Sheboygan County, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.03	-0.17	-0.33	-1.23
Sheridan County; City of Sheridan, WY	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.10	-0.19	-0.71
Shoreline Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-0.03	-0.15	-0.30	-1.12
Shoshone County; City of Pinehurst, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Shoshone County; Pinehurst Expansion Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.06	-0.12	-0.44
Silver Bow County; Butte, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.12	-0.24	-0.88
Somerville, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.04	-0.07	-0.26
Southern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.36	-1.78	-3.57	-13.15

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Southwest Indiana, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.02	-0.04	-0.12
Spokane County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.28	-1.35	-2.72	-10.02
Spokane, WA	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.27	-1.34	-2.69	-9.94
Springfield, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.27	-1.32	-2.65	-9.79
St. Bernard Parish, LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.09	-0.21	-0.51
St. Clair, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.03	-0.17	-0.34	-1.24
St. Lawrence County, NY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.02	-0.04	-0.16
St. Louis, MO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-2.51	-12.32	-24.73	-91.01
St. Louis, MO-IL	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-5.14	-25.23	-50.65	-186.38
St. Louis-St. Charles-Farmington, MO-IL	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-5.22	-25.58	-51.33	-189.14
Steubenville, OH-WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.02	-0.09	-0.20	-0.64
Steubenville-Weirton, OH-WV	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.04	-0.21	-0.42	-1.50
Stockton, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.15	-0.76	-1.52	-5.59
Sullivan County, TN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.05	-0.09	-0.33
Sutter Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Syracuse, NY	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.33	-1.60	-3.20	-11.82
Tacoma, WA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.22	-1.10	-2.21	-8.15
Tazewell County: Groveland twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.02	-0.09	-0.17	-0.63
Terre Haute, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.04	-0.21	-0.42	-1.53
Thurston County; Cities of Olympia, Tumwater, and Lacey, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.08	-0.42	-0.83	-3.08
Titus County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	-0.01
Toms River, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.02	-0.07
Tooele County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	0.00	0.00	0.00	0.04
Trenton, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.09	-0.42	-0.85	-3.12
Trona, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Tucson, AZ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.51	-2.50	-5.01	-18.47
Tuolumne County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.02	-0.12	-0.24	-0.89
Tuscan Buttes, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Tuscan Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Uinta Basin, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.08	-0.40	-0.82	-2.87
Union County; LaGrande, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.02	-0.04	-0.16
Upper Green River Basin Area, WY	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.05	-0.25	-0.51	-1.76
Utah County, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.36	-1.79	-3.60	-13.18
Vancouver, WA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.14	-0.70	-1.40	-5.16
Ventura County, CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-0.25	-1.33	-2.71	-9.54
Ventura County, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.25	-1.32	-2.70	-9.52
Vermillion County; Part of Clinton Township, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.03	-0.05	-0.19
Vigo County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.08	-0.42	-0.84	-3.06
Walla Walla County; Wallula, WA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	-0.01	-0.02	-0.08
Waltham, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.03	-0.15	-0.30	-1.11
Warren County, NJ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.01	-0.06	-0.12	-0.46
Warren County: Conewago Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.01	0.01	0.01	0.17
Warren County: Warren Boro, Pleasant Twp, Glade Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	-0.02	-0.05	-0.04
Warren, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.03	-0.07	-0.13
Washington, DC-MD-VA	Ozone (2008 8-hour)	Nonattainment (DC) Maintenance (MD, VA), Marginal	50	0	-2.87	-14.06	-28.19	-104.02
Washington, DC-MD-VA	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-2.87	-14.07	-28.20	-104.07
Washington, DC-MD-VA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.42	-2.07	-4.15	-15.33
Washoe County; Reno planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.17	-0.82	-1.65	-6.08
Wayne County, MI	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.05	-0.23	-0.47	-1.71
Wayne County: Boston, Center, Franklin, Wayne & Webster Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.04	-0.20	-0.39	-1.46
West Central Pinal, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.04	-0.08	-0.29
West Silver Valley, ID	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	-0.02	-0.04	-0.17
Whatcom County, WA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.02	0.17
Winston-Salem, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.29	-1.43	-2.87	-10.59
Worcester, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.10	-0.48	-0.96	-3.53
Yakima County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.06	-0.31	-0.63	-2.33
Yakima, WA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.11	-0.22	-0.80

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Yuba City-Marysville, CA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.08	-0.39	-0.79	-2.90
Yuma, AZ	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.08	-0.39	-0.78	-2.89
Yuma, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.12	-0.61	-1.22	-4.52

Notes:

^a Nonattainment or maintenance status as of 2/1/2024. Source: EPA, The Green Book Nonattainment Areas for Criteria Pollutants; <http://www.epa.gov/airquality/greenbook/>. "--" indicates that no severity classification has been established for the NAAQS pollutant.

^b Emissions thresholds in tons per year. Where the threshold differs by precursor pollutant, the smallest of the precursor thresholds is shown. These thresholds are provided for information only; a general conformity determination is not required for the Proposed Action. Source: 40 CFR 93.853.

^c Positive values are emissions increases; negative values are emissions decreases.

EPA = U.S. Environmental Protection Agency; NAAQS = National Ambient Air Quality Standard; CO = carbon monoxide; NO₂ = nitrogen dioxide; PM2.5 = particulate matter less than 2.5 microns in size; PM10 = particulate matter less than 10 microns in size; SO₂ = sulfur dioxide.

Table D-32. Changes in Emissions from U.S. Heavy-Duty Pickup Trucks and Vans by Nonattainment or Maintenance Area and Alternative, Direct and Indirect Impacts—Carbon Monoxide (CO), 2050

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Ada County; Boise, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.92	-13.97	-20.35	-51.27
Adams, Denver, and Boulder Counties; Denver Metropolitan area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-3.71	-56.10	-82.04	-206.06
Ajo (Pima County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.07	-0.11	-0.27
Albuquerque, NM	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-2.04	-30.81	-44.87	-113.06
Allegan County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.15	-2.20	-3.20	-8.06
Allegheny County Air Basin: Hazelwood monitor, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.14	-2.17	-3.17	-7.98
Allegheny County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	-1.90	-28.71	-41.92	-105.43
Allegheny County; Liberty, Lincoln, Port Vue, Glassport, Clairton, PA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.03	-0.45	-0.67	-1.66
Allegheny, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.18	-2.70	-4.02	-9.95
Allentown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-1.25	-18.92	-27.55	-69.43
Allentown-Bethlehem-Easton, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-1.34	-20.26	-29.50	-74.34
Alton Township, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.08	1.27	1.63	4.54
Amador County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.05	-0.69	-1.00	-2.52
Anchorage, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.47	-7.06	-10.30	-25.92
Anchorage; Eagle River, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.36	-0.53	-1.33
Anne Arundel County and Baltimore County, MD	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-7.01	-106.00	-154.32	-388.98
Archuleta County; Pagosa Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.14	2.15	2.66	7.63
Armstrong County; Madison, Mahoning, Boggs, Washington, Pine, PA	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.03	0.40	0.50	1.44
Aroostock County; City of Presque Isle, ME	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.27	-0.39	-0.98
Atlanta, GA	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-21.42	-323.72	-471.31	-1,187.97
Atlanta, GA	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-19.71	-297.93	-433.76	-1,093.33
Atlantic City, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.07	-1.11	-1.61	-4.06
Bakersfield, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.94	-14.23	-20.74	-52.23
Baltimore, MD	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	-12.71	-192.04	-279.61	-704.76
Baltimore, MD	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-12.77	-193.03	-281.06	-708.39
Baltimore, MD	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.03	-0.41	-0.59	-1.49
Baton Rouge, LA	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-2.59	-39.08	-57.38	-143.67

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Beaver, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.02	-0.25	-0.37	-0.92
Benton County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.02	-0.31	-0.46	-1.15
Berrien County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.41	-6.16	-8.97	-22.62
Billings, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.49	-7.34	-10.80	-27.00
Billings, MT	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.03	0.41	0.48	1.43
Birmingham, AL	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-3.22	-48.70	-70.97	-178.74
Boise-Northern Ada County, ID	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.92	-13.97	-20.34	-51.25
Bonner County; The Sandpoint Area, ID	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.19	-0.27	-0.69
Boston, MA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-1.86	-28.10	-40.91	-103.11
Boyd County (part), KY	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.04	0.56	0.70	1.99
Brooke; Follansbee area, WV	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.02	-0.04
Brown County: Green Bay, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.02	-0.32	-0.47	-1.19
Burlington, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.08	-1.20	-1.74	-4.40
Butte County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.26	-3.90	-5.69	-14.32
Calaveras County, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.04	-0.62	-0.90	-2.26
Calaveras County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.04	-0.62	-0.90	-2.26
Campbell-Clermont Counties, KY-OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.04	-0.54	-0.78	-1.97
Canton-Massillon, OH	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.59	-8.89	-12.99	-32.65
Central New Hampshire, NH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.40	-5.99	-8.72	-21.98
Central Steptoe Valley, NV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.03	-0.44	-0.64	-1.61
Charleston, WV	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.79	-11.89	-17.49	-43.73
Charlotte, NC	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-3.94	-59.61	-86.79	-218.76
Charlotte-Rock Hill, NC-SC	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-5.81	-87.83	-127.86	-322.29
Chicago, IL-IN-WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-18.35	-277.36	-404.30	-1,018.10
Chicago-Naperville, IL-IN-WI	Ozone (2008 8-hour)	Maintenance, Serious	100	0	-18.61	-281.22	-409.70	-1,032.16
Chico (Butte County), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.26	-3.90	-5.68	-14.32
Chico, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.11	-1.61	-2.34	-5.89
Chico, CA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	-0.25	-3.74	-5.45	-13.74
Cincinnati, OH-KY (OH Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-3.71	-56.11	-81.70	-205.92
Cincinnati, OH-KY (KY Portion)	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	-0.56	-8.46	-12.34	-31.05

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Cincinnati, OH-KY-IN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-4.65	-70.32	-102.40	-258.06
Clark County; Las Vegas planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-3.98	-60.12	-87.53	-220.62
Cleveland, OH	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-4.71	-71.21	-103.72	-261.34
Cleveland, OH	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-2.06	-31.12	-45.31	-114.21
Cleveland, OH	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-2.44	-36.86	-53.66	-135.25
Cleveland-Akron-Lorain, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-4.83	-72.92	-106.23	-267.62
Cleveland-Akron-Lorain, OH	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-4.34	-65.53	-95.45	-240.50
Cochise County; Paul Spur/Douglas planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.02	-0.37	-0.54	-1.37
Colorado Springs, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.79	-11.91	-17.36	-43.72
Columbus, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-4.42	-66.86	-97.35	-245.36
Columbus, OH	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-4.21	-63.61	-92.62	-233.44
Cook County; Lyons Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.21	-3.14	-4.58	-11.54
Cook County; Southeast Chicago, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.22	-3.39	-5.06	-12.50
Coshocton County; Franklin Township, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.03	-0.04	-0.11
Coso Junction, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.03	0.03	0.10
Cuyahoga County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-2.06	-31.19	-45.40	-114.44
Cuyahoga County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-1.68	-25.40	-36.99	-93.23
Dallas-Fort Worth, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-18.89	-285.50	-416.00	-1,047.90
Dallas-Fort Worth, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-18.75	-283.36	-412.87	-1,040.02
Dane County; Madison sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-1.39	-21.06	-30.66	-77.28
Delaware County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-0.64	-9.58	-14.30	-35.35
Denver Metro/North Front Range, CO	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-9.24	-139.62	-203.80	-512.65
Denver-Boulder, CO	CO (1971 8-hour)	Maintenance, Serious	100	0	-6.93	-104.72	-152.93	-384.55
Denver-Boulder-Greeley-Ft. Collins-Loveland, CO	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-9.24	-139.65	-203.82	-512.76
Detroit, MI	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	-14.07	-212.66	-309.84	-780.53
Detroit, MI	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-5.13	-77.53	-112.89	-284.51
Detroit, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.52	-7.82	-11.40	-28.70
Detroit-Ann Arbor, MI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-14.10	-213.09	-310.45	-782.09
Doña Ana County; Anthony, NM	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.06	-0.10	-0.23

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Door County, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	-0.01	-0.01	-0.03
Door County-Revised, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	-0.06	-0.91	-1.32	-3.34
Douglas (Cochise County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.02	-0.32	-0.46	-1.16
Dukes County, MA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.03	-0.43	-0.63	-1.58
Duluth, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.19	-2.80	-4.09	-10.29
East Chicago, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.01	0.17	0.12	0.56
East Helena Area, MT	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	-0.06	-0.08	-0.21
East Kern County, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.03	-0.45	-0.67	-1.64
El Paso County, TX	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.89	-13.47	-19.63	-49.43
El Paso, TX	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.06	-0.96	-1.42	-3.55
El Paso-Las Cruces, TX-NM	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-1.18	-17.85	-26.01	-65.51
Eugene-Springfield, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.37	-5.53	-8.05	-20.30
Evangeline Parish (Partial), LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Fairbanks, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.15	-2.33	-3.40	-8.56
Fairbanks, AK	PM _{2.5} (2006 24-hour)	Nonattainment, Serious	70	0	-0.28	-4.18	-6.09	-15.33
Flathead County; Columbia Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.03	-0.41	-0.60	-1.51
Flathead County; Kalispell and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.17	-2.60	-3.78	-9.52
Flathead County; Whitefish and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.03	-0.40	-0.58	-1.46
Fort Collins, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.35	-5.27	-7.67	-19.34
Freehold, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.31	-0.45	-1.12
Freestone and Anderson Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.21	-0.35	-0.80
Fremont County; Canon City Area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.08	-1.15	-1.68	-4.24
Fresno, CA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.96	-14.45	-21.04	-53.02
Gila County (part): Payson, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.04	-0.54	-0.78	-1.97
Giles County, VA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	-0.01	-0.02
Grant County, NM	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.07	-1.12	-1.63	-4.10
Grants Pass, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.04	-0.64	-0.93	-2.34

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Great Falls, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.01	0.00	0.04
Greater Connecticut, CT	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-2.80	-42.25	-61.51	-155.04
Greater Connecticut, CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-2.80	-42.28	-61.56	-155.17
Greeley, CO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-1.25	-18.85	-27.85	-69.39
Hancock County (part): Weirton, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.01	-0.08	-0.13	-0.30
Hancock and Brooke Counties (Part); The city of Weirton, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.07	-0.12	-0.26
Harrisburg-Lebanon-Carlisle-York, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-2.31	-34.96	-50.91	-128.31
Hartford-New Britain-Middletown, CT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-2.03	-30.75	-44.77	-112.84
Hayden (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	-0.02	-0.25	-0.36	-0.91
Hayden, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.03	-0.40	-0.58	-1.47
Hayden, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.02	-0.25	-0.36	-0.91
Henderson-Webster Counties, KY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.09	-0.15	-0.35
Hillsborough County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.03	-0.43	-0.63	-1.58
Hillsborough-Polk County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.07	-0.10	-0.26
Houston-Galveston-Brazoria, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-13.92	-210.24	-307.33	-772.21
Houston-Galveston-Brazoria, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-13.59	-205.32	-300.15	-754.14
Howard County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.03	0.40	0.51	1.42
Humphreys County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.03	-0.40	-0.58	-1.46
Huntington, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.05	-0.79	-1.15	-2.89
Hutchinson County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.02	0.32	0.35	1.11
Imperial County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-0.32	-4.90	-7.13	-17.98
Imperial County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.32	-4.89	-7.12	-17.95
Imperial County, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.26	-4.00	-5.82	-14.68
Imperial County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	-0.26	-4.00	-5.82	-14.68
Imperial Valley, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.31	-4.68	-6.81	-17.16
Indian Wells, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.08	-1.14	-1.67	-4.18
Indiana, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.08	-1.15	-1.94	-4.38
Indianapolis, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.14	-0.20	-0.51
Indianapolis, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-1.82	-27.52	-40.07	-100.99
Inland Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-0.08	-1.25	-1.82	-4.58

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Inyo County; Owens Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.01	-0.11	-0.16	-0.41
Jackson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.18	-2.65	-3.85	-9.71
Jackson County; Medford-Ashland (including White City), OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.25	-3.75	-5.46	-13.75
Jamestown, NY	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.14	-2.07	-3.15	-7.66
Jefferson County, KY	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.09	-0.13	-0.32
Jefferson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.08	-1.15	-1.67	-4.21
Jefferson County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.08	-0.12	-0.30
Jefferson County; (part) Steubenville & Mingo Junction, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.06	-0.85	-1.26	-3.13
Johnstown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.14	-2.04	-3.14	-7.58
Josephine County; Grants Pass, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.04	-0.63	-0.91	-2.30
Juneau; Mendenhall Valley area, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.03	-0.47	-0.68	-1.71
Kern County (Eastern Kern), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	-0.39	-0.21
Kern County (Eastern Kern), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	-0.39	-0.21
King County; Kent, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.03	-0.50	-0.73	-1.84
King County; Seattle, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.32	-0.47	-1.18
Klamath Falls, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.09	-1.35	-1.97	-4.96
Klamath Falls, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.09	-1.35	-1.97	-4.97
Klamath Falls, OR	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.10	-1.54	-2.25	-5.66
Knoxville, TN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-1.50	-22.67	-33.04	-83.22
Knoxville-Sevierville-La Follette, TN	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-1.65	-24.96	-36.36	-91.60
La Porte County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.10	-1.47	-2.15	-5.41
LaSalle County; Oglesby, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.06	-0.91	-1.33	-3.34
Lake County (part); Lakeview, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.03	-0.04	-0.10
Lake County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.72	-10.93	-16.04	-40.16
Lake County, OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.33	-4.98	-7.25	-18.27
Lake County; (part) Eastlake, Timberlake, Lakeline, Willoughby, Mentor, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.06	-0.85	-1.24	-3.12
Lake County; Cities of East Chicago, Hammond, Whiting, and Gary, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.46	-6.89	-10.16	-25.36
Lake County; Polson, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.06	-0.08	-0.20

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Lake County; Ronan, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.03	-0.04	-0.10
Lake Tahoe North Shore, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.03	-0.41	-0.60	-1.50
Lake Tahoe South Shore, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.04	-0.66	-0.96	-2.41
Lake Tahoe, NV	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.04	-0.61	-0.89	-2.25
Lancaster, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.98	-14.84	-21.60	-54.44
Lancaster, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.98	-14.83	-21.60	-54.43
Lane County (part); Oakridge, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01	-0.02
Lane County; Eugene/Springfield, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.37	-5.53	-8.06	-20.31
Las Vegas, NV	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-3.98	-60.12	-87.53	-220.62
Las Vegas, NV	CO (1971 8-hour)	Maintenance, Serious	100	0	-3.98	-60.21	-87.66	-220.97
Laurel Area (Yellowstone County), MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.01	0.18	0.15	0.59
Lebanon County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-0.19	-2.82	-4.10	-10.34
Lemont, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.24	-3.57	-5.32	-13.17
Liberty-Clairton, PA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.03	-0.45	-0.67	-1.66
Lincoln County; Libby and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.11	-0.16	-0.41
Logan, UT-ID	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.31	-4.76	-6.93	-17.46
Longmont, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.06	-0.21	0.07
Lorain County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.07	-1.08	-1.57	-3.95
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.69	-10.47	-15.64	-38.63
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-0.69	-10.46	-15.63	-38.62
Los Angeles-South Coast Air Basin, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-21.31	-322.06	-469.33	-1,182.12
Los Angeles-South Coast Air Basin, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-21.30	-321.91	-469.10	-1,181.55
Los Angeles-South Coast Air Basin, CA	CO (1971 8-hour)	Maintenance, Serious	100	0	-21.31	-322.10	-469.38	-1,182.25
Los Angeles-South Coast Air Basin, CA	NO ₂ (1971 Annual)	Maintenance, Primary	100	0	-21.31	-322.11	-469.38	-1,182.27
Los Angeles-South Coast Air Basin, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-21.31	-322.07	-469.33	-1,182.14
Los Angeles-South Coast Air Basin, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-21.31	-322.07	-469.33	-1,182.14
Louisville, KY-IN (IN Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.37	-5.64	-8.21	-20.68
Louisville, KY-IN (KY Portion)	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-1.83	-27.64	-40.24	-101.44
Lowell, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.16	-2.37	-3.46	-8.71

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Lucas County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.49	-7.36	-10.91	-27.12
Madison County; Granite City Township and Nameoki Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.06	-0.95	-1.61	-3.62
Manchester, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.16	-2.35	-3.42	-8.61
Manitowoc County, WI	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.09	-1.37	-2.00	-5.05
Marathon County: Rothschild Sub-city area, Rib Mountain, Weston, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.28	-4.22	-6.15	-15.49
Maricopa and Pinal Counties; Phoenix planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-14.67	-221.74	-322.82	-813.72
Marion County: Lawrence, Washington, and Warrant Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-1.50	-22.73	-33.09	-83.41
Mariposa County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-0.02	-0.29	-0.43	-1.07
Mariposa County, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.02	-0.29	-0.43	-1.08
Marshall, WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.01	0.09	0.07	0.29
Medford, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.15	-2.28	-3.32	-8.36
Memphis, TN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-1.94	-29.29	-42.66	-107.51
Memphis, TN-MS-AR	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-2.37	-35.87	-52.25	-131.66
Miami (Gila County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.05	-0.69	-1.00	-2.52
Miami, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.04	-0.62	-0.90	-2.26
Miami, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.04	-0.65	-0.95	-2.39
Millinocket AQCR 109, ME	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.39	-5.92	-8.63	-21.74
Milwaukee, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-2.49	-37.66	-54.83	-138.20
Milwaukee, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-1.01	-15.25	-22.21	-55.97
Milwaukee-Racine, WI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-2.23	-33.75	-49.14	-123.85
Minneapolis-St. Paul, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-7.70	-116.30	-169.47	-426.86
Minneapolis-St. Paul, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-7.53	-113.81	-165.85	-417.73
Missoula, MT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.35	-5.35	-7.79	-19.64
Missoula, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.36	-5.50	-8.02	-20.20
Modesto, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.40	-6.01	-8.75	-22.05
Mohave County (part); Bullhead City, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.14	-2.10	-3.06	-7.71
Mono Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.10	-0.15	-0.38

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Mono County; Mammoth Lake planning area, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.06	-0.83	-1.21	-3.06
Morenci (Greenlee County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.11	-0.16	-0.41
Morgan County, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.03	-0.51	-0.75	-1.89
Morongo Band of Mission Indians, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.01	-0.09	-0.13	-0.34
Morongo Band of Mission Indians, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.01	-0.09	-0.13	-0.33
Morristown, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.05	-0.76	-1.11	-2.80
Muscatine County, IA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.03	-0.52	-0.76	-1.92
Muscatine, IA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.06	-0.88	-1.28	-3.23
Muskegon County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.20	-3.02	-4.39	-11.07
Muskingum River, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.04	-0.07	-0.15
Nashua, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.13	-1.99	-2.89	-7.29
Nassau County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.12	-0.18	-0.45
Navarro County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.19	0.22	0.65
Nevada County (Western part), CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-0.11	-1.63	-2.38	-5.99
Nevada County (Western part), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.11	-1.64	-2.39	-6.03
New Haven County, CT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.04	-0.57	-0.83	-2.08
New Haven-Meriden-Waterbury, CT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-1.39	-21.00	-30.58	-77.08
New Madrid County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
New Manchester-Grant magisterial district in Hancock County, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.06	0.07	0.22
New York County, NY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-1.21	-18.27	-26.61	-67.06
New York-N. New Jersey-Long Island, NY-NJ-CT	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-25.37	-383.45	-558.31	-1,407.18
New York-N. New Jersey-Long Island, NY-NJ-CT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-14.29	-216.02	-314.54	-792.76
New York-N. New Jersey-Long Island, NY-NJ-CT	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-26.35	-398.19	-579.77	-1,461.28
New York-Northern New Jersey-Long Island, NY-NJ-CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-25.39	-383.66	-558.61	-1,407.95
Nogales, AZ	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.03	-0.44	-0.63	-1.60
Northern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-6.04	-91.24	-132.98	-334.92
Oakridge, OR	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	-0.02	-0.03	-0.07
Ogden, UT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.33	-4.96	-7.22	-18.20
Ogden, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.33	-4.96	-7.22	-18.20

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Olmsted County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.06	-0.84	-1.23	-3.09
Olmsted County; City of Rochester, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.20	-3.07	-4.48	-11.28
Oneida County: Rhinelander Sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.10	-1.47	-2.14	-5.41
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Pekin, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.11	-1.72	-2.50	-6.31
Penns Grove, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.01	-0.02
Peoria County: Hollis twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	-0.06	-0.09	-0.23
Peoria, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.25	-3.74	-5.44	-13.71
Perth Amboy, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.14	-2.05	-2.99	-7.53
Philadelphia-Camden County, PA-NJ	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-1.49	-22.45	-32.91	-82.51
Philadelphia-Wilmington, PA-NJ-DE (NJ Portion)	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-4.96	-74.89	-109.06	-274.85
Philadelphia-Wilmington, PA-NJ-DE (PA-DE Portion)	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-6.22	-93.96	-137.16	-345.01
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-14.20	-214.58	-312.79	-787.67
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-13.95	-210.82	-307.93	-774.21
Phoenix, AZ	CO (1971 8-hour)	Maintenance, Serious	100	0	-14.48	-218.78	-318.52	-802.86
Phoenix-Mesa, AZ	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-14.70	-222.17	-323.45	-815.31
Phoenix-Mesa, AZ	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-14.77	-223.24	-325.01	-819.23
Pierce County; Tacoma, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.03	-0.05	-0.11
Pima County; Ajo planning area, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.07	-0.10	-0.25
Pima County; Rillito planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.07	-1.09	-1.58	-3.98
Pinal County (part); West Pinal, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.29	-4.33	-6.31	-15.90
Pitkin County; Aspen, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.15	-2.27	-3.35	-8.35
Pittsburgh, PA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.51	-7.69	-11.20	-28.21
Pittsburgh-Beaver Valley, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-3.99	-60.21	-88.16	-221.21
Pittsburgh-Beaver Valley, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-3.62	-54.69	-80.09	-200.96
Plumas County, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	0.00	-0.04	-0.06	-0.16
Polk County, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.01	-0.14	-0.20	-0.51
Portland, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-2.96	-44.69	-65.08	-164.02

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Power-Bannock Counties; Fort Hall Indian Reservation, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.02	-0.23	-0.33	-0.84
Power-Bannock Counties; Portneuf Valley Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.15	-2.27	-3.31	-8.34
Provo, UT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.30	-4.53	-6.60	-16.64
Provo, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-1.06	-15.95	-23.25	-58.55
Prowers County; Lamar, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.04	-0.57	-0.83	-2.09
Raleigh-Durham, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-4.48	-67.63	-98.46	-248.19
Ramsey County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.05	0.70	0.90	2.52
Reading, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.66	-9.98	-14.53	-36.63
Reno, NV	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.50	-7.61	-11.07	-27.91
Rhineland, WI	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.05	-0.77	-1.11	-2.81
Riverside County (Coachella Valley), CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-0.52	-7.90	-11.50	-28.99
Riverside County (Coachella Valley), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-0.52	-7.90	-11.50	-28.99
Riverside County; Coachella Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.60	-9.09	-13.23	-33.35
Riverside, Los Angeles, Orange, & San Bernardino Counties; South Coast Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-21.24	-320.98	-467.75	-1,178.14
Rosebud County; Lame Deer, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.08	-0.12	-0.30
Routt County (part); Steamboat Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.12	-1.84	-2.80	-6.83
Rusk and Panola Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.04	0.55	0.70	1.97
Sacramento County, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-4.39	-66.40	-97.15	-243.92
Sacramento Metro, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-8.21	-124.01	-181.04	-455.35
Sacramento Metro, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-8.21	-124.00	-181.03	-455.31
Sacramento, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-5.75	-86.85	-126.53	-318.77
Sacramento, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-8.07	-121.93	-178.02	-447.72
Salem, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.56	-8.50	-12.38	-31.21
Salt Lake City, UT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.86	-13.04	-19.12	-47.92
Salt Lake City, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-6.28	-94.92	-138.33	-348.40
Salt Lake County, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-4.37	-66.05	-96.30	-242.46
Salt Lake County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	-4.37	-66.08	-96.35	-242.57
San Antonio, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-4.53	-68.49	-99.78	-251.38

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
San Bernardino County, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.35	-5.33	-8.16	-19.79
San Diego County, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-4.38	-66.16	-96.33	-242.80
San Diego County, CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-4.37	-66.06	-96.18	-242.42
San Diego, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-4.37	-66.05	-96.17	-242.39
San Francisco Bay Area, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-9.58	-144.78	-211.27	-531.58
San Francisco Bay Area, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-9.57	-144.57	-210.96	-530.79
San Francisco Bay Area, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-9.60	-145.02	-211.62	-532.45
San Francisco-Oakland-San Jose, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-9.13	-138.02	-201.43	-506.76
San Joaquin Valley Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-5.75	-86.86	-127.28	-319.21
San Joaquin Valley, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-5.75	-86.86	-127.28	-319.21
San Joaquin Valley, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-5.75	-86.86	-127.29	-319.22
San Joaquin Valley, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-5.75	-86.86	-127.28	-319.19
San Joaquin Valley, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-5.75	-86.86	-127.28	-319.19
San Luis Obispo (Eastern San Luis Obispo), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.18	-0.28	-0.66
San Luis Obispo (Eastern part), CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.18	-0.28	-0.66
San Manuel (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.02	-0.37	-0.55	-1.38
San Miguel County; Telluride, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.05	-0.77	-1.12	-2.82
Sanders County (part); Thompson Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.02	-0.04
Santa Cruz County; Nogales planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.03	-0.44	-0.64	-1.62
Seaford, DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.51	-7.66	-11.15	-28.10
Seattle-Tacoma, WA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-4.71	-71.21	-103.68	-261.32
Sheboygan County, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.10	-1.52	-2.22	-5.59
Sheridan County; City of Sheridan, WY	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.07	-1.08	-1.58	-3.98
Shoreline Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-0.09	-1.38	-2.01	-5.08
Shoshone County; City of Pinehurst, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Shoshone County; Pinehurst Expansion Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.04	-0.54	-0.78	-1.97
Silver Bow County; Butte, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.07	-1.13	-1.64	-4.13
Somerville, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.32	-0.47	-1.18
Southern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-1.06	-15.95	-23.25	-58.54

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Southwest Indiana, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.11	-0.17	-0.41
Spokane County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.82	-12.39	-18.03	-45.45
Spokane, WA	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.81	-12.29	-17.89	-45.10
Springfield, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.79	-12.01	-17.49	-44.09
St. Bernard Parish, LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.21	0.06	0.63
St. Clair, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.10	-1.51	-2.20	-5.54
St. Lawrence County, NY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.22	-0.32	-0.81
St. Louis, MO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-7.28	-109.94	-160.29	-403.58
St. Louis, MO-IL	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-14.87	-224.71	-327.64	-824.88
St. Louis-St. Charles-Farmington, MO-IL	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-15.14	-228.86	-333.44	-839.98
Steubenville, OH-WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.03	-0.52	-0.84	-1.96
Steubenville-Weirton, OH-WV	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.11	-1.63	-2.43	-6.01
Stockton, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.45	-6.86	-10.00	-25.19
Sullivan County, TN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.03	-0.41	-0.60	-1.50
Sutter Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.01
Syracuse, NY	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.95	-14.36	-20.90	-52.68
Tacoma, WA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.66	-9.98	-14.54	-36.64
Tazewell County: Groveland twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.05	-0.78	-1.13	-2.86
Terre Haute, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.12	-1.89	-2.75	-6.93
Thurston County; Cities of Olympia, Tumwater, and Lacey, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.25	-3.85	-5.60	-14.13
Titus County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	-0.01
Toms River, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.08	-0.12	-0.31
Tooele County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	0.01	0.15	0.18	0.52
Trenton, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.25	-3.81	-5.55	-13.98
Trona, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.01	0.09	0.11	0.32
Tucson, AZ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-1.52	-23.02	-33.52	-84.48
Tuolumne County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.07	-1.08	-1.57	-3.96
Tuscan Buttes, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Tuscan Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Uinta Basin, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.23	-3.54	-5.30	-13.08
Union County; LaGrande, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.25	-0.36	-0.90
Upper Green River Basin Area, WY	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.11	-1.63	-2.47	-6.05
Utah County, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.04	-15.69	-22.93	-57.61
Vancouver, WA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.42	-6.32	-9.19	-23.18
Ventura County, CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-0.68	-10.20	-15.25	-37.65
Ventura County, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.68	-10.18	-15.23	-37.59
Vermillion County; Part of Clinton Township, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.24	-0.35	-0.87
Vigo County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.24	-3.65	-5.34	-13.41
Walla Walla County; Wallula, WA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.01	-0.10	-0.14	-0.35
Waltham, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.09	-1.36	-1.98	-4.99
Warren County, NJ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.04	-0.54	-0.79	-1.99
Warren County: Conewago Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.04	0.63	0.79	2.23
Warren County: Warren Boro, Pleasant Twp, Glade Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.02	0.34	0.38	1.20
Warren, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.02	0.24	0.22	0.81
Washington, DC-MD-VA	Ozone (2008 8-hour)	Nonattainment (DC) Maintenance (MD, VA), Marginal	50	0	-8.36	-126.33	-183.93	-463.61
Washington, DC-MD-VA	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-8.36	-126.39	-184.02	-463.82
Washington, DC-MD-VA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-1.23	-18.62	-27.11	-68.34
Washoe County; Reno planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.51	-7.68	-11.19	-28.19
Wayne County, MI	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.13	-2.00	-2.93	-7.36
Wayne County: Boston, Center, Franklin, Wayne & Webster Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.12	-1.82	-2.65	-6.67
West Central Pinal, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.02	-0.31	-0.44	-1.12
West Silver Valley, ID	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-0.02	-0.28	-0.41	-1.03
Whatcom County, WA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.03	0.48	0.62	1.73
Winston-Salem, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.85	-12.87	-18.73	-47.22
Worcester, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.29	-4.41	-6.42	-16.19
Yakima County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.20	-2.99	-4.36	-10.99
Yakima, WA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.07	-1.03	-1.50	-3.77

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Yuba City-Marysville, CA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.23	-3.53	-5.13	-12.94
Yuma, AZ	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.24	-3.66	-5.32	-13.41
Yuma, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.38	-5.68	-8.27	-20.84

Notes:

^a Nonattainment or maintenance status as of 2/1/2024. Source: EPA, The Green Book Nonattainment Areas for Criteria Pollutants; <http://www.epa.gov/airquality/greenbook/>. "—" indicates that no severity classification has been established for the NAAQS pollutant.

^b Emissions thresholds in tons per year. Where the threshold differs by precursor pollutant, the smallest of the precursor thresholds is shown. These thresholds are provided for information only; a general conformity determination is not required for the Proposed Action. Source: 40 CFR 93.853.

^c Positive values are emissions increases; negative values are emissions decreases.

EPA = U.S. Environmental Protection Agency; NAAQS = National Ambient Air Quality Standard; CO = carbon monoxide; NO₂ = nitrogen dioxide; PM2.5 = particulate matter less than 2.5 microns in size; PM10 = particulate matter less than 10 microns in size; SO₂ = sulfur dioxide.

Table D-33. Changes in Emissions from U.S. Heavy-Duty Pickup Trucks and Vans by Nonattainment or Maintenance Area and Alternative, Direct and Indirect Impacts--Acetaldehyde, 2035

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Ada County; Boise, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Adams, Denver, and Boulder Counties; Denver Metropolitan area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.05
Ajo (Pima County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Albuquerque, NM	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.01	-0.02
Allegan County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Allegheny County Air Basin: Hazelwood monitor, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Allegheny County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01	-0.02
Allegheny County; Liberty, Lincoln, Port Vue, Glassport, Clairton, PA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Allegheny, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Allentown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Allentown-Bethlehem-Easton, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	-0.02
Alton Township, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Amador County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Anchorage, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	-0.01
Anchorage; Eagle River, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Anne Arundel County and Baltimore County, MD	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	-0.02	-0.08
Archuleta County; Pagosa Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Armstrong County; Madison, Mahoning, Boggs, Washington, Pine, PA	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	0.00	0.00
Aroostock County; City of Presque Isle, ME	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Atlanta, GA	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-0.01	-0.03	-0.07	-0.26
Atlanta, GA	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.01	-0.03	-0.06	-0.24
Atlantic City, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Bakersfield, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01
Baltimore, MD	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	0.00	-0.02	-0.04	-0.15
Baltimore, MD	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	0.00	-0.02	-0.04	-0.15
Baltimore, MD	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Baton Rouge, LA	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	-0.01	-0.01	-0.04
Beaver, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Benton County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Berrien County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Billings, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01
Billings, MT	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Birmingham, AL	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	-0.01	-0.01	-0.04
Boise-Northern Ada County, ID	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01
Bonner County; The Sandpoint Area, ID	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Boston, MA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.01	-0.02
Boyd County (part), KY	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Brooke; Follansbee area, WV	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Brown County: Green Bay, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Burlington, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Butte County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Calaveras County, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Calaveras County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Campbell-Clermont Counties, KY-OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Canton-Massillon, OH	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	0.00	0.00	-0.01
Central New Hampshire, NH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Central Steptoe Valley, NV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Charleston, WV	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	0.00	0.00	-0.01
Charlotte, NC	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.01	-0.05
Charlotte-Rock Hill, NC-SC	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	-0.01	-0.02	-0.07
Chicago, IL-IN-WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.03	-0.06	-0.22
Chicago-Naperville, IL-IN-WI	Ozone (2008 8-hour)	Maintenance, Serious	100	0	-0.01	-0.03	-0.06	-0.22
Chico (Butte County), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Chico, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Chico, CA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Cincinnati, OH-KY (OH Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	-0.01	-0.01	-0.04
Cincinnati, OH-KY (KY Portion)	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Cincinnati, OH-KY-IN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	-0.01	-0.01	-0.06
Clark County; Las Vegas planning area, NV	PM ₁₀ (1987 24-hour)	Maintenance, Serious	100	0	0.00	-0.01	-0.01	-0.05
Cleveland, OH	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.02	-0.06
Cleveland, OH	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.01	-0.02
Cleveland, OH	PM _{2.5} (2012 Annual)	Maintenance, Moderate	100	0	0.00	0.00	-0.01	-0.03

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Cleveland-Akron-Lorain, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	-0.01	-0.02	-0.06
Cleveland-Akron-Lorain, OH	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	-0.01	-0.01	-0.05
Cochise County; Paul Spur/Douglas planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Colorado Springs, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	-0.01
Columbus, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	-0.01	-0.01	-0.05
Columbus, OH	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	-0.01	-0.01	-0.05
Cook County; Lyons Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Cook County; Southeast Chicago, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Coshocton County; Franklin Township, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Coso Junction, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Cuyahoga County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01	-0.02
Cuyahoga County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.01	-0.02
Dallas-Fort Worth, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.01	-0.03	-0.07	-0.24
Dallas-Fort Worth, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.03	-0.07	-0.24
Dane County; Madison sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.02
Delaware County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Denver Metro/North Front Range, CO	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.02	-0.03	-0.11
Denver-Boulder, CO	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	-0.01	-0.02	-0.09
Denver-Boulder-Greeley-Ft. Collins-Loveland, CO	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	-0.02	-0.03	-0.11
Detroit, MI	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	0.00	-0.02	-0.05	-0.17
Detroit, MI	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.02	-0.06
Detroit, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	-0.01
Detroit-Ann Arbor, MI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	-0.02	-0.05	-0.17
Doña Ana County; Anthony, NM	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Door County, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	0.00
Door County-Revised, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	0.00
Douglas (Cochise County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Dukes County, MA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	0.00
Duluth, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
East Chicago, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
East Helena Area, MT	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
East Kern County, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00
El Paso County, TX	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01
El Paso, TX	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
El Paso-Las Cruces, TX-NM	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	-0.02
Eugene-Springfield, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Evangeline Parish (Partial), LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Fairbanks, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00
Fairbanks, AK	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00
Flathead County; Columbia Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Flathead County; Kalispell and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Flathead County; Whitefish and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Fort Collins, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Freehold, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Freestone and Anderson Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Fremont County; Canon City Area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Fresno, CA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.00	0.00	0.00	-0.01
Gila County (part): Payson, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Giles County, VA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Grant County, NM	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Grants Pass, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Great Falls, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Greater Connecticut, CT	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	-0.01	-0.03
Greater Connecticut, CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	0.00	0.00	-0.01	-0.03
Greeley, CO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.01	-0.02
Hancock County (part): Weirton, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Hancock and Brooke Counties (Part); The city of Weirton, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Harrisburg-Lebanon-Carlisle-York, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01	-0.03
Hartford-New Britain-Middletown, CT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.01	-0.02
Hayden (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	0.00	0.00
Hayden, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Hayden, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Henderson-Webster Counties, KY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Hillsborough County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Hillsborough-Polk County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Houston-Galveston-Brazoria, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.01	-0.03	-0.05	-0.19
Houston-Galveston-Brazoria, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.03	-0.05	-0.18
Howard County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Humphreys County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Huntington, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Hutchinson County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Imperial County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Imperial County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Imperial County, CA	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Imperial County, CA	PM _{2.5} (2012 Annual)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Imperial Valley, CA	PM ₁₀ (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00
Indian Wells, CA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Indiana, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Indianapolis, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Indianapolis, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.01	-0.02
Inland Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Inyo County; Owens Valley planning area, CA	PM ₁₀ (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00
Jackson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Jackson County; Medford-Ashland (including White City), OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Jamestown, NY	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	0.00
Jefferson County, KY	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Jefferson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Jefferson County, OH	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Jefferson County; (part) Steubenville & Mingo Junction, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Johnstown, PA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Josephine County; Grants Pass, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Juneau; Mendenhall Valley area, AK	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Kern County (Eastern Kern), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	0.00	0.00
Kern County (Eastern Kern), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00
King County; Kent, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
King County; Seattle, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Klamath Falls, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Klamath Falls, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Klamath Falls, OR	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Knoxville, TN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	0.00	-0.02
Knoxville-Sevierville-La Follette, TN	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01	-0.02
La Porte County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
LaSalle County; Oglesby, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Lake County (part); Lakeview, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Lake County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01
Lake County, OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Lake County; (part) Eastlake, Timberlake, Lakeline, Willoughby, Mentor, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Lake County; Cities of East Chicago, Hammond, Whiting, and Gary, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Lake County; Polson, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Lake County; Ronan, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Lake Tahoe North Shore, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Lake Tahoe South Shore, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Lake Tahoe, NV	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Lancaster, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	-0.01
Lancaster, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Lane County (part); Oakridge, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Lane County; Eugene/Springfield, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Las Vegas, NV	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.01	-0.05
Las Vegas, NV	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	-0.01	-0.01	-0.05
Laurel Area (Yellowstone County), MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	0.00	0.00
Lebanon County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Lemont, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Liberty-Clairton, PA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Lincoln County; Libby and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Logan, UT-ID	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Longmont, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Lorain County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	0.00	-0.01
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	0.00	-0.01

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Los Angeles-South Coast Air Basin, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-0.01	-0.03	-0.07	-0.26
Los Angeles-South Coast Air Basin, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-0.01	-0.03	-0.07	-0.26
Los Angeles-South Coast Air Basin, CA	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.01	-0.03	-0.07	-0.26
Los Angeles-South Coast Air Basin, CA	NO ₂ (1971 Annual)	Maintenance, Primary	100	0	-0.01	-0.03	-0.07	-0.26
Los Angeles-South Coast Air Basin, CA	PM _{2.5} (2006 24-hour)	Nonattainment, Serious	70	0	-0.01	-0.03	-0.07	-0.26
Los Angeles-South Coast Air Basin, CA	PM _{2.5} (2012 Annual)	Nonattainment, Serious	70	0	-0.01	-0.03	-0.07	-0.26
Louisville, KY-IN (IN Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	0.00	0.00
Louisville, KY-IN (KY Portion)	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01	-0.02
Lowell, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Lucas County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01
Madison County; Granite City Township and Nameoki Township, IL	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Manchester, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Manitowoc County, WI	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	0.00	0.00
Marathon County: Rothschild Sub-city area, Rib Mountain, Weston, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Maricopa and Pinal Counties; Phoenix planning area, AZ	PM ₁₀ (1987 24-hour)	Nonattainment, Serious	70	0	0.00	-0.02	-0.05	-0.17
Marion County: Lawrence, Washington, and Warrant Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.02
Mariposa County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Mariposa County, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Marshall, WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Medford, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Memphis, TN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.01	-0.02
Memphis, TN-MS-AR	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	-0.01	-0.03
Miami (Gila County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Miami, AZ	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Miami, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Millinocket AQCR 109, ME	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Milwaukee, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01	-0.03
Milwaukee, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01
Milwaukee-Racine, WI	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	0.00	-0.01	-0.03
Minneapolis-St. Paul, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.02	-0.09

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Minneapolis-St. Paul, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.02	-0.09
Missoula, MT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Missoula, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Modesto, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Mohave County (part); Bullhead City, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Mono Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Mono County; Mammoth Lake planning area, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Morenci (Greenlee County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Morgan County, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Morongo Band of Mission Indians, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	0.00	0.00
Morongo Band of Mission Indians, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00
Morristown, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Muscatine County, IA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Muscatine, IA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Muskegon County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Muskingum River, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Nashua, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Nassau County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Navarro County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Nevada County (Western part), CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00
Nevada County (Western part), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00
New Haven County, CT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
New Haven-Meriden-Waterbury, CT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.02
New Madrid County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
New Manchester-Grant magisterial district in Hancock County, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
New York County, NY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01
New York-N. New Jersey-Long Island, NY-NJ-CT	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.01	-0.04	-0.08	-0.30
New York-N. New Jersey-Long Island, NY-NJ-CT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.00	-0.02	-0.05	-0.17
New York-N. New Jersey-Long Island, NY-NJ-CT	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.01	-0.04	-0.08	-0.31
New York-Northern New Jersey-Long Island, NY-NJ-CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.01	-0.04	-0.08	-0.30
Nogales, AZ	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Northern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.02	-0.07
Oakridge, OR	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Ogden, UT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Ogden, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Olmsted County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Olmsted County; City of Rochester, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Oneida County: Rhinelander Sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Pekin, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Penns Grove, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Peoria County: Hollis twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Peoria, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Perth Amboy, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Philadelphia-Camden County, PA-NJ	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.01	-0.02
Philadelphia-Wilmington, PA-NJ-DE (NJ Portion)	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	-0.01	-0.02	-0.06
Philadelphia-Wilmington, PA-NJ-DE (PA-DE Portion)	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.02	-0.08
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	-0.02	-0.05	-0.17
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	0.00	-0.02	-0.05	-0.17
Phoenix, AZ	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	-0.02	-0.05	-0.17
Phoenix-Mesa, AZ	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.02	-0.05	-0.17
Phoenix-Mesa, AZ	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.02	-0.05	-0.17
Pierce County; Tacoma, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Pima County; Ajo planning area, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Pima County; Rillito planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Pinal County (part); West Pinal, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00
Pitkin County; Aspen, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Pittsburgh, PA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01
Pittsburgh-Beaver Valley, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	-0.01	-0.01	-0.05
Pittsburgh-Beaver Valley, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.05
Plumas County, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00
Polk County, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Portland, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.01	-0.03

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Power-Bannock Counties; Fort Hall Indian Reservation, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Power-Bannock Counties; Portneuf Valley Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Provo, UT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.00	0.00	0.00	0.00
Provo, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	-0.01
Prowers County; Lamar, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Raleigh-Durham, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.01	-0.05
Ramsey County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Reading, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	-0.01
Reno, NV	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	-0.01
Rhineland, WI	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Riverside County (Coachella Valley), CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	0.00	0.00	0.00	-0.01
Riverside County (Coachella Valley), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	0.00	-0.01
Riverside County; Coachella Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	-0.01
Riverside, Los Angeles, Orange, & San Bernardino Counties; South Coast Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.01	-0.03	-0.07	-0.25
Rosebud County; Lame Deer, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Routt County (part); Steamboat Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Rusk and Panola Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Sacramento County, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.02	-0.06
Sacramento Metro, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	-0.01	-0.03	-0.10
Sacramento Metro, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	-0.01	-0.03	-0.10
Sacramento, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.02	-0.07
Sacramento, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.03	-0.10
Salem, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01
Salt Lake City, UT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01
Salt Lake City, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	0.00	-0.01	-0.02	-0.07
Salt Lake County, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.05
Salt Lake County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	0.00	-0.01	-0.01	-0.05
San Antonio, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.01	-0.05
San Bernardino County, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01
San Diego County, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	-0.01	-0.01	-0.05
San Diego County, CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	0.00	-0.01	-0.01	-0.05

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
San Diego, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.01	-0.05
San Francisco Bay Area, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.02	-0.03	-0.12
San Francisco Bay Area, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.02	-0.03	-0.12
San Francisco Bay Area, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.02	-0.03	-0.12
San Francisco-Oakland-San Jose, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.03	-0.11
San Joaquin Valley Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	-0.01	-0.02	-0.07
San Joaquin Valley, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	0.00	-0.01	-0.02	-0.07
San Joaquin Valley, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	0.00	-0.01	-0.02	-0.07
San Joaquin Valley, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	0.00	-0.01	-0.02	-0.07
San Joaquin Valley, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	0.00	-0.01	-0.02	-0.07
San Luis Obispo (Eastern San Luis Obispo), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
San Luis Obispo (Eastern part), CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
San Manuel (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
San Miguel County; Telluride, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Sanders County (part); Thompson Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Santa Cruz County; Nogales planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Seaford, DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	-0.01
Seattle-Tacoma, WA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.00	-0.01	-0.02	-0.06
Sheboygan County, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Sheridan County; City of Sheridan, WY	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Shoreline Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Shoshone County; City of Pinehurst, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Shoshone County; Pinehurst Expansion Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Silver Bow County; Butte, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Somerville, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Southern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	-0.01
Southwest Indiana, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Spokane County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Spokane, WA	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	-0.01
Springfield, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01
St. Bernard Parish, LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
St. Clair, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
St. Lawrence County, NY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
St. Louis, MO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.02	-0.09
St. Louis, MO-IL	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.02	-0.05	-0.18
St. Louis-St. Charles-Farmington, MO-IL	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.01	-0.02	-0.05	-0.18
Steubenville, OH-WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Steubenville-Weirton, OH-WV	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	0.00	0.00	0.00
Stockton, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	-0.01
Sullivan County, TN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Sutter Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Syracuse, NY	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	-0.01
Tacoma, WA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Tazewell County: Groveland twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Terre Haute, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Thurston County; Cities of Olympia, Tumwater, and Lacey, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Titus County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Toms River, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Tooele County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Trenton, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Trona, CA	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Tucson, AZ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.02
Tuolumne County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Tuscan Buttes, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Tuscan Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	0.00
Uinta Basin, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Union County; LaGrande, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Upper Green River Basin Area, WY	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Utah County, UT	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Vancouver, WA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Ventura County, CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	-0.01
Ventura County, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	-0.01
Vermillion County; Part of Clinton Township, IN	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Vigo County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Walla Walla County; Wallula, WA	PM ₁₀ (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Waltham, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Warren County, NJ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Warren County: Conewago Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Warren County: Warren Boro, Pleasant Twp, Glade Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Warren, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Washington, DC-MD-VA	Ozone (2008 8-hour)	Nonattainment (DC) Maintenance (MD, VA), Marginal	50	0	0.00	-0.01	-0.03	-0.10
Washington, DC-MD-VA	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	0.00	-0.01	-0.03	-0.10
Washington, DC-MD-VA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	-0.01
Washoe County; Reno planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	-0.01
Wayne County, MI	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Wayne County: Boston, Center, Franklin, Wayne & Webster Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
West Central Pinal, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
West Silver Valley, ID	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Whatcom County, WA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Winston-Salem, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	-0.01
Worcester, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Yakima County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Yakima, WA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Yuba City-Marysville, CA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Yuma, AZ	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Yuma, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00

Notes:

^a Nonattainment or maintenance status as of 2/1/2024. Source: EPA, The Green Book Nonattainment Areas for Criteria Pollutants; <http://www.epa.gov/airquality/greenbook/>. "--" indicates that no severity classification has been established for the NAAQS pollutant.

^b Emissions thresholds in tons per year. Where the threshold differs by precursor pollutant, the smallest of the precursor thresholds is shown. These thresholds are provided for information only; a general conformity determination is not required for the Proposed Action. Source: 40 CFR 93.853.

^c Positive values are emissions increases; negative values are emissions decreases.

EPA = U.S. Environmental Protection Agency; NAAQS = National Ambient Air Quality Standard; CO = carbon monoxide; NO₂ = nitrogen dioxide; PM2.5 = particulate matter less than 2.5 microns in size; PM10 = particulate matter less than 10 microns in size; SO₂ = sulfur dioxide.

Table D-34. Changes in Emissions from U.S. Heavy-Duty Pickup Trucks and Vans by Nonattainment or Maintenance Area and Alternative, Direct and Indirect Impacts--Acetaldehyde, 2050

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Ada County; Boise, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.02	-0.05
Adams, Denver, and Boulder Counties; Denver Metropolitan area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.06	-0.08	-0.21
Ajo (Pima County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Albuquerque, NM	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.03	-0.04	-0.11
Allegan County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01
Allegheny County Air Basin: Hazelwood monitor, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01
Allegheny County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.00	-0.03	-0.04	-0.10
Allegheny County; Liberty, Lincoln, Port Vue, Glassport, Clairton, PA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Allegheny, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.01	-0.01
Allentown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	-0.02	-0.03	-0.06
Allentown-Bethlehem-Easton, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	-0.02	-0.03	-0.07
Alton Township, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Amador County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Anchorage, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	-0.01	-0.01	-0.02
Anchorage; Eagle River, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Anne Arundel County and Baltimore County, MD	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.10	-0.14	-0.36
Archuleta County; Pagosa Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Armstrong County: Madison, Mahoning, Boggs, Washington, Pine, PA	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	0.00	0.00
Aroostock County; City of Presque Isle, ME	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Atlanta, GA	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-0.02	-0.30	-0.44	-1.11
Atlanta, GA	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.02	-0.28	-0.41	-1.03
Atlantic City, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Bakersfield, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.02	-0.05
Baltimore, MD	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	-0.01	-0.18	-0.26	-0.66
Baltimore, MD	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.01	-0.18	-0.26	-0.66
Baltimore, MD	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Baton Rouge, LA	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	-0.04	-0.06	-0.15

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Beaver, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Benton County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Berrien County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.01	-0.02
Billings, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.01	-0.03
Billings, MT	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Birmingham, AL	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	-0.05	-0.07	-0.17
Boise-Northern Ada County, ID	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.02	-0.05
Bonner County; The Sandpoint Area, ID	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Boston, MA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.03	-0.04	-0.10
Boyd County (part), KY	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Brooke; Follansbee area, WV	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Brown County: Green Bay, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Burlington, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Butte County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	-0.01	-0.01
Calaveras County, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Calaveras County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Campbell-Clermont Counties, KY-OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Canton-Massillon, OH	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	-0.01	-0.01	-0.03
Central New Hampshire, NH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.01	-0.01	-0.02
Central Steptoe Valley, NV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Charleston, WV	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	-0.01	-0.02	-0.05
Charlotte, NC	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.06	-0.08	-0.20
Charlotte-Rock Hill, NC-SC	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.01	-0.08	-0.12	-0.30
Chicago, IL-IN-WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.02	-0.26	-0.38	-0.96
Chicago-Naperville, IL-IN-WI	Ozone (2008 8-hour)	Maintenance, Serious	100	0	-0.02	-0.26	-0.38	-0.97
Chico (Butte County), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	-0.01	-0.01
Chico, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	-0.01
Chico, CA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01	-0.01
Cincinnati, OH-KY (OH Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	-0.05	-0.08	-0.19
Cincinnati, OH-KY (KY Portion)	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.03

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Cincinnati, OH-KY-IN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	-0.07	-0.10	-0.24
Clark County; Las Vegas planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	-0.06	-0.08	-0.21
Cleveland, OH	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.07	-0.10	-0.25
Cleveland, OH	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.03	-0.04	-0.11
Cleveland, OH	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	-0.03	-0.05	-0.13
Cleveland-Akron-Lorain, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	-0.07	-0.10	-0.25
Cleveland-Akron-Lorain, OH	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	-0.06	-0.09	-0.23
Cochise County; Paul Spur/Douglas planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Colorado Springs, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.02	-0.04
Columbus, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	-0.06	-0.09	-0.23
Columbus, OH	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	-0.06	-0.09	-0.22
Cook County; Lyons Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Cook County; Southeast Chicago, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01	-0.01
Coshocton County; Franklin Township, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Coso Junction, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Cuyahoga County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.03	-0.04	-0.11
Cuyahoga County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.02	-0.03	-0.09
Dallas-Fort Worth, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.02	-0.28	-0.41	-1.03
Dallas-Fort Worth, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.02	-0.28	-0.41	-1.02
Dane County; Madison sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.02	-0.03	-0.07
Delaware County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	-0.01	-0.02	-0.04
Denver Metro/North Front Range, CO	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.13	-0.20	-0.50
Denver-Boulder, CO	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.01	-0.10	-0.15	-0.37
Denver-Boulder-Greeley-Ft. Collins-Loveland, CO	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.01	-0.13	-0.20	-0.50
Detroit, MI	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	-0.01	-0.20	-0.29	-0.73
Detroit, MI	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.07	-0.11	-0.27
Detroit, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	-0.01	-0.03
Detroit-Ann Arbor, MI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.01	-0.20	-0.29	-0.74
Doña Ana County; Anthony, NM	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Door County, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	0.00
Door County-Revised, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	0.00
Douglas (Cochise County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Dukes County, MA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	0.00
Duluth, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	-0.01
East Chicago, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
East Helena Area, MT	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
East Kern County, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00
El Paso County, TX	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.02	-0.05
El Paso, TX	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
El Paso-Las Cruces, TX-NM	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.02	-0.03	-0.06
Eugene-Springfield, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.01	-0.02
Evangeline Parish (Partial), LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Fairbanks, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	-0.01
Fairbanks, AK	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	-0.01	-0.01
Flathead County; Columbia Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Flathead County; Kalispell and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Flathead County; Whitefish and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Fort Collins, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.01	-0.02
Freehold, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Freestone and Anderson Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Fremont County; Canon City Area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Fresno, CA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.00	-0.01	-0.02	-0.05
Gila County (part): Payson, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Giles County, VA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Grant County, NM	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Grants Pass, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Great Falls, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Greater Connecticut, CT	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.00	-0.04	-0.06	-0.14
Greater Connecticut, CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	0.00	-0.04	-0.06	-0.14
Greeley, CO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.02	-0.03	-0.08
Hancock County (part): Weirton, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Hancock and Brooke Counties (Part); The city of Weirton, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Harrisburg-Lebanon-Carlisle-York, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	-0.03	-0.05	-0.12
Hartford-New Britain-Middletown, CT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.03	-0.04	-0.11
Hayden (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	0.00	0.00
Hayden, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Hayden, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Henderson-Webster Counties, KY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Hillsborough County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Hillsborough-Polk County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Houston-Galveston-Brazoria, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.01	-0.21	-0.31	-0.79
Houston-Galveston-Brazoria, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.21	-0.31	-0.77
Howard County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Humphreys County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Huntington, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Hutchinson County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	-0.01
Imperial County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01	-0.02
Imperial County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	-0.01	-0.02
Imperial County, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01	-0.01
Imperial County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01	-0.01
Imperial Valley, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	-0.01	-0.02
Indian Wells, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Indiana, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.01	-0.01
Indianapolis, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Indianapolis, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.03	-0.04	-0.09
Inland Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Inyo County; Owens Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00
Jackson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	-0.01
Jackson County; Medford-Ashland (including White City), OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01	-0.01
Jamestown, NY	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	-0.01
Jefferson County, KY	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Jefferson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Jefferson County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Jefferson County; (part) Steubenville & Mingo Junction, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Johnstown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01	-0.01
Josephine County; Grants Pass, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Juneau; Mendenhall Valley area, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Kern County (Eastern Kern), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	0.00	-0.01
Kern County (Eastern Kern), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	-0.01
King County; Kent, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
King County; Seattle, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Klamath Falls, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Klamath Falls, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Klamath Falls, OR	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01
Knoxville, TN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	-0.02	-0.03	-0.08
Knoxville-Sevierville-La Follette, TN	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	-0.02	-0.03	-0.09
La Porte County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01
LaSalle County; Oglesby, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Lake County (part); Lakeview, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Lake County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.02	-0.04
Lake County, OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.01	-0.02
Lake County; (part) Eastlake, Timberlake, Lakeline, Willoughby, Mentor, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Lake County; Cities of East Chicago, Hammond, Whiting, and Gary, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.03
Lake County; Polson, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Lake County; Ronan, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Lake Tahoe North Shore, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Lake Tahoe South Shore, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Lake Tahoe, NV	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Lancaster, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	-0.01	-0.02	-0.05
Lancaster, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.02	-0.05
Lane County (part); Oakridge, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Lane County; Eugene/Springfield, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.02
Las Vegas, NV	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.06	-0.08	-0.21
Las Vegas, NV	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	-0.06	-0.08	-0.21
Laurel Area (Yellowstone County), MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	0.00	0.00
Lebanon County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Lemont, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.01	-0.01
Liberty-Clairton, PA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Lincoln County; Libby and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Logan, UT-ID	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01	-0.02
Longmont, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.01	-0.01
Lorain County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	-0.01	-0.02	-0.05
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	0.00	-0.01	-0.02	-0.05
Los Angeles-South Coast Air Basin, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-0.02	-0.30	-0.44	-1.11
Los Angeles-South Coast Air Basin, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-0.02	-0.30	-0.44	-1.11
Los Angeles-South Coast Air Basin, CA	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.02	-0.30	-0.44	-1.11
Los Angeles-South Coast Air Basin, CA	NO ₂ (1971 Annual)	Maintenance, Primary	100	0	-0.02	-0.30	-0.44	-1.11
Los Angeles-South Coast Air Basin, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.02	-0.30	-0.44	-1.11
Los Angeles-South Coast Air Basin, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-0.02	-0.30	-0.44	-1.11
Louisville, KY-IN (IN Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	-0.01	-0.01	-0.02
Louisville, KY-IN (KY Portion)	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.03	-0.04	-0.09
Lowell, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Lucas County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.01	-0.03
Madison County; Granite City Township and Nameoki Township, IL	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Manchester, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01
Manitowoc County, WI	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	0.00	0.00
Marathon County: Rothschild Sub-city area, Rib Mountain, Weston, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	-0.01	-0.01
Maricopa and Pinal Counties; Phoenix planning area, AZ	PM ₁₀ (1987 24-hour)	Nonattainment, Serious	70	0	-0.01	-0.21	-0.30	-0.76
Marion County: Lawrence, Washington, and Warrant Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.02	-0.03	-0.08
Mariposa County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Mariposa County, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Marshall, WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Medford, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	-0.01
Memphis, TN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.03	-0.04	-0.10
Memphis, TN-MS-AR	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	-0.03	-0.05	-0.12
Miami (Gila County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Miami, AZ	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Miami, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Millinocket AQCR 109, ME	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.01	-0.02
Milwaukee, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.03	-0.05	-0.13
Milwaukee, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.02	-0.05
Milwaukee-Racine, WI	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	-0.03	-0.05	-0.12
Minneapolis-St. Paul, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.11	-0.16	-0.40
Minneapolis-St. Paul, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.11	-0.16	-0.39
Missoula, MT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.01	-0.02
Missoula, MT	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.02
Modesto, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.01	-0.02
Mohave County (part); Bullhead City, AZ	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Mono Basin, CA	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Mono County; Mammoth Lake planning area, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Morenci (Greenlee County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Morgan County, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Morongo Band of Mission Indians, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	0.00	0.00
Morongo Band of Mission Indians, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00
Morristown, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Muscatine County, IA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Muscatine, IA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Muskegon County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01
Muskingum River, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Nashua, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01
Nassau County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Navarro County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Nevada County (Western part), CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	-0.01
Nevada County (Western part), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	-0.01
New Haven County, CT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
New Haven-Meriden-Waterbury, CT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.02	-0.03	-0.07
New Madrid County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
New Manchester-Grant magisterial district in Hancock County, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
New York County, NY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.02	-0.02	-0.06
New York-N. New Jersey-Long Island, NY-NJ-CT	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.02	-0.36	-0.52	-1.32
New York-N. New Jersey-Long Island, NY-NJ-CT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.01	-0.20	-0.29	-0.74
New York-N. New Jersey-Long Island, NY-NJ-CT	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.03	-0.37	-0.54	-1.37
New York-Northern New Jersey-Long Island, NY-NJ-CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.02	-0.36	-0.52	-1.32
Nogales, AZ	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Northern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.09	-0.12	-0.32
Oakridge, OR	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Ogden, UT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.01	-0.02
Ogden, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01	-0.02

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Olmsted County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Olmsted County; City of Rochester, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01
Oneida County: Rhinelander Sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	-0.01
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Pekin, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	-0.01
Penns Grove, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Peoria County: Hollis twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Peoria, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.01	-0.01
Perth Amboy, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01
Philadelphia-Camden County, PA-NJ	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.02	-0.03	-0.08
Philadelphia-Wilmington, PA-NJ-DE (NJ Portion)	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	-0.07	-0.10	-0.26
Philadelphia-Wilmington, PA-NJ-DE (PA-DE Portion)	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.09	-0.13	-0.33
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.01	-0.20	-0.29	-0.74
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.01	-0.20	-0.29	-0.74
Phoenix, AZ	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.01	-0.20	-0.30	-0.75
Phoenix-Mesa, AZ	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.21	-0.30	-0.76
Phoenix-Mesa, AZ	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.21	-0.30	-0.76
Pierce County; Tacoma, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Pima County; Ajo planning area, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Pima County; Rillito planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Pinal County (part); West Pinal, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	-0.01	-0.01
Pitkin County; Aspen, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Pittsburgh, PA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.01	-0.03
Pittsburgh-Beaver Valley, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	-0.06	-0.09	-0.23
Pittsburgh-Beaver Valley, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	-0.06	-0.08	-0.20
Plumas County, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00
Polk County, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Portland, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.04	-0.06	-0.15

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Power-Bannock Counties; Fort Hall Indian Reservation, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Power-Bannock Counties; Portneuf Valley Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Provo, UT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.00	0.00	-0.01	-0.02
Provo, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	0.00	-0.02	-0.02	-0.06
Prowers County; Lamar, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Raleigh-Durham, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.06	-0.09	-0.23
Ramsey County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Reading, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	-0.01	-0.01	-0.03
Reno, NV	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.01	-0.03
Rhineland, WI	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Riverside County (Coachella Valley), CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	0.00	-0.01	-0.01	-0.03
Riverside County (Coachella Valley), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	0.00	-0.01	-0.01	-0.03
Riverside County; Coachella Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	-0.01	-0.01	-0.03
Riverside, Los Angeles, Orange, & San Bernardino Counties; South Coast Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.02	-0.30	-0.44	-1.11
Rosebud County; Lame Deer, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Routt County (part); Steamboat Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Rusk and Panola Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	-0.01
Sacramento County, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.06	-0.10	-0.24
Sacramento Metro, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.01	-0.12	-0.17	-0.44
Sacramento Metro, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.01	-0.12	-0.17	-0.44
Sacramento, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.08	-0.12	-0.30
Sacramento, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.12	-0.17	-0.43
Salem, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.01	-0.03
Salt Lake City, UT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.02	-0.05
Salt Lake City, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.01	-0.09	-0.13	-0.33
Salt Lake County, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.06	-0.09	-0.23
Salt Lake County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	0.00	-0.06	-0.09	-0.23
San Antonio, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.06	-0.09	-0.24

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
San Bernardino County, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.01	-0.03
San Diego County, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	-0.06	-0.09	-0.23
San Diego County, CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	0.00	-0.06	-0.09	-0.23
San Diego, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.06	-0.09	-0.23
San Francisco Bay Area, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.14	-0.20	-0.51
San Francisco Bay Area, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.14	-0.20	-0.51
San Francisco Bay Area, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.14	-0.20	-0.51
San Francisco-Oakland-San Jose, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.13	-0.19	-0.49
San Joaquin Valley Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.01	-0.09	-0.13	-0.32
San Joaquin Valley, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-0.01	-0.09	-0.13	-0.32
San Joaquin Valley, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-0.01	-0.09	-0.13	-0.32
San Joaquin Valley, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.01	-0.09	-0.13	-0.32
San Joaquin Valley, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-0.01	-0.09	-0.13	-0.32
San Luis Obispo (Eastern San Luis Obispo), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
San Luis Obispo (Eastern part), CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
San Manuel (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
San Miguel County; Telluride, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Sanders County (part); Thompson Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Santa Cruz County; Nogales planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Seaford, DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	-0.01	-0.01	-0.03
Seattle-Tacoma, WA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.00	-0.07	-0.10	-0.24
Sheboygan County, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01
Sheridan County; City of Sheridan, WY	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Shoreline Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Shoshone County; City of Pinehurst, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Shoshone County; Pinehurst Expansion Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Silver Bow County; Butte, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Somerville, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Southern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.02	-0.02	-0.06

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Southwest Indiana, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Spokane County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.02	-0.04
Spokane, WA	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	-0.01	-0.02	-0.04
Springfield, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.02	-0.04
St. Bernard Parish, LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	-0.01
St. Clair, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	-0.01
St. Lawrence County, NY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
St. Louis, MO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.10	-0.15	-0.38
St. Louis, MO-IL	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.21	-0.31	-0.78
St. Louis-St. Charles-Farmington, MO-IL	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.01	-0.21	-0.31	-0.79
Steubenville, OH-WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Steubenville-Weirton, OH-WV	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	0.00	0.00	-0.01
Stockton, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.01	-0.02
Sullivan County, TN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Sutter Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Syracuse, NY	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.02	-0.05
Tacoma, WA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.03
Tazewell County: Groveland twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Terre Haute, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	-0.01
Thurston County; Cities of Olympia, Tumwater, and Lacey, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01	-0.01
Titus County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Toms River, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Tooele County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Trenton, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.01	-0.01
Trona, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Tucson, AZ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.02	-0.03	-0.08
Tuolumne County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Tuscan Buttes, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Tuscan Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Uinta Basin, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	-0.01	-0.02
Union County; LaGrande, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Upper Green River Basin Area, WY	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	-0.01
Utah County, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.02	-0.02	-0.06
Vancouver, WA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.01	-0.02
Ventura County, CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.00	-0.01	-0.02	-0.04
Ventura County, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	-0.01	-0.02	-0.04
Vermillion County; Part of Clinton Township, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Vigo County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.01	-0.01
Walla Walla County; Wallula, WA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00
Waltham, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Warren County, NJ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Warren County: Conewago Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Warren County: Warren Boro, Pleasant Twp, Glade Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Warren, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Washington, DC-MD-VA	Ozone (2008 8-hour)	Nonattainment (DC) Maintenance (MD, VA), Marginal	50	0	-0.01	-0.12	-0.17	-0.43
Washington, DC-MD-VA	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.01	-0.12	-0.17	-0.43
Washington, DC-MD-VA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.02	-0.03	-0.06
Washoe County; Reno planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	-0.01	-0.01	-0.03
Wayne County, MI	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Wayne County: Boston, Center, Franklin, Wayne & Webster Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01
West Central Pinal, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
West Silver Valley, ID	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Whatcom County, WA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Winston-Salem, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.02	-0.04
Worcester, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.01	-0.02
Yakima County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Yakima, WA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Yuba City-Marysville, CA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Yuma, AZ	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	-0.01
Yuma, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.01	-0.02

Notes:

^a Nonattainment or maintenance status as of 2/1/2024. Source: EPA, The Green Book Nonattainment Areas for Criteria Pollutants; <http://www.epa.gov/airquality/greenbook/>. "--" indicates that no severity classification has been established for the NAAQS pollutant.

^b Emissions thresholds in tons per year. Where the threshold differs by precursor pollutant, the smallest of the precursor thresholds is shown. These thresholds are provided for information only; a general conformity determination is not required for the Proposed Action. Source: 40 CFR 93.853.

^c Positive values are emissions increases; negative values are emissions decreases.

EPA = U.S. Environmental Protection Agency; NAAQS = National Ambient Air Quality Standard; CO = carbon monoxide; NO₂ = nitrogen dioxide; PM2.5 = particulate matter less than 2.5 microns in size; PM10 = particulate matter less than 10 microns in size; SO₂ = sulfur dioxide.

Table D-35. Changes in Emissions from U.S. Heavy-Duty Pickup Trucks and Vans by Nonattainment or Maintenance Area and Alternative, Direct and Indirect Impacts--Acrolein, 2035

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Ada County; Boise, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Adams, Denver, and Boulder Counties; Denver Metropolitan area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Ajo (Pima County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Albuquerque, NM	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Allegan County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Allegheny County Air Basin: Hazelwood monitor, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Allegheny County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Allegheny County; Liberty, Lincoln, Port Vue, Glassport, Clairton, PA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Allegheny, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Allentown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Allentown-Bethlehem-Easton, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	0.00
Alton Township, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Amador County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Anchorage, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00
Anchorage; Eagle River, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Anne Arundel County and Baltimore County, MD	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	-0.01
Archuleta County; Pagosa Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Armstrong County: Madison, Mahoning, Boggs, Washington, Pine, PA	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	0.00	0.00
Aroostock County; City of Presque Isle, ME	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Atlanta, GA	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.02
Atlanta, GA	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	0.00	-0.01
Atlantic City, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Bakersfield, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Baltimore, MD	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	0.00	0.00	0.00	-0.01
Baltimore, MD	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	0.00	0.00	0.00	-0.01
Baltimore, MD	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Baton Rouge, LA	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Beaver, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Benton County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Berrien County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Billings, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Billings, MT	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Birmingham, AL	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	0.00	0.00	0.00
Boise-Northern Ada County, ID	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Bonner County; The Sandpoint Area, ID	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Boston, MA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Boyd County (part), KY	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Brooke; Follansbee area, WV	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Brown County: Green Bay, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Burlington, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Butte County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Calaveras County, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Calaveras County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Campbell-Clermont Counties, KY-OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Canton-Massillon, OH	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	0.00	0.00	0.00
Central New Hampshire, NH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Central Steptoe Valley, NV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Charleston, WV	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	0.00	0.00	0.00
Charlotte, NC	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Charlotte-Rock Hill, NC-SC	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	0.00	0.00
Chicago, IL-IN-WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01
Chicago-Naperville, IL-IN-WI	Ozone (2008 8-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	-0.01
Chico (Butte County), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Chico, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Chico, CA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Cincinnati, OH-KY (OH Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	0.00	0.00
Cincinnati, OH-KY (KY Portion)	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Cincinnati, OH-KY-IN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	0.00	0.00
Clark County; Las Vegas planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00
Cleveland, OH	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Cleveland, OH	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Cleveland, OH	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Cleveland-Akron-Lorain, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	0.00	0.00
Cleveland-Akron-Lorain, OH	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	0.00	0.00	0.00
Cochise County; Paul Spur/Douglas planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Colorado Springs, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Columbus, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	0.00	0.00
Columbus, OH	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	0.00	0.00
Cook County; Lyons Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Cook County; Southeast Chicago, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Coshocton County; Franklin Township, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Coso Junction, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Cuyahoga County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Cuyahoga County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Dallas-Fort Worth, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	0.00	-0.02
Dallas-Fort Worth, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.02
Dane County; Madison sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Delaware County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Denver Metro/North Front Range, CO	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01
Denver-Boulder, CO	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	-0.01
Denver-Boulder-Greeley-Ft. Collins-Loveland, CO	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	0.00	-0.01
Detroit, MI	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Detroit, MI	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Detroit, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Detroit-Ann Arbor, MI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	0.00	0.00	-0.01
Doña Ana County; Anthony, NM	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Door County, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	0.00
Door County-Revised, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	0.00
Douglas (Cochise County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Dukes County, MA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	0.00
Duluth, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
East Chicago, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
East Helena Area, MT	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
East Kern County, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00
El Paso County, TX	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
El Paso, TX	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
El Paso-Las Cruces, TX-NM	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Eugene-Springfield, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Evangeline Parish (Partial), LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Fairbanks, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00
Fairbanks, AK	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00
Flathead County; Columbia Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Flathead County; Kalispell and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Flathead County; Whitefish and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Fort Collins, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Freehold, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Freestone and Anderson Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Fremont County; Canon City Area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Fresno, CA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.00	0.00	0.00	0.00
Gila County (part): Payson, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Giles County, VA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Grant County, NM	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Grants Pass, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Great Falls, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Greater Connecticut, CT	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00
Greater Connecticut, CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	0.00	0.00	0.00	0.00
Greeley, CO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Hancock County (part): Weirton, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Hancock and Brooke Counties (Part); The city of Weirton, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Harrisburg-Lebanon-Cartisle-York, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Hartford-New Britain-Middletown, CT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Hayden (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	0.00	0.00
Hayden, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Hayden, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Henderson-Webster Counties, KY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Hillsborough County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Hillsborough-Polk County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Houston-Galveston-Brazoria, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	0.00	-0.01
Houston-Galveston-Brazoria, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01
Howard County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Humphreys County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Huntington, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Hutchinson County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Imperial County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Imperial County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Imperial County, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Imperial County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Imperial Valley, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00
Indian Wells, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Indiana, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Indianapolis, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Indianapolis, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Inland Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Inyo County; Owens Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00
Jackson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Jackson County; Medford-Ashland (including White City), OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Jamestown, NY	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	0.00
Jefferson County, KY	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Jefferson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Jefferson County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Jefferson County; (part) Steubenville & Mingo Junction, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Johnstown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Josephine County; Grants Pass, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Juneau; Mendenhall Valley area, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Kern County (Eastern Kern), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	0.00	0.00
Kern County (Eastern Kern), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00
King County; Kent, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
King County; Seattle, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Klamath Falls, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Klamath Falls, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Klamath Falls, OR	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Knoxville, TN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	0.00	0.00
Knoxville-Sevierville-La Follette, TN	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
La Porte County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
LaSalle County; Oglesby, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Lake County (part); Lakeview, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Lake County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Lake County, OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Lake County; (part) Eastlake, Timberlake, Lakeline, Willoughby, Mentor, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Lake County; Cities of East Chicago, Hammond, Whiting, and Gary, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Lake County; Polson, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Lake County; Ronan, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Lake Tahoe North Shore, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Lake Tahoe South Shore, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Lake Tahoe, NV	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Lancaster, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	0.00
Lancaster, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Lane County (part); Oakridge, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Lane County; Eugene/Springfield, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Las Vegas, NV	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Las Vegas, NV	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00
Laurel Area (Yellowstone County), MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	0.00	0.00
Lebanon County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Lemont, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Liberty-Clairton, PA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Lincoln County; Libby and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Logan, UT-ID	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Longmont, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Lorain County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	0.00	0.00
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	0.00	0.00
Los Angeles-South Coast Air Basin, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	0.00	0.00	0.00	-0.02
Los Angeles-South Coast Air Basin, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	0.00	0.00	0.00	-0.02
Los Angeles-South Coast Air Basin, CA	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	-0.02
Los Angeles-South Coast Air Basin, CA	NO ₂ (1971 Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.02
Los Angeles-South Coast Air Basin, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	-0.02
Los Angeles-South Coast Air Basin, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	0.00	0.00	0.00	-0.02
Louisville, KY-IN (IN Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	0.00	0.00
Louisville, KY-IN (KY Portion)	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Lowell, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Lucas County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Madison County; Granite City Township and Nameoki Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Manchester, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Manitowoc County, WI	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	0.00	0.00
Marathon County: Rothschild Sub-city area, Rib Mountain, Weston, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Maricopa and Pinal Counties; Phoenix planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	-0.01
Marion County: Lawrence, Washington, and Warrant Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Mariposa County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Mariposa County, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Marshall, WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Medford, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Memphis, TN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Memphis, TN-MS-AR	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	0.00	0.00
Miami (Gila County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Miami, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Miami, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Millinocket AQCR 109, ME	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Milwaukee, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Milwaukee, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Milwaukee-Racine, WI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	0.00	0.00	0.00
Minneapolis-St. Paul, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	-0.01
Minneapolis-St. Paul, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01
Missoula, MT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Missoula, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Modesto, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Mohave County (part); Bullhead City, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Mono Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Mono County; Mammoth Lake planning area, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Morenci (Greenlee County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Morgan County, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Morongo Band of Mission Indians, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	0.00	0.00
Morongo Band of Mission Indians, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00
Morristown, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Muscatine County, IA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Muscatine, IA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Muskegon County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Muskingum River, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Nashua, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Nassau County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Navarro County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Nevada County (Western part), CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00
Nevada County (Western part), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00
New Haven County, CT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
New Haven-Meriden-Waterbury, CT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
New Madrid County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
New Manchester-Grant magisterial district in Hancock County, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
New York County, NY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
New York-N. New Jersey-Long Island, NY-NJ-CT	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	0.00	-0.02
New York-N. New Jersey-Long Island, NY-NJ-CT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.00	0.00	0.00	-0.01
New York-N. New Jersey-Long Island, NY-NJ-CT	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	0.00	-0.01	-0.02
New York-Northern New Jersey-Long Island, NY-NJ-CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	0.00	0.00	0.00	-0.02
Nogales, AZ	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Northern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Oakridge, OR	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Ogden, UT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Ogden, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Olmsted County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Olmsted County; City of Rochester, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Oneida County: Rhinelander Sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Pekin, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Penns Grove, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Peoria County: Hollis twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Peoria, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Perth Amboy, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Philadelphia-Camden County, PA-NJ	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Philadelphia-Wilmington, PA-NJ-DE (NJ Portion)	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	0.00	0.00	0.00
Philadelphia-Wilmington, PA-NJ-DE (PA-DE Portion)	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	-0.01
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	0.00	0.00	0.00	-0.01
Phoenix, AZ	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	-0.01
Phoenix-Mesa, AZ	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01
Phoenix-Mesa, AZ	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01
Pierce County; Tacoma, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Pima County; Ajo planning area, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Pima County; Rillito planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Pinal County (part); West Pinal, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00
Pitkin County; Aspen, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Pittsburgh, PA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Pittsburgh-Beaver Valley, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	0.00
Pittsburgh-Beaver Valley, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Plumas County, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00
Polk County, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Portland, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Power-Bannock Counties; Fort Hall Indian Reservation, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Power-Bannock Counties; Portneuf Valley Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Provo, UT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.00	0.00	0.00	0.00
Provo, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00
Prowers County; Lamar, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Raleigh-Durham, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Ramsey County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Reading, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	0.00
Reno, NV	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Rhineland, WI	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Riverside County (Coachella Valley), CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	0.00	0.00	0.00	0.00
Riverside County (Coachella Valley), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	0.00	0.00
Riverside County; Coachella Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00
Riverside, Los Angeles, Orange, & San Bernardino Counties; South Coast Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	-0.02
Rosebud County; Lame Deer, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Routt County (part); Steamboat Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Rusk and Panola Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Sacramento County, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Sacramento Metro, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	0.00	-0.01
Sacramento Metro, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	-0.01
Sacramento, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Sacramento, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01
Salem, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Salt Lake City, UT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Salt Lake City, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00
Salt Lake County, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Salt Lake County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
San Antonio, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
San Bernardino County, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
San Diego County, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	0.00	0.00
San Diego County, CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	0.00	0.00
San Diego, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
San Francisco Bay Area, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	-0.01
San Francisco Bay Area, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	-0.01
San Francisco Bay Area, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01
San Francisco-Oakland-San Jose, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	-0.01
San Joaquin Valley Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00
San Joaquin Valley, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	0.00	0.00	0.00	0.00
San Joaquin Valley, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	0.00	0.00	0.00	0.00
San Joaquin Valley, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00
San Joaquin Valley, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00
San Luis Obispo (Eastern San Luis Obispo), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
San Luis Obispo (Eastern part), CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
San Manuel (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
San Miguel County; Telluride, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Sanders County (part); Thompson Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Santa Cruz County; Nogales planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Seaford, DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	0.00
Seattle-Tacoma, WA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.00	0.00	0.00	0.00
Sheboygan County, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Sheridan County; City of Sheridan, WY	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Shoreline Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Shoshone County; City of Pinehurst, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Shoshone County; Pinehurst Expansion Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Silver Bow County; Butte, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Somerville, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Southern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Southwest Indiana, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Spokane County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Spokane, WA	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00
Springfield, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
St. Bernard Parish, LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
St. Clair, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
St. Lawrence County, NY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
St. Louis, MO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01
St. Louis, MO-IL	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01
St. Louis-St. Charles-Farmington, MO-IL	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	0.00	-0.01
Steubenville, OH-WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Steubenville-Weirton, OH-WV	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	0.00	0.00	0.00
Stockton, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Sullivan County, TN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Sutter Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Syracuse, NY	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Tacoma, WA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Tazewell County: Groveland twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Terre Haute, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Thurston County; Cities of Olympia, Tumwater, and Lacey, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Titus County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Toms River, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Tooele County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Trenton, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Trona, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Tucson, AZ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Tuolumne County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Tuscan Buttes, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Tuscan Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Uinta Basin, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Union County; LaGrande, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Upper Green River Basin Area, WY	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Utah County, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Vancouver, WA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Ventura County, CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00
Ventura County, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00
Vermillion County; Part of Clinton Township, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Vigo County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Walla Walla County; Wallula, WA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00
Waltham, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Warren County, NJ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Warren County: Conewago Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Warren County: Warren Boro, Pleasant Twp, Glade Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Warren, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Washington, DC-MD-VA	Ozone (2008 8-hour)	Nonattainment (DC) Maintenance (MD, VA), Marginal	50	0	0.00	0.00	0.00	-0.01
Washington, DC-MD-VA	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	0.00	0.00	0.00	-0.01
Washington, DC-MD-VA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Washoe County; Reno planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00
Wayne County, MI	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Wayne County: Boston, Center, Franklin, Wayne & Webster Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
West Central Pinal, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
West Silver Valley, ID	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Whatcom County, WA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Winston-Salem, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Worcester, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Yakima County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Yakima, WA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Yuba City-Marysville, CA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Yuma, AZ	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Yuma, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00

Notes:

^a Nonattainment or maintenance status as of 2/1/2024. Source: EPA, The Green Book Nonattainment Areas for Criteria Pollutants; <http://www.epa.gov/airquality/greenbook/>. "--" indicates that no severity classification has been established for the NAAQS pollutant.

^b Emissions thresholds in tons per year. Where the threshold differs by precursor pollutant, the smallest of the precursor thresholds is shown. These thresholds are provided for information only; a general conformity determination is not required for the Proposed Action. Source: 40 CFR 93.853.

^c Positive values are emissions increases; negative values are emissions decreases.

EPA = U.S. Environmental Protection Agency; NAAQS = National Ambient Air Quality Standard; CO = carbon monoxide; NO₂ = nitrogen dioxide; PM2.5 = particulate matter less than 2.5 microns in size; PM10 = particulate matter less than 10 microns in size; SO₂ = sulfur dioxide.

Appendix D Air Quality Nonattainment Area Results

Table D-36. Changes in Emissions from U.S. Heavy-Duty Pickup Trucks and Vans by Nonattainment or Maintenance Area and Alternative, Direct and Indirect Impacts--Acrolein, 2050

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Ada County; Boise, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Adams, Denver, and Boulder Counties; Denver Metropolitan area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01	-0.01
Ajo (Pima County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Albuquerque, NM	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	-0.01
Allegan County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Allegheny County Air Basin: Hazelwood monitor, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Allegheny County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01
Allegheny County; Liberty, Lincoln, Port Vue, Glassport, Clairton, PA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Allegheny, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Allentown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Allentown-Bethlehem-Easton, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	0.00
Alton Township, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Amador County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Anchorage, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00
Anchorage; Eagle River, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Anne Arundel County and Baltimore County, MD	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	-0.01	-0.02
Archuleta County; Pagosa Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Armstrong County; Madison, Mahoning, Boggs, Washington, Pine, PA	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	0.00	0.00
Aroostock County; City of Presque Isle, ME	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Atlanta, GA	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	0.00	-0.02	-0.03	-0.08
Atlanta, GA	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	-0.02	-0.03	-0.07
Atlantic City, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Bakersfield, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Baltimore, MD	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	0.00	-0.01	-0.02	-0.04
Baltimore, MD	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	0.00	-0.01	-0.02	-0.04
Baltimore, MD	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Baton Rouge, LA	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	0.00	-0.01
Beaver, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Benton County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Berrien County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Billings, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Billings, MT	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Birmingham, AL	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	0.00	0.00	-0.01
Boise-Northern Ada County, ID	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Bonner County; The Sandpoint Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Boston, MA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	-0.01
Boyd County (part), KY	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Brooke; Follansbee area, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Brown County: Green Bay, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Burlington, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Butte County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Calaveras County, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Calaveras County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Campbell-Clermont Counties, KY-OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Canton-Massillon, OH	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	0.00	0.00	0.00
Central New Hampshire, NH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Central Steptoe Valley, NV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Charleston, WV	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	0.00	0.00	0.00
Charlotte, NC	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.01	-0.01
Charlotte-Rock Hill, NC-SC	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	-0.01	-0.01	-0.02
Chicago, IL-IN-WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.02	-0.03	-0.07
Chicago-Naperville, IL-IN-WI	Ozone (2008 8-hour)	Maintenance, Serious	100	0	0.00	-0.02	-0.03	-0.07
Chico (Butte County), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Chico, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Chico, CA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Cincinnati, OH-KY (OH Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	-0.01	-0.01
Cincinnati, OH-KY (KY Portion)	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Cincinnati, OH-KY-IN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	-0.01	-0.02
Clark County; Las Vegas planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	-0.01	-0.01
Cleveland, OH	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01	-0.02
Cleveland, OH	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	-0.01
Cleveland, OH	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Cleveland-Akron-Lorain, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	-0.01	-0.02
Cleveland-Akron-Lorain, OH	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	0.00	-0.01	-0.02
Cochise County; Paul Spur/Douglas planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Colorado Springs, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Columbus, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	-0.01	-0.02
Columbus, OH	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	-0.01	-0.01
Cook County; Lyons Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Cook County; Southeast Chicago, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Coshocton County; Franklin Township, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Coso Junction, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Cuyahoga County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Cuyahoga County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01
Dallas-Fort Worth, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	-0.02	-0.03	-0.07
Dallas-Fort Worth, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.02	-0.03	-0.07
Dane County; Madison sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Delaware County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Denver Metro/North Front Range, CO	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.01	-0.03
Denver-Boulder, CO	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	-0.01	-0.01	-0.02
Denver-Boulder-Greeley-Ft. Collins-Loveland, CO	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	-0.01	-0.01	-0.03
Detroit, MI	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.02	-0.05
Detroit, MI	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.01	-0.02
Detroit, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Detroit-Ann Arbor, MI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	-0.01	-0.02	-0.05
Doña Ana County; Anthony, NM	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Door County, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	0.00
Door County-Revised, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	0.00
Douglas (Cochise County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Dukes County, MA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	0.00
Duluth, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
East Chicago, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
East Helena Area, MT	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
East Kern County, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00
El Paso County, TX	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
El Paso, TX	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
El Paso-Las Cruces, TX-NM	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Eugene-Springfield, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Evangeline Parish (Partial), LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Fairbanks, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00
Fairbanks, AK	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00
Flathead County; Columbia Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Flathead County; Kalispell and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Flathead County; Whitefish and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Fort Collins, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Freehold, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Freestone and Anderson Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Fremont County; Canon City Area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Fresno, CA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.00	0.00	0.00	0.00
Gila County (part): Payson, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Giles County, VA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Grant County, NM	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Grants Pass, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Great Falls, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Greater Connecticut, CT	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	-0.01
Greater Connecticut, CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	0.00	0.00	0.00	-0.01
Greeley, CO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Hancock County (part): Weirton, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Hancock and Brooke Counties (Part); The city of Weirton, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Harrisburg-Lebanon-Carlisle-York, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Hartford-New Britain-Middletown, CT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	-0.01
Hayden (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	0.00	0.00
Hayden, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Hayden, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Henderson-Webster Counties, KY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Hillsborough County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Hillsborough-Polk County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Houston-Galveston-Brazoria, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	-0.01	-0.02	-0.05
Houston-Galveston-Brazoria, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.02	-0.05
Howard County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Humphreys County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Huntington, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Hutchinson County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Imperial County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Imperial County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Imperial County, CA	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Imperial County, CA	PM _{2.5} (2012 Annual)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Imperial Valley, CA	PM ₁₀ (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00
Indian Wells, CA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Indiana, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Indianapolis, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Indianapolis, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	-0.01
Inland Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Inyo County; Owens Valley planning area, CA	PM ₁₀ (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00
Jackson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Jackson County; Medford-Ashland (including White City), OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Jamestown, NY	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	0.00
Jefferson County, KY	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Jefferson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Jefferson County, OH	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Jefferson County; (part) Steubenville & Mingo Junction, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Johnstown, PA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Josephine County; Grants Pass, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Juneau; Mendenhall Valley area, AK	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Kern County (Eastern Kern), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	0.00	0.00
Kern County (Eastern Kern), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00
King County; Kent, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
King County; Seattle, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Klamath Falls, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Klamath Falls, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Klamath Falls, OR	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Knoxville, TN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	0.00	-0.01
Knoxville-Sevierville-La Follette, TN	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
La Porte County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
LaSalle County; Oglesby, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Lake County (part); Lakeview, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Lake County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Lake County, OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Lake County; (part) Eastlake, Timberlake, Lakeline, Willoughby, Mentor, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Lake County; Cities of East Chicago, Hammond, Whiting, and Gary, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Lake County; Polson, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Lake County; Ronan, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Lake Tahoe North Shore, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Lake Tahoe South Shore, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Lake Tahoe, NV	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Lancaster, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	0.00
Lancaster, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Lane County (part); Oakridge, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Lane County; Eugene/Springfield, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Las Vegas, NV	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01	-0.01
Las Vegas, NV	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.00	-0.01	-0.01
Laurel Area (Yellowstone County), MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	0.00	0.00
Lebanon County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Lemont, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Liberty-Clairton, PA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Lincoln County; Libby and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Logan, UT-ID	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Longmont, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Lorain County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	0.00	0.00
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Los Angeles-South Coast Air Basin, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	0.00	-0.02	-0.03	-0.08
Los Angeles-South Coast Air Basin, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	0.00	-0.02	-0.03	-0.08
Los Angeles-South Coast Air Basin, CA	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	-0.02	-0.03	-0.08
Los Angeles-South Coast Air Basin, CA	NO ₂ (1971 Annual)	Maintenance, Primary	100	0	0.00	-0.02	-0.03	-0.08
Los Angeles-South Coast Air Basin, CA	PM _{2.5} (2006 24-hour)	Nonattainment, Serious	70	0	0.00	-0.02	-0.03	-0.08
Los Angeles-South Coast Air Basin, CA	PM _{2.5} (2012 Annual)	Nonattainment, Serious	70	0	0.00	-0.02	-0.03	-0.08
Louisville, KY-IN (IN Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	0.00	0.00
Louisville, KY-IN (KY Portion)	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01
Lowell, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Lucas County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Madison County; Granite City Township and Nameoki Township, IL	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Manchester, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Manitowoc County, WI	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	0.00	0.00
Marathon County: Rothschild Sub-city area, Rib Mountain, Weston, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Maricopa and Pinal Counties; Phoenix planning area, AZ	PM ₁₀ (1987 24-hour)	Nonattainment, Serious	70	0	0.00	-0.01	-0.02	-0.05
Marion County: Lawrence, Washington, and Warrant Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01
Mariposa County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Mariposa County, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Marshall, WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Medford, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Memphis, TN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	-0.01
Memphis, TN-MS-AR	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	0.00	-0.01
Miami (Gila County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Miami, AZ	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Miami, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Millinocket AQCR 109, ME	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Milwaukee, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01
Milwaukee, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Milwaukee-Racine, WI	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	0.00	0.00	-0.01
Minneapolis-St. Paul, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.01	-0.03

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Minneapolis-St. Paul, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.01	-0.03
Missoula, MT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Missoula, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Modesto, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Mohave County (part); Bullhead City, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Mono Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Mono County; Mammoth Lake planning area, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Morenci (Greenlee County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Morgan County, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Morongo Band of Mission Indians, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	0.00	0.00
Morongo Band of Mission Indians, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00
Morristown, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Muscatine County, IA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Muscatine, IA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Muskegon County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Muskingum River, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Nashua, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Nassau County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Navarro County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Nevada County (Western part), CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00
Nevada County (Western part), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00
New Haven County, CT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
New Haven-Meriden-Waterbury, CT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
New Madrid County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
New Manchester-Grant magisterial district in Hancock County, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
New York County, NY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
New York-N. New Jersey-Long Island, NY-NJ-CT	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	-0.02	-0.04	-0.09
New York-N. New Jersey-Long Island, NY-NJ-CT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.00	-0.01	-0.02	-0.05
New York-N. New Jersey-Long Island, NY-NJ-CT	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	-0.02	-0.04	-0.09
New York-Northern New Jersey-Long Island, NY-NJ-CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	0.00	-0.02	-0.04	-0.09
Nogales, AZ	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Northern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.01	-0.02
Oakridge, OR	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Ogden, UT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Ogden, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Olmsted County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Olmsted County; City of Rochester, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Oneida County: Rhinelander Sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Pekin, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Penns Grove, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Peoria County: Hollis twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Peoria, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Perth Amboy, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Philadelphia-Camden County, PA-NJ	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	-0.01
Philadelphia-Wilmington, PA-NJ-DE (NJ Portion)	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	0.00	-0.01	-0.02
Philadelphia-Wilmington, PA-NJ-DE (PA-DE Portion)	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.02
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	-0.01	-0.02	-0.05
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	0.00	-0.01	-0.02	-0.05
Phoenix, AZ	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	-0.01	-0.02	-0.05
Phoenix-Mesa, AZ	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.02	-0.05
Phoenix-Mesa, AZ	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.02	-0.05
Pierce County; Tacoma, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Pima County; Ajo planning area, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Pima County; Rillito planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Pinal County (part); West Pinal, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00
Pitkin County; Aspen, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Pittsburgh, PA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Pittsburgh-Beaver Valley, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	-0.01	-0.02
Pittsburgh-Beaver Valley, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01	-0.01
Plumas County, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00
Polk County, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Portland, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	-0.01

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Power-Bannock Counties; Fort Hall Indian Reservation, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Power-Bannock Counties; Portneuf Valley Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Provo, UT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.00	0.00	0.00	0.00
Provo, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00
Prowers County; Lamar, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Raleigh-Durham, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.01	-0.02
Ramsey County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Reading, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	0.00
Reno, NV	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Rhineland, WI	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Riverside County (Coachella Valley), CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	0.00	0.00	0.00	0.00
Riverside County (Coachella Valley), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	0.00	0.00
Riverside County; Coachella Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00
Riverside, Los Angeles, Orange, & San Bernardino Counties; South Coast Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	-0.02	-0.03	-0.08
Rosebud County; Lame Deer, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Routt County (part); Steamboat Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Rusk and Panola Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Sacramento County, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01	-0.02
Sacramento Metro, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	-0.01	-0.01	-0.03
Sacramento Metro, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	-0.01	-0.01	-0.03
Sacramento, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.01	-0.02
Sacramento, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.01	-0.03
Salem, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Salt Lake City, UT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Salt Lake City, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	0.00	-0.01	-0.01	-0.02
Salt Lake County, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01	-0.02
Salt Lake County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	0.00	0.00	-0.01	-0.02
San Antonio, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01	-0.02
San Bernardino County, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
San Diego County, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	-0.01	-0.02
San Diego County, CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	-0.01	-0.02

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
San Diego, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.01	-0.02
San Francisco Bay Area, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.01	-0.01	-0.03
San Francisco Bay Area, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.01	-0.01	-0.03
San Francisco Bay Area, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.01	-0.03
San Francisco-Oakland-San Jose, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.01	-0.03
San Joaquin Valley Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	-0.01	-0.01	-0.02
San Joaquin Valley, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	0.00	-0.01	-0.01	-0.02
San Joaquin Valley, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	0.00	-0.01	-0.01	-0.02
San Joaquin Valley, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	0.00	-0.01	-0.01	-0.02
San Joaquin Valley, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	0.00	-0.01	-0.01	-0.02
San Luis Obispo (Eastern San Luis Obispo), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
San Luis Obispo (Eastern part), CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
San Manuel (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
San Miguel County; Telluride, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Sanders County (part); Thompson Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Santa Cruz County; Nogales planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Seaford, DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	0.00
Seattle-Tacoma, WA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.00	0.00	-0.01	-0.02
Sheboygan County, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Sheridan County; City of Sheridan, WY	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Shoreline Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Shoshone County; City of Pinehurst, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Shoshone County; Pinehurst Expansion Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Silver Bow County; Butte, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Somerville, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Southern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Southwest Indiana, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Spokane County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Spokane, WA	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00
Springfield, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
St. Bernard Parish, LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
St. Clair, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
St. Lawrence County, NY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
St. Louis, MO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.01	-0.03
St. Louis, MO-IL	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.02	-0.05
St. Louis-St. Charles-Farmington, MO-IL	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	-0.01	-0.02	-0.05
Steubenville, OH-WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Steubenville-Weirton, OH-WV	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	0.00	0.00	0.00
Stockton, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Sullivan County, TN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Sutter Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Syracuse, NY	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Tacoma, WA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Tazewell County: Groveland twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Terre Haute, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Thurston County; Cities of Olympia, Tumwater, and Lacey, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Titus County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Toms River, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Tooele County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Trenton, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Trona, CA	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Tucson, AZ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01
Tuolumne County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Tuscan Buttes, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Tuscan Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	0.00
Uinta Basin, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Union County; LaGrande, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Upper Green River Basin Area, WY	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Utah County, UT	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Vancouver, WA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Ventura County, CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00
Ventura County, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00
Vermillion County; Part of Clinton Township, IN	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Vigo County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Walla Walla County; Wallula, WA	PM ₁₀ (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Waltham, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Warren County, NJ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Warren County: Conewago Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Warren County: Warren Boro, Pleasant Twp, Glade Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Warren, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Washington, DC-MD-VA	Ozone (2008 8-hour)	Nonattainment (DC) Maintenance (MD, VA), Marginal	50	0	0.00	-0.01	-0.01	-0.03
Washington, DC-MD-VA	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	0.00	-0.01	-0.01	-0.03
Washington, DC-MD-VA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Washoe County; Reno planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00
Wayne County, MI	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Wayne County: Boston, Center, Franklin, Wayne & Webster Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
West Central Pinal, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
West Silver Valley, ID	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Whatcom County, WA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Winston-Salem, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Worcester, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Yakima County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Yakima, WA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Yuba City-Marysville, CA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Yuma, AZ	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Yuma, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00

Notes:

^a Nonattainment or maintenance status as of 2/1/2024. Source: EPA, The Green Book Nonattainment Areas for Criteria Pollutants; <http://www.epa.gov/airquality/greenbook/>. "--" indicates that no severity classification has been established for the NAAQS pollutant.

^b Emissions thresholds in tons per year. Where the threshold differs by precursor pollutant, the smallest of the precursor thresholds is shown. These thresholds are provided for information only; a general conformity determination is not required for the Proposed Action. Source: 40 CFR 93.853.

^c Positive values are emissions increases; negative values are emissions decreases.

EPA = U.S. Environmental Protection Agency; NAAQS = National Ambient Air Quality Standard; CO = carbon monoxide; NO₂ = nitrogen dioxide; PM2.5 = particulate matter less than 2.5 microns in size; PM10 = particulate matter less than 10 microns in size; SO₂ = sulfur dioxide.

Table D-37. Changes in Emissions from U.S. Heavy-Duty Pickup Trucks and Vans by Nonattainment or Maintenance Area and Alternative, Direct and Indirect Impacts--Benzene, 2035

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Ada County; Boise, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.02	-0.05	-0.15
Adams, Denver, and Boulder Counties; Denver Metropolitan area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.04	-0.08	-0.28
Ajo (Pima County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Albuquerque, NM	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.03	-0.10
Allegan County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01
Allegheny County Air Basin: Hazelwood monitor, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01
Allegheny County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.00	-0.02	-0.04	-0.15
Allegheny County; Liberty, Lincoln, Port Vue, Glassport, Clairton, PA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Allegheny, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	-0.02	-0.07
Allentown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.02	-0.06
Allentown-Bethlehem-Easton, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	-0.01	-0.02	-0.07
Alton Township, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	-0.01
Amador County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Anchorage, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.00	-0.01	-0.03
Anchorage; Eagle River, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Anne Arundel County and Baltimore County, MD	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.04	-0.08	-0.28
Archuleta County; Pagosa Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Armstrong County; Madison, Mahoning, Boggs, Washington, Pine, PA	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	0.00	-0.01
Aroostock County; City of Presque Isle, ME	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Atlanta, GA	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-0.02	-0.13	-0.25	-0.91
Atlanta, GA	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.02	-0.12	-0.23	-0.83
Atlantic City, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Bakersfield, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.01	-0.04
Baltimore, MD	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	-0.01	-0.07	-0.14	-0.51
Baltimore, MD	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.01	-0.07	-0.14	-0.51
Baltimore, MD	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Baton Rouge, LA	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	-0.02	-0.05	-0.16

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Beaver, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Benton County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Berrien County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01	-0.02
Billings, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.01	-0.03
Billings, MT	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	-0.01
Birmingham, AL	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	-0.02	-0.05	-0.17
Boise-Northern Ada County, ID	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.02	-0.05	-0.15
Bonner County; The Sandpoint Area, ID	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Boston, MA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.02	-0.08
Boyd County (part), KY	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01
Brooke; Follansbee area, WV	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Brown County: Green Bay, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Burlington, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Butte County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	-0.01
Calaveras County, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Calaveras County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Campbell-Clermont Counties, KY-OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Canton-Massillon, OH	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	0.00	-0.01	-0.03
Central New Hampshire, NH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	-0.02
Central Steptoe Valley, NV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Charleston, WV	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	-0.01	-0.01	-0.05
Charlotte, NC	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.02	-0.05	-0.17
Charlotte-Rock Hill, NC-SC	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.01	-0.04	-0.07	-0.25
Chicago, IL-IN-WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.02	-0.11	-0.22	-0.78
Chicago-Naperville, IL-IN-WI	Ozone (2008 8-hour)	Maintenance, Serious	100	0	-0.02	-0.12	-0.23	-0.83
Chico (Butte County), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	-0.01
Chico, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Chico, CA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Cincinnati, OH-KY (OH Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	-0.02	-0.04	-0.15
Cincinnati, OH-KY (KY Portion)	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.04

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Cincinnati, OH-KY-IN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.01	-0.03	-0.06	-0.21
Clark County; Las Vegas planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	-0.02	-0.05	-0.17
Cleveland, OH	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.03	-0.07	-0.24
Cleveland, OH	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.02	-0.03	-0.11
Cleveland, OH	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	-0.02	-0.04	-0.13
Cleveland-Akron-Lorain, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.01	-0.04	-0.07	-0.25
Cleveland-Akron-Lorain, OH	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.01	-0.03	-0.06	-0.22
Cochise County; Paul Spur/Douglas planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Colorado Springs, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.02	-0.08
Columbus, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.01	-0.03	-0.06	-0.20
Columbus, OH	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	-0.03	-0.05	-0.19
Cook County; Lyons Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Cook County; Southeast Chicago, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01	-0.02
Coshocton County; Franklin Township, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Coso Junction, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Cuyahoga County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.02	-0.03	-0.11
Cuyahoga County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.03	-0.09
Dallas-Fort Worth, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.02	-0.12	-0.24	-0.85
Dallas-Fort Worth, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.02	-0.12	-0.24	-0.84
Dane County; Madison sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.02	-0.06
Delaware County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	-0.01	-0.02	-0.06
Denver Metro/North Front Range, CO	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.02	-0.10	-0.20	-0.69
Denver-Boulder, CO	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.01	-0.08	-0.16	-0.53
Denver-Boulder-Greeley-Ft. Collins-Loveland, CO	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.02	-0.10	-0.20	-0.69
Detroit, MI	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	-0.02	-0.09	-0.17	-0.62
Detroit, MI	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.03	-0.06	-0.23
Detroit, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.01	-0.02
Detroit-Ann Arbor, MI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.02	-0.09	-0.17	-0.62
Doña Ana County; Anthony, NM	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Door County, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	0.00
Door County-Revised, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	0.00
Douglas (Cochise County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Dukes County, MA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	0.00
Duluth, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	-0.01
East Chicago, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01
East Helena Area, MT	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
East Kern County, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00
El Paso County, TX	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.01	-0.05
El Paso, TX	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	-0.01
El Paso-Las Cruces, TX-NM	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.01	-0.01	-0.05
Eugene-Springfield, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.02
Evangeline Parish (Partial), LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Fairbanks, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	-0.01
Fairbanks, AK	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	-0.01
Flathead County; Columbia Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Flathead County; Kalispell and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Flathead County; Whitefish and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Fort Collins, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.01	-0.02
Freehold, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Freestone and Anderson Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	-0.01
Fremont County; Canon City Area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Fresno, CA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.00	-0.01	-0.01	-0.04
Gila County (part): Payson, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Giles County, VA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Grant County, NM	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Grants Pass, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Great Falls, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Greater Connecticut, CT	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.00	-0.02	-0.03	-0.12
Greater Connecticut, CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	0.00	-0.02	-0.03	-0.12
Greeley, CO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.03	-0.09
Hancock County (part): Weirton, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Hancock and Brooke Counties (Part); The city of Weirton, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Harrisburg-Lebanon-Cartisle-York, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.03	-0.10
Hartford-New Britain-Middletown, CT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.03	-0.09
Hayden (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	0.00	0.00
Hayden, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Hayden, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Henderson-Webster Counties, KY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Hillsborough County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Hillsborough-Polk County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Houston-Galveston-Brazoria, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.02	-0.12	-0.25	-0.85
Houston-Galveston-Brazoria, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.02	-0.12	-0.24	-0.83
Howard County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.01	-0.02
Humphreys County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Huntington, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Hutchinson County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	-0.01
Imperial County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.02
Imperial County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	-0.02
Imperial County, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01
Imperial County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01
Imperial Valley, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	-0.01
Indian Wells, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Indiana, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.01	-0.03
Indianapolis, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Indianapolis, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.01	-0.02	-0.08
Inland Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Inyo County; Owens Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00
Jackson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	-0.01
Jackson County; Medford-Ashland (including White City), OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Jamestown, NY	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	-0.02
Jefferson County, KY	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Jefferson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Jefferson County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Jefferson County; (part) Steubenville & Mingo Junction, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01
Johnstown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01	-0.02
Josephine County; Grants Pass, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Juneau; Mendenhall Valley area, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Kern County (Eastern Kern), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	0.00	-0.01
Kern County (Eastern Kern), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	-0.01
King County; Kent, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
King County; Seattle, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Klamath Falls, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Klamath Falls, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Klamath Falls, OR	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Knoxville, TN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	-0.01	-0.02	-0.07
Knoxville-Sevierville-La Follette, TN	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.02	-0.08
La Porte County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
LaSalle County; Oglesby, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Lake County (part); Lakeview, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Lake County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.01	-0.04
Lake County, OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	-0.02
Lake County; (part) Eastlake, Timberlake, Lakeline, Willoughby, Mentor, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Lake County; Cities of East Chicago, Hammond, Whiting, and Gary, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01	-0.03
Lake County; Polson, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Lake County; Ronan, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Lake Tahoe North Shore, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Lake Tahoe South Shore, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Lake Tahoe, NV	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Lancaster, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	-0.01	-0.01	-0.05
Lancaster, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.05
Lane County (part); Oakridge, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Lane County; Eugene/Springfield, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.02
Las Vegas, NV	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.02	-0.05	-0.17
Las Vegas, NV	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	-0.02	-0.05	-0.17
Laurel Area (Yellowstone County), MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	0.00	-0.01
Lebanon County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Lemont, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.01	-0.02
Liberty-Clairton, PA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01
Lincoln County; Libby and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Logan, UT-ID	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.02
Longmont, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	-0.01
Lorain County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	-0.01	-0.01	-0.04
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	0.00	-0.01	-0.01	-0.04
Los Angeles-South Coast Air Basin, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-0.02	-0.13	-0.26	-0.91
Los Angeles-South Coast Air Basin, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-0.02	-0.13	-0.26	-0.91
Los Angeles-South Coast Air Basin, CA	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.02	-0.13	-0.26	-0.91
Los Angeles-South Coast Air Basin, CA	NO ₂ (1971 Annual)	Maintenance, Primary	100	0	-0.02	-0.13	-0.26	-0.91
Los Angeles-South Coast Air Basin, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.02	-0.13	-0.26	-0.91
Los Angeles-South Coast Air Basin, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-0.02	-0.13	-0.26	-0.91
Louisville, KY-IN (IN Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	-0.01	-0.02
Louisville, KY-IN (KY Portion)	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.02	-0.07
Lowell, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Lucas County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.01	-0.03
Madison County; Granite City Township and Nameoki Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01	-0.02
Manchester, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01
Manitowoc County, WI	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	0.00	0.00
Marathon County: Rothschild Sub-city area, Rib Mountain, Weston, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	-0.01
Maricopa and Pinal Counties; Phoenix planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.02	-0.08	-0.16	-0.59
Marion County: Lawrence, Washington, and Warrant Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.02	-0.06
Mariposa County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Mariposa County, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Marshall, WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.01	-0.02	-0.05
Medford, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	-0.01
Memphis, TN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.03	-0.09
Memphis, TN-MS-AR	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	-0.02	-0.03	-0.12
Miami (Gila County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Miami, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Miami, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Millinocket AQCR 109, ME	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.02
Milwaukee, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.02	-0.04	-0.12
Milwaukee, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.02	-0.05
Milwaukee-Racine, WI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	-0.02	-0.03	-0.11
Minneapolis-St. Paul, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.05	-0.10	-0.36
Minneapolis-St. Paul, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.05	-0.10	-0.35
Missoula, MT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.01	-0.02
Missoula, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01	-0.02
Modesto, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.01	-0.02
Mohave County (part); Bullhead City, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Mono Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Mono County; Mammoth Lake planning area, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Morenci (Greenlee County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Morgan County, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Morongo Band of Mission Indians, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	0.00	0.00
Morongo Band of Mission Indians, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00
Morristown, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Muscatine County, IA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Muscatine, IA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Muskegon County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01
Muskingum River, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Nashua, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01
Nassau County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Navarro County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	-0.01
Nevada County (Western part), CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00
Nevada County (Western part), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00
New Haven County, CT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
New Haven-Meriden-Waterbury, CT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.02	-0.07
New Madrid County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
New Manchester-Grant magisterial district in Hancock County, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
New York County, NY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.02	-0.06
New York-N. New Jersey-Long Island, NY-NJ-CT	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.03	-0.16	-0.33	-1.15
New York-N. New Jersey-Long Island, NY-NJ-CT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.02	-0.09	-0.19	-0.66
New York-N. New Jersey-Long Island, NY-NJ-CT	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.03	-0.17	-0.34	-1.20
New York-Northern New Jersey-Long Island, NY-NJ-CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.03	-0.17	-0.33	-1.17
Nogales, AZ	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Northern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.04	-0.08	-0.28
Oakridge, OR	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Ogden, UT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	-0.01
Ogden, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Olmsted County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Olmsted County; City of Rochester, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01
Oneida County: Rhinelander Sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Pekin, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Penns Grove, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Peoria County: Hollis twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Peoria, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01
Perth Amboy, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01
Philadelphia-Camden County, PA-NJ	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.02	-0.03	-0.10
Philadelphia-Wilmington, PA-NJ-DE (NJ Portion)	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.01	-0.03	-0.06	-0.21
Philadelphia-Wilmington, PA-NJ-DE (PA-DE Portion)	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.05	-0.09	-0.32
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.02	-0.09	-0.18	-0.65
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.02	-0.09	-0.18	-0.64
Phoenix, AZ	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.02	-0.08	-0.16	-0.58
Phoenix-Mesa, AZ	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-0.02	-0.08	-0.16	-0.59
Phoenix-Mesa, AZ	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.02	-0.08	-0.16	-0.59
Pierce County; Tacoma, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Pima County; Ajo planning area, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Pima County; Rillito planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Pinal County (part); West Pinal, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	-0.01
Pitkin County; Aspen, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Pittsburgh, PA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.01	-0.03
Pittsburgh-Beaver Valley, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.01	-0.05	-0.10	-0.33
Pittsburgh-Beaver Valley, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.05	-0.09	-0.31
Plumas County, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00
Polk County, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Portland, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.02	-0.04	-0.15

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Power-Bannock Counties; Fort Hall Indian Reservation, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Power-Bannock Counties; Portneuf Valley Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01	-0.02
Provo, UT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.00	0.00	0.00	-0.01
Provo, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	0.00	-0.01	-0.01	-0.05
Prowers County; Lamar, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Raleigh-Durham, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.03	-0.05	-0.19
Ramsey County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Reading, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	-0.01	-0.03
Reno, NV	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.01	-0.02
Rhineland, WI	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Riverside County (Coachella Valley), CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	0.00	0.00	-0.01	-0.02
Riverside County (Coachella Valley), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	-0.01	-0.02
Riverside County; Coachella Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	-0.01	-0.02
Riverside, Los Angeles, Orange, & San Bernardino Counties; South Coast Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.02	-0.13	-0.26	-0.91
Rosebud County; Lame Deer, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Routt County (part); Steamboat Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Rusk and Panola Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.01	-0.03
Sacramento County, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.03	-0.05	-0.19
Sacramento Metro, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.01	-0.05	-0.10	-0.35
Sacramento Metro, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.01	-0.05	-0.10	-0.35
Sacramento, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.03	-0.06	-0.23
Sacramento, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.05	-0.09	-0.34
Salem, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.01	-0.03
Salt Lake City, UT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.01	-0.04
Salt Lake City, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.01	-0.04	-0.08	-0.28
Salt Lake County, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.03	-0.06	-0.20
Salt Lake County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	-0.01	-0.03	-0.06	-0.20
San Antonio, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.03	-0.06	-0.21

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
San Bernardino County, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01	-0.03
San Diego County, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	-0.03	-0.05	-0.18
San Diego County, CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	0.00	-0.03	-0.05	-0.18
San Diego, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.03	-0.05	-0.18
San Francisco Bay Area, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.06	-0.12	-0.41
San Francisco Bay Area, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.06	-0.12	-0.41
San Francisco Bay Area, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.06	-0.12	-0.41
San Francisco-Oakland-San Jose, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.06	-0.11	-0.39
San Joaquin Valley Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.01	-0.04	-0.08	-0.28
San Joaquin Valley, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-0.01	-0.04	-0.08	-0.28
San Joaquin Valley, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-0.01	-0.04	-0.08	-0.28
San Joaquin Valley, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.01	-0.04	-0.08	-0.28
San Joaquin Valley, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-0.01	-0.04	-0.08	-0.28
San Luis Obispo (Eastern San Luis Obispo), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
San Luis Obispo (Eastern part), CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
San Manuel (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
San Miguel County; Telluride, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Sanders County (part); Thompson Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Santa Cruz County; Nogales planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Seaford, DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	-0.01	-0.02
Seattle-Tacoma, WA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.01	-0.04	-0.07	-0.25
Sheboygan County, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Sheridan County; City of Sheridan, WY	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Shoreline Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Shoshone County; City of Pinehurst, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Shoshone County; Pinehurst Expansion Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Silver Bow County; Butte, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Somerville, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Southern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.01	-0.01	-0.05

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Southwest Indiana, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Spokane County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.04
Spokane, WA	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	-0.01	-0.01	-0.04
Springfield, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.01	-0.03
St. Bernard Parish, LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	-0.01	-0.04
St. Clair, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
St. Lawrence County, NY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
St. Louis, MO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.04	-0.09	-0.31
St. Louis, MO-IL	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.02	-0.09	-0.19	-0.67
St. Louis-St. Charles-Farmington, MO-IL	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.02	-0.09	-0.19	-0.66
Steubenville, OH-WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.01	-0.02	-0.06
Steubenville-Weirton, OH-WV	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	0.00	-0.01	-0.02
Stockton, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.01	-0.02
Sullivan County, TN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Sutter Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Syracuse, NY	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.01	-0.04
Tacoma, WA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.04
Tazewell County: Groveland twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Terre Haute, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	-0.01
Thurston County; Cities of Olympia, Tumwater, and Lacey, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Titus County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Toms River, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Tooele County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Trenton, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01
Trona, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Tucson, AZ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.02	-0.06
Tuolumne County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Tuscan Buttes, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Tuscan Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Uinta Basin, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	-0.01
Union County; LaGrande, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Upper Green River Basin Area, WY	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	-0.01
Utah County, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.05
Vancouver, WA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.01	-0.02
Ventura County, CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.00	-0.01	-0.01	-0.04
Ventura County, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	-0.01	-0.01	-0.04
Vermillion County; Part of Clinton Township, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Vigo County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01
Walla Walla County; Wallula, WA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00
Waltham, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Warren County, NJ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Warren County: Conewago Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01
Warren County: Warren Boro, Pleasant Twp, Glade Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	-0.01
Warren, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	-0.01
Washington, DC-MD-VA	Ozone (2008 8-hour)	Nonattainment (DC) Maintenance (MD, VA), Marginal	50	0	-0.01	-0.05	-0.10	-0.36
Washington, DC-MD-VA	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.01	-0.05	-0.10	-0.35
Washington, DC-MD-VA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.01	-0.05
Washoe County; Reno planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	-0.01	-0.02
Wayne County, MI	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Wayne County: Boston, Center, Franklin, Wayne & Webster Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
West Central Pinal, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
West Silver Valley, ID	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Whatcom County, WA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Winston-Salem, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.01	-0.04
Worcester, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01
Yakima County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Yakima, WA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Yuba City-Marysville, CA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Yuma, AZ	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	-0.01
Yuma, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.02

Notes:

^a Nonattainment or maintenance status as of 2/1/2024. Source: EPA, The Green Book Nonattainment Areas for Criteria Pollutants; <http://www.epa.gov/airquality/greenbook/>. "--" indicates that no severity classification has been established for the NAAQS pollutant.

^b Emissions thresholds in tons per year. Where the threshold differs by precursor pollutant, the smallest of the precursor thresholds is shown. These thresholds are provided for information only; a general conformity determination is not required for the Proposed Action. Source: 40 CFR 93.853.

^c Positive values are emissions increases; negative values are emissions decreases.

EPA = U.S. Environmental Protection Agency; NAAQS = National Ambient Air Quality Standard; CO = carbon monoxide; NO₂ = nitrogen dioxide; PM2.5 = particulate matter less than 2.5 microns in size; PM10 = particulate matter less than 10 microns in size; SO₂ = sulfur dioxide.

Table D-38. Changes in Emissions from U.S. Heavy-Duty Pickup Trucks and Vans by Nonattainment or Maintenance Area and Alternative, Direct and Indirect Impacts--Benzene, 2050

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Ada County; Boise, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.13	-0.19	-0.46
Adams, Denver, and Boulder Counties; Denver Metropolitan area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.28	-0.41	-1.00
Ajo (Pima County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Albuquerque, NM	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.11	-0.17	-0.41
Allegan County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.01	-0.03
Allegheny County Air Basin: Hazelwood monitor, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.02	-0.04
Allegheny County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	-0.01	-0.15	-0.22	-0.54
Allegheny County; Liberty, Lincoln, Port Vue, Glassport, Clairton, PA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01	-0.02
Allegheny, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.06	-0.08	-0.19
Allentown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	-0.07	-0.10	-0.25
Allentown-Bethlehem-Easton, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	-0.07	-0.11	-0.27
Alton Township, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	-0.01	-0.02
Amador County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	-0.01
Anchorage, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	-0.03	-0.04	-0.10
Anchorage; Eagle River, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Anne Arundel County and Baltimore County, MD	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.02	-0.33	-0.48	-1.23
Archuleta County; Pagosa Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Armstrong County; Madison, Mahoning, Boggs, Washington, Pine, PA	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	-0.01	-0.01	-0.02
Aroostock County; City of Presque Isle, ME	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Atlanta, GA	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-0.07	-1.05	-1.54	-3.90
Atlanta, GA	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.07	-0.96	-1.41	-3.57
Atlantic City, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.01	-0.01
Bakersfield, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.05	-0.07	-0.18
Baltimore, MD	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	-0.04	-0.60	-0.88	-2.23
Baltimore, MD	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.04	-0.60	-0.88	-2.24
Baltimore, MD	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Baton Rouge, LA	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.01	-0.17	-0.25	-0.61

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Beaver, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	-0.01
Benton County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Berrien County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.02	-0.03	-0.08
Billings, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.04	-0.05	-0.13
Billings, MT	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.01	-0.01	-0.02
Birmingham, AL	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.01	-0.18	-0.27	-0.67
Boise-Northern Ada County, ID	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.13	-0.19	-0.46
Bonner County; The Sandpoint Area, ID	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Boston, MA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.09	-0.14	-0.35
Boyd County (part), KY	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.01	-0.02
Brooke; Follansbee area, WV	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Brown County: Green Bay, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Burlington, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.01	-0.01
Butte County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.01	-0.02	-0.05
Calaveras County, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	-0.01
Calaveras County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	-0.01
Campbell-Clermont Counties, KY-OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	-0.01
Canton-Massillon, OH	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	-0.04	-0.05	-0.13
Central New Hampshire, NH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.02	-0.03	-0.07
Central Steptoe Valley, NV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01
Charleston, WV	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	-0.05	-0.08	-0.19
Charlotte, NC	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.19	-0.28	-0.72
Charlotte-Rock Hill, NC-SC	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.02	-0.29	-0.42	-1.07
Chicago, IL-IN-WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.06	-0.91	-1.33	-3.37
Chicago-Naperville, IL-IN-WI	Ozone (2008 8-hour)	Maintenance, Serious	100	0	-0.06	-0.94	-1.38	-3.49
Chico (Butte County), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.01	-0.02	-0.05
Chico, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.01	-0.02
Chico, CA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.02	-0.05
Cincinnati, OH-KY (OH Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.01	-0.18	-0.26	-0.66
Cincinnati, OH-KY (KY Portion)	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	0.00	-0.04	-0.06	-0.14

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Cincinnati, OH-KY-IN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.02	-0.24	-0.35	-0.89
Clark County; Las Vegas planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.01	-0.20	-0.29	-0.74
Cleveland, OH	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.02	-0.26	-0.38	-0.96
Cleveland, OH	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.12	-0.17	-0.43
Cleveland, OH	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-0.01	-0.14	-0.20	-0.51
Cleveland-Akron-Lorain, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.02	-0.27	-0.39	-0.99
Cleveland-Akron-Lorain, OH	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.02	-0.24	-0.35	-0.89
Cochise County; Paul Spur/Douglas planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Colorado Springs, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.08	-0.11	-0.27
Columbus, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.02	-0.23	-0.33	-0.84
Columbus, OH	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.01	-0.21	-0.31	-0.79
Cook County; Lyons Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.02	-0.04
Cook County; Southeast Chicago, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.02	-0.03	-0.07
Coshocton County; Franklin Township, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Coso Junction, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Cuyahoga County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.12	-0.17	-0.43
Cuyahoga County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.10	-0.14	-0.35
Dallas-Fort Worth, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.07	-0.96	-1.41	-3.57
Dallas-Fort Worth, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.07	-0.95	-1.40	-3.54
Dane County; Madison sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.07	-0.10	-0.26
Delaware County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	-0.06	-0.08	-0.21
Denver Metro/North Front Range, CO	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.04	-0.69	-1.01	-2.48
Denver-Boulder, CO	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.03	-0.53	-0.78	-1.90
Denver-Boulder-Greeley-Ft. Collins-Loveland, CO	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.04	-0.69	-1.01	-2.47
Detroit, MI	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	-0.05	-0.71	-1.04	-2.63
Detroit, MI	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.26	-0.38	-0.96
Detroit, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.03	-0.04	-0.10
Detroit-Ann Arbor, MI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.05	-0.71	-1.04	-2.64
Doña Ana County; Anthony, NM	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Door County, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	0.00
Door County-Revised, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	-0.01
Douglas (Cochise County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Dukes County, MA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	-0.01
Duluth, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.02	-0.05
East Chicago, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.01	-0.02
East Helena Area, MT	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
East Kern County, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	-0.01
El Paso County, TX	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.05	-0.07	-0.18
El Paso, TX	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.01	-0.02
El Paso-Las Cruces, TX-NM	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.06	-0.09	-0.22
Eugene-Springfield, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.02	-0.03	-0.07
Evangeline Parish (Partial), LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Fairbanks, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	-0.01	-0.01	-0.03
Fairbanks, AK	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	0.00	-0.01	-0.02	-0.05
Flathead County; Columbia Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Flathead County; Kalispell and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.04
Flathead County; Whitefish and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Fort Collins, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.03	-0.04	-0.09
Freehold, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Freestone and Anderson Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	-0.01	-0.03
Fremont County; Canon City Area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.02
Fresno, CA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.00	-0.05	-0.07	-0.18
Gila County (part): Payson, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Giles County, VA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Grant County, NM	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.01	-0.01
Grants Pass, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	-0.01

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Great Falls, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01
Greater Connecticut, CT	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-0.01	-0.14	-0.21	-0.52
Greater Connecticut, CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.01	-0.14	-0.21	-0.52
Greeley, CO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.09	-0.13	-0.33
Hancock County (part): Weirton, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	-0.01
Hancock and Brooke Counties (Part); The city of Weirton, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Harrisburg-Lebanon-Carlisle-York, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.12	-0.17	-0.43
Hartford-New Britain-Middletown, CT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.10	-0.15	-0.38
Hayden (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	0.00	0.00
Hayden, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Hayden, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Henderson-Webster Counties, KY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Hillsborough County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	-0.01
Hillsborough-Polk County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Houston-Galveston-Brazoria, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.06	-0.89	-1.31	-3.24
Houston-Galveston-Brazoria, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.06	-0.87	-1.28	-3.18
Howard County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	-0.02	-0.04
Humphreys County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	-0.01
Huntington, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.01	-0.01
Hutchinson County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	-0.01	-0.03
Imperial County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.02	-0.02	-0.06
Imperial County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.02	-0.02	-0.06
Imperial County, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.02	-0.05
Imperial County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.02	-0.05
Imperial Valley, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	-0.02	-0.02	-0.06
Indian Wells, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01	-0.02
Indiana, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.03	-0.04	-0.09
Indianapolis, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Indianapolis, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.09	-0.13	-0.33
Inland Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01	-0.02

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Inyo County; Owens Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00
Jackson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.01	-0.01	-0.03
Jackson County; Medford-Ashland (including White City), OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.02	-0.05
Jamestown, NY	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	-0.02	-0.02	-0.06
Jefferson County, KY	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Jefferson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.01	-0.02
Jefferson County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Jefferson County; (part) Steubenville & Mingo Junction, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.01	-0.02
Johnstown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	-0.02	-0.03	-0.08
Josephine County; Grants Pass, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Juneau; Mendenhall Valley area, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Kern County (Eastern Kern), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	-0.01	-0.02	-0.04
Kern County (Eastern Kern), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	-0.01	-0.02	-0.04
King County; Kent, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
King County; Seattle, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Klamath Falls, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.01	-0.02
Klamath Falls, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01	-0.02
Klamath Falls, OR	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.01	-0.02
Knoxville, TN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.01	-0.08	-0.12	-0.30
Knoxville-Sevierville-La Follette, TN	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.09	-0.13	-0.33
La Porte County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.01	-0.02
LaSalle County; Oglesby, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Lake County (part); Lakeview, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Lake County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.05	-0.07	-0.17
Lake County, OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.02	-0.03	-0.06
Lake County; (part) Eastlake, Timberlake, Lakeline, Willoughby, Mentor, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01
Lake County; Cities of East Chicago, Hammond, Whiting, and Gary, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.03	-0.05	-0.11
Lake County; Polson, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Lake County; Ronan, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Lake Tahoe North Shore, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Lake Tahoe South Shore, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	-0.01
Lake Tahoe, NV	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01
Lancaster, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	-0.05	-0.07	-0.19
Lancaster, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	-0.05	-0.07	-0.19
Lane County (part); Oakridge, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Lane County; Eugene/Springfield, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.02	-0.03	-0.07
Las Vegas, NV	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.20	-0.29	-0.74
Las Vegas, NV	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.01	-0.20	-0.30	-0.75
Laurel Area (Yellowstone County), MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	-0.01	-0.01	-0.03
Lebanon County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.04
Lemont, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.02	-0.03	-0.07
Liberty-Clairton, PA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01	-0.02
Lincoln County; Libby and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Logan, UT-ID	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	-0.02	-0.03	-0.06
Longmont, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.02	-0.04
Lorain County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.01	-0.01
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	-0.05	-0.07	-0.17
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	0.00	-0.05	-0.07	-0.17
Los Angeles-South Coast Air Basin, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-0.07	-1.05	-1.55	-3.92
Los Angeles-South Coast Air Basin, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-0.07	-1.05	-1.55	-3.92
Los Angeles-South Coast Air Basin, CA	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.07	-1.05	-1.55	-3.93
Los Angeles-South Coast Air Basin, CA	NO ₂ (1971 Annual)	Maintenance, Primary	100	0	-0.07	-1.05	-1.55	-3.93
Los Angeles-South Coast Air Basin, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.07	-1.05	-1.55	-3.93
Los Angeles-South Coast Air Basin, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-0.07	-1.05	-1.55	-3.93
Louisville, KY-IN (IN Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	-0.02	-0.03	-0.08
Louisville, KY-IN (KY Portion)	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.09	-0.13	-0.32
Lowell, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.01	-0.03

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Lucas County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.03	-0.05	-0.13
Madison County; Granite City Township and Nameoki Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.02	-0.02	-0.06
Manchester, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.01	-0.03
Manitowoc County, WI	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	-0.01	-0.02
Marathon County: Rothschild Sub-city area, Rib Mountain, Weston, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	-0.01	-0.02	-0.05
Maricopa and Pinal Counties; Phoenix planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.05	-0.69	-1.02	-2.59
Marion County: Lawrence, Washington, and Warrant Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.07	-0.11	-0.28
Mariposa County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Mariposa County, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Marshall, WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.04	-0.06	-0.13
Medford, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.01	-0.03
Memphis, TN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.10	-0.15	-0.38
Memphis, TN-MS-AR	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.01	-0.13	-0.19	-0.47
Miami (Gila County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01
Miami, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01
Miami, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	-0.01
Millinocket AQCR 109, ME	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.02	-0.03	-0.07
Milwaukee, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.14	-0.20	-0.50
Milwaukee, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.06	-0.08	-0.21
Milwaukee-Racine, WI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.01	-0.12	-0.18	-0.45
Minneapolis-St. Paul, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.03	-0.40	-0.59	-1.49
Minneapolis-St. Paul, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.03	-0.40	-0.58	-1.46
Missoula, MT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.02	-0.03	-0.08
Missoula, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.02	-0.03	-0.08
Modesto, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.02	-0.03	-0.08
Mohave County (part); Bullhead City, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.03
Mono Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Mono County; Mammoth Lake planning area, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Morenci (Greenlee County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Morgan County, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	-0.01
Morongo Band of Mission Indians, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	0.00	0.00
Morongo Band of Mission Indians, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00
Morristown, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01
Muscatine County, IA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01
Muscatine, IA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	-0.01
Muskegon County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.02	-0.04
Muskingum River, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Nashua, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.01	-0.02
Nassau County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Navarro County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	-0.01	-0.03
Nevada County (Western part), CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.00	-0.01	-0.01	-0.02
Nevada County (Western part), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	-0.01	-0.01	-0.02
New Haven County, CT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
New Haven-Meriden-Waterbury, CT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.08	-0.11	-0.28
New Madrid County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
New Manchester-Grant magisterial district in Hancock County, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01
New York County, NY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.06	-0.09	-0.24
New York-N. New Jersey-Long Island, NY-NJ-CT	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.09	-1.30	-1.91	-4.82
New York-N. New Jersey-Long Island, NY-NJ-CT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.05	-0.74	-1.09	-2.75
New York-N. New Jersey-Long Island, NY-NJ-CT	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.09	-1.35	-1.98	-5.00
New York-Northern New Jersey-Long Island, NY-NJ-CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.09	-1.31	-1.93	-4.86
Nogales, AZ	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Northern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.02	-0.31	-0.46	-1.16
Oakridge, OR	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Ogden, UT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.02	-0.02	-0.06
Ogden, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.02	-0.02	-0.06

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Olmsted County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Olmsted County; City of Rochester, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.02	-0.04
Oneida County: Rhinelander Sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	-0.01	-0.01	-0.02
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Pekin, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.01	-0.01	-0.02
Penns Grove, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Peoria County: Hollis twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Peoria, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.02	-0.04
Perth Amboy, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.01	-0.03
Philadelphia-Camden County, PA-NJ	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.11	-0.16	-0.38
Philadelphia-Wilmington, PA-NJ-DE (NJ Portion)	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.02	-0.24	-0.35	-0.89
Philadelphia-Wilmington, PA-NJ-DE (PA-DE Portion)	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.35	-0.52	-1.30
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.05	-0.74	-1.08	-2.73
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.05	-0.73	-1.07	-2.70
Phoenix, AZ	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.05	-0.68	-1.00	-2.55
Phoenix-Mesa, AZ	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-0.05	-0.69	-1.02	-2.59
Phoenix-Mesa, AZ	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.05	-0.70	-1.02	-2.60
Pierce County; Tacoma, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Pima County; Ajo planning area, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Pima County; Rillito planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01	-0.01
Pinal County (part); West Pinal, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	-0.01	-0.02	-0.05
Pitkin County; Aspen, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.03
Pittsburgh, PA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.03	-0.04	-0.11
Pittsburgh-Beaver Valley, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.02	-0.32	-0.48	-1.16
Pittsburgh-Beaver Valley, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.30	-0.44	-1.07
Plumas County, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00
Polk County, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Portland, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.16	-0.24	-0.60

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Power-Bannock Counties; Fort Hall Indian Reservation, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Power-Bannock Counties; Portneuf Valley Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.02	-0.03	-0.08
Provo, UT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.00	-0.02	-0.02	-0.06
Provo, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	0.00	-0.06	-0.08	-0.20
Prowers County; Lamar, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Raleigh-Durham, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.22	-0.32	-0.81
Ramsey County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Reading, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	-0.03	-0.05	-0.13
Reno, NV	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.03	-0.04	-0.10
Rhineland, WI	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	-0.01
Riverside County (Coachella Valley), CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	0.00	-0.03	-0.04	-0.09
Riverside County (Coachella Valley), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	0.00	-0.03	-0.04	-0.09
Riverside County; Coachella Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	-0.03	-0.04	-0.11
Riverside, Los Angeles, Orange, & San Bernardino Counties; South Coast Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.07	-1.05	-1.54	-3.91
Rosebud County; Lame Deer, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Routt County (part); Steamboat Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.02	-0.04
Rusk and Panola Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.02	-0.03	-0.07
Sacramento County, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.22	-0.32	-0.82
Sacramento Metro, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.03	-0.40	-0.59	-1.50
Sacramento Metro, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.03	-0.40	-0.59	-1.50
Sacramento, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.27	-0.40	-1.03
Sacramento, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.03	-0.40	-0.58	-1.48
Salem, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.03	-0.04	-0.11
Salt Lake City, UT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.05	-0.07	-0.18
Salt Lake City, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.02	-0.32	-0.48	-1.20
Salt Lake County, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.22	-0.33	-0.83
Salt Lake County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	-0.02	-0.22	-0.33	-0.83
San Antonio, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.02	-0.24	-0.35	-0.88

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
San Bernardino County, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.03	-0.05	-0.11
San Diego County, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.01	-0.21	-0.31	-0.79
San Diego County, CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-0.01	-0.21	-0.31	-0.79
San Diego, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.21	-0.31	-0.79
San Francisco Bay Area, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.03	-0.48	-0.70	-1.78
San Francisco Bay Area, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.03	-0.48	-0.70	-1.77
San Francisco Bay Area, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.03	-0.48	-0.70	-1.78
San Francisco-Oakland-San Jose, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.03	-0.45	-0.67	-1.69
San Joaquin Valley Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.02	-0.31	-0.46	-1.16
San Joaquin Valley, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-0.02	-0.31	-0.46	-1.16
San Joaquin Valley, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-0.02	-0.31	-0.46	-1.16
San Joaquin Valley, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.02	-0.31	-0.46	-1.16
San Joaquin Valley, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-0.02	-0.31	-0.46	-1.16
San Luis Obispo (Eastern San Luis Obispo), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	-0.01
San Luis Obispo (Eastern part), CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	-0.01
San Manuel (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
San Miguel County; Telluride, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Sanders County (part); Thompson Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Santa Cruz County; Nogales planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01
Seaford, DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	-0.02	-0.04	-0.09
Seattle-Tacoma, WA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.02	-0.27	-0.40	-1.00
Sheboygan County, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.01	-0.02
Sheridan County; City of Sheridan, WY	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01	-0.01
Shoreline Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01	-0.02
Shoshone County; City of Pinehurst, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Shoshone County; Pinehurst Expansion Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01	-0.01
Silver Bow County; Butte, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01	-0.01
Somerville, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Southern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.06	-0.08	-0.20

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Southwest Indiana, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Spokane County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.04	-0.06	-0.16
Spokane, WA	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	-0.04	-0.06	-0.16
Springfield, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.04	-0.06	-0.14
St. Bernard Parish, LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.03	-0.04	-0.10
St. Clair, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	-0.01	-0.02
St. Lawrence County, NY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
St. Louis, MO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.36	-0.52	-1.33
St. Louis, MO-IL	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.05	-0.76	-1.11	-2.81
St. Louis-St. Charles-Farmington, MO-IL	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.05	-0.76	-1.11	-2.82
Steubenville, OH-WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.05	-0.07	-0.16
Steubenville-Weirton, OH-WV	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	-0.02	-0.02	-0.06
Stockton, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.02	-0.03	-0.09
Sullivan County, TN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	-0.01
Sutter Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Syracuse, NY	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.05	-0.07	-0.18
Tacoma, WA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	-0.04	-0.06	-0.15
Tazewell County: Groveland twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01
Terre Haute, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.01	-0.01	-0.02
Thurston County; Cities of Olympia, Tumwater, and Lacey, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.02	-0.05
Titus County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Toms River, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Tooele County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Trenton, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.02	-0.04
Trona, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Tucson, AZ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.08	-0.11	-0.28
Tuolumne County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	-0.01	-0.01
Tuscan Buttes, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Tuscan Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Uinta Basin, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.01	-0.02	-0.05
Union County; LaGrande, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Upper Green River Basin Area, WY	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.01	-0.01	-0.03
Utah County, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.06	-0.08	-0.21
Vancouver, WA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.02	-0.03	-0.09
Ventura County, CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.00	-0.05	-0.07	-0.17
Ventura County, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	-0.05	-0.07	-0.17
Vermillion County; Part of Clinton Township, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Vigo County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.02	-0.05
Walla Walla County; Wallula, WA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00
Waltham, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.01	-0.02
Warren County, NJ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	-0.01
Warren County: Conewago Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.01	-0.02
Warren County: Warren Boro, Pleasant Twp, Glade Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	-0.01	-0.01	-0.03
Warren, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	-0.01	-0.03
Washington, DC-MD-VA	Ozone (2008 8-hour)	Nonattainment (DC) Maintenance (MD, VA), Marginal	50	0	-0.03	-0.41	-0.61	-1.53
Washington, DC-MD-VA	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.03	-0.41	-0.60	-1.51
Washington, DC-MD-VA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.06	-0.09	-0.23
Washoe County; Reno planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	-0.03	-0.04	-0.10
Wayne County, MI	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.03
Wayne County: Boston, Center, Franklin, Wayne & Webster Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.01	-0.02
West Central Pinal, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
West Silver Valley, ID	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Whatcom County, WA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	-0.01
Winston-Salem, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.04	-0.06	-0.15
Worcester, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.02	-0.05
Yakima County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.02	-0.04
Yakima, WA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.01	-0.01

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Yuba City-Marysville, CA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.02	-0.04
Yuma, AZ	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.01	-0.02	-0.04
Yuma, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.02	-0.03	-0.07

Notes:

^a Nonattainment or maintenance status as of 2/1/2024. Source: EPA, The Green Book Nonattainment Areas for Criteria Pollutants; <http://www.epa.gov/airquality/greenbook/>. "--" indicates that no severity classification has been established for the NAAQS pollutant.

^b Emissions thresholds in tons per year. Where the threshold differs by precursor pollutant, the smallest of the precursor thresholds is shown. These thresholds are provided for information only; a general conformity determination is not required for the Proposed Action. Source: 40 CFR 93.853.

^c Positive values are emissions increases; negative values are emissions decreases.

EPA = U.S. Environmental Protection Agency; NAAQS = National Ambient Air Quality Standard; CO = carbon monoxide; NO₂ = nitrogen dioxide; PM2.5 = particulate matter less than 2.5 microns in size; PM10 = particulate matter less than 10 microns in size; SO₂ = sulfur dioxide.

Table D-39. Changes in Emissions from U.S. Heavy-Duty Pickup Trucks and Vans by Nonattainment or Maintenance Area and Alternative, Direct and Indirect Impacts--1,3-Butadiene, 2035

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Ada County; Boise, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Adams, Denver, and Boulder Counties; Denver Metropolitan area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01	-0.02
Ajo (Pima County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Albuquerque, NM	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	-0.01
Allegan County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Allegheny County Air Basin: Hazelwood monitor, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Allegheny County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01
Allegheny County; Liberty, Lincoln, Port Vue, Glassport, Clairton, PA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Allegheny, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Allentown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Allentown-Bethlehem-Easton, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	-0.01
Alton Township, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Amador County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Anchorage, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00
Anchorage; Eagle River, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Anne Arundel County and Baltimore County, MD	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.01	-0.03
Archuleta County; Pagosa Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Armstrong County; Madison, Mahoning, Boggs, Washington, Pine, PA	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	0.00	0.00
Aroostock County; City of Presque Isle, ME	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Atlanta, GA	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.03	-0.10
Atlanta, GA	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	-0.01	-0.03	-0.09
Atlantic City, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Bakersfield, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Baltimore, MD	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	0.00	-0.01	-0.02	-0.06
Baltimore, MD	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	0.00	-0.01	-0.02	-0.06
Baltimore, MD	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Baton Rouge, LA	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	0.00	-0.01
Beaver, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Benton County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Berrien County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Billings, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Billings, MT	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Birmingham, AL	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	0.00	0.00	-0.02
Boise-Northern Ada County, ID	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Bonner County; The Sandpoint Area, ID	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Boston, MA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	-0.01
Boyd County (part), KY	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Brooke; Follansbee area, WV	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Brown County: Green Bay, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Burlington, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Butte County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Calaveras County, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Calaveras County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Campbell-Clermont Counties, KY-OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Canton-Massillon, OH	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	0.00	0.00	0.00
Central New Hampshire, NH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Central Steptoe Valley, NV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Charleston, WV	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	0.00	0.00	0.00
Charlotte, NC	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.01	-0.02
Charlotte-Rock Hill, NC-SC	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	-0.01	-0.03
Chicago, IL-IN-WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.02	-0.09
Chicago-Naperville, IL-IN-WI	Ozone (2008 8-hour)	Maintenance, Serious	100	0	0.00	-0.01	-0.03	-0.09
Chico (Butte County), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Chico, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Chico, CA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Cincinnati, OH-KY (OH Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	0.00	-0.02
Cincinnati, OH-KY (KY Portion)	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Cincinnati, OH-KY-IN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	-0.01	-0.02
Clark County; Las Vegas planning area, NV	PM ₁₀ (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	-0.01	-0.02
Cleveland, OH	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01	-0.02
Cleveland, OH	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	-0.01
Cleveland, OH	PM _{2.5} (2012 Annual)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Cleveland-Akron-Lorain, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	-0.01	-0.02
Cleveland-Akron-Lorain, OH	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	0.00	-0.01	-0.02
Cochise County; Paul Spur/Douglas planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Colorado Springs, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Columbus, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	-0.01	-0.02
Columbus, OH	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	-0.01	-0.02
Cook County; Lyons Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Cook County; Southeast Chicago, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Coshocton County; Franklin Township, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Coso Junction, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Cuyahoga County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Cuyahoga County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01
Dallas-Fort Worth, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	-0.01	-0.03	-0.09
Dallas-Fort Worth, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.03	-0.09
Dane County; Madison sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01
Delaware County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Denver Metro/North Front Range, CO	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.01	-0.05
Denver-Boulder, CO	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.00	-0.01	-0.03
Denver-Boulder-Greeley-Ft. Collins-Loveland, CO	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	-0.01	-0.01	-0.05
Detroit, MI	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.02	-0.07
Detroit, MI	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.01	-0.02
Detroit, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Detroit-Ann Arbor, MI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	-0.01	-0.02	-0.07
Doña Ana County; Anthony, NM	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Door County, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	0.00
Door County-Revised, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	0.00
Douglas (Cochise County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Dukes County, MA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	0.00
Duluth, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
East Chicago, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
East Helena Area, MT	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
East Kern County, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00
El Paso County, TX	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
El Paso, TX	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
El Paso-Las Cruces, TX-NM	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	-0.01
Eugene-Springfield, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Evangeline Parish (Partial), LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Fairbanks, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00
Fairbanks, AK	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00
Flathead County; Columbia Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Flathead County; Kalispell and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Flathead County; Whitefish and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Fort Collins, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Freehold, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Freestone and Anderson Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Fremont County; Canon City Area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Fresno, CA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.00	0.00	0.00	0.00
Gila County (part): Payson, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Giles County, VA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Grant County, NM	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Grants Pass, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Great Falls, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Greater Connecticut, CT	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	-0.01
Greater Connecticut, CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	0.00	0.00	0.00	-0.01
Greeley, CO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01
Hancock County (part): Weirton, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Hancock and Brooke Counties (Part); The city of Weirton, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Harrisburg-Lebanon-Carlisle-York, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Hartford-New Britain-Middletown, CT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	-0.01
Hayden (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	0.00	0.00
Hayden, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Hayden, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Henderson-Webster Counties, KY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Hillsborough County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Hillsborough-Polk County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Houston-Galveston-Brazoria, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	-0.01	-0.02	-0.09
Houston-Galveston-Brazoria, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.02	-0.09
Howard County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Humphreys County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Huntington, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Hutchinson County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Imperial County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Imperial County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Imperial County, CA	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Imperial County, CA	PM _{2.5} (2012 Annual)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Imperial Valley, CA	PM ₁₀ (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00
Indian Wells, CA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Indiana, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Indianapolis, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Indianapolis, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	-0.01
Inland Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Inyo County; Owens Valley planning area, CA	PM ₁₀ (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00
Jackson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Jackson County; Medford-Ashland (including White City), OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Jamestown, NY	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	0.00
Jefferson County, KY	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Jefferson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Jefferson County, OH	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Jefferson County; (part) Steubenville & Mingo Junction, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Johnstown, PA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Josephine County; Grants Pass, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Juneau; Mendenhall Valley area, AK	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Kern County (Eastern Kern), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	0.00	0.00
Kern County (Eastern Kern), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00
King County; Kent, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
King County; Seattle, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Klamath Falls, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Klamath Falls, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Klamath Falls, OR	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Knoxville, TN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	0.00	-0.01
Knoxville-Sevierville-La Follette, TN	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
La Porte County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
LaSalle County; Oglesby, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Lake County (part); Lakeview, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Lake County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Lake County, OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Lake County; (part) Eastlake, Timberlake, Lakeline, Willoughby, Mentor, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Lake County; Cities of East Chicago, Hammond, Whiting, and Gary, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Lake County; Polson, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Lake County; Ronan, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Lake Tahoe North Shore, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Lake Tahoe South Shore, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Lake Tahoe, NV	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Lancaster, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	0.00
Lancaster, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Lane County (part); Oakridge, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Lane County; Eugene/Springfield, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Las Vegas, NV	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01	-0.02
Las Vegas, NV	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.00	-0.01	-0.02
Laurel Area (Yellowstone County), MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	0.00	0.00
Lebanon County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Lemont, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Liberty-Clairton, PA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Lincoln County; Libby and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Logan, UT-ID	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Longmont, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Lorain County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	0.00	0.00
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Los Angeles-South Coast Air Basin, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	0.00	-0.01	-0.03	-0.10
Los Angeles-South Coast Air Basin, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	0.00	-0.01	-0.03	-0.10
Los Angeles-South Coast Air Basin, CA	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	-0.01	-0.03	-0.10
Los Angeles-South Coast Air Basin, CA	NO ₂ (1971 Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.03	-0.10
Los Angeles-South Coast Air Basin, CA	PM _{2.5} (2006 24-hour)	Nonattainment, Serious	70	0	0.00	-0.01	-0.03	-0.10
Los Angeles-South Coast Air Basin, CA	PM _{2.5} (2012 Annual)	Nonattainment, Serious	70	0	0.00	-0.01	-0.03	-0.10
Louisville, KY-IN (IN Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	0.00	0.00
Louisville, KY-IN (KY Portion)	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01
Lowell, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Lucas County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Madison County; Granite City Township and Nameoki Township, IL	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Manchester, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Manitowoc County, WI	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	0.00	0.00
Marathon County: Rothschild Sub-city area, Rib Mountain, Weston, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Maricopa and Pinal Counties; Phoenix planning area, AZ	PM ₁₀ (1987 24-hour)	Nonattainment, Serious	70	0	0.00	-0.01	-0.02	-0.07
Marion County: Lawrence, Washington, and Warrant Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01
Mariposa County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Mariposa County, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Marshall, WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Medford, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Memphis, TN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	-0.01
Memphis, TN-MS-AR	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	0.00	-0.01
Miami (Gila County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Miami, AZ	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Miami, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Millinocket AQCR 109, ME	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Milwaukee, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01
Milwaukee, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Milwaukee-Racine, WI	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	0.00	0.00	-0.01
Minneapolis-St. Paul, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.01	-0.04

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Minneapolis-St. Paul, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.01	-0.04
Missoula, MT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Missoula, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Modesto, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Mohave County (part); Bullhead City, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Mono Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Mono County; Mammoth Lake planning area, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Morenci (Greenlee County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Morgan County, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Morongo Band of Mission Indians, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	0.00	0.00
Morongo Band of Mission Indians, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00
Morristown, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Muscatine County, IA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Muscatine, IA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Muskegon County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Muskingum River, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Nashua, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Nassau County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Navarro County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Nevada County (Western part), CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00
Nevada County (Western part), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00
New Haven County, CT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
New Haven-Meriden-Waterbury, CT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01
New Madrid County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
New Manchester-Grant magisterial district in Hancock County, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
New York County, NY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01
New York-N. New Jersey-Long Island, NY-NJ-CT	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	-0.02	-0.03	-0.12
New York-N. New Jersey-Long Island, NY-NJ-CT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.00	-0.01	-0.02	-0.07
New York-N. New Jersey-Long Island, NY-NJ-CT	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	-0.02	-0.03	-0.13
New York-Northern New Jersey-Long Island, NY-NJ-CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	0.00	-0.02	-0.03	-0.12
Nogales, AZ	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Northern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01	-0.03
Oakridge, OR	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Ogden, UT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Ogden, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Olmsted County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Olmsted County; City of Rochester, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Oneida County: Rhinelander Sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Pekin, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Penns Grove, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Peoria County: Hollis twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Peoria, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Perth Amboy, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Philadelphia-Camden County, PA-NJ	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	-0.01
Philadelphia-Wilmington, PA-NJ-DE (NJ Portion)	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	0.00	-0.01	-0.02
Philadelphia-Wilmington, PA-NJ-DE (PA-DE Portion)	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01	-0.03
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	-0.01	-0.02	-0.07
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	0.00	-0.01	-0.02	-0.07
Phoenix, AZ	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	-0.01	-0.02	-0.07
Phoenix-Mesa, AZ	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.02	-0.07
Phoenix-Mesa, AZ	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.02	-0.07
Pierce County; Tacoma, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Pima County; Ajo planning area, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Pima County; Rillito planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Pinal County (part); West Pinal, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00
Pitkin County; Aspen, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Pittsburgh, PA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Pittsburgh-Beaver Valley, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	-0.01	-0.02
Pittsburgh-Beaver Valley, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01	-0.02
Plumas County, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00
Polk County, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Portland, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	-0.01

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Power-Bannock Counties; Fort Hall Indian Reservation, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Power-Bannock Counties; Portneuf Valley Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Provo, UT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.00	0.00	0.00	0.00
Provo, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	-0.01
Prowers County; Lamar, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Raleigh-Durham, NC	CO (1971 8-hour)	Maintenance, Moderate ≤ 12.7ppm	100	0	0.00	0.00	-0.01	-0.02
Ramsey County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Reading, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	0.00
Reno, NV	CO (1971 8-hour)	Maintenance, Moderate ≤ 12.7ppm	100	0	0.00	0.00	0.00	0.00
Rhineland, WI	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Riverside County (Coachella Valley), CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	0.00	0.00	0.00	0.00
Riverside County (Coachella Valley), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	0.00	0.00
Riverside County; Coachella Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00
Riverside, Los Angeles, Orange, & San Bernardino Counties; South Coast Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	-0.01	-0.03	-0.10
Rosebud County; Lame Deer, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Routt County (part); Steamboat Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Rusk and Panola Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Sacramento County, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01	-0.02
Sacramento Metro, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	-0.01	-0.01	-0.04
Sacramento Metro, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	-0.01	-0.01	-0.04
Sacramento, CA	CO (1971 8-hour)	Maintenance, Moderate ≤ 12.7ppm	100	0	0.00	0.00	-0.01	-0.03
Sacramento, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.01	-0.04
Salem, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Salt Lake City, UT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Salt Lake City, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	-0.01	-0.03
Salt Lake County, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01	-0.02
Salt Lake County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	0.00	0.00	-0.01	-0.02
San Antonio, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01	-0.02
San Bernardino County, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
San Diego County, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	-0.01	-0.02
San Diego County, CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	-0.01	-0.02

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
San Diego, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.01	-0.02
San Francisco Bay Area, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.01	-0.01	-0.05
San Francisco Bay Area, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.01	-0.01	-0.05
San Francisco Bay Area, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.01	-0.05
San Francisco-Oakland-San Jose, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.01	-0.04
San Joaquin Valley Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	-0.01	-0.03
San Joaquin Valley, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	0.00	0.00	-0.01	-0.03
San Joaquin Valley, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	0.00	0.00	-0.01	-0.03
San Joaquin Valley, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	-0.01	-0.03
San Joaquin Valley, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	0.00	0.00	-0.01	-0.03
San Luis Obispo (Eastern San Luis Obispo), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
San Luis Obispo (Eastern part), CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
San Manuel (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
San Miguel County; Telluride, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Sanders County (part); Thompson Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Santa Cruz County; Nogales planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Seaford, DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	0.00
Seattle-Tacoma, WA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.00	0.00	-0.01	-0.02
Sheboygan County, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Sheridan County; City of Sheridan, WY	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Shoreline Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Shoshone County; City of Pinehurst, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Shoshone County; Pinehurst Expansion Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Silver Bow County; Butte, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Somerville, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Southern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	-0.01
Southwest Indiana, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Spokane County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Spokane, WA	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00
Springfield, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
St. Bernard Parish, LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
St. Clair, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
St. Lawrence County, NY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
St. Louis, MO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.01	-0.04
St. Louis, MO-IL	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.02	-0.07
St. Louis-St. Charles-Farmington, MO-IL	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	-0.01	-0.02	-0.07
Steubenville, OH-WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Steubenville-Weirton, OH-WV	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	0.00	0.00	0.00
Stockton, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Sullivan County, TN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Sutter Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Syracuse, NY	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Tacoma, WA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Tazewell County: Groveland twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Terre Haute, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Thurston County; Cities of Olympia, Tumwater, and Lacey, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Titus County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Toms River, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Tooele County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Trenton, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Trona, CA	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Tucson, AZ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01
Tuolumne County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Tuscan Buttes, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Tuscan Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	0.00
Uinta Basin, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Union County; LaGrande, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Upper Green River Basin Area, WY	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Utah County, UT	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Vancouver, WA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Ventura County, CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00
Ventura County, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00
Vermillion County; Part of Clinton Township, IN	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Vigo County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Walla Walla County; Wallula, WA	PM ₁₀ (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Waltham, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Warren County, NJ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Warren County: Conewago Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Warren County: Warren Boro, Pleasant Twp, Glade Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Warren, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Washington, DC-MD-VA	Ozone (2008 8-hour)	Nonattainment (DC) Maintenance (MD, VA), Marginal	50	0	0.00	-0.01	-0.01	-0.04
Washington, DC-MD-VA	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	0.00	-0.01	-0.01	-0.04
Washington, DC-MD-VA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	-0.01
Washoe County; Reno planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00
Wayne County, MI	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Wayne County: Boston, Center, Franklin, Wayne & Webster Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
West Central Pinal, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
West Silver Valley, ID	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Whatcom County, WA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Winston-Salem, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Worcester, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Yakima County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Yakima, WA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Yuba City-Marysville, CA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Yuma, AZ	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Yuma, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00

Notes:

^a Nonattainment or maintenance status as of 2/1/2024. Source: EPA, The Green Book Nonattainment Areas for Criteria Pollutants; <http://www.epa.gov/airquality/greenbook/>. "--" indicates that no severity classification has been established for the NAAQS pollutant.

^b Emissions thresholds in tons per year. Where the threshold differs by precursor pollutant, the smallest of the precursor thresholds is shown. These thresholds are provided for information only; a general conformity determination is not required for the Proposed Action. Source: 40 CFR 93.853.

^c Positive values are emissions increases; negative values are emissions decreases.

EPA = U.S. Environmental Protection Agency; NAAQS = National Ambient Air Quality Standard; CO = carbon monoxide; NO₂ = nitrogen dioxide; PM2.5 = particulate matter less than 2.5 microns in size; PM10 = particulate matter less than 10 microns in size; SO₂ = sulfur dioxide.

Table D-40. Changes in Emissions from U.S. Heavy-Duty Pickup Trucks and Vans by Nonattainment or Maintenance Area and Alternative, Direct and Indirect Impacts--1,3-Butadiene, 2050

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Ada County; Boise, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01	-0.02
Adams, Denver, and Boulder Counties; Denver Metropolitan area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.02	-0.03	-0.07
Ajo (Pima County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Albuquerque, NM	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.02	-0.04
Allegan County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Allegheny County Air Basin: Hazelwood monitor, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Allegheny County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.01	-0.04
Allegheny County; Liberty, Lincoln, Port Vue, Glassport, Clairton, PA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Allegheny, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Allentown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.02
Allentown-Bethlehem-Easton, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	-0.01	-0.01	-0.03
Alton Township, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Amador County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Anchorage, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	-0.01
Anchorage; Eagle River, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Anne Arundel County and Baltimore County, MD	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.04	-0.05	-0.14
Archuleta County; Pagosa Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Armstrong County; Madison, Mahoning, Boggs, Washington, Pine, PA	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	0.00	0.00
Aroostock County; City of Presque Isle, ME	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Atlanta, GA	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-0.01	-0.11	-0.16	-0.42
Atlanta, GA	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.01	-0.10	-0.15	-0.38
Atlantic City, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Bakersfield, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.01	-0.02
Baltimore, MD	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	0.00	-0.07	-0.10	-0.25
Baltimore, MD	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	0.00	-0.07	-0.10	-0.25
Baltimore, MD	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Baton Rouge, LA	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	-0.02	-0.02	-0.06
Beaver, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Benton County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Berrien County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Billings, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.01	-0.01
Billings, MT	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Birmingham, AL	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	-0.02	-0.02	-0.06
Boise-Northern Ada County, ID	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.01	-0.02
Bonner County; The Sandpoint Area, ID	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Boston, MA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.01	-0.04
Boyd County (part), KY	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Brooke; Follansbee area, WV	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Brown County: Green Bay, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Burlington, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Butte County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	-0.01
Calaveras County, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Calaveras County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Campbell-Clermont Counties, KY-OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Canton-Massillon, OH	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	0.00	0.00	-0.01
Central New Hampshire, NH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	-0.01
Central Steptoe Valley, NV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Charleston, WV	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	0.00	-0.01	-0.02
Charlotte, NC	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.02	-0.03	-0.08
Charlotte-Rock Hill, NC-SC	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	-0.03	-0.04	-0.11
Chicago, IL-IN-WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.10	-0.14	-0.36
Chicago-Naperville, IL-IN-WI	Ozone (2008 8-hour)	Maintenance, Serious	100	0	-0.01	-0.10	-0.14	-0.37
Chico (Butte County), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	-0.01
Chico, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Chico, CA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Cincinnati, OH-KY (OH Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	-0.02	-0.03	-0.07
Cincinnati, OH-KY (KY Portion)	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Cincinnati, OH-KY-IN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	-0.02	-0.04	-0.09
Clark County; Las Vegas planning area, NV	PM ₁₀ (1987 24-hour)	Maintenance, Serious	100	0	0.00	-0.02	-0.03	-0.08
Cleveland, OH	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.02	-0.04	-0.09
Cleveland, OH	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.02	-0.04
Cleveland, OH	PM _{2.5} (2012 Annual)	Maintenance, Moderate	100	0	0.00	-0.01	-0.02	-0.05

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Cleveland-Akron-Lorain, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	-0.03	-0.04	-0.09
Cleveland-Akron-Lorain, OH	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	-0.02	-0.03	-0.08
Cochise County; Paul Spur/Douglas planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Colorado Springs, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.01	-0.02
Columbus, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	-0.02	-0.03	-0.09
Columbus, OH	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	-0.02	-0.03	-0.08
Cook County; Lyons Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Cook County; Southeast Chicago, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Coshocton County; Franklin Township, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Coso Junction, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Cuyahoga County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.02	-0.04
Cuyahoga County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.01	-0.03
Dallas-Fort Worth, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.01	-0.10	-0.15	-0.37
Dallas-Fort Worth, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.10	-0.15	-0.37
Dane County; Madison sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.01	-0.03
Delaware County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	0.00	-0.01	-0.02
Denver Metro/North Front Range, CO	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.05	-0.07	-0.18
Denver-Boulder, CO	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	-0.04	-0.05	-0.14
Denver-Boulder-Greeley-Ft. Collins-Loveland, CO	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	-0.05	-0.07	-0.18
Detroit, MI	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	-0.01	-0.07	-0.11	-0.28
Detroit, MI	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.03	-0.04	-0.10
Detroit, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	-0.01
Detroit-Ann Arbor, MI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.01	-0.07	-0.11	-0.28
Doña Ana County; Anthony, NM	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Door County, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	0.00
Door County-Revised, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	0.00
Douglas (Cochise County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Dukes County, MA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	0.00
Duluth, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
East Chicago, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
East Helena Area, MT	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
East Kern County, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00
El Paso County, TX	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01	-0.02
El Paso, TX	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
El Paso-Las Cruces, TX-NM	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.01	-0.01	-0.02
Eugene-Springfield, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01
Evangeline Parish (Partial), LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Fairbanks, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00
Fairbanks, AK	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	-0.01
Flathead County; Columbia Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Flathead County; Kalispell and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Flathead County; Whitefish and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Fort Collins, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	-0.01
Freehold, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Freestone and Anderson Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Fremont County; Canon City Area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Fresno, CA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.00	-0.01	-0.01	-0.02
Gila County (part): Payson, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Giles County, VA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Grant County, NM	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Grants Pass, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Great Falls, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Greater Connecticut, CT	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.00	-0.01	-0.02	-0.05
Greater Connecticut, CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	0.00	-0.01	-0.02	-0.05
Greeley, CO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.01	-0.03
Hancock County (part): Weirton, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Hancock and Brooke Counties (Part); The city of Weirton, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Harrisburg-Lebanon-Carlisle-York, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.02	-0.04
Hartford-New Britain-Middletown, CT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.02	-0.04
Hayden (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	0.00	0.00
Hayden, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Hayden, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Henderson-Webster Counties, KY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Hillsborough County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Hillsborough-Polk County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Houston-Galveston-Brazoria, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.01	-0.09	-0.13	-0.33
Houston-Galveston-Brazoria, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.09	-0.13	-0.32
Howard County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Humphreys County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Huntington, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Hutchinson County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Imperial County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01
Imperial County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	-0.01
Imperial County, CA	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01
Imperial County, CA	PM _{2.5} (2012 Annual)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01
Imperial Valley, CA	PM ₁₀ (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	-0.01
Indian Wells, CA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Indiana, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Indianapolis, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Indianapolis, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.01	-0.01	-0.04
Inland Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Inyo County; Owens Valley planning area, CA	PM ₁₀ (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00
Jackson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Jackson County; Medford-Ashland (including White City), OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Jamestown, NY	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	0.00
Jefferson County, KY	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Jefferson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Jefferson County, OH	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Jefferson County; (part) Steubenville & Mingo Junction, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Johnstown, PA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Josephine County; Grants Pass, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Juneau; Mendenhall Valley area, AK	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Kern County (Eastern Kern), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	0.00	0.00
Kern County (Eastern Kern), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00
King County; Kent, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
King County; Seattle, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Klamath Falls, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Klamath Falls, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Klamath Falls, OR	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Knoxville, TN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	-0.01	-0.01	-0.03
Knoxville-Sevierville-La Follette, TN	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.03
La Porte County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
LaSalle County; Oglesby, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Lake County (part); Lakeview, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Lake County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.01	-0.02
Lake County, OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	-0.01
Lake County; (part) Eastlake, Timberlake, Lakeline, Willoughby, Mentor, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Lake County; Cities of East Chicago, Hammond, Whiting, and Gary, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Lake County; Polson, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Lake County; Ronan, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Lake Tahoe North Shore, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Lake Tahoe South Shore, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Lake Tahoe, NV	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Lancaster, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	-0.01	-0.01	-0.02
Lancaster, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.02
Lane County (part); Oakridge, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Lane County; Eugene/Springfield, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Las Vegas, NV	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.02	-0.03	-0.08
Las Vegas, NV	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	-0.02	-0.03	-0.08
Laurel Area (Yellowstone County), MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	0.00	0.00
Lebanon County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Lemont, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	-0.01
Liberty-Clairton, PA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Lincoln County; Libby and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Logan, UT-ID	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Longmont, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Lorain County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	-0.01	-0.02
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	-0.01	-0.02

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Los Angeles-South Coast Air Basin, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-0.01	-0.11	-0.17	-0.42
Los Angeles-South Coast Air Basin, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-0.01	-0.11	-0.17	-0.42
Los Angeles-South Coast Air Basin, CA	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.01	-0.11	-0.17	-0.42
Los Angeles-South Coast Air Basin, CA	NO2 (1971 Annual)	Maintenance, Primary	100	0	-0.01	-0.11	-0.17	-0.42
Los Angeles-South Coast Air Basin, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.01	-0.11	-0.17	-0.42
Los Angeles-South Coast Air Basin, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-0.01	-0.11	-0.17	-0.42
Louisville, KY-IN (IN Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	0.00	-0.01
Louisville, KY-IN (KY Portion)	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.01	-0.04
Lowell, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Lucas County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01
Madison County; Granite City Township and Nameoki Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Manchester, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Manitowoc County, WI	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	0.00	0.00
Marathon County: Rothschild Sub-city area, Rib Mountain, Weston, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	-0.01
Maricopa and Pinal Counties; Phoenix planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.01	-0.08	-0.11	-0.29
Marion County: Lawrence, Washington, and Warrant Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.01	-0.03
Mariposa County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Mariposa County, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Marshall, WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Medford, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Memphis, TN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.01	-0.04
Memphis, TN-MS-AR	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	-0.01	-0.02	-0.05
Miami (Gila County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Miami, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Miami, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Millinocket AQCR 109, ME	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01
Milwaukee, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.02	-0.05
Milwaukee, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.01	-0.02
Milwaukee-Racine, WI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	-0.01	-0.02	-0.04
Minneapolis-St. Paul, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.04	-0.06	-0.15

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Minneapolis-St. Paul, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.04	-0.06	-0.15
Missoula, MT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	-0.01
Missoula, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Modesto, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	-0.01
Mohave County (part); Bullhead City, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Mono Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Mono County; Mammoth Lake planning area, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Morenci (Greenlee County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Morgan County, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Morongo Band of Mission Indians, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	0.00	0.00
Morongo Band of Mission Indians, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00
Morristown, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Muscatine County, IA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Muscatine, IA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Muskegon County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Muskingum River, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Nashua, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Nassau County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Navarro County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Nevada County (Western part), CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00
Nevada County (Western part), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00
New Haven County, CT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
New Haven-Meriden-Waterbury, CT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.01	-0.03
New Madrid County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
New Manchester-Grant magisterial district in Hancock County, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
New York County, NY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.01	-0.02
New York-N. New Jersey-Long Island, NY-NJ-CT	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.01	-0.13	-0.19	-0.49
New York-N. New Jersey-Long Island, NY-NJ-CT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.01	-0.08	-0.11	-0.28
New York-N. New Jersey-Long Island, NY-NJ-CT	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.01	-0.14	-0.20	-0.51
New York-Northern New Jersey-Long Island, NY-NJ-CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.01	-0.13	-0.19	-0.49
Nogales, AZ	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Northern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.03	-0.05	-0.12
Oakridge, OR	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Ogden, UT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	-0.01
Ogden, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Olmsted County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Olmsted County; City of Rochester, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Oneida County: Rhinelander Sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Pekin, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Penns Grove, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Peoria County: Hollis twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Peoria, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Perth Amboy, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Philadelphia-Camden County, PA-NJ	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.01	-0.03
Philadelphia-Wilmington, PA-NJ-DE (NJ Portion)	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	-0.03	-0.04	-0.10
Philadelphia-Wilmington, PA-NJ-DE (PA-DE Portion)	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	-0.03	-0.05	-0.12
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.01	-0.08	-0.11	-0.28
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.01	-0.08	-0.11	-0.28
Phoenix, AZ	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.01	-0.08	-0.11	-0.28
Phoenix-Mesa, AZ	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.08	-0.11	-0.29
Phoenix-Mesa, AZ	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.08	-0.11	-0.29
Pierce County; Tacoma, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Pima County; Ajo planning area, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Pima County; Rillito planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Pinal County (part); West Pinal, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	-0.01
Pitkin County; Aspen, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Pittsburgh, PA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01
Pittsburgh-Beaver Valley, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	-0.02	-0.03	-0.08
Pittsburgh-Beaver Valley, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	-0.02	-0.03	-0.07
Plumas County, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00
Polk County, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Portland, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.02	-0.02	-0.06

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Power-Bannock Counties; Fort Hall Indian Reservation, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Power-Bannock Counties; Portneuf Valley Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Provo, UT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.00	0.00	0.00	-0.01
Provo, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	0.00	-0.01	-0.01	-0.02
Prowers County; Lamar, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Raleigh-Durham, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.02	-0.03	-0.09
Ramsey County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Reading, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	-0.01	-0.01
Reno, NV	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	-0.01
Rhineland, WI	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Riverside County (Coachella Valley), CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	0.00	0.00	0.00	-0.01
Riverside County (Coachella Valley), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	0.00	-0.01
Riverside County; Coachella Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	-0.01
Riverside, Los Angeles, Orange, & San Bernardino Counties; South Coast Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.01	-0.11	-0.16	-0.42
Rosebud County; Lame Deer, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Routt County (part); Steamboat Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Rusk and Panola Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Sacramento County, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.02	-0.04	-0.09
Sacramento Metro, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	-0.04	-0.06	-0.16
Sacramento Metro, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	-0.04	-0.06	-0.16
Sacramento, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.03	-0.04	-0.11
Sacramento, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.04	-0.06	-0.16
Salem, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01
Salt Lake City, UT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.01	-0.02
Salt Lake City, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	0.00	-0.03	-0.05	-0.12
Salt Lake County, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.02	-0.03	-0.09
Salt Lake County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	0.00	-0.02	-0.03	-0.09
San Antonio, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.02	-0.03	-0.09
San Bernardino County, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01
San Diego County, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	-0.02	-0.03	-0.08
San Diego County, CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	0.00	-0.02	-0.03	-0.08

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
San Diego, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.02	-0.03	-0.08
San Francisco Bay Area, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.05	-0.08	-0.19
San Francisco Bay Area, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.05	-0.08	-0.19
San Francisco Bay Area, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.05	-0.08	-0.19
San Francisco-Oakland-San Jose, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.05	-0.07	-0.18
San Joaquin Valley Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	-0.03	-0.05	-0.12
San Joaquin Valley, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	0.00	-0.03	-0.05	-0.12
San Joaquin Valley, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	0.00	-0.03	-0.05	-0.12
San Joaquin Valley, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	0.00	-0.03	-0.05	-0.12
San Joaquin Valley, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	0.00	-0.03	-0.05	-0.12
San Luis Obispo (Eastern San Luis Obispo), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
San Luis Obispo (Eastern part), CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
San Manuel (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
San Miguel County; Telluride, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Sanders County (part); Thompson Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Santa Cruz County; Nogales planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Seaford, DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	-0.01
Seattle-Tacoma, WA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.00	-0.02	-0.04	-0.09
Sheboygan County, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Sheridan County; City of Sheridan, WY	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Shoreline Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Shoshone County; City of Pinehurst, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Shoshone County; Pinehurst Expansion Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Silver Bow County; Butte, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Somerville, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Southern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.01	-0.01	-0.02
Southwest Indiana, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Spokane County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01	-0.02
Spokane, WA	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.00	-0.01	-0.02
Springfield, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.01	-0.02
St. Bernard Parish, LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
St. Clair, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
St. Lawrence County, NY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
St. Louis, MO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.04	-0.06	-0.14
St. Louis, MO-IL	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.08	-0.12	-0.30
St. Louis-St. Charles-Farmington, MO-IL	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.01	-0.08	-0.12	-0.30
Steubenville, OH-WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Steubenville-Weirton, OH-WV	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	0.00	0.00	0.00
Stockton, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	-0.01
Sullivan County, TN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Sutter Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Syracuse, NY	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.01	-0.02
Tacoma, WA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01	-0.01
Tazewell County: Groveland twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Terre Haute, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Thurston County; Cities of Olympia, Tumwater, and Lacey, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Titus County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Toms River, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Tooele County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Trenton, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Trona, CA	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Tucson, AZ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.01	-0.03
Tuolumne County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Tuscan Buttes, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Tuscan Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	0.00
Uinta Basin, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	-0.01
Union County; LaGrande, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Upper Green River Basin Area, WY	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Utah County, UT	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.02
Vancouver, WA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	-0.01
Ventura County, CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	-0.01	-0.02
Ventura County, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	-0.01	-0.02
Vermillion County; Part of Clinton Township, IN	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Vigo County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Walla Walla County; Wallula, WA	PM ₁₀ (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Waltham, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Warren County, NJ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Warren County: Conewago Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Warren County: Warren Boro, Pleasant Twp, Glade Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Warren, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Washington, DC-MD-VA	Ozone (2008 8-hour)	Nonattainment (DC) Maintenance (MD, VA), Marginal	50	0	0.00	-0.04	-0.06	-0.16
Washington, DC-MD-VA	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	0.00	-0.04	-0.06	-0.16
Washington, DC-MD-VA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.01	-0.02
Washoe County; Reno planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	-0.01
Wayne County, MI	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Wayne County: Boston, Center, Franklin, Wayne & Webster Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
West Central Pinal, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
West Silver Valley, ID	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Whatcom County, WA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Winston-Salem, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.01	-0.02
Worcester, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01
Yakima County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Yakima, WA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Yuba City-Marysville, CA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Yuma, AZ	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Yuma, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01

Notes:

^a Nonattainment or maintenance status as of 2/1/2024. Source: EPA, The Green Book Nonattainment Areas for Criteria Pollutants; <http://www.epa.gov/airquality/greenbook/>. "--" indicates that no severity classification has been established for the NAAQS pollutant.

^b Emissions thresholds in tons per year. Where the threshold differs by precursor pollutant, the smallest of the precursor thresholds is shown. These thresholds are provided for information only; a general conformity determination is not required for the Proposed Action. Source: 40 CFR 93.853.

^c Positive values are emissions increases; negative values are emissions decreases.

EPA = U.S. Environmental Protection Agency; NAAQS = National Ambient Air Quality Standard; CO = carbon monoxide; NO₂ = nitrogen dioxide; PM2.5 = particulate matter less than 2.5 microns in size; PM10 = particulate matter less than 10 microns in size; SO₂ = sulfur dioxide.

Table D-41. Changes in Emissions from U.S. Heavy-Duty Pickup Trucks and Vans by Nonattainment or Maintenance Area and Alternative, Direct and Indirect Impacts--Diesel Particulate Matter (DPM), 2035

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Ada County; Boise, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Adams, Denver, and Boulder Counties; Denver Metropolitan area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.04	-0.09	-0.22
Ajo (Pima County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Albuquerque, NM	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.01
Allegan County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Allegheny County Air Basin: Hazelwood monitor, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Allegheny County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.02	-0.04
Allegheny County; Liberty, Lincoln, Port Vue, Glassport, Clairton, PA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Allegheny, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	-0.02	-0.04
Allentown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Allentown-Bethlehem-Easton, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	0.00
Alton Township, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.08	-0.18	-0.43
Amador County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Anchorage, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	-0.01
Anchorage; Eagle River, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Anne Arundel County and Baltimore County, MD	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.01	0.01	0.03
Archuleta County; Pagosa Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.03	-0.06
Armstrong County; Madison, Mahoning, Boggs, Washington, Pine, PA	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	-0.01	-0.02
Aroostock County; City of Presque Isle, ME	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Atlanta, GA	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	0.00	0.02	0.03	0.07
Atlanta, GA	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	0.02	0.03	0.07
Atlantic City, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Bakersfield, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.03	-0.06
Baltimore, MD	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	0.00	0.01	0.02	0.04
Baltimore, MD	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	0.00	0.01	0.02	0.04
Baltimore, MD	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Baton Rouge, LA	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.02	-0.28	-0.62	-1.46
Beaver, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Benton County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Berrien County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Billings, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.07	-0.15	-0.35
Billings, MT	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.07	-0.15	-0.35
Birmingham, AL	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	-0.02	-0.04	-0.09
Boise-Northern Ada County, ID	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Bonner County; The Sandpoint Area, ID	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Boston, MA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.01
Boyd County (part), KY	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.09	-0.18	-0.43
Brooke; Follansbee area, WV	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Brown County: Green Bay, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Burlington, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Butte County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Calaveras County, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Calaveras County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Campbell-Clermont Counties, KY-OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Canton-Massillon, OH	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	-0.04	-0.09	-0.21
Central New Hampshire, NH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Central Steptoe Valley, NV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Charleston, WV	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	0.00	-0.01	-0.02
Charlotte, NC	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.01	0.01
Charlotte-Rock Hill, NC-SC	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	0.01	0.01	0.02
Chicago, IL-IN-WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.05	-0.82	-1.79	-4.20
Chicago-Naperville, IL-IN-WI	Ozone (2008 8-hour)	Maintenance, Serious	100	0	-0.03	-0.40	-0.88	-2.08
Chico (Butte County), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Chico, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Chico, CA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Cincinnati, OH-KY (OH Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	0.00	0.01
Cincinnati, OH-KY (KY Portion)	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.03	-0.07
Cincinnati, OH-KY-IN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	-0.01	-0.03	-0.06
Clark County; Las Vegas planning area, NV	PM ₁₀ (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00
Cleveland, OH	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.03	-0.07	-0.17
Cleveland, OH	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.01
Cleveland, OH	PM _{2.5} (2012 Annual)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.01

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Cleveland-Akron-Lorain, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	-0.03	-0.07	-0.17
Cleveland-Akron-Lorain, OH	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	-0.03	-0.07	-0.17
Cochise County; Paul Spur/Douglas planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Colorado Springs, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Columbus, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	0.00	0.01
Columbus, OH	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	0.00	0.01
Cook County; Lyons Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Cook County; Southeast Chicago, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.24	-0.51	-1.21
Coshocton County; Franklin Township, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Coso Junction, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.03	-0.06
Cuyahoga County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.01
Cuyahoga County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.01
Dallas-Fort Worth, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	-0.01	-0.03
Dallas-Fort Worth, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01	-0.03
Dane County; Madison sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.01
Delaware County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-0.02	-0.34	-0.75	-1.76
Denver Metro/North Front Range, CO	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.10	-0.22	-0.52
Denver-Boulder, CO	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	-0.04	-0.09	-0.21
Denver-Boulder-Greeley-Ft. Collins-Loveland, CO	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	-0.04	-0.10	-0.22
Detroit, MI	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	-0.01	-0.11	-0.25	-0.58
Detroit, MI	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.03	-0.08
Detroit, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.02	-0.04	-0.09
Detroit-Ann Arbor, MI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.01	-0.11	-0.25	-0.58
Doña Ana County; Anthony, NM	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.04	-0.08	-0.19
Door County, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	0.00
Door County-Revised, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	0.00
Douglas (Cochise County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Dukes County, MA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	0.00
Duluth, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	-0.01
East Chicago, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.24	-0.52	-1.21
East Helena Area, MT	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
East Kern County, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	-0.01	-0.03	-0.06
El Paso County, TX	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.04	-0.08	-0.18
El Paso, TX	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.04	-0.08	-0.19
El Paso-Las Cruces, TX-NM	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.07	-0.16	-0.37
Eugene-Springfield, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Evangeline Parish (Partial), LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Fairbanks, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	-0.01
Fairbanks, AK	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	-0.01
Flathead County; Columbia Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Flathead County; Kalispell and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Flathead County; Whitefish and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Fort Collins, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Freehold, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Freestone and Anderson Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	-0.01
Fremont County; Canon City Area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Fresno, CA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.00	0.00	0.00	-0.01
Gila County (part): Payson, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Giles County, VA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Grant County, NM	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Grants Pass, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Great Falls, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.02	-0.05
Greater Connecticut, CT	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.01
Greater Connecticut, CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	0.00	0.00	0.00	0.01
Greeley, CO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.11	-0.23	-0.54
Hancock County (part): Weirton, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	-0.01	-0.02
Hancock and Brooke Counties (Part); The city of Weirton, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01	-0.02
Harrisburg-Lebanon-Carlisle-York, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.01
Hartford-New Britain-Middletown, CT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.01
Hayden (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	0.00	0.00
Hayden, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Hayden, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Henderson-Webster Counties, KY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Hillsborough County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Hillsborough-Polk County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Houston-Galveston-Brazoria, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.05	-0.86	-1.86	-4.38
Houston-Galveston-Brazoria, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.05	-0.86	-1.86	-4.38
Howard County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.04	-0.08	-0.19
Humphreys County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Huntington, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Hutchinson County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.06	-0.12	-0.28
Imperial County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Imperial County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Imperial County, CA	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Imperial County, CA	PM _{2.5} (2012 Annual)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Imperial Valley, CA	PM ₁₀ (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00
Indian Wells, CA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.03	-0.06
Indiana, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	-0.03	-0.06
Indianapolis, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Indianapolis, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.01
Inland Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Inyo County; Owens Valley planning area, CA	PM ₁₀ (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	-0.01
Jackson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Jackson County; Medford-Ashland (including White City), OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Jamestown, NY	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	-0.04	-0.08	-0.18
Jefferson County, KY	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Jefferson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Jefferson County, OH	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Jefferson County; (part) Steubenville & Mingo Junction, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.01	-0.02
Johnstown, PA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.02	-0.04
Josephine County; Grants Pass, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Juneau; Mendenhall Valley area, AK	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Kern County (Eastern Kern), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.02	-0.31	-0.67	-1.57
Kern County (Eastern Kern), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.02	-0.31	-0.67	-1.57
King County; Kent, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
King County; Seattle, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Klamath Falls, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Klamath Falls, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Klamath Falls, OR	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Knoxville, TN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	0.00	0.01
Knoxville-Sevierville-La Follette, TN	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.01
La Porte County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
LaSalle County; Oglesby, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Lake County (part); Lakeview, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Lake County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.24	-0.52	-1.21
Lake County, OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Lake County; (part) Eastlake, Timberlake, Lakeline, Willoughby, Mentor, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Lake County; Cities of East Chicago, Hammond, Whiting, and Gary, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.24	-0.52	-1.21
Lake County; Polson, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Lake County; Ronan, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Lake Tahoe North Shore, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Lake Tahoe South Shore, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Lake Tahoe, NV	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Lancaster, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	0.00
Lancaster, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Lane County (part); Oakridge, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Lane County; Eugene/Springfield, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Las Vegas, NV	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Las Vegas, NV	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00
Laurel Area (Yellowstone County), MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	-0.07	-0.15	-0.35
Lebanon County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Lemont, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.18	-0.39	-0.92
Liberty-Clairton, PA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Lincoln County; Libby and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Logan, UT-ID	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Longmont, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.03	-0.07
Lorain County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.02	-0.31	-0.67	-1.57
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-0.02	-0.31	-0.67	-1.57

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Los Angeles-South Coast Air Basin, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-0.02	-0.29	-0.64	-1.51
Los Angeles-South Coast Air Basin, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-0.02	-0.29	-0.64	-1.51
Los Angeles-South Coast Air Basin, CA	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.02	-0.29	-0.64	-1.51
Los Angeles-South Coast Air Basin, CA	NO2 (1971 Annual)	Maintenance, Primary	100	0	-0.02	-0.29	-0.64	-1.51
Los Angeles-South Coast Air Basin, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.02	-0.29	-0.64	-1.51
Los Angeles-South Coast Air Basin, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-0.02	-0.29	-0.64	-1.51
Louisville, KY-IN (IN Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	0.00	0.00
Louisville, KY-IN (KY Portion)	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.01
Lowell, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Lucas County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.10	-0.22	-0.53
Madison County; Granite City Township and Nameoki Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.08	-0.18	-0.43
Manchester, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Manitowoc County, WI	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	0.00	0.00
Marathon County: Rothschild Sub-city area, Rib Mountain, Weston, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Maricopa and Pinal Counties; Phoenix planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.01	0.02	0.06
Marion County: Lawrence, Washington, and Warrant Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Mariposa County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01
Mariposa County, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01
Marshall, WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.01	-0.01
Medford, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Memphis, TN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.03	-0.07	-0.16
Memphis, TN-MS-AR	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	-0.03	-0.07	-0.16
Miami (Gila County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Miami, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Miami, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Millinocket AQCR 109, ME	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Milwaukee, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.01
Milwaukee, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Milwaukee-Racine, WI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	0.00	0.00	0.01
Minneapolis-St. Paul, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.07	-0.15	-0.36

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Minneapolis-St. Paul, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.07	-0.15	-0.36
Missoula, MT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Missoula, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Modesto, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Mohave County (part); Bullhead City, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Mono Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01
Mono County; Mammoth Lake planning area, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Morenci (Greenlee County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Morgan County, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Morongo Band of Mission Indians, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	0.00	0.00
Morongo Band of Mission Indians, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00
Morristown, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Muscatine County, IA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Muscatine, IA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Muskegon County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Muskingum River, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	-0.01
Nashua, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Nassau County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Navarro County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	-0.01
Nevada County (Western part), CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00
Nevada County (Western part), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00
New Haven County, CT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
New Haven-Meriden-Waterbury, CT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.01
New Madrid County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
New Manchester-Grant magisterial district in Hancock County, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.01	-0.02
New York County, NY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
New York-N. New Jersey-Long Island, NY-NJ-CT	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	-0.04	-0.10	-0.23
New York-N. New Jersey-Long Island, NY-NJ-CT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.00	-0.05	-0.11	-0.26
New York-N. New Jersey-Long Island, NY-NJ-CT	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	-0.04	-0.10	-0.23
New York-Northern New Jersey-Long Island, NY-NJ-CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	0.00	-0.04	-0.10	-0.23
Nogales, AZ	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Northern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.04	-0.09	-0.22
Oakridge, OR	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Ogden, UT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Ogden, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Olmsted County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Olmsted County; City of Rochester, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Oneida County: Rhinelander Sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Pekin, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Penns Grove, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Peoria County: Hollis twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Peoria, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Perth Amboy, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Philadelphia-Camden County, PA-NJ	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.27	-0.59	-1.38
Philadelphia-Wilmington, PA-NJ-DE (NJ Portion)	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	-0.04	-0.10	-0.24
Philadelphia-Wilmington, PA-NJ-DE (PA-DE Portion)	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.29	-0.64	-1.50
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.02	-0.33	-0.73	-1.72
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.05	-0.78	-1.70	-4.00
Phoenix, AZ	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.01	0.02	0.05
Phoenix-Mesa, AZ	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.01	0.02	0.06
Phoenix-Mesa, AZ	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.01	0.02	0.06
Pierce County; Tacoma, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Pima County; Ajo planning area, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Pima County; Rillito planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Pinal County (part); West Pinal, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00
Pitkin County; Aspen, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01	-0.01
Pittsburgh, PA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Pittsburgh-Beaver Valley, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	-0.03	-0.06	-0.14
Pittsburgh-Beaver Valley, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	-0.02	-0.06	-0.13
Plumas County, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00
Polk County, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Portland, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.01

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Power-Bannock Counties; Fort Hall Indian Reservation, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Power-Bannock Counties; Portneuf Valley Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Provo, UT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.00	0.00	0.00	0.00
Provo, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	0.00	-0.03	-0.06	-0.15
Prowers County; Lamar, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Raleigh-Durham, NC	CO (1971 8-hour)	Maintenance, Moderate ≤ 12.7ppm	100	0	0.00	0.00	0.01	0.02
Ramsey County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.08	-0.16	-0.39
Reading, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	0.00
Reno, NV	CO (1971 8-hour)	Maintenance, Moderate ≤ 12.7ppm	100	0	0.00	0.00	0.00	0.00
Rhineland, WI	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Riverside County (Coachella Valley), CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	0.00	0.00	0.00	0.00
Riverside County (Coachella Valley), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	0.00	0.00
Riverside County; Coachella Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00
Riverside, Los Angeles, Orange, & San Bernardino Counties; South Coast Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.02	-0.29	-0.64	-1.51
Rosebud County; Lame Deer, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Routt County (part); Steamboat Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.04	-0.09	-0.21
Rusk and Panola Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.01	-0.02
Sacramento County, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.03	-0.42	-0.91	-2.13
Sacramento Metro, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.03	-0.42	-0.91	-2.13
Sacramento Metro, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.03	-0.42	-0.91	-2.13
Sacramento, CA	CO (1971 8-hour)	Maintenance, Moderate ≤ 12.7ppm	100	0	0.00	-0.02	-0.06	-0.13
Sacramento, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.03	-0.42	-0.91	-2.13
Salem, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Salt Lake City, UT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.05	-0.10	-0.24
Salt Lake City, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	0.00	-0.04	-0.09	-0.22
Salt Lake County, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.04	-0.10	-0.22
Salt Lake County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	0.00	-0.04	-0.10	-0.22
San Antonio, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
San Bernardino County, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.02	-0.31	-0.67	-1.57
San Diego County, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	0.01	0.02
San Diego County, CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	0.01	0.02

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
San Diego, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.01	0.02
San Francisco Bay Area, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.03	-0.42	-0.91	-2.13
San Francisco Bay Area, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.03	-0.42	-0.91	-2.13
San Francisco Bay Area, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.03	-0.42	-0.91	-2.13
San Francisco-Oakland-San Jose, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.03	-0.42	-0.91	-2.14
San Joaquin Valley Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.04	-0.71	-1.53	-3.61
San Joaquin Valley, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-0.04	-0.71	-1.53	-3.61
San Joaquin Valley, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-0.04	-0.71	-1.53	-3.61
San Joaquin Valley, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.04	-0.71	-1.53	-3.61
San Joaquin Valley, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-0.04	-0.71	-1.53	-3.61
San Luis Obispo (Eastern San Luis Obispo), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.02	-0.04	-0.09
San Luis Obispo (Eastern part), CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.02	-0.04	-0.09
San Manuel (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
San Miguel County; Telluride, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Sanders County (part); Thompson Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Santa Cruz County; Nogales planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Seaford, DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	0.00
Seattle-Tacoma, WA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.00	0.00	0.00	0.01
Sheboygan County, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Sheridan County; City of Sheridan, WY	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Shoreline Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Shoshone County; City of Pinehurst, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Shoshone County; Pinehurst Expansion Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Silver Bow County; Butte, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Somerville, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Southern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.03	-0.06	-0.15
Southwest Indiana, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Spokane County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Spokane, WA	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00
Springfield, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
St. Bernard Parish, LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.09	-0.20	-0.48
St. Clair, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
St. Lawrence County, NY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
St. Louis, MO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.08	-0.17	-0.41
St. Louis, MO-IL	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.16	-0.35	-0.81
St. Louis-St. Charles-Farmington, MO-IL	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.01	-0.07	-0.16	-0.38
Steubenville, OH-WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.01	-0.02	-0.05
Steubenville-Weirton, OH-WV	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	-0.01	-0.02	-0.04
Stockton, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Sullivan County, TN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Sutter Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Syracuse, NY	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Tacoma, WA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Tazewell County: Groveland twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Terre Haute, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Thurston County; Cities of Olympia, Tumwater, and Lacey, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Titus County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Toms River, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Tooele County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	0.00	-0.03	-0.06	-0.15
Trenton, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Trona, CA	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.03	-0.06
Tucson, AZ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.01
Tuolumne County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	-0.01
Tuscan Buttes, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Tuscan Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	0.00
Uinta Basin, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.01	-0.03	-0.06
Union County; LaGrande, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Upper Green River Basin Area, WY	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.01	-0.02	-0.06
Utah County, UT	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.03	-0.07	-0.17
Vancouver, WA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Ventura County, CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-0.02	-0.31	-0.67	-1.57
Ventura County, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.02	-0.31	-0.67	-1.57
Vermillion County; Part of Clinton Township, IN	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Vigo County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Walla Walla County; Wallula, WA	PM ₁₀ (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Waltham, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Warren County, NJ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Warren County: Conewago Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.03	-0.08	-0.18
Warren County: Warren Boro, Pleasant Twp, Glade Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	-0.03	-0.08	-0.18
Warren, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.03	-0.08	-0.18
Washington, DC-MD-VA	Ozone (2008 8-hour)	Nonattainment (DC) Maintenance (MD, VA), Marginal	50	0	0.00	0.01	0.01	0.03
Washington, DC-MD-VA	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	0.00	0.01	0.01	0.03
Washington, DC-MD-VA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Washoe County; Reno planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00
Wayne County, MI	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.02	-0.04	-0.10
Wayne County: Boston, Center, Franklin, Wayne & Webster Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
West Central Pinal, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
West Silver Valley, ID	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Whatcom County, WA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.04	-0.08	-0.19
Winston-Salem, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Worcester, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Yakima County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Yakima, WA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Yuba City-Marysville, CA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Yuma, AZ	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Yuma, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00

Notes:

^a Nonattainment or maintenance status as of 2/1/2024. Source: EPA, The Green Book Nonattainment Areas for Criteria Pollutants; <http://www.epa.gov/airquality/greenbook/>. "--" indicates that no severity classification has been established for the NAAQS pollutant.

^b Emissions thresholds in tons per year. Where the threshold differs by precursor pollutant, the smallest of the precursor thresholds is shown. These thresholds are provided for information only; a general conformity determination is not required for the Proposed Action. Source: 40 CFR 93.853.

^c Positive values are emissions increases; negative values are emissions decreases.

EPA = U.S. Environmental Protection Agency; NAAQS = National Ambient Air Quality Standard; CO = carbon monoxide; NO₂ = nitrogen dioxide; PM2.5 = particulate matter less than 2.5 microns in size; PM10 = particulate matter less than 10 microns in size; SO₂ = sulfur dioxide.

Table D-42. Changes in Emissions from U.S. Heavy-Duty Pickup Trucks and Vans by Nonattainment or Maintenance Area and Alternative, Direct and Indirect Impacts—Diesel Particulate Matter (DPM), 2050

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Ada County; Boise, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01	-0.01
Adams, Denver, and Boulder Counties; Denver Metropolitan area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.27	-0.46	-0.84
Ajo (Pima County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Albuquerque, NM	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Allegan County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Allegheny County Air Basin: Hazelwood monitor, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01
Allegheny County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.00	-0.05	-0.09	-0.17
Allegheny County; Liberty, Lincoln, Port Vue, Glassport, Clairton, PA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Allegheny, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.04	-0.07	-0.13
Allentown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01	-0.01
Allentown-Bethlehem-Easton, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	-0.01	-0.01
Alton Township, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.02	-0.50	-0.85	-1.56
Amador County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Anchorage, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	-0.01	-0.01	-0.03
Anchorage; Eagle River, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.03
Anne Arundel County and Baltimore County, MD	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Archuleta County; Pagosa Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.07	-0.12	-0.23
Armstrong County; Madison, Mahoning, Boggs, Washington, Pine, PA	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	-0.02	-0.04	-0.07
Aroostock County; City of Presque Isle, ME	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Atlanta, GA	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.02
Atlanta, GA	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	-0.01	-0.01	-0.02
Atlantic City, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Bakersfield, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.08	-0.13	-0.24
Baltimore, MD	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	0.00	-0.01	-0.02	-0.04
Baltimore, MD	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	0.00	-0.01	-0.02	-0.04
Baltimore, MD	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Baton Rouge, LA	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.06	-1.71	-2.88	-5.31

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Beaver, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Benton County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Berrien County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01
Billings, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.41	-0.69	-1.28
Billings, MT	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.41	-0.69	-1.28
Birmingham, AL	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	-0.12	-0.21	-0.38
Boise-Northern Ada County, ID	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.01	-0.01
Bonner County; The Sandpoint Area, ID	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Boston, MA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Boyd County (part), KY	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.02	-0.51	-0.85	-1.57
Brooke; Follansbee area, WV	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Brown County: Green Bay, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Burlington, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Butte County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Calaveras County, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Calaveras County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Campbell-Clermont Counties, KY-OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Canton-Massillon, OH	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.01	-0.24	-0.41	-0.75
Central New Hampshire, NH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Central Steptoe Valley, NV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Charleston, WV	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	-0.02	-0.04	-0.07
Charlotte, NC	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Charlotte-Rock Hill, NC-SC	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	0.00	0.00
Chicago, IL-IN-WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.17	-4.98	-8.39	-15.48
Chicago-Naperville, IL-IN-WI	Ozone (2008 8-hour)	Maintenance, Serious	100	0	-0.09	-2.50	-4.21	-7.77
Chico (Butte County), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Chico, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Chico, CA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Cincinnati, OH-KY (OH Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	-0.01	-0.01
Cincinnati, OH-KY (KY Portion)	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	0.00	-0.08	-0.14	-0.26

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Cincinnati, OH-KY-IN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	-0.09	-0.15	-0.28
Clark County; Las Vegas planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	-0.02	-0.04	-0.07
Cleveland, OH	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.22	-0.36	-0.67
Cleveland, OH	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Cleveland, OH	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Cleveland-Akron-Lorain, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.01	-0.22	-0.37	-0.68
Cleveland-Akron-Lorain, OH	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.01	-0.22	-0.36	-0.67
Cochise County; Paul Spur/Douglas planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Colorado Springs, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.01	-0.01
Columbus, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	-0.01	-0.02	-0.04
Columbus, OH	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	-0.01	-0.02	-0.04
Cook County; Lyons Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Cook County; Southeast Chicago, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.05	-1.41	-2.38	-4.39
Coshocton County; Franklin Township, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Coso Junction, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.07	-0.13	-0.23
Cuyahoga County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Cuyahoga County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Dallas-Fort Worth, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	-0.12	-0.20	-0.37
Dallas-Fort Worth, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.12	-0.20	-0.37
Dane County; Madison sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Delaware County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-0.07	-2.06	-3.46	-6.39
Denver Metro/North Front Range, CO	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.02	-0.64	-1.08	-2.00
Denver-Boulder, CO	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.01	-0.27	-0.46	-0.85
Denver-Boulder-Greeley-Ft. Collins-Loveland, CO	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.01	-0.30	-0.51	-0.94
Detroit, MI	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	-0.03	-0.73	-1.24	-2.28
Detroit, MI	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.11	-0.19	-0.36
Detroit, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.11	-0.19	-0.35
Detroit-Ann Arbor, MI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.03	-0.73	-1.24	-2.28
Doña Ana County; Anthony, NM	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.22	-0.36	-0.67

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Door County, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	0.00
Door County-Revised, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	0.00
Douglas (Cochise County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Dukes County, MA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	0.00
Duluth, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.02	-0.03
East Chicago, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.05	-1.41	-2.38	-4.39
East Helena Area, MT	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
East Kern County, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	-0.07	-0.13	-0.23
El Paso County, TX	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.22	-0.37	-0.68
El Paso, TX	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.22	-0.36	-0.67
El Paso-Las Cruces, TX-NM	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.02	-0.43	-0.73	-1.35
Eugene-Springfield, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Evangeline Parish (Partial), LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Fairbanks, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	-0.01	-0.02	-0.03
Fairbanks, AK	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	0.00	-0.01	-0.02	-0.03
Flathead County; Columbia Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Flathead County; Kalispell and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Flathead County; Whitefish and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Fort Collins, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Freehold, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Freestone and Anderson Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	-0.01	-0.02
Fremont County; Canon City Area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Fresno, CA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.00	-0.02	-0.03	-0.06
Gila County (part): Payson, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Giles County, VA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Grant County, NM	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Grants Pass, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Great Falls, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.06	-0.11	-0.20
Greater Connecticut, CT	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00
Greater Connecticut, CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	0.00	0.00	0.00	0.00
Greeley, CO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.64	-1.08	-1.99
Hancock County (part): Weirton, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	-0.02	-0.03	-0.06
Hancock and Brooke Counties (Part); The city of Weirton, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.02	-0.03	-0.06
Harrisburg-Lebanon-Carlisle-York, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Hartford-New Britain-Middletown, CT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Hayden (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	0.00	0.00
Hayden, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Hayden, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Henderson-Webster Counties, KY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	-0.01
Hillsborough County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.01	-0.01
Hillsborough-Polk County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.01	-0.01
Houston-Galveston-Brazoria, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.18	-5.17	-8.70	-16.06
Houston-Galveston-Brazoria, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.18	-5.17	-8.70	-16.06
Howard County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.22	-0.38	-0.69
Humphreys County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Huntington, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Hutchinson County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.33	-0.56	-1.03
Imperial County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Imperial County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Imperial County, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Imperial County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Imperial Valley, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00
Indian Wells, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.07	-0.12	-0.22
Indiana, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.07	-0.12	-0.22
Indianapolis, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Indianapolis, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Inland Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Inyo County; Owens Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	-0.01	-0.01	-0.03
Jackson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Jackson County; Medford-Ashland (including White City), OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Jamestown, NY	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.01	-0.21	-0.35	-0.65
Jefferson County, KY	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Jefferson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Jefferson County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Jefferson County; (part) Steubenville & Mingo Junction, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.02	-0.03	-0.06
Johnstown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	-0.04	-0.07	-0.14
Josephine County; Grants Pass, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Juneau; Mendenhall Valley area, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Kern County (Eastern Kern), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.06	-1.83	-3.09	-5.70
Kern County (Eastern Kern), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.06	-1.83	-3.09	-5.70
King County; Kent, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
King County; Seattle, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Klamath Falls, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Klamath Falls, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Klamath Falls, OR	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Knoxville, TN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	0.00	0.00
Knoxville-Sevierville-La Follette, TN	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
La Porte County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
LaSalle County; Oglesby, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Lake County (part); Lakeview, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Lake County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.05	-1.42	-2.38	-4.40
Lake County, OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Lake County; (part) Eastlake, Timberlake, Lakeline, Willoughby, Mentor, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Lake County; Cities of East Chicago, Hammond, Whiting, and Gary, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.05	-1.42	-2.38	-4.40
Lake County; Polson, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Lake County; Ronan, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Lake Tahoe North Shore, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Lake Tahoe South Shore, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Lake Tahoe, NV	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Lancaster, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	-0.01
Lancaster, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Lane County (part); Oakridge, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Lane County; Eugene/Springfield, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Las Vegas, NV	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.02	-0.04	-0.07
Las Vegas, NV	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	-0.02	-0.04	-0.07
Laurel Area (Yellowstone County), MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	-0.01	-0.41	-0.69	-1.28
Lebanon County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Lemont, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.04	-1.07	-1.81	-3.34
Liberty-Clairton, PA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01
Lincoln County; Libby and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Logan, UT-ID	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Longmont, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.08	-0.13	-0.24
Lorain County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.06	-1.83	-3.09	-5.70
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-0.06	-1.83	-3.09	-5.70
Los Angeles-South Coast Air Basin, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-0.06	-1.85	-3.12	-5.75
Los Angeles-South Coast Air Basin, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-0.06	-1.85	-3.12	-5.75
Los Angeles-South Coast Air Basin, CA	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.06	-1.85	-3.12	-5.75
Los Angeles-South Coast Air Basin, CA	NO ₂ (1971 Annual)	Maintenance, Primary	100	0	-0.06	-1.85	-3.12	-5.75
Los Angeles-South Coast Air Basin, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.06	-1.85	-3.12	-5.75
Los Angeles-South Coast Air Basin, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-0.06	-1.85	-3.12	-5.75
Louisville, KY-IN (IN Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	0.00	0.00
Louisville, KY-IN (KY Portion)	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Lowell, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Lucas County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.02	-0.62	-1.04	-1.92
Madison County; Granite City Township and Nameoki Township, IL	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.50	-0.85	-1.56
Manchester, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Manitowoc County, WI	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	0.00	0.00
Marathon County: Rothschild Sub-city area, Rib Mountain, Weston, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Maricopa and Pinal Counties; Phoenix planning area, AZ	PM ₁₀ (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00
Marion County: Lawrence, Washington, and Warrant Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Mariposa County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.01	-0.02
Mariposa County, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.01	-0.02
Marshall, WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.02	-0.03	-0.05
Medford, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Memphis, TN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.20	-0.34	-0.62
Memphis, TN-MS-AR	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.01	-0.20	-0.34	-0.63
Miami (Gila County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Miami, AZ	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Miami, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Millinocket AQCR 109, ME	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Milwaukee, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Milwaukee, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Milwaukee-Racine, WI	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	0.00	0.00	0.00
Minneapolis-St. Paul, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.46	-0.77	-1.42
Minneapolis-St. Paul, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.02	-0.46	-0.77	-1.42
Missoula, MT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Missoula, MT	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Modesto, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.01	-0.02
Mohave County (part); Bullhead City, AZ	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Mono Basin, CA	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.01	-0.02

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Mono County; Mammoth Lake planning area, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.02
Morenci (Greenlee County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Morgan County, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Morongo Band of Mission Indians, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	0.00	0.00
Morongo Band of Mission Indians, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00
Morristown, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Muscatine County, IA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Muscatine, IA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Muskegon County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Muskingum River, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	-0.01	-0.02
Nashua, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Nassau County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Navarro County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	-0.02	-0.03
Nevada County (Western part), CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00
Nevada County (Western part), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00
New Haven County, CT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
New Haven-Meriden-Waterbury, CT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
New Madrid County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
New Manchester-Grant magisterial district in Hancock County, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.02	-0.04	-0.07
New York County, NY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
New York-N. New Jersey-Long Island, NY-NJ-CT	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.01	-0.39	-0.65	-1.20
New York-N. New Jersey-Long Island, NY-NJ-CT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.01	-0.37	-0.63	-1.16
New York-N. New Jersey-Long Island, NY-NJ-CT	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.01	-0.38	-0.64	-1.19
New York-Northern New Jersey-Long Island, NY-NJ-CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.01	-0.39	-0.65	-1.20
Nogales, AZ	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Northern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.28	-0.47	-0.87
Oakridge, OR	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Ogden, UT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Ogden, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Olmsted County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Olmsted County; City of Rochester, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Oneida County: Rhinelander Sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Pekin, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Penns Grove, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Peoria County: Hollis twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Peoria, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Perth Amboy, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Philadelphia-Camden County, PA-NJ	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.06	-1.61	-2.71	-5.00
Philadelphia-Wilmington, PA-NJ-DE (NJ Portion)	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.01	-0.30	-0.50	-0.92
Philadelphia-Wilmington, PA-NJ-DE (PA-DE Portion)	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.06	-1.77	-2.99	-5.52
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.07	-2.07	-3.49	-6.44
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.16	-4.72	-7.95	-14.66
Phoenix, AZ	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00
Phoenix-Mesa, AZ	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Phoenix-Mesa, AZ	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Pierce County; Tacoma, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.02	-0.04
Pima County; Ajo planning area, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Pima County; Rillito planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Pinal County (part); West Pinal, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00
Pitkin County; Aspen, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.02	-0.03	-0.06
Pittsburgh, PA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.01	-0.01
Pittsburgh-Beaver Valley, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.01	-0.18	-0.31	-0.57
Pittsburgh-Beaver Valley, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.17	-0.29	-0.53
Plumas County, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00
Polk County, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Portland, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.01	-0.02

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Power-Bannock Counties; Fort Hall Indian Reservation, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Power-Bannock Counties; Portneuf Valley Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Provo, UT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.00	0.00	0.00	0.00
Provo, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.01	-0.18	-0.30	-0.55
Prowers County; Lamar, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Raleigh-Durham, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Ramsey County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.45	-0.76	-1.40
Reading, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	0.00
Reno, NV	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Rhineland, WI	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Riverside County (Coachella Valley), CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	0.00	0.00	0.00	0.00
Riverside County (Coachella Valley), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	0.00	0.00
Riverside County; Coachella Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00
Riverside, Los Angeles, Orange, & San Bernardino Counties; South Coast Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.06	-1.85	-3.12	-5.75
Rosebud County; Lame Deer, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Routt County (part); Steamboat Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.25	-0.41	-0.76
Rusk and Panola Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.02	-0.04	-0.07
Sacramento County, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.09	-2.50	-4.22	-7.79
Sacramento Metro, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.09	-2.52	-4.24	-7.82
Sacramento Metro, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.09	-2.52	-4.24	-7.82
Sacramento, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.18	-0.30	-0.55
Sacramento, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.09	-2.52	-4.24	-7.82
Salem, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Salt Lake City, UT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.28	-0.47	-0.87
Salt Lake City, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.01	-0.28	-0.47	-0.87
Salt Lake County, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.28	-0.47	-0.87
Salt Lake County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	-0.01	-0.28	-0.47	-0.87
San Antonio, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.02	-0.04	-0.08

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
San Bernardino County, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.06	-1.83	-3.09	-5.70
San Diego County, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	0.00	0.00
San Diego County, CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	0.00	0.00
San Diego, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
San Francisco Bay Area, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.09	-2.53	-4.26	-7.86
San Francisco Bay Area, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.09	-2.53	-4.26	-7.86
San Francisco Bay Area, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.09	-2.53	-4.26	-7.86
San Francisco-Oakland-San Jose, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.09	-2.53	-4.27	-7.88
San Joaquin Valley Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.15	-4.23	-7.13	-13.15
San Joaquin Valley, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-0.15	-4.23	-7.13	-13.15
San Joaquin Valley, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-0.15	-4.23	-7.13	-13.15
San Joaquin Valley, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.15	-4.23	-7.13	-13.15
San Joaquin Valley, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-0.15	-4.23	-7.13	-13.15
San Luis Obispo (Eastern San Luis Obispo), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.10	-0.17	-0.32
San Luis Obispo (Eastern part), CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.10	-0.17	-0.32
San Manuel (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
San Miguel County; Telluride, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.02	-0.03
Sanders County (part); Thompson Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Santa Cruz County; Nogales planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Seaford, DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	0.00
Seattle-Tacoma, WA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.00	-0.01	-0.02	-0.04
Sheboygan County, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Sheridan County; City of Sheridan, WY	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Shoreline Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Shoshone County; City of Pinehurst, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Shoshone County; Pinehurst Expansion Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Silver Bow County; Butte, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Somerville, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Southern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.18	-0.30	-0.55

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Southwest Indiana, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	-0.01
Spokane County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Spokane, WA	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00
Springfield, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
St. Bernard Parish, LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.02	-0.56	-0.94	-1.73
St. Clair, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
St. Lawrence County, NY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
St. Louis, MO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.51	-0.85	-1.57
St. Louis, MO-IL	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.04	-1.01	-1.70	-3.14
St. Louis-St. Charles-Farmington, MO-IL	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.02	-0.51	-0.86	-1.58
Steubenville, OH-WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.05	-0.09	-0.17
Steubenville-Weirton, OH-WV	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	-0.05	-0.08	-0.15
Stockton, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	-0.01
Sullivan County, TN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Sutter Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Syracuse, NY	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Tacoma, WA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.02	-0.04
Tazewell County: Groveland twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Terre Haute, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Thurston County; Cities of Olympia, Tumwater, and Lacey, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Titus County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Toms River, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Tooele County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	-0.01	-0.18	-0.30	-0.55
Trenton, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Trona, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.07	-0.12	-0.22
Tucson, AZ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Tuolumne County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.01	-0.01	-0.02
Tuscan Buttes, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Tuscan Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Uinta Basin, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.07	-0.12	-0.22
Union County; LaGrande, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Upper Green River Basin Area, WY	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.06	-0.11	-0.20
Utah County, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.21	-0.35	-0.64
Vancouver, WA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Ventura County, CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-0.06	-1.83	-3.09	-5.70
Ventura County, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.06	-1.83	-3.09	-5.70
Vermillion County; Part of Clinton Township, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Vigo County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01
Walla Walla County; Wallula, WA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00
Waltham, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Warren County, NJ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Warren County: Conewago Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.21	-0.35	-0.64
Warren County: Warren Boro, Pleasant Twp, Glade Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.01	-0.21	-0.35	-0.65
Warren, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.21	-0.35	-0.65
Washington, DC-MD-VA	Ozone (2008 8-hour)	Nonattainment (DC) Maintenance (MD, VA), Marginal	50	0	0.00	0.00	0.00	0.00
Washington, DC-MD-VA	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	0.00	0.00	0.00	0.00
Washington, DC-MD-VA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Washoe County; Reno planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00
Wayne County, MI	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.11	-0.19	-0.35
Wayne County: Boston, Center, Franklin, Wayne & Webster Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
West Central Pinal, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
West Silver Valley, ID	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Whatcom County, WA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.22	-0.38	-0.69
Winston-Salem, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Worcester, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Yakima County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Yakima, WA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Yuba City-Marysville, CA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Yuma, AZ	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Yuma, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00

Notes:

^a Nonattainment or maintenance status as of 2/1/2024. Source: EPA, The Green Book Nonattainment Areas for Criteria Pollutants; <http://www.epa.gov/airquality/greenbook/>. "—" indicates that no severity classification has been established for the NAAQS pollutant.

^b Emissions thresholds in tons per year. Where the threshold differs by precursor pollutant, the smallest of the precursor thresholds is shown. These thresholds are provided for information only; a general conformity determination is not required for the Proposed Action. Source: 40 CFR 93.853.

^c Positive values are emissions increases; negative values are emissions decreases.

EPA = U.S. Environmental Protection Agency; NAAQS = National Ambient Air Quality Standard; CO = carbon monoxide; NO₂ = nitrogen dioxide; PM2.5 = particulate matter less than 2.5 microns in size; PM10 = particulate matter less than 10 microns in size; SO₂ = sulfur dioxide.

Table D-43. Changes in Emissions from U.S. Heavy-Duty Pickup Trucks and Vans by Nonattainment or Maintenance Area and Alternative, Direct and Indirect Impacts--Formaldehyde, 2035

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Ada County; Boise, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Adams, Denver, and Boulder Counties; Denver Metropolitan area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.04
Ajo (Pima County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Albuquerque, NM	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	-0.02
Allegan County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Allegheny County Air Basin: Hazelwood monitor, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Allegheny County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01	-0.02
Allegheny County; Liberty, Lincoln, Port Vue, Glassport, Clairton, PA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Allegheny, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	-0.01
Allentown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Allentown-Bethlehem-Easton, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	-0.01
Alton Township, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Amador County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Anchorage, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00
Anchorage; Eagle River, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Anne Arundel County and Baltimore County, MD	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	-0.01	-0.05
Archuleta County; Pagosa Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Armstrong County; Madison, Mahoning, Boggs, Washington, Pine, PA	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	0.00	-0.01
Aroostock County; City of Presque Isle, ME	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Atlanta, GA	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.05	-0.18
Atlanta, GA	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	-0.02	-0.04	-0.17
Atlantic City, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Bakersfield, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01
Baltimore, MD	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	0.00	-0.01	-0.02	-0.10
Baltimore, MD	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	0.00	-0.01	-0.03	-0.10
Baltimore, MD	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Baton Rouge, LA	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	-0.01	-0.01	-0.04

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Beaver, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Benton County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Berrien County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Billings, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Billings, MT	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Birmingham, AL	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	0.00	-0.01	-0.03
Boise-Northern Ada County, ID	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01
Bonner County; The Sandpoint Area, ID	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Boston, MA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	-0.01
Boyd County (part), KY	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Brooke; Follansbee area, WV	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Brown County: Green Bay, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Burlington, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Butte County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Calaveras County, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Calaveras County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Campbell-Clermont Counties, KY-OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Canton-Massillon, OH	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	0.00	0.00	-0.01
Central New Hampshire, NH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Central Steptoe Valley, NV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Charleston, WV	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	-0.01	-0.01	-0.03
Charlotte, NC	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.01	-0.03
Charlotte-Rock Hill, NC-SC	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	-0.01	-0.01	-0.05
Chicago, IL-IN-WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.02	-0.04	-0.14
Chicago-Naperville, IL-IN-WI	Ozone (2008 8-hour)	Maintenance, Serious	100	0	0.00	-0.02	-0.04	-0.14
Chico (Butte County), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Chico, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Chico, CA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Cincinnati, OH-KY (OH Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	-0.01	-0.03
Cincinnati, OH-KY (KY Portion)	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Cincinnati, OH-KY-IN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	-0.01	-0.04
Clark County; Las Vegas planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	-0.01	-0.03
Cleveland, OH	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01	-0.04
Cleveland, OH	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	-0.02
Cleveland, OH	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.02
Cleveland-Akron-Lorain, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	-0.01	-0.01	-0.04
Cleveland-Akron-Lorain, OH	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	0.00	-0.01	-0.03
Cochise County; Paul Spur/Douglas planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Colorado Springs, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	-0.01
Columbus, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	-0.01	-0.03
Columbus, OH	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	-0.01	-0.03
Cook County; Lyons Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Cook County; Southeast Chicago, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Coshocton County; Franklin Township, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Coso Junction, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Cuyahoga County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.02
Cuyahoga County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01
Dallas-Fort Worth, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.01	-0.04	-0.07	-0.26
Dallas-Fort Worth, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.04	-0.07	-0.26
Dane County; Madison sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01
Delaware County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Denver Metro/North Front Range, CO	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.02	-0.08
Denver-Boulder, CO	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	-0.01	-0.02	-0.06
Denver-Boulder-Greeley-Ft. Collins-Loveland, CO	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	-0.01	-0.02	-0.08
Detroit, MI	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	0.00	-0.02	-0.03	-0.12
Detroit, MI	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.01	-0.04
Detroit, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	-0.01
Detroit-Ann Arbor, MI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	-0.02	-0.03	-0.12
Doña Ana County; Anthony, NM	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Door County, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	0.00
Door County-Revised, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	0.00
Douglas (Cochise County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Dukes County, MA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	0.00
Duluth, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
East Chicago, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
East Helena Area, MT	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
East Kern County, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	-0.01
El Paso County, TX	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01
El Paso, TX	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
El Paso-Las Cruces, TX-NM	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	-0.01	-0.02
Eugene-Springfield, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Evangeline Parish (Partial), LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Fairbanks, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00
Fairbanks, AK	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00
Flathead County; Columbia Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Flathead County; Kalispell and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Flathead County; Whitefish and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Fort Collins, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Freehold, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Freestone and Anderson Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	-0.01
Fremont County; Canon City Area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Fresno, CA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.00	0.00	0.00	-0.01
Gila County (part): Payson, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Giles County, VA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Grant County, NM	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Grants Pass, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Great Falls, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Greater Connecticut, CT	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	-0.01	-0.02
Greater Connecticut, CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	0.00	0.00	-0.01	-0.02
Greeley, CO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.01	-0.02
Hancock County (part): Weirton, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Hancock and Brooke Counties (Part); The city of Weirton, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Harrisburg-Lebanon-Cartisle-York, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.02
Hartford-New Britain-Middletown, CT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	-0.02
Hayden (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	0.00	0.00
Hayden, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Hayden, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Henderson-Webster Counties, KY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Hillsborough County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Hillsborough-Polk County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Houston-Galveston-Brazoria, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	-0.02	-0.05	-0.17
Houston-Galveston-Brazoria, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.02	-0.05	-0.17
Howard County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	-0.01
Humphreys County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Huntington, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Hutchinson County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	-0.01
Imperial County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Imperial County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Imperial County, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Imperial County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Imperial Valley, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00
Indian Wells, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Indiana, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.01	-0.02
Indianapolis, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Indianapolis, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	-0.02
Inland Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Inyo County; Owens Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00
Jackson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Jackson County; Medford-Ashland (including White City), OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Jamestown, NY	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	-0.01
Jefferson County, KY	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Jefferson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Jefferson County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Jefferson County; (part) Steubenville & Mingo Junction, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Johnstown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Josephine County; Grants Pass, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Juneau; Mendenhall Valley area, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Kern County (Eastern Kern), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	0.00	-0.01
Kern County (Eastern Kern), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	-0.01
King County; Kent, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
King County; Seattle, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Klamath Falls, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Klamath Falls, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Klamath Falls, OR	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Knoxville, TN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	0.00	-0.01
Knoxville-Sevierville-La Follette, TN	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
La Porte County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
LaSalle County; Oglesby, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Lake County (part); Lakeview, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Lake County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01
Lake County, OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Lake County; (part) Eastlake, Timberlake, Lakeline, Willoughby, Mentor, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Lake County; Cities of East Chicago, Hammond, Whiting, and Gary, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Lake County; Polson, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Lake County; Ronan, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Lake Tahoe North Shore, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Lake Tahoe South Shore, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Lake Tahoe, NV	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Lancaster, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	-0.01
Lancaster, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Lane County (part); Oakridge, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Lane County; Eugene/Springfield, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Las Vegas, NV	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01	-0.03
Las Vegas, NV	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.00	-0.01	-0.03
Laurel Area (Yellowstone County), MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	0.00	0.00
Lebanon County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Lemont, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Liberty-Clairton, PA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Lincoln County; Libby and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Logan, UT-ID	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Longmont, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	-0.01
Lorain County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	-0.01	-0.02
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	-0.01	-0.02
Los Angeles-South Coast Air Basin, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-0.01	-0.02	-0.05	-0.18
Los Angeles-South Coast Air Basin, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-0.01	-0.02	-0.05	-0.18
Los Angeles-South Coast Air Basin, CA	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.01	-0.02	-0.05	-0.18
Los Angeles-South Coast Air Basin, CA	NO ₂ (1971 Annual)	Maintenance, Primary	100	0	-0.01	-0.02	-0.05	-0.18
Los Angeles-South Coast Air Basin, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.01	-0.02	-0.05	-0.18
Los Angeles-South Coast Air Basin, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-0.01	-0.02	-0.05	-0.18
Louisville, KY-IN (IN Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	0.00	0.00
Louisville, KY-IN (KY Portion)	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01
Lowell, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Lucas County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01
Madison County; Granite City Township and Nameoki Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Manchester, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Manitowoc County, WI	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	0.00	0.00
Marathon County: Rothschild Sub-city area, Rib Mountain, Weston, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Maricopa and Pinal Counties; Phoenix planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	-0.01	-0.03	-0.11
Marion County: Lawrence, Washington, and Warrant Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01
Mariposa County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Mariposa County, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Marshall, WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	-0.01
Medford, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Memphis, TN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	-0.02
Memphis, TN-MS-AR	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	0.00	-0.02
Miami (Gila County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Miami, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Miami, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Millinocket AQCR 109, ME	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Milwaukee, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.02
Milwaukee, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01
Milwaukee-Racine, WI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	0.00	0.00	-0.02
Minneapolis-St. Paul, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.02	-0.06
Minneapolis-St. Paul, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.02	-0.06
Missoula, MT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Missoula, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Modesto, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Mohave County (part); Bullhead City, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Mono Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Mono County; Mammoth Lake planning area, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Morenci (Greenlee County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Morgan County, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Morongo Band of Mission Indians, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	0.00	0.00
Morongo Band of Mission Indians, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00
Morristown, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Muscatine County, IA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Muscatine, IA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Muskegon County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Muskingum River, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Nashua, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Nassau County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Navarro County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	-0.01
Nevada County (Western part), CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00
Nevada County (Western part), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00
New Haven County, CT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
New Haven-Meriden-Waterbury, CT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01
New Madrid County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
New Manchester-Grant magisterial district in Hancock County, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
New York County, NY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01
New York-N. New Jersey-Long Island, NY-NJ-CT	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.01	-0.03	-0.05	-0.20
New York-N. New Jersey-Long Island, NY-NJ-CT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.00	-0.01	-0.03	-0.11
New York-N. New Jersey-Long Island, NY-NJ-CT	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.01	-0.03	-0.05	-0.20
New York-Northern New Jersey-Long Island, NY-NJ-CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.01	-0.03	-0.05	-0.20
Nogales, AZ	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Northern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.01	-0.06
Oakridge, OR	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Ogden, UT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Ogden, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Olmsted County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Olmsted County; City of Rochester, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Oneida County: Rhinelander Sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Pekin, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Penns Grove, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Peoria County: Hollis twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Peoria, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Perth Amboy, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Philadelphia-Camden County, PA-NJ	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	-0.01
Philadelphia-Wilmington, PA-NJ-DE (NJ Portion)	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	0.00	-0.01	-0.04
Philadelphia-Wilmington, PA-NJ-DE (PA-DE Portion)	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.05
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	-0.01	-0.03	-0.11
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	0.00	-0.01	-0.03	-0.11
Phoenix, AZ	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	-0.01	-0.03	-0.11
Phoenix-Mesa, AZ	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.03	-0.11
Phoenix-Mesa, AZ	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.03	-0.11
Pierce County; Tacoma, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Pima County; Ajo planning area, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Pima County; Rillito planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Pinal County (part); West Pinal, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00
Pitkin County; Aspen, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Pittsburgh, PA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Pittsburgh-Beaver Valley, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	-0.01	-0.02	-0.08
Pittsburgh-Beaver Valley, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.02	-0.07
Plumas County, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00
Polk County, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Portland, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.01	-0.02

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Power-Bannock Counties; Fort Hall Indian Reservation, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Power-Bannock Counties; Portneuf Valley Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Provo, UT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.00	0.00	0.00	0.00
Provo, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	-0.01
Prowers County; Lamar, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Raleigh-Durham, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.01	-0.03
Ramsey County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Reading, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	-0.01
Reno, NV	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Rhineland, WI	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Riverside County (Coachella Valley), CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	0.00	0.00	0.00	0.00
Riverside County (Coachella Valley), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	0.00	0.00
Riverside County; Coachella Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00
Riverside, Los Angeles, Orange, & San Bernardino Counties; South Coast Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.01	-0.02	-0.05	-0.18
Rosebud County; Lame Deer, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Routt County (part); Steamboat Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Rusk and Panola Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.01	-0.02
Sacramento County, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.02	-0.06
Sacramento Metro, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	-0.01	-0.03	-0.09
Sacramento Metro, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	-0.01	-0.03	-0.09
Sacramento, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.01	-0.04
Sacramento, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.03	-0.09
Salem, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Salt Lake City, UT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.02
Salt Lake City, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	0.00	-0.01	-0.02	-0.06
Salt Lake County, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.04
Salt Lake County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	0.00	-0.01	-0.01	-0.04
San Antonio, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.01	-0.04

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
San Bernardino County, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.02
San Diego County, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	-0.01	-0.03
San Diego County, CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	-0.01	-0.03
San Diego, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.01	-0.03
San Francisco Bay Area, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.01	-0.03	-0.10
San Francisco Bay Area, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.01	-0.03	-0.10
San Francisco Bay Area, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.03	-0.10
San Francisco-Oakland-San Jose, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.03	-0.10
San Joaquin Valley Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	-0.01	-0.02	-0.08
San Joaquin Valley, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	0.00	-0.01	-0.02	-0.08
San Joaquin Valley, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	0.00	-0.01	-0.02	-0.08
San Joaquin Valley, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	0.00	-0.01	-0.02	-0.08
San Joaquin Valley, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	0.00	-0.01	-0.02	-0.08
San Luis Obispo (Eastern San Luis Obispo), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	-0.01
San Luis Obispo (Eastern part), CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	-0.01
San Manuel (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
San Miguel County; Telluride, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Sanders County (part); Thompson Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Santa Cruz County; Nogales planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Seaford, DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	0.00
Seattle-Tacoma, WA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.00	0.00	-0.01	-0.04
Sheboygan County, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Sheridan County; City of Sheridan, WY	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Shoreline Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Shoshone County; City of Pinehurst, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Shoshone County; Pinehurst Expansion Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Silver Bow County; Butte, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Somerville, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Southern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	-0.01

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Southwest Indiana, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Spokane County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Spokane, WA	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	-0.01
Springfield, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01
St. Bernard Parish, LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.01	-0.02
St. Clair, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
St. Lawrence County, NY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
St. Louis, MO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.01	-0.06
St. Louis, MO-IL	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.03	-0.12
St. Louis-St. Charles-Farmington, MO-IL	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	-0.01	-0.03	-0.12
Steubenville, OH-WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	-0.01
Steubenville-Weirton, OH-WV	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	0.00	0.00	-0.01
Stockton, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Sullivan County, TN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Sutter Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Syracuse, NY	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	-0.01
Tacoma, WA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Tazewell County: Groveland twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Terre Haute, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Thurston County; Cities of Olympia, Tumwater, and Lacey, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Titus County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Toms River, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Tooele County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Trenton, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Trona, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01
Tucson, AZ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01
Tuolumne County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Tuscan Buttes, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Tuscan Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Uinta Basin, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Union County; LaGrande, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Upper Green River Basin Area, WY	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Utah County, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Vancouver, WA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Ventura County, CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	-0.01	-0.02
Ventura County, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	-0.01	-0.02
Vermillion County; Part of Clinton Township, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Vigo County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Walla Walla County; Wallula, WA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00
Waltham, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Warren County, NJ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Warren County: Conewago Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01
Warren County: Warren Boro, Pleasant Twp, Glade Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	-0.01
Warren, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	-0.01
Washington, DC-MD-VA	Ozone (2008 8-hour)	Nonattainment (DC) Maintenance (MD, VA), Marginal	50	0	0.00	-0.01	-0.02	-0.06
Washington, DC-MD-VA	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	0.00	-0.01	-0.02	-0.06
Washington, DC-MD-VA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	-0.01
Washoe County; Reno planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00
Wayne County, MI	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Wayne County: Boston, Center, Franklin, Wayne & Webster Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
West Central Pinal, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
West Silver Valley, ID	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Whatcom County, WA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Winston-Salem, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	-0.01
Worcester, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Yakima County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Yakima, WA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Yuba City-Marysville, CA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Yuma, AZ	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Yuma, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00

Notes:
^a Nonattainment or maintenance status as of 2/1/2024. Source: EPA, The Green Book Nonattainment Areas for Criteria Pollutants; <http://www.epa.gov/airquality/greenbook/>. "--" indicates that no severity classification has been established for the NAAQS pollutant.
^b Emissions thresholds in tons per year. Where the threshold differs by precursor pollutant, the smallest of the precursor thresholds is shown. These thresholds are provided for information only; a general conformity determination is not required for the Proposed Action. Source: 40 CFR 93.853.
^c Positive values are emissions increases; negative values are emissions decreases.
 EPA = U.S. Environmental Protection Agency; NAAQS = National Ambient Air Quality Standard; CO = carbon monoxide; NO₂ = nitrogen dioxide; PM2.5 = particulate matter less than 2.5 microns in size; PM10 = particulate matter less than 10 microns in size; SO₂ = sulfur dioxide.

Appendix D Air Quality Nonattainment Area Results

Table D-44. Changes in Emissions from U.S. Heavy-Duty Pickup Trucks and Vans by Nonattainment or Maintenance Area and Alternative, Direct and Indirect Impacts--Formaldehyde, 2050

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Ada County; Boise, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.04
Adams, Denver, and Boulder Counties; Denver Metropolitan area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.05	-0.07	-0.18
Ajo (Pima County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Albuquerque, NM	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.02	-0.03	-0.08
Allegan County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01
Allegheny County Air Basin: Hazelwood monitor, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01
Allegheny County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.00	-0.03	-0.04	-0.10
Allegheny County; Liberty, Lincoln, Port Vue, Glassport, Clairton, PA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Allegheny, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	-0.01	-0.03
Allentown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.02	-0.05
Allentown-Bethlehem-Easton, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	-0.01	-0.02	-0.05
Alton Township, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Amador County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Anchorage, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.00	-0.01	-0.02
Anchorage; Eagle River, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Anne Arundel County and Baltimore County, MD	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.07	-0.11	-0.27
Archuleta County; Pagosa Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Armstrong County; Madison, Mahoning, Boggs, Washington, Pine, PA	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	-0.01	-0.01	-0.02
Aroostock County; City of Presque Isle, ME	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Atlanta, GA	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-0.02	-0.24	-0.35	-0.88
Atlanta, GA	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.01	-0.22	-0.32	-0.81
Atlantic City, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Bakersfield, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.02	-0.02	-0.06
Baltimore, MD	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	-0.01	-0.13	-0.19	-0.49
Baltimore, MD	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.01	-0.13	-0.19	-0.49
Baltimore, MD	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Baton Rouge, LA	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	-0.05	-0.07	-0.17
Beaver, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Benton County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Berrien County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.01	-0.02

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Billings, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.01	-0.02
Billings, MT	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Birmingham, AL	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	-0.04	-0.06	-0.15
Boise-Northern Ada County, ID	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.01	-0.04
Bonner County; The Sandpoint Area, ID	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Boston, MA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.02	-0.03	-0.07
Boyd County (part), KY	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01
Brooke; Follansbee area, WV	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Brown County: Green Bay, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Burlington, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Butte County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	-0.01
Calaveras County, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Calaveras County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Campbell-Clermont Counties, KY-OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Canton-Massillon, OH	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	-0.01	-0.01	-0.03
Central New Hampshire, NH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.01	-0.02
Central Steptoe Valley, NV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Charleston, WV	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	-0.03	-0.05	-0.11
Charlotte, NC	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.04	-0.06	-0.15
Charlotte-Rock Hill, NC-SC	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	-0.06	-0.09	-0.23
Chicago, IL-IN-WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.19	-0.28	-0.72
Chicago-Naperville, IL-IN-WI	Ozone (2008 8-hour)	Maintenance, Serious	100	0	-0.01	-0.20	-0.29	-0.72
Chico (Butte County), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	-0.01
Chico, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Chico, CA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Cincinnati, OH-KY (OH Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	-0.04	-0.06	-0.14
Cincinnati, OH-KY (KY Portion)	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.02
Cincinnati, OH-KY-IN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	-0.05	-0.07	-0.18
Clark County; Las Vegas planning area, NV	PM ₁₀ (1987 24-hour)	Maintenance, Serious	100	0	0.00	-0.04	-0.06	-0.15
Cleveland, OH	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.05	-0.07	-0.18
Cleveland, OH	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.02	-0.03	-0.08
Cleveland, OH	PM _{2.5} (2012 Annual)	Maintenance, Moderate	100	0	0.00	-0.03	-0.04	-0.09

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Cleveland-Akron-Lorain, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	-0.05	-0.08	-0.20
Cleveland-Akron-Lorain, OH	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	-0.05	-0.07	-0.17
Cochise County; Paul Spur/Douglas planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Colorado Springs, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.01	-0.03
Columbus, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	-0.05	-0.07	-0.17
Columbus, OH	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	-0.04	-0.07	-0.17
Cook County; Lyons Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Cook County; Southeast Chicago, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Coshocton County; Franklin Township, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Coso Junction, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.02
Cuyahoga County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.02	-0.03	-0.08
Cuyahoga County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.02	-0.03	-0.06
Dallas-Fort Worth, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.02	-0.29	-0.42	-1.03
Dallas-Fort Worth, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.02	-0.29	-0.42	-1.03
Dane County; Madison sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.02	-0.05
Delaware County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.03
Denver Metro/North Front Range, CO	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.11	-0.16	-0.40
Denver-Boulder, CO	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.01	-0.08	-0.12	-0.30
Denver-Boulder-Greeley-Ft. Collins-Loveland, CO	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.01	-0.11	-0.16	-0.39
Detroit, MI	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	-0.01	-0.16	-0.23	-0.57
Detroit, MI	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.06	-0.08	-0.21
Detroit, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	-0.01	-0.03
Detroit-Ann Arbor, MI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.01	-0.16	-0.23	-0.58
Doña Ana County; Anthony, NM	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01	-0.01
Door County, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	0.00
Door County-Revised, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	0.00
Douglas (Cochise County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Dukes County, MA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00	0.00
Duluth, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	-0.01
East Chicago, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
East Helena Area, MT	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
East Kern County, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	-0.01	-0.01	-0.02
El Paso County, TX	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.02	-0.05
El Paso, TX	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.01	-0.01
El Paso-Las Cruces, TX-NM	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.02	-0.03	-0.07
Eugene-Springfield, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.01	-0.01
Evangeline Parish (Partial), LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Fairbanks, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	-0.01
Fairbanks, AK	PM _{2.5} (2006 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	-0.01
Flathead County; Columbia Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Flathead County; Kalispell and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Flathead County; Whitefish and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Fort Collins, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.01	-0.01
Freehold, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Freestone and Anderson Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	-0.01	-0.02
Fremont County; Canon City Area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Fresno, CA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.00	-0.01	-0.01	-0.04
Gila County (part): Payson, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Giles County, VA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Grant County, NM	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Grants Pass, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Great Falls, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Greater Connecticut, CT	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.00	-0.03	-0.04	-0.11
Greater Connecticut, CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	0.00	-0.03	-0.04	-0.11
Greeley, CO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.02	-0.03	-0.08
Hancock County (part): Weirton, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Hancock and Brooke Counties (Part); The city of Weirton, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Harrisburg-Lebanon-Carlisle-York, PA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	0.00	-0.02	-0.04	-0.09
Hartford-New Britain-Middletown, CT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.02	-0.03	-0.08
Hayden (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	0.00	0.00
Hayden, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Hayden, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Henderson-Webster Counties, KY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Hillsborough County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Hillsborough-Polk County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Houston-Galveston-Brazoria, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.01	-0.20	-0.30	-0.73
Houston-Galveston-Brazoria, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.19	-0.28	-0.70
Howard County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	-0.02	-0.04
Humphreys County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Huntington, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Hutchinson County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	-0.01	-0.03
Imperial County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01
Imperial County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	-0.01
Imperial County, CA	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01
Imperial County, CA	PM _{2.5} (2012 Annual)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01
Imperial Valley, CA	PM ₁₀ (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	-0.01
Indian Wells, CA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.02
Indiana, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.02	-0.03	-0.06
Indianapolis, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Indianapolis, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.02	-0.03	-0.08
Inland Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Inyo County; Owens Valley planning area, CA	PM ₁₀ (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00
Jackson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	-0.01
Jackson County; Medford-Ashland (including White City), OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Jamestown, NY	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	-0.01	-0.01	-0.03
Jefferson County, KY	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Jefferson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Jefferson County, OH	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Jefferson County; (part) Steubenville & Mingo Junction, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Johnstown, PA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.02	-0.04
Josephine County; Grants Pass, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Juneau; Mendenhall Valley area, AK	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Kern County (Eastern Kern), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	-0.01	-0.01	-0.03
Kern County (Eastern Kern), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	-0.01	-0.01	-0.03
King County; Kent, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
King County; Seattle, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Klamath Falls, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Klamath Falls, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Klamath Falls, OR	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Knoxville, TN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	-0.02	-0.02	-0.06
Knoxville-Sevierville-La Follette, TN	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	-0.02	-0.03	-0.07
La Porte County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
LaSalle County; Oglesby, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Lake County (part); Lakeview, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Lake County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.01	-0.03
Lake County, OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.01	-0.01
Lake County; (part) Eastlake, Timberlake, Lakeline, Willoughby, Mentor, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Lake County; Cities of East Chicago, Hammond, Whiting, and Gary, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.02
Lake County; Polson, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Lake County; Ronan, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Lake Tahoe North Shore, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Lake Tahoe South Shore, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	0.00
Lake Tahoe, NV	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Lancaster, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	-0.01	-0.02	-0.04
Lancaster, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.02	-0.04
Lane County (part); Oakridge, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Lane County; Eugene/Springfield, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01	-0.01
Las Vegas, NV	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.04	-0.06	-0.15
Las Vegas, NV	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	-0.04	-0.06	-0.15
Laurel Area (Yellowstone County), MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	0.00	0.00
Lebanon County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Lemont, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	-0.01
Liberty-Clairton, PA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Lincoln County; Libby and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Logan, UT-ID	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Longmont, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.01	-0.03
Lorain County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	-0.02	-0.03	-0.06
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	0.00	-0.02	-0.03	-0.06

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Los Angeles-South Coast Air Basin, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-0.02	-0.24	-0.35	-0.88
Los Angeles-South Coast Air Basin, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-0.02	-0.24	-0.35	-0.88
Los Angeles-South Coast Air Basin, CA	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.02	-0.24	-0.35	-0.88
Los Angeles-South Coast Air Basin, CA	NO ₂ (1971 Annual)	Maintenance, Primary	100	0	-0.02	-0.24	-0.35	-0.88
Los Angeles-South Coast Air Basin, CA	PM _{2.5} (2006 24-hour)	Nonattainment, Serious	70	0	-0.02	-0.24	-0.35	-0.88
Los Angeles-South Coast Air Basin, CA	PM _{2.5} (2012 Annual)	Nonattainment, Serious	70	0	-0.02	-0.24	-0.35	-0.88
Louisville, KY-IN (IN Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	-0.01	-0.02
Louisville, KY-IN (KY Portion)	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.02	-0.03	-0.07
Lowell, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01
Lucas County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.01	-0.03
Madison County; Granite City Township and Nameoki Township, IL	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Manchester, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01
Manitowoc County, WI	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	0.00	0.00
Marathon County: Rothschild Sub-city area, Rib Mountain, Weston, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	-0.01
Maricopa and Pinal Counties; Phoenix planning area, AZ	PM ₁₀ (1987 24-hour)	Nonattainment, Serious	70	0	-0.01	-0.15	-0.22	-0.57
Marion County: Lawrence, Washington, and Warrant Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.02	-0.02	-0.06
Mariposa County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Mariposa County, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Marshall, WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.01	-0.01	-0.03
Medford, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	-0.01
Memphis, TN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.02	-0.03	-0.08
Memphis, TN-MS-AR	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	-0.03	-0.04	-0.09
Miami (Gila County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Miami, AZ	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Miami, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Millinocket AQCR 109, ME	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.01	-0.02
Milwaukee, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.03	-0.04	-0.10
Milwaukee, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.02	-0.04
Milwaukee-Racine, WI	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	-0.02	-0.03	-0.09
Minneapolis-St. Paul, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.08	-0.12	-0.30

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Minneapolis-St. Paul, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.08	-0.12	-0.30
Missoula, MT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.01	-0.01
Missoula, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01	-0.01
Modesto, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.01	-0.02
Mohave County (part); Bullhead City, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Mono Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Mono County; Mammoth Lake planning area, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Morenci (Greenlee County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Morgan County, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Morongo Band of Mission Indians, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	0.00	0.00
Morongo Band of Mission Indians, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00
Morristown, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Muscatine County, IA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Muscatine, IA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Muskegon County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	-0.01
Muskingum River, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Nashua, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01
Nassau County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Navarro County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	-0.01	-0.02
Nevada County (Western part), CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00
Nevada County (Western part), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00	0.00
New Haven County, CT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
New Haven-Meriden-Waterbury, CT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.02	-0.05
New Madrid County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
New Manchester-Grant magisterial district in Hancock County, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
New York County, NY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.02	-0.05
New York-N. New Jersey-Long Island, NY-NJ-CT	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.02	-0.27	-0.39	-0.99
New York-N. New Jersey-Long Island, NY-NJ-CT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.01	-0.15	-0.22	-0.56
New York-N. New Jersey-Long Island, NY-NJ-CT	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.02	-0.28	-0.41	-1.03
New York-Northern New Jersey-Long Island, NY-NJ-CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.02	-0.27	-0.39	-1.00
Nogales, AZ	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Northern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.07	-0.10	-0.26
Oakridge, OR	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Ogden, UT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00	-0.01
Ogden, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Olmsted County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Olmsted County; City of Rochester, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01
Oneida County: Rhinelander Sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Pekin, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Penns Grove, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Peoria County: Hollis twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Peoria, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	-0.01
Perth Amboy, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01
Philadelphia-Camden County, PA-NJ	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.02	-0.03	-0.07
Philadelphia-Wilmington, PA-NJ-DE (NJ Portion)	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	-0.05	-0.08	-0.19
Philadelphia-Wilmington, PA-NJ-DE (PA-DE Portion)	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	-0.07	-0.10	-0.25
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.01	-0.15	-0.22	-0.56
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.01	-0.15	-0.22	-0.56
Phoenix, AZ	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.01	-0.15	-0.22	-0.56
Phoenix-Mesa, AZ	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.15	-0.22	-0.57
Phoenix-Mesa, AZ	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.15	-0.22	-0.57
Pierce County; Tacoma, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Pima County; Ajo planning area, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Pima County; Rillito planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Pinal County (part); West Pinal, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00	-0.01
Pitkin County; Aspen, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01	-0.02
Pittsburgh, PA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.01	-0.02
Pittsburgh-Beaver Valley, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	-0.08	-0.11	-0.28
Pittsburgh-Beaver Valley, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	-0.07	-0.10	-0.25
Plumas County, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	0.00	0.00	0.00	0.00
Polk County, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Portland, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.03	-0.04	-0.11

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Power-Bannock Counties; Fort Hall Indian Reservation, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Power-Bannock Counties; Portneuf Valley Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Provo, UT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.00	0.00	0.00	-0.01
Provo, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	0.00	-0.01	-0.02	-0.05
Prowers County; Lamar, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Raleigh-Durham, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.05	-0.07	-0.17
Ramsey County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Reading, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	-0.01	-0.01	-0.03
Reno, NV	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.01	-0.02
Rhineland, WI	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Riverside County (Coachella Valley), CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	0.00	-0.01	-0.01	-0.02
Riverside County (Coachella Valley), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	0.00	-0.01	-0.01	-0.02
Riverside County; Coachella Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	-0.01	-0.01	-0.02
Riverside, Los Angeles, Orange, & San Bernardino Counties; South Coast Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.02	-0.24	-0.35	-0.88
Rosebud County; Lame Deer, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Routt County (part); Steamboat Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.02
Rusk and Panola Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.02	-0.03	-0.07
Sacramento County, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.07	-0.10	-0.25
Sacramento Metro, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.01	-0.11	-0.16	-0.40
Sacramento Metro, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.01	-0.11	-0.16	-0.40
Sacramento, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.06	-0.09	-0.23
Sacramento, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.11	-0.16	-0.40
Salem, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.01	-0.02
Salt Lake City, UT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.02	-0.03	-0.06
Salt Lake City, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	0.00	-0.07	-0.11	-0.27
Salt Lake County, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.05	-0.08	-0.20
Salt Lake County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	0.00	-0.05	-0.08	-0.20
San Antonio, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.05	-0.08	-0.19
San Bernardino County, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.02	-0.05
San Diego County, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	-0.05	-0.07	-0.17
San Diego County, CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	0.00	-0.05	-0.07	-0.17

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
San Diego, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.05	-0.07	-0.17
San Francisco Bay Area, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.12	-0.18	-0.45
San Francisco Bay Area, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.12	-0.18	-0.45
San Francisco Bay Area, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.12	-0.18	-0.45
San Francisco-Oakland-San Jose, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.12	-0.18	-0.44
San Joaquin Valley Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.01	-0.09	-0.14	-0.34
San Joaquin Valley, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-0.01	-0.09	-0.14	-0.34
San Joaquin Valley, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-0.01	-0.09	-0.14	-0.34
San Joaquin Valley, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.01	-0.09	-0.14	-0.34
San Joaquin Valley, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-0.01	-0.09	-0.14	-0.34
San Luis Obispo (Eastern San Luis Obispo), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.01	-0.01	-0.02
San Luis Obispo (Eastern part), CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.01	-0.01	-0.02
San Manuel (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
San Miguel County; Telluride, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Sanders County (part); Thompson Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Santa Cruz County; Nogales planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Seaford, DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	-0.01	-0.01	-0.02
Seattle-Tacoma, WA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.00	-0.05	-0.07	-0.18
Sheboygan County, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
Sheridan County; City of Sheridan, WY	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Shoreline Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Shoshone County; City of Pinehurst, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Shoshone County; Pinehurst Expansion Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Silver Bow County; Butte, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Somerville, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Southern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.01	-0.02	-0.05
Southwest Indiana, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	0.00
Spokane County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.03
Spokane, WA	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	-0.01	-0.01	-0.03
Springfield, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.01	-0.03
St. Bernard Parish, LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.02	-0.02	-0.05
St. Clair, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	-0.01
St. Lawrence County, NY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
St. Louis, MO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.08	-0.11	-0.28
St. Louis, MO-IL	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.16	-0.23	-0.59
St. Louis-St. Charles-Farmington, MO-IL	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.01	-0.16	-0.23	-0.59
Steubenville, OH-WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.01	-0.01	-0.02
Steubenville-Weirton, OH-WV	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	-0.01	-0.01	-0.03
Stockton, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.01	-0.02
Sullivan County, TN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Sutter Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Syracuse, NY	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.02	-0.04
Tacoma, WA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.03
Tazewell County: Groveland twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
Terre Haute, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00	-0.01
Thurston County; Cities of Olympia, Tumwater, and Lacey, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Titus County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Toms River, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Tooele County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	0.00	0.00	0.00	-0.01
Trenton, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01
Trona, CA	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.01	-0.02
Tucson, AZ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.02	-0.02	-0.06
Tuolumne County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Tuscan Buttes, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	0.00
Tuscan Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal (Rural Transport)	100	0	0.00	0.00	0.00	0.00
Uinta Basin, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	-0.01	-0.02
Union County; LaGrande, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Upper Green River Basin Area, WY	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	-0.01	-0.02
Utah County, UT	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.02	-0.05
Vancouver, WA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.01	-0.02
Ventura County, CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.00	-0.02	-0.03	-0.06
Ventura County, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	-0.02	-0.03	-0.06
Vermillion County; Part of Clinton Township, IN	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Vigo County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.01	-0.01
Walla Walla County; Wallula, WA	PM ₁₀ (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c				
				No Action	HDPUV4	HDPUV108	HDPUV10	HDPUV14
Waltham, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Warren County, NJ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00	0.00
Warren County: Conewago Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.01	-0.02
Warren County: Warren Boro, Pleasant Twp, Glade Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	-0.01	-0.01	-0.02
Warren, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	-0.01	-0.02
Washington, DC-MD-VA	Ozone (2008 8-hour)	Nonattainment (DC) Maintenance (MD, VA), Marginal	50	0	-0.01	-0.09	-0.13	-0.32
Washington, DC-MD-VA	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.01	-0.09	-0.13	-0.32
Washington, DC-MD-VA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.02	-0.05
Washoe County; Reno planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	-0.01	-0.01	-0.02
Wayne County, MI	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.01	-0.02
Wayne County: Boston, Center, Franklin, Wayne & Webster Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00	0.00
West Central Pinal, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00	0.00
West Silver Valley, ID	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	0.00	0.00	0.00
Whatcom County, WA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00	0.00
Winston-Salem, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.01	-0.03
Worcester, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	-0.01
Yakima County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Yakima, WA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00	0.00
Yuba City-Marysville, CA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00	-0.01
Yuma, AZ	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00	-0.01
Yuma, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01	-0.01

Notes:

^a Nonattainment or maintenance status as of 2/1/2024. Source: EPA, The Green Book Nonattainment Areas for Criteria Pollutants; <http://www.epa.gov/airquality/greenbook/>. "--" indicates that no severity classification has been established for the NAAQS pollutant.

^b Emissions thresholds in tons per year. Where the threshold differs by precursor pollutant, the smallest of the precursor thresholds is shown. These thresholds are provided for information only; a general conformity determination is not required for the Proposed Action. Source: 40 CFR 93.853.

^c Positive values are emissions increases; negative values are emissions decreases.

EPA = U.S. Environmental Protection Agency; NAAQS = National Ambient Air Quality Standard; CO = carbon monoxide; NO₂ = nitrogen dioxide; PM2.5 = particulate matter less than 2.5 microns in size; PM10 = particulate matter less than 10 microns in size; SO₂ = sulfur dioxide.

Table D-45. Changes in Emissions from U.S. Combined Passenger Cars, Light Trucks, and HDPUVs by Nonattainment or Maintenance Area and Alternative, Direct and Indirect Impacts—Particulate Matter (PM2.5), 2035

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Ada County; Boise, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.09	-0.10	-0.89
Adams, Denver, and Boulder Counties; Denver Metropolitan area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.49	-0.53	-5.31
Ajo (Pima County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.01
Albuquerque, NM	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.19	-0.21	-1.94
Allegan County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.02	-0.02	-0.18
Allegheny County Air Basin: Hazelwood monitor, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.02	-0.02	-0.17
Allegheny County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	-0.23	-0.24	-2.35
Allegheny County; Liberty, Lincoln, Port Vue, Glassport, Clairton, PA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.05
Allegheny, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.04	-0.04	-0.48
Allentown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.13	-0.14	-1.33
Allentown-Bethlehem-Easton, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.15	-0.16	-1.51
Alton Township, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.15	-0.16	-2.09
Amador County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.01	-0.09
Anchorage, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.03	-0.04	-0.34
Anchorage; Eagle River, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.07
Anne Arundel County and Baltimore County, MD	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.27	-0.29	-2.66
Archuleta County; Pagosa Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.04	-0.04	-0.49
Armstrong County; Madison, Mahoning, Boggs, Washington, Pine, PA	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	-0.01	-0.01	-0.15
Aroostock County; City of Presque Isle, ME	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.02
Atlanta, GA	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-1.32	-1.44	-13.12
Atlanta, GA	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-1.02	-1.11	-10.16
Atlantic City, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.01	-0.09
Bakersfield, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.15	-0.16	-1.64
Baltimore, MD	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	-0.67	-0.73	-6.78
Baltimore, MD	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.68	-0.74	-6.82
Baltimore, MD	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.03
Baton Rouge, LA	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.83	-0.88	-10.95

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Beaver, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.03
Benton County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.01	-0.01	-0.05
Berrien County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.05	-0.05	-0.50
Billings, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.19	-0.20	-2.56
Billings, MT	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.17	-0.18	-2.38
Birmingham, AL	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.34	-0.37	-3.51
Boise-Northern Ada County, ID	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.09	-0.10	-0.89
Bonner County; The Sandpoint Area, ID	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.02
Boston, MA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.16	-0.18	-1.62
Boyd County (part), KY	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.21	-0.23	-3.04
Brooke; Follansbee area, WV	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Brown County: Green Bay, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.02
Burlington, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.02
Butte County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.04	-0.04	-0.40
Calaveras County, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.01	-0.09
Calaveras County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.01	-0.09
Campbell-Clermont Counties, KY-OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.01	-0.06
Canton-Massillon, OH	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.21	-0.23	-2.75
Central New Hampshire, NH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.04	-0.05	-0.41
Central Steptoe Valley, NV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.01
Charleston, WV	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.07	-0.08	-0.78
Charlotte, NC	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.34	-0.37	-3.36
Charlotte-Rock Hill, NC-SC	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.62	-0.67	-6.14
Chicago, IL-IN-WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-3.29	-3.54	-40.11
Chicago-Naperville, IL-IN-WI	Ozone (2008 8-hour)	Maintenance, Serious	100	0	-2.47	-2.67	-28.35
Chico (Butte County), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.04	-0.04	-0.40
Chico, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.02	-0.16
Chico, CA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	-0.04	-0.04	-0.38
Cincinnati, OH-KY (OH Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.37	-0.41	-3.73
Cincinnati, OH-KY (KY Portion)	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	-0.12	-0.13	-1.30

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Cincinnati, OH-KY-IN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.51	-0.56	-5.22
Clark County; Las Vegas planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.52	-0.57	-5.34
Cleveland, OH	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.62	-0.68	-6.59
Cleveland, OH	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.20	-0.22	-1.97
Cleveland, OH	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-0.26	-0.28	-2.57
Cleveland-Akron-Lorain, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.65	-0.70	-6.85
Cleveland-Akron-Lorain, OH	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.60	-0.66	-6.39
Cochise County; Paul Spur/Douglas planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.03
Colorado Springs, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.14	-0.15	-1.40
Columbus, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.42	-0.46	-4.25
Columbus, OH	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.39	-0.43	-3.96
Cook County; Lyons Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.02	-0.16
Cook County; Southeast Chicago, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.48	-0.50	-6.69
Coshocton County; Franklin Township, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.01
Coso Junction, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.03	-0.03	-0.43
Cuyahoga County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.20	-0.22	-1.97
Cuyahoga County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.16	-0.18	-1.60
Dallas-Fort Worth, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-1.82	-1.98	-18.33
Dallas-Fort Worth, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-1.79	-1.95	-18.04
Dane County; Madison sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.11	-0.12	-1.12
Delaware County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-0.95	-1.01	-13.15
Denver Metro/North Front Range, CO	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-1.20	-1.30	-13.24
Denver-Boulder, CO	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.78	-0.85	-8.24
Denver-Boulder-Greeley-Ft. Collins-Loveland, CO	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-1.05	-1.14	-11.08
Detroit, MI	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	-1.36	-1.48	-14.86
Detroit, MI	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.44	-0.48	-4.59
Detroit, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.09	-0.10	-1.10
Detroit-Ann Arbor, MI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-1.37	-1.48	-14.89
Doña Ana County; Anthony, NM	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.09	-0.10	-1.33

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Door County, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	0.00	0.00
Door County-Revised, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	-0.01	-0.01	-0.06
Douglas (Cochise County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.03
Dukes County, MA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	-0.02
Duluth, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.03	-0.03	-0.27
East Chicago, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.46	-0.49	-6.52
East Helena Area, MT	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00
East Kern County, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.04	-0.04	-0.48
El Paso County, TX	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.23	-0.25	-2.67
El Paso, TX	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.10	-0.11	-1.43
El Paso-Las Cruces, TX-NM	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.36	-0.39	-4.43
Eugene-Springfield, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.05	-0.05	-0.45
Evangeline Parish (Partial), LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Fairbanks, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.01	-0.01	-0.15
Fairbanks, AK	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.02	-0.02	-0.22
Flathead County; Columbia Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Flathead County; Kalispell and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.08
Flathead County; Whitefish and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Fort Collins, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.04	-0.04	-0.41
Freehold, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.02
Freestone and Anderson Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.01	-0.07
Fremont County; Canon City Area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.11
Fresno, CA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.15	-0.16	-1.54
Gila County (part): Payson, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.03
Giles County, VA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Grant County, NM	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.01	-0.09
Grants Pass, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.01	-0.07
Great Falls, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.02	-0.30

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Greater Connecticut, CT	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-0.33	-0.35	-3.24
Greater Connecticut, CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.33	-0.36	-3.24
Greeley, CO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.40	-0.43	-5.25
Hancock County (part): Weirton, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.01	-0.01	-0.14
Hancock and Brooke Counties (Part); The city of Weirton, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.14
Harrisburg-Lebanon-Carlisle-York, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.24	-0.26	-2.36
Hartford-New Britain-Middletown, CT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.23	-0.25	-2.26
Hayden (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	-0.02
Hayden, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.04
Hayden, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.02
Henderson-Webster Counties, KY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.03
Hillsborough County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.01	-0.06
Hillsborough-Polk County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.04
Houston-Galveston-Brazoria, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-3.75	-4.03	-46.22
Houston-Galveston-Brazoria, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-3.70	-3.98	-45.74
Howard County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.09	-0.09	-1.27
Humphreys County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.01	-0.01	-0.07
Huntington, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.01	-0.08
Hutchinson County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.12	-0.13	-1.73
Imperial County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-0.05	-0.05	-0.50
Imperial County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.05	-0.05	-0.50
Imperial County, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.04	-0.04	-0.39
Imperial County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	-0.04	-0.04	-0.39
Imperial Valley, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.05	-0.05	-0.47
Indian Wells, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.04	-0.04	-0.53
Indiana, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.05	-0.05	-0.61
Indianapolis, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.01
Indianapolis, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.13	-0.14	-1.27
Inland Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.13
Inyo County; Owens Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	-0.05

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Jackson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.02	-0.02	-0.15
Jackson County; Medford-Ashland (including White City), OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.03	-0.04	-0.34
Jamestown, NY	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.12	-0.12	-1.51
Jefferson County, KY	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.01
Jefferson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.02	-0.14
Jefferson County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Jefferson County; (part) Steubenville & Mingo Junction, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.02	-0.02	-0.21
Johnstown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.04	-0.05	-0.51
Josephine County; Grants Pass, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.06
Juneau; Mendenhall Valley area, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Kern County (Eastern Kern), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.72	-0.77	-10.24
Kern County (Eastern Kern), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.72	-0.77	-10.24
King County; Kent, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.04
King County; Seattle, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.03
Klamath Falls, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.01	-0.09
Klamath Falls, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.09
Klamath Falls, OR	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.01	-0.11
Knoxville, TN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.17	-0.19	-1.74
Knoxville-Sevierville-La Follette, TN	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.21	-0.23	-2.13
La Porte County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.02	-0.14
LaSalle County; Oglesby, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.08
Lake County (part); Lakeview, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Lake County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.55	-0.59	-7.45
Lake County, OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.05	-0.05	-0.49
Lake County; (part) Eastlake, Timberlake, Lakeline, Willoughby, Mentor, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.01	-0.08
Lake County; Cities of East Chicago, Hammond, Whiting, and Gary, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.52	-0.55	-7.11
Lake County; Polson, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Lake County; Ronan, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Lake Tahoe North Shore, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.03
Lake Tahoe South Shore, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.01	-0.08
Lake Tahoe, NV	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.01	-0.05
Lancaster, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.11	-0.12	-1.06
Lancaster, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.11	-0.12	-1.06
Lane County (part); Oakridge, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Lane County; Eugene/Springfield, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.05	-0.05	-0.45
Las Vegas, NV	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.52	-0.57	-5.34
Las Vegas, NV	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.52	-0.57	-5.35
Laurel Area (Yellowstone County), MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	-0.17	-0.18	-2.39
Lebanon County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-0.03	-0.03	-0.27
Lemont, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.43	-0.46	-6.03
Liberty-Clairton, PA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.05
Lincoln County; Libby and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Logan, UT-ID	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.03	-0.03	-0.29
Longmont, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.05	-0.05	-0.62
Lorain County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.01	-0.11
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.88	-0.93	-11.74
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-0.88	-0.93	-11.74
Los Angeles-South Coast Air Basin, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-4.23	-4.59	-45.18
Los Angeles-South Coast Air Basin, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-4.22	-4.59	-45.16
Los Angeles-South Coast Air Basin, CA	CO (1971 8-hour)	Maintenance, Serious	100	0	-4.23	-4.59	-45.18
Los Angeles-South Coast Air Basin, CA	NO ₂ (1971 Annual)	Maintenance, Primary	100	0	-4.23	-4.59	-45.18
Los Angeles-South Coast Air Basin, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-4.23	-4.59	-45.19
Los Angeles-South Coast Air Basin, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-4.23	-4.59	-45.19
Louisville, KY-IN (IN Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.05	-0.06	-0.51
Louisville, KY-IN (KY Portion)	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.21	-0.23	-2.12
Lowell, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.02	-0.21
Lucas County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.31	-0.34	-4.19

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Madison County; Granite City Township and Nameoki Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.16	-0.17	-2.22
Manchester, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.02	-0.22
Manitowoc County, WI	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.01	-0.01	-0.12
Marathon County: Rothschild Sub-city area, Rib Mountain, Weston, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.04	-0.04	-0.36
Maricopa and Pinal Counties; Phoenix planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-1.00	-1.10	-10.00
Marion County: Lawrence, Washington, and Warrant Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.11	-0.11	-1.05
Mariposa County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.04
Mariposa County, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.04
Marshall, WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.01	-0.12
Medford, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.02	-0.20
Memphis, TN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.33	-0.35	-3.56
Memphis, TN-MS-AR	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.40	-0.43	-4.25
Miami (Gila County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.03
Miami, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.03
Miami, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.03
Millinocket AQCR 109, ME	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.04	-0.04	-0.40
Milwaukee, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.30	-0.33	-2.98
Milwaukee, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.14	-0.15	-1.36
Milwaukee-Racine, WI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.27	-0.29	-2.65
Minneapolis-St. Paul, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.89	-0.96	-9.53
Minneapolis-St. Paul, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.87	-0.94	-9.31
Missoula, MT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.02	-0.17
Missoula, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.02	-0.18
Modesto, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.07	-0.08	-0.78
Mohave County (part); Bullhead City, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.14
Mono Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01
Mono County; Mammoth Lake planning area, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.03

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Morenci (Greenlee County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Morgan County, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.01	-0.07
Morongo Band of Mission Indians, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	-0.01
Morongo Band of Mission Indians, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	-0.01
Morristown, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.04
Muscatine County, IA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.04
Muscatine, IA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.01	-0.06
Muskegon County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.03	-0.04	-0.32
Muskingum River, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.05
Nashua, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.02	-0.19
Nassau County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.02
Navarro County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.01	-0.07
Nevada County (Western part), CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-0.02	-0.02	-0.19
Nevada County (Western part), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.02	-0.02	-0.19
New Haven County, CT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.05
New Haven-Meriden-Waterbury, CT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.17	-0.19	-1.74
New Madrid County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
New Manchester-Grant magisterial district in Hancock County, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.01	-0.14
New York County, NY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.07	-0.08	-0.73
New York-N. New Jersey-Long Island, NY-NJ-CT	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-2.92	-3.18	-29.64
New York-N. New Jersey-Long Island, NY-NJ-CT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-1.66	-1.81	-17.12
New York-N. New Jersey-Long Island, NY-NJ-CT	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-2.98	-3.24	-30.24
New York-Northern New Jersey-Long Island, NY-NJ-CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-2.92	-3.18	-29.66
Nogales, AZ	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.05
Northern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.48	-0.52	-5.11
Oakridge, OR	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Ogden, UT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.02	-0.18
Ogden, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.02	-0.18
Olmsted County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.07
Olmsted County; City of Rochester, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.03	-0.03	-0.25

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Oneida County: Rhinelander Sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.01	-0.01	-0.11
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Pekin, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.01	-0.10
Penns Grove, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Peoria County: Hollis twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00
Peoria, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.02	-0.03	-0.25
Perth Amboy, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.01	-0.12
Philadelphia-Camden County, PA-NJ	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.89	-0.95	-11.73
Philadelphia-Wilmington, PA-NJ-DE (NJ Portion)	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.39	-0.42	-4.49
Philadelphia-Wilmington, PA-NJ-DE (PA-DE Portion)	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-1.48	-1.59	-17.96
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-2.23	-2.40	-25.95
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-3.35	-3.59	-42.00
Phoenix, AZ	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.98	-1.07	-9.77
Phoenix-Mesa, AZ	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-1.01	-1.10	-10.03
Phoenix-Mesa, AZ	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-1.02	-1.11	-10.15
Pierce County; Tacoma, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.09
Pima County; Ajo planning area, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Pima County; Rillito planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.01	-0.08
Pinal County (part); West Pinal, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.05	-0.05	-0.48
Pitkin County; Aspen, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.18
Pittsburgh, PA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.05	-0.06	-0.55
Pittsburgh-Beaver Valley, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.52	-0.56	-5.48
Pittsburgh-Beaver Valley, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.47	-0.51	-5.01
Plumas County, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	0.00	0.00	0.00
Polk County, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	-0.05
Portland, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.30	-0.32	-3.02
Power-Bannock Counties; Fort Hall Indian Reservation, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01
Power-Bannock Counties; Portneuf Valley Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.02	-0.15

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Provo, UT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.04	-0.04	-0.35
Provo, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.17	-0.18	-1.85
Prowers County; Lamar, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.02
Raleigh-Durham, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.40	-0.44	-4.02
Ramsey County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.16	-0.17	-2.23
Reading, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.08	-0.09	-0.80
Reno, NV	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.05	-0.06	-0.53
Rhineland, WI	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.01	-0.05
Riverside County (Coachella Valley), CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-0.12	-0.13	-1.15
Riverside County (Coachella Valley), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-0.12	-0.13	-1.15
Riverside County; Coachella Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.13	-0.15	-1.33
Riverside, Los Angeles, Orange, & San Bernardino Counties; South Coast Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-4.21	-4.57	-45.02
Rosebud County; Lame Deer, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Routt County (part); Steamboat Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.12	-0.12	-1.61
Rusk and Panola Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.01	-0.14
Sacramento County, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.29	-1.37	-17.05
Sacramento Metro, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-1.52	-1.62	-19.40
Sacramento Metro, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-1.52	-1.62	-19.40
Sacramento, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.42	-0.45	-4.49
Sacramento, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-1.50	-1.61	-19.26
Salem, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.05	-0.06	-0.53
Salt Lake City, UT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.13	-0.14	-1.68
Salt Lake City, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.50	-0.54	-5.30
Salt Lake County, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.34	-0.37	-3.70
Salt Lake County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	-0.34	-0.37	-3.71
San Antonio, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.46	-0.50	-4.65
San Bernardino County, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.83	-0.88	-11.25
San Diego County, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.76	-0.83	-7.56
San Diego County, CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-0.76	-0.83	-7.55

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
San Diego, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.76	-0.83	-7.54
San Francisco Bay Area, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-2.56	-2.76	-29.83
San Francisco Bay Area, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-2.56	-2.76	-29.81
San Francisco Bay Area, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-2.56	-2.76	-29.86
San Francisco-Oakland-San Jose, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-2.48	-2.67	-29.05
San Joaquin Valley Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-2.62	-2.80	-33.44
San Joaquin Valley, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-2.62	-2.80	-33.44
San Joaquin Valley, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-2.62	-2.80	-33.44
San Joaquin Valley, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-2.62	-2.80	-33.44
San Joaquin Valley, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-2.62	-2.80	-33.44
San Luis Obispo (Eastern San Luis Obispo), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.05	-0.05	-0.67
San Luis Obispo (Eastern part), CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.05	-0.05	-0.67
San Manuel (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.04
San Miguel County; Telluride, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.08
Sanders County (part); Thompson Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Santa Cruz County; Nogales planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.05
Seaford, DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.06	-0.07	-0.62
Seattle-Tacoma, WA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.66	-0.72	-6.63
Sheboygan County, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.02	-0.02	-0.15
Sheridan County; City of Sheridan, WY	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.05
Shoreline Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.14
Shoshone County; City of Pinehurst, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Shoshone County; Pinehurst Expansion Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.05
Silver Bow County; Butte, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.07
Somerville, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.03
Southern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.17	-0.18	-1.85
Southwest Indiana, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.03
Spokane County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.08	-0.08	-0.75
Spokane, WA	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.07	-0.08	-0.74
Springfield, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.03	-0.03	-0.30

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
St. Bernard Parish, LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.26	-0.28	-3.71
St. Clair, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.01	-0.13
St. Lawrence County, NY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.02
St. Louis, MO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.36	-0.38	-4.19
St. Louis, MO-IL	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.94	-1.01	-10.61
St. Louis-St. Charles-Farmington, MO-IL	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.82	-0.88	-8.78
Steubenville, OH-WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.03	-0.04	-0.43
Steubenville-Weirton, OH-WV	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.04	-0.04	-0.49
Stockton, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.09	-0.09	-0.87
Sullivan County, TN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.01	-0.06
Sutter Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00
Syracuse, NY	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.11	-0.12	-1.07
Tacoma, WA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	-0.12	-0.13	-1.22
Tazewell County: Groveland twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.04
Terre Haute, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.02	-0.15
Thurston County; Cities of Olympia, Tumwater, and Lacey, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.03	-0.23
Titus County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Toms River, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.01
Tooele County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	-0.04	-0.04	-0.58
Trenton, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.02	-0.18
Trona, CA	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	-0.03	-0.03	-0.43
Tucson, AZ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.17	-0.18	-1.65
Tuolumne County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.01	-0.12
Tuscan Buttes, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00
Tuscan Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal (Rural Transport)	100	0	0.00	0.00	0.00
Uinta Basin, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.04	-0.04	-0.55
Union County; LaGrande, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.02
Upper Green River Basin Area, WY	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.06	-0.06	-0.80
Utah County, UT	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.18	-0.20	-2.06

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Vancouver, WA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.07	-0.08	-0.69
Ventura County, CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-0.88	-0.93	-11.75
Ventura County, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.88	-0.93	-11.75
Vermillion County; Part of Clinton Township, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.03
Vigo County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.03	-0.03	-0.31
Walla Walla County; Wallula, WA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	-0.01
Waltham, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.01	-0.12
Warren County, NJ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.01	-0.01	-0.06
Warren County: Conewago Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.08	-0.09	-1.21
Warren County: Warren Boro, Pleasant Twp, Glade Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.09	-0.10	-1.27
Warren, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.09	-0.10	-1.30
Washington, DC-MD-VA	Ozone (2008 8-hour)	Nonattainment (DC) Maintenance (MD, VA), Marginal	50	0	-1.18	-1.29	-11.73
Washington, DC-MD-VA	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-1.18	-1.29	-11.73
Washington, DC-MD-VA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.15	-0.16	-1.50
Washoe County; Reno planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.05	-0.06	-0.54
Wayne County, MI	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.06	-0.06	-0.75
Wayne County: Boston, Center, Franklin, Wayne & Webster Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.02	-0.14
West Central Pinal, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.04
West Silver Valley, ID	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	0.00	-0.02
Whatcom County, WA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.09	-0.09	-1.27
Winston-Salem, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.11	-0.12	-1.09
Worcester, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.05	-0.05	-0.46
Yakima County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.02	-0.21
Yakima, WA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.01	-0.07
Yuba City-Marysville, CA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.04	-0.04	-0.38
Yuma, AZ	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.02	-0.03	-0.25
Yuma, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.04	-0.04	-0.39

Notes:

^a Nonattainment or maintenance status as of 2/1/2024. Source: EPA, The Green Book Nonattainment Areas for Criteria Pollutants; <http://www.epa.gov/airquality/greenbook/>. “—” indicates that no severity classification has been established for the NAAQS pollutant.

^b Emissions thresholds in tons per year. Where the threshold differs by precursor pollutant, the smallest of the precursor thresholds is shown. These thresholds are provided for information only; a general conformity determination is not required for the Proposed Action. Source: 40 CFR 93.853.

^c Positive values are emissions increases; negative values are emissions decreases.

EPA = U.S. Environmental Protection Agency; NAAQS = National Ambient Air Quality Standard; CO = carbon monoxide; NO₂ = nitrogen dioxide; PM_{2.5} = particulate matter less than 2.5 microns in size; PM₁₀ = particulate matter less than 10 microns in size; SO₂ = sulfur dioxide.

Table D-46. Changes in Emissions from U.S. Combined Passenger Cars, Light Trucks, and HDPUVs by Nonattainment or Maintenance Area and Alternative, Direct and Indirect Impacts--Particulate Matter (PM2.5), 2050

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Ada County; Boise, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.09	-0.18	-1.75
Adams, Denver, and Boulder Counties; Denver Metropolitan area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.51	-0.86	-8.36
Ajo (Pima County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.01
Albuquerque, NM	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.21	-0.40	-3.94
Allegan County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.02	-0.04	-0.35
Allegheny County Air Basin: Hazelwood monitor, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.02	-0.03	-0.31
Allegheny County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	-0.24	-0.42	-4.16
Allegheny County; Liberty, Lincoln, Port Vue, Glassport, Clairton, PA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.07
Allegheny, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.04	-0.06	-0.54
Allentown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.14	-0.26	-2.54
Allentown-Bethlehem-Easton, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.16	-0.30	-2.91
Alton Township, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.14	-0.09	-0.72
Amador County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.02	-0.19
Anchorage, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.03	-0.06	-0.62
Anchorage; Eagle River, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.05
Anne Arundel County and Baltimore County, MD	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.28	-0.55	-5.43
Archuleta County; Pagosa Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.03	-0.03	-0.24
Armstrong County; Madison, Mahoning, Boggs, Washington, Pine, PA	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	-0.01	-0.01	-0.07
Aroostock County; City of Presque Isle, ME	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.04
Atlanta, GA	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-1.40	-2.70	-26.66
Atlanta, GA	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-1.08	-2.09	-20.62
Atlantic City, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.02	-0.18
Bakersfield, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.16	-0.26	-2.47
Baltimore, MD	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	-0.71	-1.35	-13.28
Baltimore, MD	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.71	-1.35	-13.35
Baltimore, MD	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.05
Baton Rouge, LA	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.80	-0.80	-7.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Beaver, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	-0.06
Benton County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.01	-0.01	-0.11
Berrien County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.05	-0.10	-1.01
Billings, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.18	-0.15	-1.21
Billings, MT	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.16	-0.11	-0.82
Birmingham, AL	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.35	-0.64	-6.25
Boise-Northern Ada County, ID	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.09	-0.18	-1.75
Bonner County; The Sandpoint Area, ID	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.04
Boston, MA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.17	-0.33	-3.29
Boyd County (part), KY	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.20	-0.14	-1.05
Brooke; Follansbee area, WV	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Brown County: Green Bay, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.04
Burlington, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.04
Butte County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.04	-0.08	-0.81
Calaveras County, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.02	-0.19
Calaveras County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.02	-0.19
Campbell-Clermont Counties, KY-OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.01	-0.13
Canton-Massillon, OH	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.21	-0.24	-2.17
Central New Hampshire, NH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.05	-0.09	-0.86
Central Steptoe Valley, NV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.06
Charleston, WV	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.08	-0.14	-1.35
Charlotte, NC	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.36	-0.69	-6.84
Charlotte-Rock Hill, NC-SC	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.66	-1.27	-12.56
Chicago, IL-IN-WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-3.29	-4.33	-40.33
Chicago-Naperville, IL-IN-WI	Ozone (2008 8-hour)	Maintenance, Serious	100	0	-2.52	-3.83	-36.68
Chico (Butte County), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.04	-0.08	-0.81
Chico, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.03	-0.33
Chico, CA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	-0.04	-0.08	-0.78
Cincinnati, OH-KY (OH Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.40	-0.76	-7.56
Cincinnati, OH-KY (KY Portion)	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	-0.12	-0.21	-2.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Cincinnati, OH-KY-IN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.54	-1.01	-9.95
Clark County; Las Vegas planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.55	-1.03	-10.08
Cleveland, OH	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.65	-1.15	-11.26
Cleveland, OH	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.21	-0.40	-4.00
Cleveland, OH	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-0.27	-0.53	-5.23
Cleveland-Akron-Lorain, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.68	-1.20	-11.73
Cleveland-Akron-Lorain, OH	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.63	-1.11	-10.85
Cochise County; Paul Spur/Douglas planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.07
Colorado Springs, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.15	-0.27	-2.66
Columbus, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.45	-0.86	-8.48
Columbus, OH	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.42	-0.80	-7.89
Cook County; Lyons Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.03	-0.32
Cook County; Southeast Chicago, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.45	-0.33	-2.63
Coshocton County; Franklin Township, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.01
Coso Junction, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.03	-0.02	-0.16
Cuyahoga County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.21	-0.41	-4.01
Cuyahoga County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.17	-0.33	-3.27
Dallas-Fort Worth, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-1.92	-3.65	-36.01
Dallas-Fort Worth, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-1.89	-3.59	-35.42
Dane County; Madison sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.12	-0.23	-2.29
Delaware County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-0.90	-0.72	-5.90
Denver Metro/North Front Range, CO	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-1.24	-2.02	-19.58
Denver-Boulder, CO	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.82	-1.47	-14.36
Denver-Boulder-Greeley-Ft. Collins-Loveland, CO	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-1.10	-1.93	-18.85
Detroit, MI	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	-1.41	-2.38	-23.09
Detroit, MI	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.46	-0.84	-8.24
Detroit, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.09	-0.12	-1.16
Detroit-Ann Arbor, MI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-1.42	-2.38	-23.14
Doña Ana County; Anthony, NM	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.09	-0.06	-0.48

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Door County, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	0.00	0.00
Door County-Revised, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	-0.01	-0.01	-0.12
Douglas (Cochise County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.06
Dukes County, MA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	-0.05
Duluth, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.03	-0.05	-0.50
East Chicago, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.43	-0.30	-2.31
East Helena Area, MT	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00
East Kern County, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.03	-0.03	-0.23
El Paso County, TX	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.23	-0.34	-3.20
El Paso, TX	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.10	-0.08	-0.67
El Paso-Las Cruces, TX-NM	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.37	-0.49	-4.55
Eugene-Springfield, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.05	-0.10	-0.96
Evangeline Parish (Partial), LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Fairbanks, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.02	-0.03	-0.27
Fairbanks, AK	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.03	-0.05	-0.47
Flathead County; Columbia Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.03
Flathead County; Kalispell and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.20
Flathead County; Whitefish and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.03
Fort Collins, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.04	-0.08	-0.82
Freehold, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.05
Freestone and Anderson Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.01	-0.07
Fremont County; Canon City Area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.22
Fresno, CA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.16	-0.29	-2.88
Gila County (part): Payson, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.06
Giles County, VA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Grant County, NM	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.02	-0.17
Grants Pass, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.01	-0.15
Great Falls, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.01	-0.11

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Greater Connecticut, CT	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-0.35	-0.67	-6.59
Greater Connecticut, CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.35	-0.67	-6.60
Greeley, CO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.39	-0.39	-3.44
Hancock County (part): Weirton, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.01	-0.01	-0.09
Hancock and Brooke Counties (Part); The city of Weirton, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.09
Harrisburg-Lebanon-Carlisle-York, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.25	-0.49	-4.80
Hartford-New Britain-Middletown, CT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.24	-0.46	-4.59
Hayden (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	-0.05
Hayden, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.07
Hayden, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.05
Henderson-Webster Counties, KY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.04
Hillsborough County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.01	-0.08
Hillsborough-Polk County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.02
Houston-Galveston-Brazoria, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-3.74	-4.76	-44.14
Houston-Galveston-Brazoria, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-3.69	-4.67	-43.21
Howard County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.08	-0.06	-0.44
Humphreys County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.01	-0.01	-0.15
Huntington, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.02	-0.16
Hutchinson County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.12	-0.08	-0.62
Imperial County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-0.05	-0.10	-1.01
Imperial County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.05	-0.10	-1.01
Imperial County, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.04	-0.08	-0.83
Imperial County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	-0.04	-0.08	-0.83
Imperial Valley, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.05	-0.10	-0.96
Indian Wells, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.04	-0.04	-0.34
Indiana, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.05	-0.06	-0.51
Indianapolis, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.01
Indianapolis, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.14	-0.26	-2.58
Inland Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-0.01	-0.03	-0.26
Inyo County; Owens Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	-0.03

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Jackson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.02	-0.03	-0.31
Jackson County; Medford-Ashland (including White City), OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.04	-0.07	-0.71
Jamestown, NY	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.11	-0.12	-1.03
Jefferson County, KY	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.01
Jefferson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.02	-0.03	-0.29
Jefferson County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.02
Jefferson County; (part) Steubenville & Mingo Junction, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.02	-0.02	-0.23
Johnstown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.04	-0.06	-0.59
Josephine County; Grants Pass, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.15
Juneau; Mendenhall Valley area, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.04
Kern County (Eastern Kern), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.68	-0.49	-3.80
Kern County (Eastern Kern), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.68	-0.49	-3.80
King County; Kent, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.08
King County; Seattle, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.05
Klamath Falls, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.02	-0.23
Klamath Falls, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.23
Klamath Falls, OR	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.03	-0.26
Knoxville, TN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.19	-0.36	-3.54
Knoxville-Sevierville-La Follette, TN	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.23	-0.44	-4.33
La Porte County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.02	-0.03	-0.29
LaSalle County; Oglesby, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.15
Lake County (part); Lakeview, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Lake County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.53	-0.49	-4.14
Lake County, OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.05	-0.10	-0.99
Lake County; (part) Eastlake, Timberlake, Lakeline, Willoughby, Mentor, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.02	-0.17
Lake County; Cities of East Chicago, Hammond, Whiting, and Gary, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.50	-0.42	-3.48
Lake County; Polson, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01
Lake County; Ronan, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Lake Tahoe North Shore, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.06
Lake Tahoe South Shore, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.02	-0.17
Lake Tahoe, NV	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.01	-0.10
Lancaster, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.11	-0.22	-2.15
Lancaster, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.11	-0.22	-2.15
Lane County (part); Oakridge, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Lane County; Eugene/Springfield, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.05	-0.10	-0.96
Las Vegas, NV	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.55	-1.03	-10.08
Las Vegas, NV	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.56	-1.03	-10.10
Laurel Area (Yellowstone County), MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	-0.16	-0.11	-0.84
Lebanon County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-0.03	-0.06	-0.56
Lemont, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.41	-0.32	-2.64
Liberty-Clairton, PA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.07
Lincoln County; Libby and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.02
Logan, UT-ID	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.03	-0.06	-0.59
Longmont, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.05	-0.06	-0.52
Lorain County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.02	-0.23
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.84	-0.79	-6.78
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-0.84	-0.79	-6.78
Los Angeles-South Coast Air Basin, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-4.42	-7.67	-74.81
Los Angeles-South Coast Air Basin, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-4.42	-7.67	-74.77
Los Angeles-South Coast Air Basin, CA	CO (1971 8-hour)	Maintenance, Serious	100	0	-4.42	-7.67	-74.82
Los Angeles-South Coast Air Basin, CA	NO ₂ (1971 Annual)	Maintenance, Primary	100	0	-4.42	-7.67	-74.82
Los Angeles-South Coast Air Basin, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-4.42	-7.67	-74.82
Los Angeles-South Coast Air Basin, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-4.42	-7.67	-74.82
Louisville, KY-IN (IN Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.05	-0.10	-1.03
Louisville, KY-IN (KY Portion)	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.23	-0.44	-4.32
Lowell, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.04	-0.42
Lucas County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.30	-0.29	-2.55

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Madison County; Granite City Township and Nameoki Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.15	-0.12	-0.96
Manchester, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.05	-0.47
Manitowoc County, WI	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.01	-0.03	-0.26
Marathon County: Rothschild Sub-city area, Rib Mountain, Weston, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.04	-0.07	-0.72
Maricopa and Pinal Counties; Phoenix planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-1.07	-2.07	-20.49
Marion County: Lawrence, Washington, and Warrant Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.11	-0.22	-2.13
Mariposa County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.08
Mariposa County, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.08
Marshall, WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.01	-0.10
Medford, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.04	-0.43
Memphis, TN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.34	-0.56	-5.47
Memphis, TN-MS-AR	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.41	-0.71	-6.89
Miami (Gila County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.08
Miami, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.07
Miami, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	-0.08
Millinocket AQCR 109, ME	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.04	-0.08	-0.82
Milwaukee, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.32	-0.62	-6.09
Milwaukee, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.15	-0.28	-2.77
Milwaukee-Racine, WI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.28	-0.55	-5.39
Minneapolis-St. Paul, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.93	-1.60	-15.59
Minneapolis-St. Paul, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.90	-1.55	-15.12
Missoula, MT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.04	-0.38
Missoula, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.04	-0.39
Modesto, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.08	-0.14	-1.33
Mohave County (part); Bullhead City, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.03	-0.33
Mono Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01
Mono County; Mammoth Lake planning area, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.11

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Morenci (Greenlee County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.01
Morgan County, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.01	-0.14
Morongo Band of Mission Indians, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	-0.03
Morongo Band of Mission Indians, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	-0.03
Morristown, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.09
Muscatine County, IA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.08
Muscatine, IA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.01	-0.14
Muskegon County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.03	-0.07	-0.66
Muskingum River, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.03
Nashua, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.04	-0.39
Nassau County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.04
Navarro County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.04
Nevada County (Western part), CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-0.02	-0.04	-0.38
Nevada County (Western part), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.02	-0.04	-0.38
New Haven County, CT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.10
New Haven-Meriden-Waterbury, CT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.19	-0.36	-3.55
New Madrid County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
New Manchester-Grant magisterial district in Hancock County, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.01	-0.07
New York County, NY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.08	-0.15	-1.48
New York-N. New Jersey-Long Island, NY-NJ-CT	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-3.08	-5.77	-56.88
New York-N. New Jersey-Long Island, NY-NJ-CT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-1.75	-3.23	-31.70
New York-N. New Jersey-Long Island, NY-NJ-CT	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-3.14	-5.90	-58.13
New York-Northern New Jersey-Long Island, NY-NJ-CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-3.08	-5.78	-56.91
Nogales, AZ	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.11
Northern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.50	-0.87	-8.53
Oakridge, OR	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Ogden, UT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.04	-0.36
Ogden, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.04	-0.36
Olmsted County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.14
Olmsted County; City of Rochester, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.03	-0.05	-0.53

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Oneida County: Rhinelander Sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.01	-0.02	-0.22
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Pekin, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.02	-0.20
Penns Grove, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Peoria County: Hollis twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	-0.01
Peoria, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.03	-0.05	-0.47
Perth Amboy, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.02	-0.23
Philadelphia-Camden County, PA-NJ	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.86	-0.87	-7.66
Philadelphia-Wilmington, PA-NJ-DE (NJ Portion)	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.40	-0.61	-5.86
Philadelphia-Wilmington, PA-NJ-DE (PA-DE Portion)	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-1.48	-1.97	-18.45
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-2.26	-3.31	-31.45
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-3.32	-4.02	-36.92
Phoenix, AZ	CO (1971 8-hour)	Maintenance, Serious	100	0	-1.05	-2.02	-20.00
Phoenix-Mesa, AZ	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-1.08	-2.08	-20.53
Phoenix-Mesa, AZ	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-1.09	-2.10	-20.77
Pierce County; Tacoma, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.04
Pima County; Ajo planning area, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Pima County; Rillito planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.02	-0.16
Pinal County (part); West Pinal, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.05	-0.10	-1.00
Pitkin County; Aspen, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.18
Pittsburgh, PA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.06	-0.11	-1.07
Pittsburgh-Beaver Valley, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.54	-0.94	-9.20
Pittsburgh-Beaver Valley, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.49	-0.86	-8.39
Plumas County, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	0.00	0.00	-0.01
Polk County, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	-0.01	-0.09
Portland, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.32	-0.59	-5.86
Power-Bannock Counties; Fort Hall Indian Reservation, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.02
Power-Bannock Counties; Portneuf Valley Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.03	-0.32

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Provo, UT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.04	-0.07	-0.73
Provo, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.17	-0.29	-2.80
Prowers County; Lamar, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.05
Raleigh-Durham, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.43	-0.83	-8.20
Ramsey County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.15	-0.10	-0.77
Reading, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.09	-0.16	-1.63
Reno, NV	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.06	-0.11	-1.13
Rhineland, WI	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.01	-0.11
Riverside County (Coachella Valley), CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-0.12	-0.24	-2.34
Riverside County (Coachella Valley), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-0.12	-0.24	-2.34
Riverside County; Coachella Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.14	-0.27	-2.69
Riverside, Los Angeles, Orange, & San Bernardino Counties; South Coast Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-4.40	-7.64	-74.49
Rosebud County; Lame Deer, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01
Routt County (part); Steamboat Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.11	-0.09	-0.71
Rusk and Panola Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.01	-0.05
Sacramento County, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.25	-1.24	-10.84
Sacramento Metro, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-1.49	-1.69	-15.29
Sacramento Metro, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-1.49	-1.69	-15.29
Sacramento, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.44	-0.76	-7.36
Sacramento, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-1.48	-1.67	-15.05
Salem, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.06	-0.11	-1.10
Salt Lake City, UT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.13	-0.16	-1.47
Salt Lake City, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.53	-0.92	-9.02
Salt Lake County, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.35	-0.58	-5.59
Salt Lake County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	-0.35	-0.58	-5.59
San Antonio, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.49	-0.92	-9.05
San Bernardino County, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.78	-0.68	-5.67
San Diego County, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.81	-1.55	-15.36
San Diego County, CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-0.80	-1.55	-15.34

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
San Diego, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.80	-1.55	-15.33
San Francisco Bay Area, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-2.60	-3.80	-36.15
San Francisco Bay Area, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-2.59	-3.80	-36.12
San Francisco Bay Area, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-2.60	-3.81	-36.21
San Francisco-Oakland-San Jose, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-2.51	-3.63	-34.45
San Joaquin Valley Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-2.58	-2.95	-26.69
San Joaquin Valley, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-2.58	-2.95	-26.69
San Joaquin Valley, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-2.58	-2.95	-26.69
San Joaquin Valley, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-2.58	-2.95	-26.69
San Joaquin Valley, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-2.58	-2.95	-26.69
San Luis Obispo (Eastern San Luis Obispo), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.04	-0.03	-0.28
San Luis Obispo (Eastern part), CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.04	-0.03	-0.28
San Manuel (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.08
San Miguel County; Telluride, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.07
Sanders County (part); Thompson Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Santa Cruz County; Nogales planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.01	-0.11
Seaford, DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.07	-0.13	-1.26
Seattle-Tacoma, WA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.71	-1.36	-13.47
Sheboygan County, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.02	-0.03	-0.31
Sheridan County; City of Sheridan, WY	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.10
Shoreline Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-0.01	-0.03	-0.28
Shoshone County; City of Pinehurst, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Shoshone County; Pinehurst Expansion Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.10
Silver Bow County; Butte, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.15
Somerville, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.06
Southern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.17	-0.29	-2.80
Southwest Indiana, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.04
Spokane County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.08	-0.16	-1.54
Spokane, WA	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.08	-0.15	-1.53
Springfield, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.03	-0.06	-0.61

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
St. Bernard Parish, LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.25	-0.18	-1.39
St. Clair, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.03	-0.25
St. Lawrence County, NY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.04
St. Louis, MO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.36	-0.52	-4.88
St. Louis, MO-IL	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.96	-1.49	-14.33
St. Louis-St. Charles-Farmington, MO-IL	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.85	-1.45	-14.13
Steubenville, OH-WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.03	-0.04	-0.33
Steubenville-Weirton, OH-WV	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.04	-0.06	-0.53
Stockton, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.09	-0.17	-1.71
Sullivan County, TN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.01	-0.13
Sutter Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00
Syracuse, NY	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.11	-0.22	-2.19
Tacoma, WA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	-0.13	-0.24	-2.38
Tazewell County: Groveland twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.09
Terre Haute, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.02	-0.03	-0.30
Thurston County; Cities of Olympia, Tumwater, and Lacey, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.03	-0.05	-0.49
Titus County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Toms River, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.02
Tooele County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	-0.04	-0.03	-0.21
Trenton, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.04	-0.37
Trona, CA	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	-0.03	-0.02	-0.15
Tucson, AZ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.18	-0.35	-3.44
Tuolumne County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.02	-0.24
Tuscan Buttes, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00
Tuscan Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal (Rural Transport)	100	0	0.00	0.00	0.00
Uinta Basin, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.04	-0.04	-0.40
Union County; LaGrande, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.04
Upper Green River Basin Area, WY	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.05	-0.05	-0.37
Utah County, UT	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.19	-0.30	-2.89

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Vancouver, WA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.07	-0.14	-1.42
Ventura County, CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-0.85	-0.80	-6.93
Ventura County, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.85	-0.80	-6.92
Vermillion County; Part of Clinton Township, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.07
Vigo County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.03	-0.06	-0.60
Walla Walla County; Wallula, WA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	-0.02
Waltham, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.02	-0.24
Warren County, NJ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.01	-0.01	-0.13
Warren County: Conewago Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.08	-0.06	-0.42
Warren County: Warren Boro, Pleasant Twp, Glade Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.09	-0.06	-0.48
Warren, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.09	-0.06	-0.50
Washington, DC-MD-VA	Ozone (2008 8-hour)	Nonattainment (DC) Maintenance (MD, VA), Marginal	50	0	-1.25	-2.42	-23.89
Washington, DC-MD-VA	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-1.25	-2.42	-23.90
Washington, DC-MD-VA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.16	-0.31	-3.05
Washoe County; Reno planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.06	-0.12	-1.14
Wayne County, MI	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.05	-0.05	-0.47
Wayne County: Boston, Center, Franklin, Wayne & Webster Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.02	-0.03	-0.30
West Central Pinal, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.07
West Silver Valley, ID	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	-0.01	-0.05
Whatcom County, WA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.08	-0.06	-0.44
Winston-Salem, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.12	-0.22	-2.21
Worcester, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.05	-0.10	-0.96
Yakima County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.05	-0.45
Yakima, WA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.02	-0.16
Yuba City-Marysville, CA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.04	-0.08	-0.77
Yuma, AZ	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.03	-0.05	-0.52
Yuma, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.04	-0.08	-0.81

Notes:

^a Nonattainment or maintenance status as of 2/1/2024. Source: EPA, The Green Book Nonattainment Areas for Criteria Pollutants; <http://www.epa.gov/airquality/greenbook/>. "--" indicates that no severity classification has been established for the NAAQS pollutant.

Appendix D Air Quality Nonattainment Area Results

^b Emissions thresholds in tons per year. Where the threshold differs by precursor pollutant, the smallest of the precursor thresholds is shown. These thresholds are provided for information only; a general conformity determination is not required for the Proposed Action. Source: 40 CFR 93.853.

^c Positive values are emissions increases; negative values are emissions decreases.

EPA = U.S. Environmental Protection Agency; NAAQS = National Ambient Air Quality Standard; CO = carbon monoxide; NO₂ = nitrogen dioxide; PM_{2.5} = particulate matter less than 2.5 microns in size; PM₁₀ = particulate matter less than 10 microns in size; SO₂ = sulfur dioxide.

Table D-47. Changes in Emissions from U.S. Combined Passenger Cars, Light Trucks, and HDPUVs by Nonattainment or Maintenance Area and Alternative, Direct and Indirect Impacts--Sulfur Oxides (SO₂), 2035

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Ada County; Boise, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.05	-0.05	-0.62
Adams, Denver, and Boulder Counties; Denver Metropolitan area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.42	0.47	5.06
Ajo (Pima County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Albuquerque, NM	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.11	-0.12	-1.43
Allegan County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.01	-0.09
Allegheny County Air Basin: Hazelwood monitor, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.01	0.01	0.13
Allegheny County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.11	0.13	1.34
Allegheny County; Liberty, Lincoln, Port Vue, Glassport, Clairton, PA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.02	0.21
Allegheny, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.18	0.20	2.19
Allentown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.06	-0.07	-0.83
Allentown-Bethlehem-Easton, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.07	-0.08	-0.96
Alton Township, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	6.22	6.97	77.97
Amador County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.01	-0.07
Anchorage, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.01	-0.01	-0.08
Anchorage; Eagle River, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.01	0.06
Anne Arundel County and Baltimore County, MD	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.15	-0.16	-1.96
Archuleta County; Pagosa Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.05	0.06	0.68
Armstrong County; Madison, Mahoning, Boggs, Washington, Pine, PA	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.04	0.05	0.52
Aroostock County; City of Presque Isle, ME	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Atlanta, GA	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-0.73	-0.80	-9.65
Atlanta, GA	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.56	-0.62	-7.47
Atlantic City, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.01	-0.07
Bakersfield, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.05	0.06	0.64
Baltimore, MD	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	1.06	1.19	12.97
Baltimore, MD	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	1.05	1.18	12.89
Baltimore, MD	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.04	0.04	0.47
Baton Rouge, LA	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	3.02	3.39	37.77
Beaver, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.01	0.05
Benton County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	-0.04
Berrien County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.03	-0.03	-0.36

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Billings, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	3.54	3.97	44.43
Billings, MT	SO ₂ (2010 1-hour)	Maintenance, --	100	0	3.55	3.98	44.56
Birmingham, AL	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.11	0.13	1.26
Boise-Northern Ada County, ID	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.05	-0.05	-0.62
Bonner County; The Sandpoint Area, ID	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Boston, MA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.08	-0.09	-1.12
Boyd County (part), KY	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.78	0.88	9.79
Brooke; Follansbee area, WV	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.04	0.05	0.56
Brown County: Green Bay, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.01
Burlington, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.02
Butte County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.02	-0.02	-0.29
Calaveras County, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.01	-0.07
Calaveras County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.01	-0.07
Campbell-Clermont Counties, KY-OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.05
Canton-Massillon, OH	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.52	0.59	6.55
Central New Hampshire, NH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.02	-0.03	-0.31
Central Steptoe Valley, NV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.01
Charleston, WV	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.03	-0.04	-0.43
Charlotte, NC	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.19	-0.21	-2.48
Charlotte-Rock Hill, NC-SC	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.34	-0.38	-4.53
Chicago, IL-IN-WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	7.42	8.34	92.41
Chicago-Naperville, IL-IN-WI	Ozone (2008 8-hour)	Maintenance, Serious	100	0	3.28	3.70	40.52
Chico (Butte County), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.02	-0.02	-0.29
Chico, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.01	-0.11
Chico, CA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.02	-0.28
Cincinnati, OH-KY (OH Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.21	-0.23	-2.73
Cincinnati, OH-KY (KY Portion)	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	1.01	1.14	12.65
Cincinnati, OH-KY-IN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.80	0.90	9.85
Clark County; Las Vegas planning area, NV	PM ₁₀ (1987 24-hour)	Maintenance, Serious	100	0	-0.26	-0.29	-3.51
Cleveland, OH	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.23	0.26	2.63
Cleveland, OH	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.08	-0.09	-1.06
Cleveland, OH	PM _{2.5} (2012 Annual)	Maintenance, Moderate	100	0	-0.11	-0.12	-1.46

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Cleveland-Akron-Lorain, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.24	0.27	2.74
Cleveland-Akron-Lorain, OH	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.24	0.27	2.77
Cochise County; Paul Spur/Douglas planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.02
Colorado Springs, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.07	-0.08	-0.93
Columbus, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.19	-0.21	-2.56
Columbus, OH	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.19	-0.20	-2.49
Cook County; Lyons Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.11
Cook County; Southeast Chicago, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	1.64	1.84	20.59
Coshocton County; Franklin Township, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.05
Coso Junction, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.11	0.12	1.33
Cuyahoga County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.08	-0.09	-1.06
Cuyahoga County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.07	-0.08	-1.00
Dallas-Fort Worth, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.79	-0.86	-10.57
Dallas-Fort Worth, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.77	-0.84	-10.36
Dane County; Madison sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.06	-0.07	-0.83
Delaware County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	3.15	3.53	39.41
Denver Metro/North Front Range, CO	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	1.47	1.66	18.06
Denver-Boulder, CO	CO (1971 8-hour)	Maintenance, Serious	100	0	0.25	0.29	2.92
Denver-Boulder-Greeley-Ft. Collins-Loveland, CO	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.28	0.32	3.10
Detroit, MI	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	4.33	4.87	53.87
Detroit, MI	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.61	0.69	7.49
Detroit, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.80	0.90	10.00
Detroit-Ann Arbor, MI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	4.33	4.86	53.85
Doña Ana County; Anthony, NM	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.34	0.38	4.23
Door County, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	0.00	0.00
Door County-Revised, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	0.00	-0.04
Douglas (Cochise County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.02
Dukes County, MA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	-0.02
Duluth, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.08	0.09	0.98
East Chicago, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	1.65	1.85	20.71
East Helena Area, MT	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00
East Kern County, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.10	0.12	1.31

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
El Paso County, TX	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.27	0.30	3.33
El Paso, TX	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.33	0.37	4.17
El Paso-Las Cruces, TX-NM	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.58	0.65	7.17
Eugene-Springfield, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.03	-0.33
Evangeline Parish (Partial), LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.04
Fairbanks, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.03	0.04	0.39
Fairbanks, AK	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	0.03	0.03	0.34
Flathead County; Columbia Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Flathead County; Kalispell and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.06
Flathead County; Whitefish and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Fort Collins, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.01	-0.14
Freehold, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.02
Freestone and Anderson Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.04	0.04	0.50
Fremont County; Canon City Area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.08
Fresno, CA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.06	-0.07	-0.86
Gila County (part): Payson, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.02
Giles County, VA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Grant County, NM	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.06
Grants Pass, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.05
Great Falls, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.06	0.07	0.81
Greater Connecticut, CT	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-0.18	-0.20	-2.38
Greater Connecticut, CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.18	-0.20	-2.39
Greeley, CO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	1.88	2.11	23.56
Hancock County (part): Weirton, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.10	0.11	1.24
Hancock and Brooke Counties (Part); The city of Weirton, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.10	0.11	1.24
Harrisburg-Lebanon-Carlisle-York, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.13	-0.14	-1.72
Hartford-New Britain-Middletown, CT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.12	-0.14	-1.66
Hayden (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	-0.02
Hayden, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.03
Hayden, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.02
Henderson-Webster Counties, KY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.04
Hillsborough County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.01	0.01	0.07
Hillsborough-Polk County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.01	0.01	0.09
Houston-Galveston-Brazoria, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	24.13	27.07	301.94

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Houston-Galveston-Brazoria, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	24.14	27.08	302.10
Howard County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	3.25	3.65	40.80
Humphreys County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	-0.05
Huntington, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.06
Hutchinson County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.79	0.89	9.97
Imperial County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-0.03	-0.03	-0.37
Imperial County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.03	-0.03	-0.37
Imperial County, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.02	-0.02	-0.29
Imperial County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	-0.02	-0.02	-0.29
Imperial Valley, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.03	-0.03	-0.35
Indian Wells, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.10	0.11	1.28
Indiana, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.09	0.10	1.07
Indianapolis, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Indianapolis, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.07	-0.08	-0.93
Inland Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.10
Inyo County; Owens Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00
Jackson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.01	-0.11
Jackson County; Medford-Ashland (including White City), OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.02	-0.25
Jamestown, NY	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	1.30	1.46	16.28
Jefferson County, KY	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00
Jefferson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.01	-0.11
Jefferson County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.04	0.05	0.55
Jefferson County; (part) Steubenville & Mingo Junction, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.09	0.11	1.19
Johnstown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.05	0.05	0.56
Josephine County; Grants Pass, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.05
Juneau; Mendenhall Valley area, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Kern County (Eastern Kern), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	7.58	8.49	95.01
Kern County (Eastern Kern), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	7.58	8.49	95.01
King County; Kent, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.03
King County; Seattle, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.02
Klamath Falls, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.05
Klamath Falls, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.05
Klamath Falls, OR	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.06
Knoxville, TN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.10	-0.11	-1.28
Knoxville-Sevierville-La Follette, TN	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.11	-0.12	-1.50

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
La Porte County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.01	-0.10
LaSalle County; Oglesby, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.05
Lake County (part); Lakeview, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Lake County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	1.61	1.81	20.16
Lake County, OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.02	-0.20
Lake County; (part) Eastlake, Timberlake, Lakeline, Willoughby, Mentor, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.06
Lake County; Cities of East Chicago, Hammond, Whiting, and Gary, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	1.63	1.82	20.36
Lake County; Polson, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Lake County; Ronan, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Lake Tahoe North Shore, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.02
Lake Tahoe South Shore, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.06
Lake Tahoe, NV	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.04
Lancaster, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.06	-0.06	-0.77
Lancaster, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.06	-0.06	-0.77
Lane County (part); Oakridge, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Lane County; Eugene/Springfield, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.03	-0.33
Las Vegas, NV	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.26	-0.29	-3.51
Las Vegas, NV	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.26	-0.29	-3.52
Laurel Area (Yellowstone County), MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	3.55	3.98	44.56
Lebanon County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-0.02	-0.02	-0.20
Lemont, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	2.46	2.76	30.89
Liberty-Clairton, PA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.02	0.02	0.21
Lincoln County; Libby and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Logan, UT-ID	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.02	-0.21
Longmont, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.04	0.05	0.51
Lorain County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.05
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	7.50	8.40	93.94
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	7.50	8.40	93.94
Los Angeles-South Coast Air Basin, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	5.79	6.54	71.24
Los Angeles-South Coast Air Basin, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	5.80	6.54	71.25
Los Angeles-South Coast Air Basin, CA	CO (1971 8-hour)	Maintenance, Serious	100	0	5.79	6.53	71.20

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Los Angeles-South Coast Air Basin, CA	NO2 (1971 Annual)	Maintenance, Primary	100	0	5.79	6.53	71.20
Los Angeles-South Coast Air Basin, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	5.79	6.54	71.23
Los Angeles-South Coast Air Basin, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	5.79	6.54	71.23
Louisville, KY-IN (IN Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.03	-0.03	-0.37
Louisville, KY-IN (KY Portion)	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.12	-0.13	-1.57
Lowell, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.01	-0.15
Lucas County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	3.33	3.73	41.68
Madison County; Granite City Township and Nameoki Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	6.21	6.96	77.89
Manchester, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.01	-0.16
Manitowoc County, WI	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.01	-0.01	-0.09
Marathon County: Rothschild Sub-city area, Rib Mountain, Weston, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.02	-0.02	-0.26
Maricopa and Pinal Counties; Phoenix planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.56	-0.61	-7.38
Marion County: Lawrence, Washington, and Warrant Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.06	-0.06	-0.77
Mariposa County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.03
Mariposa County, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.03
Marshall, WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.16	0.18	2.06
Medford, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.01	-0.15
Memphis, TN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.09	0.11	1.08
Memphis, TN-MS-AR	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.06	0.07	0.58
Miami (Gila County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.02
Miami, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.02
Miami, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.02
Millinocket AQCR 109, ME	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.02	-0.02	-0.29
Milwaukee, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.17	-0.18	-2.20
Milwaukee, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.08	-0.08	-1.01
Milwaukee-Racine, WI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.15	-0.16	-1.96
Minneapolis-St. Paul, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	2.71	3.04	33.67
Minneapolis-St. Paul, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	2.72	3.06	33.83
Missoula, MT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.01	-0.13
Missoula, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.13

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Modesto, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.03	-0.03	-0.34
Mohave County (part); Bullhead City, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.06
Mono Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01
Mono County; Mammoth Lake planning area, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.02
Morenci (Greenlee County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Morgan County, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.05
Morongo Band of Mission Indians, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	-0.01
Morongo Band of Mission Indians, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	-0.01
Morristown, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.03
Muscatine County, IA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.03
Muscatine, IA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.05
Muskegon County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.02	-0.02	-0.22
Muskingum River, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.03	0.03	0.34
Nashua, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.01	-0.14
Nassau County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.01
Navarro County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.04	0.04	0.47
Nevada County (Western part), CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-0.01	-0.01	-0.14
Nevada County (Western part), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.01	-0.01	-0.14
New Haven County, CT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.04
New Haven-Meriden-Waterbury, CT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.10	-0.11	-1.28
New Madrid County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
New Manchester-Grant magisterial district in Hancock County, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.11	0.12	1.33
New York County, NY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.04	-0.04	-0.54
New York-N. New Jersey-Long Island, NY-NJ-CT	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-1.11	-1.22	-15.10
New York-N. New Jersey-Long Island, NY-NJ-CT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.44	-0.47	-6.13
New York-N. New Jersey-Long Island, NY-NJ-CT	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-1.15	-1.26	-15.60
New York-Northern New Jersey-Long Island, NY-NJ-CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-1.11	-1.22	-15.11
Nogales, AZ	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.03
Northern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	2.51	2.82	31.29
Oakridge, OR	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Ogden, UT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.01	-0.13
Ogden, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.13
Olmsted County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.05
Olmsted County; City of Rochester, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.02	-0.18

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Oneida County: Rhinelander Sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.01	-0.01	-0.08
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Pekin, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.01	-0.06
Penns Grove, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Peoria County: Hollis twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00
Peoria, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.02	0.02	0.26
Perth Amboy, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.01	-0.08
Philadelphia-Camden County, PA-NJ	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	1.02	1.15	12.70
Philadelphia-Wilmington, PA-NJ-DE (NJ Portion)	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.04	0.05	0.41
Philadelphia-Wilmington, PA-NJ-DE (PA-DE Portion)	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	2.61	2.94	32.49
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	2.46	2.77	30.31
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	9.44	10.60	117.85
Phoenix, AZ	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.54	-0.60	-7.21
Phoenix-Mesa, AZ	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-0.56	-0.61	-7.41
Phoenix-Mesa, AZ	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.56	-0.62	-7.49
Pierce County; Tacoma, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.02	0.27
Pima County; Ajo planning area, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Pima County; Rillito planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.06
Pinal County (part); West Pinal, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.03	-0.03	-0.35
Pitkin County; Aspen, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.02
Pittsburgh, PA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.01	-0.14
Pittsburgh-Beaver Valley, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.24	0.27	2.79
Pittsburgh-Beaver Valley, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.24	0.27	2.82
Plumas County, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	0.00	0.00	0.00
Polk County, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	-0.03
Portland, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.10	-0.11	-1.33
Power-Bannock Counties; Fort Hall Indian Reservation, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01
Power-Bannock Counties; Portneuf Valley Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.11
Provo, UT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.02	-0.02	-0.26
Provo, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	2.08	2.33	25.99

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Prowers County; Lamar, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.02
Raleigh-Durham, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.22	-0.25	-2.97
Ramsey County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	3.10	3.48	38.92
Reading, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.04	-0.04	-0.54
Reno, NV	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.03	-0.03	-0.39
Rhineland, WI	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.04
Riverside County (Coachella Valley), CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-0.06	-0.07	-0.85
Riverside County (Coachella Valley), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-0.06	-0.07	-0.85
Riverside County; Coachella Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.07	-0.08	-0.98
Riverside, Los Angeles, Orange, & San Bernardino Counties; South Coast Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	5.80	6.55	71.35
Rosebud County; Lame Deer, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Routt County (part); Steamboat Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.66	0.74	8.24
Rusk and Panola Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.01	0.15
Sacramento County, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	11.21	12.57	140.43
Sacramento Metro, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	11.09	12.43	138.84
Sacramento Metro, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	11.09	12.43	138.84
Sacramento, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.24	0.27	2.83
Sacramento, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	11.09	12.44	138.94
Salem, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.03	-0.03	-0.39
Salt Lake City, UT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	2.70	3.03	33.82
Salt Lake City, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	2.50	2.80	31.15
Salt Lake County, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	2.59	2.90	32.33
Salt Lake County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	2.59	2.90	32.32
San Antonio, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.26	0.29	3.05
San Bernardino County, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	7.52	8.43	94.26
San Diego County, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.42	-0.46	-5.55
San Diego County, CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-0.42	-0.46	-5.54
San Diego, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.42	-0.46	-5.54
San Francisco Bay Area, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	10.53	11.82	131.44
San Francisco Bay Area, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	10.53	11.82	131.46
San Francisco Bay Area, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	10.53	11.82	131.43

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
San Francisco-Oakland-San Jose, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	10.58	11.88	132.09
San Joaquin Valley Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	18.85	21.14	235.99
San Joaquin Valley, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	18.85	21.14	235.99
San Joaquin Valley, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	18.85	21.14	235.99
San Joaquin Valley, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	18.85	21.14	235.99
San Joaquin Valley, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	18.85	21.14	235.99
San Luis Obispo (Eastern San Luis Obispo), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.86	0.97	10.83
San Luis Obispo (Eastern part), CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.86	0.97	10.83
San Manuel (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.03
San Miguel County; Telluride, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.20	0.23	2.54
Sanders County (part); Thompson Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Santa Cruz County; Nogales planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.03
Seaford, DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.03	-0.04	-0.46
Seattle-Tacoma, WA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.34	-0.38	-4.56
Sheboygan County, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.01	-0.11
Sheridan County; City of Sheridan, WY	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.02
Shoreline Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.10
Shoshone County; City of Pinehurst, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Shoshone County; Pinehurst Expansion Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.04
Silver Bow County; Butte, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.05
Somerville, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.02
Southern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	2.08	2.33	25.99
Southwest Indiana, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.03
Spokane County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.04	-0.04	-0.54
Spokane, WA	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.04	-0.04	-0.53
Springfield, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.02	-0.22
St. Bernard Parish, LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	2.87	3.22	35.98
St. Clair, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.01	-0.09
St. Lawrence County, NY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.01
St. Louis, MO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	6.11	6.85	76.51
St. Louis, MO-IL	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	12.37	13.87	154.90
St. Louis-St. Charles-Farmington, MO-IL	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	6.00	6.73	74.98
Steubenville, OH-WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.33	0.37	4.17
Steubenville-Weirton, OH-WV	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.35	0.39	4.38

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Stockton, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.04	-0.04	-0.53
Sullivan County, TN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.05
Sutter Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00
Syracuse, NY	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.06	-0.07	-0.79
Tacoma, WA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.04	-0.05	-0.57
Tazewell County: Groveland twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.03
Terre Haute, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.01	-0.10
Thurston County; Cities of Olympia, Tumwater, and Lacey, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.17
Titus County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.01
Toms River, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.01
Tooele County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	2.15	2.41	26.93
Trenton, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.01	-0.13
Trona, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.11	0.12	1.34
Tucson, AZ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.09	-0.10	-1.22
Tuolumne County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.01	-0.09
Tuscan Buttes, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00
Tuscan Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal (Rural Transport)	100	0	0.00	0.00	0.00
Uinta Basin, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.12	0.14	1.52
Union County; LaGrande, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Upper Green River Basin Area, WY	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	1.78	2.00	22.33
Utah County, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	2.08	2.33	26.05
Vancouver, WA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.04	-0.04	-0.50
Ventura County, CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	7.52	8.43	94.27
Ventura County, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	7.52	8.43	94.28
Vermillion County; Part of Clinton Township, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Vigo County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.01	-0.16
Walla Walla County; Wallula, WA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	-0.01
Waltham, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.01	-0.09
Warren County, NJ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	-0.05
Warren County: Conewago Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	1.28	1.44	16.07
Warren County: Warren Boro, Pleasant Twp, Glade Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	1.28	1.44	16.06
Warren, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	1.28	1.44	16.06

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Washington, DC-MD-VA	Ozone (2008 8-hour)	Nonattainment (DC), Maintenance (MD, VA), Marginal	50	0	-0.65	-0.72	-8.65
Washington, DC-MD-VA	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.65	-0.72	-8.66
Washington, DC-MD-VA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.08	-0.09	-1.11
Washoe County; Reno planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.03	-0.03	-0.40
Wayne County, MI	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.82	0.92	10.24
Wayne County: Boston, Center, Franklin, Wayne & Webster Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.01	-0.11
West Central Pinal, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.03
West Silver Valley, ID	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Whatcom County, WA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	3.03	3.40	38.02
Winston-Salem, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.06	-0.07	-0.80
Worcester, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.03	-0.03	-0.34
Yakima County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.15
Yakima, WA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.05
Yuba City-Marysville, CA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.02	-0.28
Yuma, AZ	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.02	-0.18
Yuma, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.02	-0.02	-0.29

Notes:

^a Nonattainment or maintenance status as of 2/1/2024. Source: EPA, The Green Book Nonattainment Areas for Criteria Pollutants; <http://www.epa.gov/airquality/greenbook/>. "--" indicates that no severity classification has been established for the NAAQS pollutant.

^b Emissions thresholds in tons per year. Where the threshold differs by precursor pollutant, the smallest of the precursor thresholds is shown. These thresholds are provided for information only; a general conformity determination is not required for the Proposed Action. Source: 40 CFR 93.853.

^c Positive values are emissions increases; negative values are emissions decreases.

EPA = U.S. Environmental Protection Agency; NAAQS = National Ambient Air Quality Standard; CO = carbon monoxide; NO₂ = nitrogen dioxide; PM2.5 = particulate matter less than 2.5 microns in size; PM10 = particulate matter less than 10 microns in size; SO₂ = sulfur dioxide.

Table D-48. Changes in Emissions from U.S. Combined Passenger Cars, Light Trucks, and HDPUVs by Nonattainment or Maintenance Area and Alternative, Direct and Indirect Impacts--Sulfur Oxides (SO₂), 2050

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Ada County; Boise, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.03	-0.06	-0.79
Adams, Denver, and Boulder Counties; Denver Metropolitan area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.11	0.63	10.47
Ajo (Pima County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.01
Albuquerque, NM	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.07	-0.13	-1.81
Allegan County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.01	-0.10
Allegheny County Air Basin: Hazelwood monitor, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.02	0.28
Allegheny County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.02	0.18	3.14
Allegheny County; Liberty, Lincoln, Port Vue, Glassport, Clairton, PA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.02	0.39
Allegheny, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.07	0.25	3.98
Allentown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.04	-0.07	-1.01
Allentown-Bethlehem-Easton, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.05	-0.09	-1.18
Alton Township, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	2.47	8.72	138.68
Amador County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.01	-0.09
Anchorage, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.01	0.00	-0.04
Anchorage; Eagle River, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.01	0.11
Anne Arundel County and Baltimore County, MD	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.10	-0.18	-2.49
Archuleta County; Pagosa Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.08	1.23
Armstrong County; Madison, Mahoning, Boggs, Washington, Pine, PA	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.02	0.06	0.93
Aroostock County; City of Presque Isle, ME	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.02
Atlanta, GA	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-0.48	-0.88	-12.23
Atlanta, GA	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.37	-0.68	-9.46
Atlantic City, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.08
Bakersfield, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.09	1.52
Baltimore, MD	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	0.33	1.55	25.52
Baltimore, MD	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	0.32	1.54	25.38
Baltimore, MD	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.01	0.05	0.84
Baton Rouge, LA	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	1.17	4.25	67.90

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Beaver, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.01	0.11
Benton County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	-0.05
Berrien County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.02	-0.03	-0.46
Billings, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	1.41	4.97	79.08
Billings, MT	SO ₂ (2010 1-hour)	Maintenance, --	100	0	1.41	4.98	79.26
Birmingham, AL	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	0.19	3.37
Boise-Northern Ada County, ID	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.03	-0.06	-0.79
Bonner County; The Sandpoint Area, ID	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Boston, MA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.06	-0.10	-1.40
Boyd County (part), KY	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.31	1.10	17.42
Brooke; Follansbee area, WV	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.06	0.99
Brown County: Green Bay, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.02
Burlington, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.02
Butte County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.03	-0.37
Calaveras County, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.01	-0.09
Calaveras County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.01	-0.09
Campbell-Clermont Counties, KY-OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.06
Canton-Massillon, OH	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.20	0.74	11.92
Central New Hampshire, NH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.02	-0.03	-0.40
Central Steptoe Valley, NV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.03
Charleston, WV	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.02	-0.04	-0.53
Charlotte, NC	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.12	-0.23	-3.15
Charlotte-Rock Hill, NC-SC	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.23	-0.41	-5.77
Chicago, IL-IN-WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	2.72	10.57	170.27
Chicago-Naperville, IL-IN-WI	Ozone (2008 8-hour)	Maintenance, Serious	100	0	1.07	4.78	78.08
Chico (Butte County), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.03	-0.37
Chico, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.01	-0.15
Chico, CA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.03	-0.36
Cincinnati, OH-KY (OH Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.14	-0.25	-3.46
Cincinnati, OH-KY (KY Portion)	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	0.39	1.43	22.84

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Cincinnati, OH-KY-IN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.25	1.18	19.33
Clark County; Las Vegas planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.18	-0.32	-4.48
Cleveland, OH	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.01	0.38	6.69
Cleveland, OH	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.06	-0.09	-1.14
Cleveland, OH	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-0.08	-0.12	-1.62
Cleveland-Akron-Lorain, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.01	0.39	6.97
Cleveland-Akron-Lorain, OH	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.02	0.39	6.86
Cochise County; Paul Spur/Douglas planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.03
Colorado Springs, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.05	-0.09	-1.20
Columbus, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.14	-0.22	-2.98
Columbus, OH	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.13	-0.22	-2.97
Cook County; Lyons Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.13
Cook County; Southeast Chicago, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.65	2.31	36.70
Coshocton County; Franklin Township, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.01	0.10
Coso Junction, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.04	0.15	2.38
Cuyahoga County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.06	-0.09	-1.14
Cuyahoga County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.05	-0.09	-1.18
Dallas-Fort Worth, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.57	-0.91	-12.17
Dallas-Fort Worth, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.56	-0.89	-11.90
Dane County; Madison sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.04	-0.08	-1.05
Delaware County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	1.24	4.42	70.41
Denver Metro/North Front Range, CO	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.45	2.16	35.47
Denver-Boulder, CO	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.43	7.72
Denver-Boulder-Greeley-Ft. Collins-Loveland, CO	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.02	0.49	8.89
Detroit, MI	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	1.57	6.19	99.83
Detroit, MI	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.18	0.90	14.78
Detroit, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.31	1.12	17.96
Detroit-Ann Arbor, MI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	1.57	6.19	99.81
Doña Ana County; Anthony, NM	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.13	0.47	7.53

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Door County, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	0.00	0.00
Door County-Revised, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	0.00	-0.06
Douglas (Cochise County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.03
Dukes County, MA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	-0.02
Duluth, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.03	0.11	1.81
East Chicago, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.66	2.32	36.85
East Helena Area, MT	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00
East Kern County, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.04	0.15	2.35
El Paso County, TX	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.09	0.39	6.43
El Paso, TX	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.13	0.47	7.46
El Paso-Las Cruces, TX-NM	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.20	0.83	13.42
Eugene-Springfield, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.03	-0.44
Evangeline Parish (Partial), LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.08
Fairbanks, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.01	0.04	0.69
Fairbanks, AK	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	0.01	0.04	0.60
Flathead County; Columbia Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Flathead County; Kalispell and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.09
Flathead County; Whitefish and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Fort Collins, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.01	-0.11
Freehold, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.02
Freestone and Anderson Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.02	0.06	0.90
Fremont County; Canon City Area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.10
Fresno, CA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.05	-0.08	-1.05
Gila County (part): Payson, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.03
Giles County, VA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Grant County, NM	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.08
Grants Pass, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.07
Great Falls, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.03	0.09	1.45

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Greater Connecticut, CT	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-0.12	-0.22	-3.02
Greater Connecticut, CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.12	-0.22	-3.02
Greeley, CO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.73	2.65	42.27
Hancock County (part): Weirton, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.04	0.14	2.21
Hancock and Brooke Counties (Part); The city of Weirton, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.04	0.14	2.21
Harrisburg-Lebanon-Carlisle-York, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.09	-0.16	-2.17
Hartford-New Britain-Middletown, CT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.08	-0.15	-2.10
Hayden (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	-0.02
Hayden, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.03
Hayden, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.02
Henderson-Webster Counties, KY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.01	0.09
Hillsborough County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.01	0.14
Hillsborough-Polk County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.01	0.17
Houston-Galveston-Brazoria, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	9.35	34.01	543.35
Houston-Galveston-Brazoria, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	9.36	34.02	543.47
Howard County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	1.29	4.56	72.57
Humphreys County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	-0.07
Huntington, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	-0.07
Hutchinson County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.32	1.11	17.74
Imperial County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-0.02	-0.03	-0.46
Imperial County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.02	-0.03	-0.46
Imperial County, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.03	-0.38
Imperial County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	-0.01	-0.03	-0.38
Imperial Valley, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.02	-0.03	-0.44
Indian Wells, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.04	0.14	2.31
Indiana, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.03	0.12	1.98
Indianapolis, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.01
Indianapolis, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.05	-0.08	-1.18
Inland Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.12
Inyo County; Owens Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.02

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Jackson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.01	-0.14
Jackson County; Medford-Ashland (including White City), OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.33
Jamestown, NY	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.51	1.83	29.08
Jefferson County, KY	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.01
Jefferson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.01	-0.13
Jefferson County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.02	0.06	0.99
Jefferson County; (part) Steubenville & Mingo Junction, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.04	0.13	2.14
Johnstown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.01	0.07	1.08
Josephine County; Grants Pass, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.07
Juneau; Mendenhall Valley area, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.02
Kern County (Eastern Kern), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	3.01	10.63	169.08
Kern County (Eastern Kern), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	3.01	10.63	169.08
King County; Kent, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.04
King County; Seattle, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.02
Klamath Falls, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.08
Klamath Falls, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.08
Klamath Falls, OR	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.09
Knoxville, TN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.06	-0.12	-1.62
Knoxville-Sevierville-La Follette, TN	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.08	-0.14	-1.87
La Porte County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.01	-0.13
LaSalle County; Oglesby, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.07
Lake County (part); Lakeview, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Lake County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.63	2.27	36.21
Lake County, OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.01	-0.16
Lake County; (part) Eastlake, Timberlake, Lakeline, Willoughby, Mentor, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.08
Lake County; Cities of East Chicago, Hammond, Whiting, and Gary, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.64	2.29	36.44
Lake County; Polson, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Lake County; Ronan, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Lake Tahoe North Shore, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.03
Lake Tahoe South Shore, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.08
Lake Tahoe, NV	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.05
Lancaster, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.04	-0.07	-0.97
Lancaster, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.04	-0.07	-0.97
Lane County (part); Oakridge, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Lane County; Eugene/Springfield, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.03	-0.44
Las Vegas, NV	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.18	-0.32	-4.48
Las Vegas, NV	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.18	-0.32	-4.49
Laurel Area (Yellowstone County), MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	1.41	4.98	79.25
Lebanon County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.26
Lemont, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.97	3.46	55.07
Liberty-Clairton, PA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.01	0.02	0.39
Lincoln County; Libby and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Logan, UT-ID	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.26
Longmont, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.01	0.06	0.98
Lorain County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.05
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	2.96	10.53	167.78
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	2.96	10.53	167.78
Los Angeles-South Coast Air Basin, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	1.79	8.49	139.73
Los Angeles-South Coast Air Basin, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	1.79	8.49	139.75
Los Angeles-South Coast Air Basin, CA	CO (1971 8-hour)	Maintenance, Serious	100	0	1.79	8.49	139.67
Los Angeles-South Coast Air Basin, CA	NO ₂ (1971 Annual)	Maintenance, Primary	100	0	1.79	8.49	139.67
Los Angeles-South Coast Air Basin, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	1.79	8.49	139.72
Los Angeles-South Coast Air Basin, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	1.79	8.49	139.72
Louisville, KY-IN (IN Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.02	-0.03	-0.47
Louisville, KY-IN (KY Portion)	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.08	-0.14	-1.98
Lowell, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.01	-0.19
Lucas County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	1.31	4.67	74.37

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Madison County; Granite City Township and Nameoki Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	2.47	8.71	138.58
Manchester, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.02	-0.21
Manitowoc County, WI	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	-0.01	-0.12
Marathon County: Rothschild Sub-city area, Rib Mountain, Weston, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.01	-0.02	-0.33
Maricopa and Pinal Counties; Phoenix planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.37	-0.67	-9.41
Marion County: Lawrence, Washington, and Warrant Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.04	-0.07	-0.98
Mariposa County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.04
Mariposa County, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.04
Marshall, WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.06	0.23	3.68
Medford, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.01	-0.20
Memphis, TN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.16	2.88
Memphis, TN-MS-AR	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.02	0.11	2.23
Miami (Gila County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.04
Miami, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.03
Miami, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.04
Millinocket AQCR 109, ME	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.03	-0.37
Milwaukee, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.11	-0.20	-2.80
Milwaukee, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.05	-0.09	-1.27
Milwaukee-Racine, WI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.10	-0.18	-2.48
Minneapolis-St. Paul, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.97	3.87	62.61
Minneapolis-St. Paul, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.98	3.89	62.82
Missoula, MT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.01	-0.18
Missoula, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.18
Modesto, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.03	-0.38
Mohave County (part); Bullhead City, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.07
Mono Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01
Mono County; Mammoth Lake planning area, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.05

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Morenci (Greenlee County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Morgan County, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.06
Morongo Band of Mission Indians, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	-0.01
Morongo Band of Mission Indians, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	-0.01
Morristown, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.04
Muscatine County, IA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.04
Muscatine, IA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.06
Muskegon County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.02	-0.27
Muskingum River, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.04	0.62
Nashua, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.01	-0.18
Nassau County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.02
Navarro County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.01	0.05	0.85
Nevada County (Western part), CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-0.01	-0.01	-0.17
Nevada County (Western part), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.01	-0.01	-0.18
New Haven County, CT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.04
New Haven-Meriden-Waterbury, CT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.06	-0.12	-1.63
New Madrid County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
New Manchester-Grant magisterial district in Hancock County, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.04	0.15	2.36
New York County, NY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.03	-0.05	-0.68
New York-N. New Jersey-Long Island, NY-NJ-CT	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.85	-1.26	-16.44
New York-N. New Jersey-Long Island, NY-NJ-CT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.40	-0.45	-5.15
New York-N. New Jersey-Long Island, NY-NJ-CT	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.87	-1.31	-17.09
New York-Northern New Jersey-Long Island, NY-NJ-CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.85	-1.26	-16.47
Nogales, AZ	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.05
Northern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.94	3.56	57.11
Oakridge, OR	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Ogden, UT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.01	-0.17
Ogden, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.17
Olmsted County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.07
Olmsted County; City of Rochester, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.02	-0.24

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Oneida County: Rhinelander Sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	-0.01	-0.10
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Pekin, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.01	-0.08
Penns Grove, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Peoria County: Hollis twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.01
Peoria, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.01	0.03	0.56
Perth Amboy, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.09
Philadelphia-Camden County, PA-NJ	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.37	1.45	23.41
Philadelphia-Wilmington, PA-NJ-DE (NJ Portion)	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.02	0.09	1.70
Philadelphia-Wilmington, PA-NJ-DE (PA-DE Portion)	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.93	3.74	60.53
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.78	3.59	58.95
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	3.56	13.38	214.64
Phoenix, AZ	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.36	-0.66	-9.19
Phoenix-Mesa, AZ	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-0.37	-0.68	-9.43
Phoenix-Mesa, AZ	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.37	-0.68	-9.54
Pierce County; Tacoma, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.01	0.03	0.48
Pima County; Ajo planning area, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Pima County; Rillito planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.07
Pinal County (part); West Pinal, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.02	-0.03	-0.45
Pitkin County; Aspen, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.07
Pittsburgh, PA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.01	-0.05
Pittsburgh-Beaver Valley, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.03	0.38	6.59
Pittsburgh-Beaver Valley, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.04	0.38	6.50
Plumas County, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	0.00	0.00	0.00
Polk County, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	-0.04
Portland, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.08	-0.11	-1.32
Power-Bannock Counties; Fort Hall Indian Reservation, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01
Power-Bannock Counties; Portneuf Valley Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.15

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Provo, UT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.01	-0.02	-0.34
Provo, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	0.81	2.92	46.70
Prowers County; Lamar, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.03
Raleigh-Durham, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.15	-0.27	-3.77
Ramsey County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	1.23	4.35	69.22
Reading, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.03	-0.05	-0.65
Reno, NV	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.04	-0.52
Rhineland, WI	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.05
Riverside County (Coachella Valley), CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-0.04	-0.08	-1.08
Riverside County (Coachella Valley), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-0.04	-0.08	-1.08
Riverside County; Coachella Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.05	-0.09	-1.24
Riverside, Los Angeles, Orange, & San Bernardino Counties; South Coast Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	1.80	8.50	139.88
Rosebud County; Lame Deer, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Routt County (part); Steamboat Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.26	0.92	14.69
Rusk and Panola Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.02	0.28
Sacramento County, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	4.41	15.75	250.89
Sacramento Metro, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	4.33	15.60	248.88
Sacramento Metro, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	4.33	15.60	248.88
Sacramento, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.04	0.37	6.29
Sacramento, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	4.34	15.61	248.99
Salem, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.04	-0.51
Salt Lake City, UT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	1.06	3.79	60.35
Salt Lake City, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	0.93	3.54	56.89
Salt Lake County, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.99	3.65	58.46
Salt Lake County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	0.99	3.65	58.46
San Antonio, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.04	0.41	7.09
San Bernardino County, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	2.98	10.56	168.22
San Diego County, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.28	-0.50	-7.03
San Diego County, CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-0.28	-0.50	-7.02

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
San Diego, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.28	-0.50	-7.02
San Francisco Bay Area, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	3.96	14.93	239.56
San Francisco Bay Area, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	3.96	14.93	239.58
San Francisco Bay Area, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	3.96	14.93	239.54
San Francisco-Oakland-San Jose, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	3.99	14.99	240.34
San Joaquin Valley Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	7.36	26.52	423.11
San Joaquin Valley, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	7.36	26.52	423.11
San Joaquin Valley, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	7.36	26.52	423.11
San Joaquin Valley, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	7.36	26.52	423.11
San Joaquin Valley, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	7.36	26.52	423.11
San Luis Obispo (Eastern San Luis Obispo), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.34	1.21	19.29
San Luis Obispo (Eastern part), CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.34	1.21	19.29
San Manuel (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.04
San Miguel County; Telluride, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.08	0.28	4.52
Sanders County (part); Thompson Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Santa Cruz County; Nogales planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.05
Seaford, DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.02	-0.04	-0.58
Seattle-Tacoma, WA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.23	-0.41	-5.68
Sheboygan County, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.01	-0.14
Sheridan County; City of Sheridan, WY	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.03
Shoreline Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.13
Shoshone County; City of Pinehurst, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Shoshone County; Pinehurst Expansion Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.05
Silver Bow County; Butte, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.07
Somerville, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.03
Southern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.81	2.92	46.70
Southwest Indiana, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.06
Spokane County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.03	-0.05	-0.69
Spokane, WA	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.03	-0.05	-0.68
Springfield, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.02	-0.28

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
St. Bernard Parish, LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	1.14	4.03	64.05
St. Clair, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	-0.11
St. Lawrence County, NY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.02
St. Louis, MO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	2.40	8.58	136.84
St. Louis, MO-IL	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	4.83	17.41	277.89
St. Louis-St. Charles-Farmington, MO-IL	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	2.29	8.48	135.84
Steubenville, OH-WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.13	0.47	7.45
Steubenville-Weirton, OH-WV	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.14	0.49	7.88
Stockton, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.03	-0.05	-0.63
Sullivan County, TN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.06
Sutter Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00
Syracuse, NY	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.04	-0.07	-1.00
Tacoma, WA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	-0.03	-0.05	-0.59
Tazewell County: Groveland twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.04
Terre Haute, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.01	-0.12
Thurston County; Cities of Olympia, Tumwater, and Lacey, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.22
Titus County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.02
Toms River, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.01
Tooele County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	0.85	3.01	47.89
Trenton, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.01	-0.17
Trona, CA	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.04	0.15	2.38
Tucson, AZ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.06	-0.11	-1.58
Tuolumne County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.01	-0.11
Tuscan Buttes, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00
Tuscan Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal (Rural Transport)	100	0	0.00	0.00	0.00
Uinta Basin, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.05	0.17	2.73
Union County; LaGrande, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.02
Upper Green River Basin Area, WY	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.71	2.50	39.74
Utah County, UT	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.81	2.93	46.81

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Vancouver, WA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.03	-0.05	-0.64
Ventura County, CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	2.97	10.57	168.33
Ventura County, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	2.97	10.57	168.33
Vermillion County; Part of Clinton Township, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Vigo County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.01	-0.18
Walla Walla County; Wallula, WA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	-0.01
Waltham, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.11
Warren County, NJ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	-0.06
Warren County: Conewago Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.51	1.80	28.59
Warren County: Warren Boro, Pleasant Twp, Glade Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.51	1.80	28.58
Warren, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.51	1.80	28.57
Washington, DC-MD-VA	Ozone (2008 8-hour)	Nonattainment (DC) Maintenance (MD, VA), Marginal	50	0	-0.43	-0.79	-10.96
Washington, DC-MD-VA	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.43	-0.79	-10.97
Washington, DC-MD-VA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.05	-0.10	-1.40
Washoe County; Reno planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.02	-0.04	-0.53
Wayne County, MI	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.32	1.15	18.26
Wayne County: Boston, Center, Franklin, Wayne & Webster Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.01	-0.14
West Central Pinal, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.03
West Silver Valley, ID	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	0.00	-0.02
Whatcom County, WA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	1.21	4.25	67.63
Winston-Salem, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.04	-0.07	-1.02
Worcester, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.03	-0.44
Yakima County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.21
Yakima, WA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.07
Yuba City-Marysville, CA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.03	-0.35
Yuma, AZ	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.02	-0.24
Yuma, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.03	-0.37

Notes:

^a Nonattainment or maintenance status as of 2/1/2024. Source: EPA, The Green Book Nonattainment Areas for Criteria Pollutants; <http://www.epa.gov/airquality/greenbook/>. "--" indicates that no severity classification has been established for the NAAQS pollutant.

Appendix D Air Quality Nonattainment Area Results

^b Emissions thresholds in tons per year. Where the threshold differs by precursor pollutant, the smallest of the precursor thresholds is shown. These thresholds are provided for information only; a general conformity determination is not required for the Proposed Action. Source: 40 CFR 93.853.

^c Positive values are emissions increases; negative values are emissions decreases.

EPA = U.S. Environmental Protection Agency; NAAQS = National Ambient Air Quality Standard; CO = carbon monoxide; NO₂ = nitrogen dioxide; PM2.5 = particulate matter less than 2.5 microns in size; PM10 = particulate matter less than 10 microns in size; SO₂ = sulfur dioxide.

Table D-49. Changes in Emissions from U.S. Combined Passenger Cars, Light Trucks, and HDPUVs by Nonattainment or Maintenance Area and Alternative, Direct and Indirect Impacts--Nitrogen Oxides (NOx), 2035

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Ada County; Boise, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.85	-0.89	-10.12
Adams, Denver, and Boulder Counties; Denver Metropolitan area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-5.64	-5.92	-70.91
Ajo (Pima County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.01	-0.06
Albuquerque, NM	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-1.71	-1.79	-19.70
Allegan County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.18	-0.19	-2.13
Allegheny County Air Basin: Hazelwood monitor, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.19	-0.20	-2.40
Allegheny County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	-2.65	-2.78	-32.95
Allegheny County; Liberty, Lincoln, Port Vue, Glassport, Clairton, PA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.09	-0.09	-1.19
Allegheny, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.95	-1.01	-13.00
Allentown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-1.26	-1.31	-14.90
Allentown-Bethlehem-Easton, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-1.41	-1.47	-16.61
Alton Township, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-1.99	-2.11	-28.31
Amador County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.08	-0.08	-0.88
Anchorage, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.47	-0.49	-5.97
Anchorage; Eagle River, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.03	-0.04	-0.45
Anne Arundel County and Baltimore County, MD	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-2.22	-2.31	-25.18
Archuleta County; Pagosa Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-2.88	-3.05	-40.80
Armstrong County; Madison, Mahoning, Boggs, Washington, Pine, PA	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	-0.47	-0.50	-6.66
Aroostock County; City of Presque Isle, ME	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.15
Atlanta, GA	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-11.47	-11.98	-131.82
Atlanta, GA	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-8.99	-9.39	-103.67
Atlantic City, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.08	-0.08	-0.85
Bakersfield, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-1.01	-1.05	-11.70
Baltimore, MD	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	-6.00	-6.27	-69.79
Baltimore, MD	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-6.02	-6.29	-70.09
Baltimore, MD	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.03	-0.04	-0.44
Baton Rouge, LA	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-6.59	-6.95	-89.02
Beaver, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.04	-0.04	-0.46
Benton County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.04	-0.05	-0.49
Berrien County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.48	-0.50	-5.61

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Billings, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-1.22	-1.29	-16.93
Billings, MT	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-1.07	-1.14	-15.25
Birmingham, AL	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-3.10	-3.24	-36.93
Boise-Northern Ada County, ID	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.85	-0.89	-10.12
Bonner County; The Sandpoint Area, ID	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.17
Boston, MA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-1.36	-1.42	-15.46
Boyd County (part), KY	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-1.11	-1.18	-15.78
Brooke; Follansbee area, WV	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.02	-0.33
Brown County: Green Bay, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.03	-0.04	-0.43
Burlington, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.02	-0.20
Butte County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.42	-0.44	-5.06
Calaveras County, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.08	-0.08	-0.89
Calaveras County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.08	-0.08	-0.89
Campbell-Clermont Counties, KY-OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.05	-0.05	-0.59
Canton-Massillon, OH	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-1.04	-1.10	-13.10
Central New Hampshire, NH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.35	-0.36	-3.93
Central Steptoe Valley, NV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.01	-0.08
Charleston, WV	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-1.55	-1.63	-20.46
Charlotte, NC	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-2.81	-2.93	-31.86
Charlotte-Rock Hill, NC-SC	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-5.13	-5.36	-58.33
Chicago, IL-IN-WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-20.18	-21.17	-249.33
Chicago-Naperville, IL-IN-WI	Ozone (2008 8-hour)	Maintenance, Serious	100	0	-17.46	-18.29	-210.19
Chico (Butte County), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.42	-0.44	-5.06
Chico, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.14	-0.14	-1.60
Chico, CA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	-0.41	-0.42	-4.86
Cincinnati, OH-KY (OH Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-3.17	-3.31	-36.21
Cincinnati, OH-KY (KY Portion)	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	-0.96	-1.00	-11.46
Cincinnati, OH-KY-IN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-4.31	-4.50	-49.71
Clark County; Las Vegas planning area, NV	PM ₁₀ (1987 24-hour)	Maintenance, Serious	100	0	-4.03	-4.20	-45.75
Cleveland, OH	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-4.84	-5.06	-56.15
Cleveland, OH	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-1.65	-1.72	-18.71
Cleveland, OH	PM _{2.5} (2012 Annual)	Maintenance, Moderate	100	0	-2.15	-2.25	-24.50

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Cleveland-Akron-Lorain, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-5.18	-5.41	-60.36
Cleveland-Akron-Lorain, OH	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-4.67	-4.88	-54.20
Cochise County; Paul Spur/Douglas planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.03	-0.03	-0.34
Colorado Springs, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-1.38	-1.44	-16.57
Columbus, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-3.63	-3.80	-41.76
Columbus, OH	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-3.38	-3.53	-38.90
Cook County; Lyons Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.14	-0.15	-1.65
Cook County; Southeast Chicago, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.80	-1.90	-25.08
Coshocton County; Franklin Township, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.01	-0.13
Coso Junction, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.10	-0.10	-1.33
Cuyahoga County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.65	-1.72	-18.75
Cuyahoga County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-1.34	-1.40	-15.26
Dallas-Fort Worth, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-17.29	-18.09	-203.93
Dallas-Fort Worth, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-17.05	-17.83	-201.17
Dane County; Madison sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.94	-0.98	-10.63
Delaware County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-4.40	-4.65	-60.50
Denver Metro/North Front Range, CO	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-12.19	-12.79	-152.03
Denver-Boulder, CO	CO (1971 8-hour)	Maintenance, Serious	100	0	-9.36	-9.82	-116.82
Denver-Boulder-Greeley-Ft. Collins-Loveland, CO	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-11.74	-12.33	-145.83
Detroit, MI	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	-11.46	-12.00	-137.51
Detroit, MI	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-3.79	-3.97	-44.57
Detroit, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.77	-0.81	-9.79
Detroit-Ann Arbor, MI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-11.48	-12.02	-137.79
Doña Ana County; Anthony, NM	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.43	-0.45	-6.03
Door County, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	0.00	-0.01
Door County-Revised, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	-0.05	-0.05	-0.57
Douglas (Cochise County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.02	-0.02	-0.28
Dukes County, MA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.02	-0.02	-0.22
Duluth, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.28	-0.30	-3.54
East Chicago, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-1.65	-1.75	-23.39
East Helena Area, MT	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	-0.01
East Kern County, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.13	-0.14	-1.75

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
El Paso County, TX	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-1.64	-1.72	-20.07
El Paso, TX	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.51	-0.54	-6.99
El Paso-Las Cruces, TX-NM	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-2.32	-2.44	-28.74
Eugene-Springfield, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.37	-0.39	-4.25
Evangeline Parish (Partial), LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.06
Fairbanks, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.19	-0.20	-2.51
Fairbanks, AK	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.25	-0.26	-3.16
Flathead County; Columbia Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.12
Flathead County; Kalispell and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.07	-0.07	-0.76
Flathead County; Whitefish and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.12
Fort Collins, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.37	-0.39	-4.38
Freehold, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.02	-0.21
Freestone and Anderson Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.25	-0.26	-3.43
Fremont County; Canon City Area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.09	-0.10	-1.06
Fresno, CA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-1.14	-1.19	-13.04
Gila County (part): Payson, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.02	-0.26
Giles County, VA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.01
Grant County, NM	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.07	-0.07	-0.81
Grants Pass, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.06	-0.06	-0.63
Great Falls, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.15	-0.16	-2.12
Greater Connecticut, CT	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-2.75	-2.87	-31.34
Greater Connecticut, CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-2.75	-2.87	-31.37
Greeley, CO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-4.12	-4.35	-56.28
Hancock County (part): Weirton, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.12	-0.13	-1.67
Hancock and Brooke Counties (Part); The city of Weirton, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.12	-0.13	-1.67
Harrisburg-Lebanon-Carlisle-York, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-2.14	-2.23	-24.78
Hartford-New Britain-Middletown, CT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-1.94	-2.02	-22.17
Hayden (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	-0.02	-0.02	-0.24
Hayden, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.04	-0.04	-0.40
Hayden, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.02	-0.02	-0.24
Henderson-Webster Counties, KY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.09	-0.09	-1.23
Hillsborough County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.04	-0.04	-0.44
Hillsborough-Polk County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.01	-0.14
Houston-Galveston-Brazoria, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-26.72	-28.09	-339.93

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Houston-Galveston-Brazoria, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-26.24	-27.58	-334.09
Howard County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.91	-0.97	-12.97
Humphreys County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.06	-0.06	-0.68
Huntington, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.06	-0.07	-0.72
Hutchinson County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-1.17	-1.24	-16.65
Imperial County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-0.41	-0.43	-4.70
Imperial County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.41	-0.43	-4.70
Imperial County, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.32	-0.34	-3.67
Imperial County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	-0.32	-0.34	-3.67
Imperial Valley, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.39	-0.41	-4.45
Indian Wells, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.17	-0.18	-2.17
Indiana, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-1.56	-1.65	-21.71
Indianapolis, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.01	-0.06
Indianapolis, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-1.08	-1.13	-12.36
Inland Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-0.11	-0.11	-1.24
Inyo County; Owens Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.02	-0.02	-0.23
Jackson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.14	-0.14	-1.55
Jackson County; Medford-Ashland (including White City), OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.28	-0.29	-3.19
Jamestown, NY	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-1.25	-1.32	-17.10
Jefferson County, KY	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.01	-0.06
Jefferson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.12	-0.13	-1.40
Jefferson County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.03	-0.03	-0.38
Jefferson County; (part) Steubenville & Mingo Junction, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.18	-0.19	-2.32
Johnstown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-1.11	-1.17	-15.16
Josephine County; Grants Pass, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.05	-0.06	-0.62
Juneau; Mendenhall Valley area, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.14
Kern County (Eastern Kern), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-3.90	-4.13	-54.92
Kern County (Eastern Kern), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-3.90	-4.13	-54.92
King County; Kent, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.03	-0.04	-0.39
King County; Seattle, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.02	-0.25
Klamath Falls, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.08	-0.08	-0.94
Klamath Falls, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.08	-0.08	-0.94
Klamath Falls, OR	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.09	-0.10	-1.07
Knoxville, TN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-1.88	-1.97	-22.59
Knoxville-Sevierville-La Follette, TN	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-2.23	-2.34	-26.66

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
La Porte County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.12	-0.12	-1.32
LaSalle County; Oglesby, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.07	-0.07	-0.77
Lake County (part); Lakeview, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Lake County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-2.46	-2.60	-32.77
Lake County, OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.41	-0.43	-4.65
Lake County; (part) Eastlake, Timberlake, Lakeline, Willoughby, Mentor, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.07	-0.07	-0.80
Lake County; Cities of East Chicago, Hammond, Whiting, and Gary, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-2.17	-2.29	-29.37
Lake County; Polson, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.04
Lake County; Ronan, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.02
Lake Tahoe North Shore, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.03	-0.03	-0.30
Lake Tahoe South Shore, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.07	-0.07	-0.80
Lake Tahoe, NV	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.04	-0.04	-0.48
Lancaster, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.93	-0.98	-10.76
Lancaster, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.93	-0.98	-10.76
Lane County (part); Oakridge, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Lane County; Eugene/Springfield, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.37	-0.39	-4.26
Las Vegas, NV	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-4.03	-4.20	-45.75
Las Vegas, NV	CO (1971 8-hour)	Maintenance, Serious	100	0	-4.03	-4.21	-45.82
Laurel Area (Yellowstone County), MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	-1.08	-1.14	-15.29
Lebanon County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-0.23	-0.24	-2.59
Lemont, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-2.12	-2.24	-29.35
Liberty-Clairton, PA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.09	-0.09	-1.19
Lincoln County; Libby and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.06
Logan, UT-ID	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.24	-0.25	-2.73
Longmont, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-1.89	-2.00	-26.43
Lorain County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.09	-0.10	-1.07
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-5.37	-5.67	-72.29
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-5.37	-5.67	-72.28
Los Angeles-South Coast Air Basin, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-34.36	-35.94	-405.23
Los Angeles-South Coast Air Basin, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-34.35	-35.92	-405.06
Los Angeles-South Coast Air Basin, CA	CO (1971 8-hour)	Maintenance, Serious	100	0	-34.36	-35.94	-405.23

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Los Angeles-South Coast Air Basin, CA	NO2 (1971 Annual)	Maintenance, Primary	100	0	-34.36	-35.94	-405.24
Los Angeles-South Coast Air Basin, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-34.36	-35.94	-405.27
Los Angeles-South Coast Air Basin, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-34.36	-35.94	-405.27
Louisville, KY-IN (IN Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.44	-0.46	-5.11
Louisville, KY-IN (KY Portion)	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-1.77	-1.85	-20.12
Lowell, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.17	-0.18	-1.97
Lucas County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-2.42	-2.55	-32.80
Madison County; Granite City Township and Nameoki Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-2.16	-2.29	-30.41
Manchester, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.19	-0.19	-2.11
Manitowoc County, WI	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.10	-0.11	-1.18
Marathon County: Rothschild Sub-city area, Rib Mountain, Weston, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.30	-0.31	-3.37
Maricopa and Pinal Counties; Phoenix planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-8.35	-8.72	-94.86
Marion County: Lawrence, Washington, and Warrant Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.90	-0.93	-10.23
Mariposa County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-0.03	-0.03	-0.37
Mariposa County, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.03	-0.03	-0.38
Marshall, WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.37	-0.40	-5.24
Medford, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.17	-0.18	-1.93
Memphis, TN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-2.31	-2.42	-26.90
Memphis, TN-MS-AR	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-3.00	-3.14	-35.01
Miami (Gila County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.03	-0.03	-0.32
Miami, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.02	-0.03	-0.28
Miami, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.03	-0.03	-0.30
Millinocket AQCR 109, ME	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.37	-0.39	-4.37
Milwaukee, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-2.49	-2.60	-28.26
Milwaukee, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-1.14	-1.19	-12.90
Milwaukee-Racine, WI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-2.21	-2.31	-25.10
Minneapolis-St. Paul, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-8.13	-8.51	-98.20
Minneapolis-St. Paul, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-7.95	-8.33	-96.22
Missoula, MT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.22	-0.23	-2.72
Missoula, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.23	-0.24	-2.80

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Modesto, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.53	-0.56	-6.09
Mohave County (part); Bullhead City, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.13	-0.14	-1.52
Mono Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.01	-0.12
Mono County; Mammoth Lake planning area, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.03	-0.03	-0.30
Morenci (Greenlee County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.04
Morgan County, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.06	-0.06	-0.64
Morongo Band of Mission Indians, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.01	-0.01	-0.13
Morongo Band of Mission Indians, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.01	-0.01	-0.13
Morristown, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.04	-0.04	-0.40
Muscatine County, IA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.03	-0.03	-0.35
Muscatine, IA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.05	-0.06	-0.61
Muskegon County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.28	-0.29	-3.24
Muskingum River, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.06	-0.06	-0.84
Nashua, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.16	-0.17	-1.80
Nassau County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.02	-0.17
Navarro County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.30	-0.32	-4.25
Nevada County (Western part), CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-0.16	-0.16	-1.78
Nevada County (Western part), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.16	-0.16	-1.79
New Haven County, CT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.04	-0.04	-0.45
New Haven-Meriden-Waterbury, CT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-1.45	-1.51	-16.48
New Madrid County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
New Manchester-Grant magisterial district in Hancock County, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.13	-0.13	-1.78
New York County, NY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.61	-0.63	-6.90
New York-N. New Jersey-Long Island, NY-NJ-CT	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-24.82	-25.92	-286.92
New York-N. New Jersey-Long Island, NY-NJ-CT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-14.20	-14.84	-165.41
New York-N. New Jersey-Long Island, NY-NJ-CT	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-25.30	-26.43	-292.34
New York-Northern New Jersey-Long Island, NY-NJ-CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-24.83	-25.94	-287.14
Nogales, AZ	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.04	-0.04	-0.43
Northern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-4.18	-4.38	-50.04
Oakridge, OR	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.02
Ogden, UT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.15	-0.15	-1.67
Ogden, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.15	-0.15	-1.67
Olmsted County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.08	-0.08	-0.96
Olmsted County; City of Rochester, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.29	-0.30	-3.52

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Oneida County: Rhinelander Sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.09	-0.09	-1.02
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Pekin, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.08	-0.09	-0.95
Penns Grove, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Peoria County: Hollis twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.01	-0.01	-0.06
Peoria, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.21	-0.22	-2.43
Perth Amboy, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.11	-0.12	-1.31
Philadelphia-Camden County, PA-NJ	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-4.35	-4.58	-56.74
Philadelphia-Wilmington, PA-NJ-DE (NJ Portion)	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-2.57	-2.68	-30.38
Philadelphia-Wilmington, PA-NJ-DE (PA-DE Portion)	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-9.89	-10.38	-123.24
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-15.38	-16.12	-186.84
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-21.75	-22.86	-277.33
Phoenix, AZ	CO (1971 8-hour)	Maintenance, Serious	100	0	-8.16	-8.51	-92.61
Phoenix-Mesa, AZ	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-8.38	-8.75	-95.18
Phoenix-Mesa, AZ	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-8.48	-8.85	-96.31
Pierce County; Tacoma, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.06	-0.07	-0.90
Pima County; Ajo planning area, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.05
Pima County; Rillito planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.07	-0.07	-0.77
Pinal County (part); West Pinal, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.41	-0.42	-4.64
Pitkin County; Aspen, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.63	-0.67	-8.84
Pittsburgh, PA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.53	-0.55	-6.26
Pittsburgh-Beaver Valley, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-6.86	-7.21	-87.15
Pittsburgh-Beaver Valley, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-6.28	-6.60	-79.88
Plumas County, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	0.00	0.00	-0.04
Polk County, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.04	-0.04	-0.43
Portland, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-2.51	-2.62	-28.98
Power-Bannock Counties; Fort Hall Indian Reservation, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.01	-0.08
Power-Bannock Counties; Portneuf Valley Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.13	-0.13	-1.44
Provo, UT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.30	-0.31	-3.35
Provo, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-1.34	-1.40	-15.95

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Prowers County; Lamar, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.02	-0.19
Raleigh-Durham, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-3.38	-3.53	-38.45
Ramsey County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.54	-1.63	-21.91
Reading, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.72	-0.76	-8.39
Reno, NV	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.45	-0.47	-5.07
Rhineland, WI	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.04	-0.04	-0.49
Riverside County (Coachella Valley), CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-0.96	-1.01	-10.96
Riverside County (Coachella Valley), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-0.96	-1.01	-10.96
Riverside County; Coachella Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-1.11	-1.16	-12.60
Riverside, Los Angeles, Orange, & San Bernardino Counties; South Coast Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-34.23	-35.80	-403.74
Rosebud County; Lame Deer, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.04
Routt County (part); Steamboat Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.25	-1.33	-17.58
Rusk and Panola Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.62	-0.66	-8.80
Sacramento County, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-6.53	-6.88	-85.73
Sacramento Metro, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-8.40	-8.84	-107.24
Sacramento Metro, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-8.40	-8.83	-107.23
Sacramento, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-4.04	-4.24	-49.35
Sacramento, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-8.29	-8.71	-105.89
Salem, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.44	-0.46	-5.00
Salt Lake City, UT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-1.32	-1.39	-17.53
Salt Lake City, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-4.35	-4.55	-51.88
Salt Lake County, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-3.01	-3.16	-36.71
Salt Lake County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	-3.01	-3.16	-36.72
San Antonio, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-4.36	-4.56	-51.46
San Bernardino County, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-4.96	-5.24	-67.64
San Diego County, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-6.44	-6.73	-73.59
San Diego County, CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-6.43	-6.71	-73.47
San Diego, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-6.43	-6.71	-73.40
San Francisco Bay Area, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-16.85	-17.65	-203.04
San Francisco Bay Area, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-16.84	-17.64	-202.86
San Francisco Bay Area, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-16.88	-17.67	-203.29

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
San Francisco-Oakland-San Jose, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-16.11	-16.87	-194.56
San Joaquin Valley Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-14.38	-15.11	-182.94
San Joaquin Valley, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-14.38	-15.11	-182.94
San Joaquin Valley, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-14.38	-15.11	-182.94
San Joaquin Valley, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-14.38	-15.11	-182.94
San Joaquin Valley, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-14.38	-15.11	-182.94
San Luis Obispo (Eastern San Luis Obispo), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.23	-0.24	-3.17
San Luis Obispo (Eastern part), CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.23	-0.24	-3.17
San Manuel (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.04	-0.04	-0.43
San Miguel County; Telluride, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.07	-0.07	-0.92
Sanders County (part); Thompson Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Santa Cruz County; Nogales planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.04	-0.04	-0.44
Seaford, DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.52	-0.54	-5.90
Seattle-Tacoma, WA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-5.53	-5.77	-62.96
Sheboygan County, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.13	-0.13	-1.46
Sheridan County; City of Sheridan, WY	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.05	-0.05	-0.63
Shoreline Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-0.12	-0.12	-1.32
Shoshone County; City of Pinehurst, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Shoshone County; Pinehurst Expansion Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.04	-0.04	-0.47
Silver Bow County; Butte, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.06	-0.06	-0.66
Somerville, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.02	-0.26
Southern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-1.34	-1.40	-15.95
Southwest Indiana, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.09	-0.10	-1.24
Spokane County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.63	-0.65	-7.13
Spokane, WA	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.62	-0.65	-7.07
Springfield, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.25	-0.26	-2.85
St. Bernard Parish, LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-2.55	-2.70	-36.07
St. Clair, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.12	-0.13	-1.42
St. Lawrence County, NY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.02	-0.02	-0.17
St. Louis, MO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-3.80	-4.00	-49.18
St. Louis, MO-IL	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-10.44	-10.97	-133.30
St. Louis-St. Charles-Farmington, MO-IL	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-8.21	-8.62	-101.09
Steubenville, OH-WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.75	-0.79	-10.38
Steubenville-Weirton, OH-WV	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.52	-0.55	-6.87

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Stockton, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.73	-0.76	-8.42
Sullivan County, TN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.06	-0.06	-0.63
Sutter Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.02	-0.02	-0.28
Syracuse, NY	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.91	-0.95	-10.34
Tacoma, WA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	-1.01	-1.05	-11.63
Tazewell County: Groveland twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.04	-0.04	-0.43
Terre Haute, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.14	-0.14	-1.58
Thurston County; Cities of Olympia, Tumwater, and Lacey, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.19	-0.20	-2.19
Titus County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.01	-0.09
Toms River, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.01	-0.08
Tooele County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	-0.28	-0.29	-3.91
Trenton, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.15	-0.16	-1.72
Trona, CA	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	-0.09	-0.10	-1.30
Tucson, AZ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-1.37	-1.43	-15.61
Tuolumne County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.10	-0.10	-1.13
Tuscan Buttes, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	-0.06
Tuscan Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal (Rural Transport)	100	0	0.00	0.00	-0.06
Uinta Basin, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-1.27	-1.34	-17.76
Union County; LaGrande, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.14
Upper Green River Basin Area, WY	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-2.19	-2.32	-30.93
Utah County, UT	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-1.86	-1.95	-23.29
Vancouver, WA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.58	-0.61	-6.65
Ventura County, CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-5.19	-5.47	-69.63
Ventura County, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-5.19	-5.47	-69.61
Vermillion County; Part of Clinton Township, IN	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.04	-0.04	-0.49
Vigo County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.36	-0.37	-4.38
Walla Walla County; Wallula, WA	PM ₁₀ (1987 24-hour)	Maintenance, Serious	100	0	-0.01	-0.01	-0.09
Waltham, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.10	-0.10	-1.13
Warren County, NJ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.05	-0.06	-0.60
Warren County: Conewago Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.92	-0.98	-13.13
Warren County: Warren Boro, Pleasant Twp, Glade Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.95	-1.01	-13.45
Warren, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.96	-1.02	-13.57

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Washington, DC-MD-VA	Ozone (2008 8-hour)	Nonattainment (DC) Maintenance (MD, VA), Marginal	50	0	-9.92	-10.35	-112.95
Washington, DC-MD-VA	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-9.91	-10.35	-112.92
Washington, DC-MD-VA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-1.25	-1.31	-14.20
Washoe County; Reno planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.45	-0.47	-5.12
Wayne County, MI	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.46	-0.49	-6.24
Wayne County: Boston, Center, Franklin, Wayne & Webster Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.12	-0.12	-1.36
West Central Pinal, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.03	-0.04	-0.39
West Silver Valley, ID	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-0.02	-0.02	-0.18
Whatcom County, WA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-2.45	-2.59	-34.79
Winston-Salem, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.91	-0.95	-10.30
Worcester, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.38	-0.40	-4.36
Yakima County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.17	-0.18	-1.99
Yakima, WA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.06	-0.06	-0.68
Yuba City-Marysville, CA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.35	-0.37	-4.14
Yuma, AZ	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.21	-0.21	-2.34
Yuma, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.32	-0.34	-3.66

Notes:

^a Nonattainment or maintenance status as of 2/1/2024. Source: EPA, The Green Book Nonattainment Areas for Criteria Pollutants; <http://www.epa.gov/airquality/greenbook/>. "--" indicates that no severity classification has been established for the NAAQS pollutant.

^b Emissions thresholds in tons per year. Where the threshold differs by precursor pollutant, the smallest of the precursor thresholds is shown. These thresholds are provided for information only; a general conformity determination is not required for the Proposed Action. Source: 40 CFR 93.853.

^c Positive values are emissions increases; negative values are emissions decreases.

EPA = U.S. Environmental Protection Agency; NAAQS = National Ambient Air Quality Standard; CO = carbon monoxide; NO₂ = nitrogen dioxide; PM2.5 = particulate matter less than 2.5 microns in size; PM10 = particulate matter less than 10 microns in size; SO₂ = sulfur dioxide.

Appendix D Air Quality Nonattainment Area Results

Table D-50. Changes in Emissions from U.S. Combined Passenger Cars, Light Trucks, and HDPUVs by Nonattainment or Maintenance Area and Alternative, Direct and Indirect Impacts--Nitrogen Oxides (NOx), 2050

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Ada County; Boise, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.93	-1.36	-15.37
Adams, Denver, and Boulder Counties; Denver Metropolitan area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-5.94	-7.53	-81.77
Ajo (Pima County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.09
Albuquerque, NM	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-1.87	-2.91	-33.19
Allegan County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.19	-0.28	-3.11
Allegheny County Air Basin: Hazelwood monitor, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.21	-0.27	-3.00
Allegheny County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	-2.81	-3.67	-40.24
Allegheny County; Liberty, Lincoln, Port Vue, Glassport, Clairton, PA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.09	-0.10	-1.00
Allegheny, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.96	-0.92	-9.06
Allentown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-1.36	-1.98	-22.31
Allentown-Bethlehem-Easton, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-1.52	-2.25	-25.34
Alton Township, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-1.97	-1.54	-13.90
Amador County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.09	-0.14	-1.55
Anchorage, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.50	-0.61	-6.60
Anchorage; Eagle River, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.04	-0.04	-0.42
Anne Arundel County and Baltimore County, MD	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-2.45	-3.91	-44.84
Archuleta County; Pagosa Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-2.86	-2.26	-20.53
Armstrong County; Madison, Mahoning, Boggs, Washington, Pine, PA	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	-0.47	-0.37	-3.38
Aroostock County; City of Presque Isle, ME	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.03	-0.32
Atlanta, GA	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-12.57	-19.61	-223.86
Atlanta, GA	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-9.84	-15.26	-173.99
Atlantic City, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.08	-0.13	-1.51
Bakersfield, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-1.13	-1.72	-19.51
Baltimore, MD	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	-6.54	-9.95	-112.97
Baltimore, MD	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-6.57	-10.00	-113.53
Baltimore, MD	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.04	-0.04	-0.48
Baton Rouge, LA	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-6.70	-6.68	-67.04

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Beaver, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.04	-0.05	-0.55
Benton County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.05	-0.08	-0.88
Berrien County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.52	-0.77	-8.75
Billings, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-1.24	-1.11	-10.72
Billings, MT	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-1.06	-0.84	-7.54
Birmingham, AL	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-3.34	-4.84	-54.34
Boise-Northern Ada County, ID	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.93	-1.36	-15.36
Bonner County; The Sandpoint Area, ID	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.03	-0.32
Boston, MA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-1.50	-2.38	-27.22
Boyd County (part), KY	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-1.10	-0.86	-7.80
Brooke; Follansbee area, WV	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.02	-0.20
Brown County: Green Bay, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.04	-0.04	-0.46
Burlington, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.03	-0.36
Butte County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.45	-0.65	-7.31
Calaveras County, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.09	-0.14	-1.58
Calaveras County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.09	-0.14	-1.58
Campbell-Clermont Counties, KY-OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.06	-0.09	-1.07
Canton-Massillon, OH	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-1.10	-1.40	-15.24
Central New Hampshire, NH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.39	-0.62	-7.11
Central Steptoe Valley, NV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.03	-0.04	-0.46
Charleston, WV	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-1.59	-1.72	-17.78
Charlotte, NC	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-3.09	-4.93	-56.53
Charlotte-Rock Hill, NC-SC	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-5.68	-9.05	-103.81
Chicago, IL-IN-WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-21.44	-28.51	-313.44
Chicago-Naperville, IL-IN-WI	Ozone (2008 8-hour)	Maintenance, Serious	100	0	-18.77	-26.58	-296.86
Chico (Butte County), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.45	-0.65	-7.31
Chico, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.16	-0.25	-2.80
Chico, CA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	-0.44	-0.63	-7.03
Cincinnati, OH-KY (OH Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-3.48	-5.50	-62.91
Cincinnati, OH-KY (KY Portion)	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	-1.04	-1.50	-16.82

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Cincinnati, OH-KY-IN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-4.71	-7.29	-83.00
Clark County; Las Vegas planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-4.48	-7.14	-81.86
Cleveland, OH	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-5.29	-8.11	-92.21
Cleveland, OH	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-1.81	-2.89	-33.10
Cleveland, OH	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-2.37	-3.77	-43.26
Cleveland-Akron-Lorain, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-5.64	-8.55	-97.05
Cleveland-Akron-Lorain, OH	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-5.10	-7.81	-88.79
Cochise County; Paul Spur/Douglas planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.03	-0.05	-0.60
Colorado Springs, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-1.50	-2.13	-23.84
Columbus, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-3.98	-6.22	-70.96
Columbus, OH	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-3.71	-5.78	-65.99
Cook County; Lyons Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.16	-0.24	-2.71
Cook County; Southeast Chicago, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.80	-1.56	-14.78
Coshocton County; Franklin Township, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.01	-0.11
Coso Junction, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.09	-0.07	-0.69
Cuyahoga County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.82	-2.89	-33.16
Cuyahoga County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-1.48	-2.36	-27.00
Dallas-Fort Worth, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-18.75	-27.78	-313.57
Dallas-Fort Worth, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-18.48	-27.35	-308.66
Dane County; Madison sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-1.03	-1.65	-18.87
Delaware County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-4.43	-4.08	-39.72
Denver Metro/North Front Range, CO	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-12.90	-16.73	-182.70
Denver-Boulder, CO	CO (1971 8-hour)	Maintenance, Serious	100	0	-9.92	-12.84	-140.22
Denver-Boulder-Greeley-Ft. Collins-Loveland, CO	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-12.49	-16.40	-179.75
Detroit, MI	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	-12.33	-17.58	-196.72
Detroit, MI	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-4.13	-6.17	-69.77
Detroit, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.80	-0.97	-10.41
Detroit-Ann Arbor, MI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-12.35	-17.62	-197.18
Doña Ana County; Anthony, NM	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.42	-0.34	-3.14

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Door County, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	0.00	-0.01
Door County-Revised, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	-0.06	-0.09	-1.03
Douglas (Cochise County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.03	-0.04	-0.51
Dukes County, MA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.02	-0.03	-0.38
Duluth, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.32	-0.43	-4.68
East Chicago, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-1.64	-1.32	-12.03
East Helena Area, MT	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	-0.03
East Kern County, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.13	-0.13	-1.32
El Paso County, TX	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-1.75	-2.38	-26.30
El Paso, TX	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.52	-0.48	-4.71
El Paso-Las Cruces, TX-NM	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-2.47	-3.27	-35.87
Eugene-Springfield, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.43	-0.69	-7.93
Evangeline Parish (Partial), LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.03
Fairbanks, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.23	-0.27	-2.90
Fairbanks, AK	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.32	-0.41	-4.51
Flathead County; Columbia Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.26
Flathead County; Kalispell and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.09	-0.14	-1.61
Flathead County; Whitefish and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.25
Fort Collins, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.42	-0.62	-7.04
Freehold, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.03	-0.37
Freestone and Anderson Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.25	-0.21	-2.03
Fremont County; Canon City Area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.10	-0.16	-1.85
Fresno, CA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-1.29	-2.04	-23.34
Gila County (part): Payson, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.03	-0.05	-0.53
Giles County, VA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.01
Grant County, NM	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.08	-0.13	-1.44
Grants Pass, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.07	-0.11	-1.22
Great Falls, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.15	-0.12	-1.12

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Greater Connecticut, CT	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-3.02	-4.78	-54.76
Greater Connecticut, CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-3.02	-4.79	-54.81
Greeley, CO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-4.17	-3.99	-39.42
Hancock County (part): Weirton, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.12	-0.11	-1.12
Hancock and Brooke Counties (Part); The city of Weirton, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.12	-0.11	-1.12
Harrisburg-Lebanon-Carlisle-York, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-2.34	-3.59	-40.85
Hartford-New Britain-Middletown, CT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-2.13	-3.35	-38.34
Hayden (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	-0.02	-0.03	-0.38
Hayden, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.03	-0.05	-0.62
Hayden, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.02	-0.03	-0.38
Henderson-Webster Counties, KY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.09	-0.08	-0.78
Hillsborough County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.04	-0.06	-0.65
Hillsborough-Polk County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.01	-0.14
Houston-Galveston-Brazoria, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-28.01	-34.40	-370.13
Houston-Galveston-Brazoria, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-27.49	-33.65	-361.77
Howard County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.90	-0.71	-6.37
Humphreys County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.07	-0.10	-1.20
Huntington, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.07	-0.12	-1.32
Hutchinson County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-1.17	-0.93	-8.40
Imperial County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-0.46	-0.73	-8.34
Imperial County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.46	-0.73	-8.33
Imperial County, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.37	-0.59	-6.81
Imperial County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	-0.37	-0.59	-6.81
Imperial Valley, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.44	-0.69	-7.96
Indian Wells, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.18	-0.21	-2.23
Indiana, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-1.56	-1.35	-12.77
Indianapolis, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.01	-0.11
Indianapolis, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-1.19	-1.87	-21.44
Inland Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-0.12	-0.19	-2.13
Inyo County; Owens Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.01	-0.02	-0.17

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Jackson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.15	-0.23	-2.63
Jackson County; Medford-Ashland (including White City), OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.32	-0.51	-5.90
Jamestown, NY	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-1.27	-1.22	-12.07
Jefferson County, KY	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.01	-0.11
Jefferson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.13	-0.21	-2.44
Jefferson County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.03	-0.03	-0.30
Jefferson County; (part) Steubenville & Mingo Junction, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.19	-0.22	-2.31
Johnstown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-1.12	-1.06	-10.43
Josephine County; Grants Pass, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.07	-0.10	-1.20
Juneau; Mendenhall Valley area, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.03	-0.36
Kern County (Eastern Kern), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-3.86	-3.15	-29.03
Kern County (Eastern Kern), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-3.86	-3.15	-29.03
King County; Kent, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.04	-0.06	-0.69
King County; Seattle, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.04	-0.44
Klamath Falls, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.11	-0.17	-1.90
Klamath Falls, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.11	-0.17	-1.90
Klamath Falls, OR	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.12	-0.19	-2.17
Knoxville, TN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-2.02	-2.88	-32.23
Knoxville-Sevierville-La Follette, TN	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-2.41	-3.47	-38.96
La Porte County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.13	-0.21	-2.40
LaSalle County; Oglesby, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.07	-0.11	-1.25
Lake County (part); Lakeview, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.02
Lake County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-2.53	-2.68	-27.55
Lake County, OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.45	-0.71	-8.17
Lake County; (part) Eastlake, Timberlake, Lakeline, Willoughby, Mentor, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.08	-0.12	-1.39
Lake County; Cities of East Chicago, Hammond, Whiting, and Gary, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-2.21	-2.19	-21.91
Lake County; Polson, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.08
Lake County; Ronan, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.04

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Lake Tahoe North Shore, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.03	-0.04	-0.51
Lake Tahoe South Shore, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.08	-0.13	-1.44
Lake Tahoe, NV	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.05	-0.07	-0.86
Lancaster, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-1.02	-1.59	-18.10
Lancaster, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-1.02	-1.59	-18.10
Lane County (part); Oakridge, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Lane County; Eugene/Springfield, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.43	-0.69	-7.94
Las Vegas, NV	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-4.48	-7.14	-81.86
Las Vegas, NV	CO (1971 8-hour)	Maintenance, Serious	100	0	-4.49	-7.15	-81.99
Laurel Area (Yellowstone County), MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	-1.07	-0.84	-7.63
Lebanon County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-0.25	-0.40	-4.59
Lemont, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-2.14	-1.92	-18.53
Liberty-Clairton, PA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.09	-0.10	-1.00
Lincoln County; Libby and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.18
Logan, UT-ID	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.27	-0.43	-4.89
Longmont, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-1.89	-1.61	-15.13
Lorain County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.10	-0.17	-1.91
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-5.41	-5.46	-55.08
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-5.41	-5.46	-55.07
Los Angeles-South Coast Air Basin, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-37.40	-55.42	-625.47
Los Angeles-South Coast Air Basin, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-37.39	-55.39	-625.18
Los Angeles-South Coast Air Basin, CA	CO (1971 8-hour)	Maintenance, Serious	100	0	-37.40	-55.42	-625.54
Los Angeles-South Coast Air Basin, CA	NO ₂ (1971 Annual)	Maintenance, Primary	100	0	-37.40	-55.42	-625.55
Los Angeles-South Coast Air Basin, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-37.41	-55.42	-625.55
Los Angeles-South Coast Air Basin, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-37.41	-55.42	-625.55
Louisville, KY-IN (IN Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.49	-0.76	-8.65
Louisville, KY-IN (KY Portion)	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-1.95	-3.11	-35.68
Lowell, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.19	-0.30	-3.49
Lucas County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-2.46	-2.41	-24.11

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Madison County; Granite City Township and Nameoki Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-2.15	-1.77	-16.36
Manchester, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.21	-0.34	-3.84
Manitowoc County, WI	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.12	-0.19	-2.15
Marathon County: Rothschild Sub-city area, Rib Mountain, Weston, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.33	-0.52	-5.98
Maricopa and Pinal Counties; Phoenix planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-9.25	-14.75	-169.22
Marion County: Lawrence, Washington, and Warrant Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.98	-1.55	-17.73
Mariposa County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-0.04	-0.06	-0.66
Mariposa County, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.04	-0.06	-0.67
Marshall, WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.37	-0.32	-2.97
Medford, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.20	-0.31	-3.59
Memphis, TN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-2.52	-3.85	-43.73
Memphis, TN-MS-AR	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-3.27	-4.95	-56.19
Miami (Gila County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.04	-0.06	-0.68
Miami, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.03	-0.05	-0.61
Miami, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.04	-0.06	-0.64
Millinocket AQCR 109, ME	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.41	-0.62	-7.02
Milwaukee, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-2.75	-4.38	-50.26
Milwaukee, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-1.25	-2.00	-22.89
Milwaukee-Racine, WI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-2.43	-3.88	-44.54
Minneapolis-St. Paul, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-8.73	-12.27	-136.74
Minneapolis-St. Paul, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-8.52	-11.93	-132.87
Missoula, MT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.26	-0.34	-3.74
Missoula, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.26	-0.35	-3.85
Modesto, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.59	-0.93	-10.67
Mohave County (part); Bullhead City, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.17	-0.25	-2.85
Mono Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.01	-0.11
Mono County; Mammoth Lake planning area, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.05	-0.08	-0.87

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Morenci (Greenlee County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.09
Morgan County, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.06	-0.10	-1.15
Morongo Band of Mission Indians, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.01	-0.02	-0.23
Morongo Band of Mission Indians, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.01	-0.02	-0.22
Morristown, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.04	-0.06	-0.72
Muscatine County, IA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.04	-0.06	-0.67
Muscatine, IA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.06	-0.10	-1.12
Muskegon County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.31	-0.49	-5.55
Muskingum River, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.06	-0.05	-0.48
Nashua, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.18	-0.28	-3.25
Nassau County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.02	-0.03	-0.31
Navarro County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.30	-0.24	-2.21
Nevada County (Western part), CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-0.17	-0.27	-3.14
Nevada County (Western part), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.17	-0.27	-3.15
New Haven County, CT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.04	-0.07	-0.80
New Haven-Meriden-Waterbury, CT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-1.60	-2.55	-29.28
New Madrid County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
New Manchester-Grant magisterial district in Hancock County, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.13	-0.11	-0.99
New York County, NY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.67	-1.07	-12.24
New York-N. New Jersey-Long Island, NY-NJ-CT	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-27.12	-41.84	-476.40
New York-N. New Jersey-Long Island, NY-NJ-CT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-15.47	-23.50	-266.75
New York-N. New Jersey-Long Island, NY-NJ-CT	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-27.66	-42.72	-486.59
New York-Northern New Jersey-Long Island, NY-NJ-CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-27.14	-41.86	-476.66
Nogales, AZ	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.05	-0.08	-0.91
Northern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-4.55	-6.54	-73.35
Oakridge, OR	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.03
Ogden, UT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.16	-0.26	-3.00
Ogden, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.16	-0.26	-3.00
Olmsted County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.09	-0.12	-1.35
Olmsted County; City of Rochester, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.32	-0.44	-4.92

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Oneida County: Rhinelander Sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.10	-0.16	-1.80
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Pekin, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.09	-0.15	-1.68
Penns Grove, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.01
Peoria County: Hollis twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.01	-0.01	-0.08
Peoria, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.23	-0.35	-3.95
Perth Amboy, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.12	-0.18	-1.99
Philadelphia-Camden County, PA-NJ	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-4.51	-5.13	-54.01
Philadelphia-Wilmington, PA-NJ-DE (NJ Portion)	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-2.78	-4.08	-45.95
Philadelphia-Wilmington, PA-NJ-DE (PA-DE Portion)	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-10.47	-13.61	-148.82
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-16.46	-22.83	-253.73
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-22.77	-27.76	-298.01
Phoenix, AZ	CO (1971 8-hour)	Maintenance, Serious	100	0	-9.02	-14.40	-165.14
Phoenix-Mesa, AZ	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-9.27	-14.78	-169.55
Phoenix-Mesa, AZ	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-9.38	-14.96	-171.59
Pierce County; Tacoma, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.06	-0.06	-0.53
Pima County; Ajo planning area, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.08
Pima County; Rillito planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.07	-0.12	-1.34
Pinal County (part); West Pinal, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.46	-0.73	-8.31
Pitkin County; Aspen, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.63	-0.55	-5.21
Pittsburgh, PA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.57	-0.84	-9.41
Pittsburgh-Beaver Valley, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-7.19	-8.85	-95.34
Pittsburgh-Beaver Valley, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-6.58	-8.09	-87.07
Plumas County, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	0.00	-0.01	-0.07
Polk County, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.04	-0.07	-0.76
Portland, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-2.77	-4.29	-48.89
Power-Bannock Counties; Fort Hall Indian Reservation, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.02	-0.18
Power-Bannock Counties; Portneuf Valley Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.15	-0.23	-2.66

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Provo, UT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.33	-0.53	-6.05
Provo, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-1.45	-2.09	-23.41
Prowers County; Lamar, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.04	-0.45
Raleigh-Durham, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-3.72	-5.92	-67.86
Ramsey County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.53	-1.20	-10.77
Reading, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.79	-1.22	-13.85
Reno, NV	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.51	-0.82	-9.35
Rhineland, WI	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.05	-0.08	-0.94
Riverside County (Coachella Valley), CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-1.06	-1.69	-19.34
Riverside County (Coachella Valley), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-1.06	-1.69	-19.34
Riverside County; Coachella Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-1.22	-1.94	-22.25
Riverside, Los Angeles, Orange, & San Bernardino Counties; South Coast Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-37.26	-55.18	-622.82
Rosebud County; Lame Deer, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.01	-0.08
Routt County (part); Steamboat Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.25	-1.05	-9.75
Rusk and Panola Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.61	-0.48	-4.35
Sacramento County, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-6.74	-7.48	-78.06
Sacramento Metro, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-8.79	-10.69	-114.76
Sacramento Metro, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-8.79	-10.69	-114.75
Sacramento, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-4.34	-5.96	-66.07
Sacramento, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-8.68	-10.52	-112.74
Salem, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.50	-0.79	-9.08
Salt Lake City, UT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-1.36	-1.46	-15.04
Salt Lake City, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-4.77	-6.89	-77.38
Salt Lake County, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-3.22	-4.42	-49.02
Salt Lake County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	-3.22	-4.42	-49.04
San Antonio, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-4.72	-6.99	-78.83
San Bernardino County, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-4.91	-4.66	-45.90
San Diego County, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-7.08	-11.17	-127.83
San Diego County, CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-7.06	-11.15	-127.63

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
San Diego, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-7.06	-11.15	-127.62
San Francisco Bay Area, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-18.12	-25.62	-286.00
San Francisco Bay Area, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-18.10	-25.59	-285.68
San Francisco Bay Area, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-18.14	-25.65	-286.42
San Francisco-Oakland-San Jose, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-17.33	-24.36	-271.61
San Joaquin Valley Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-15.09	-18.53	-199.33
San Joaquin Valley, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-15.09	-18.53	-199.33
San Joaquin Valley, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-15.09	-18.53	-199.33
San Joaquin Valley, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-15.09	-18.53	-199.32
San Joaquin Valley, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-15.09	-18.53	-199.32
San Luis Obispo (Eastern San Luis Obispo), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.22	-0.20	-1.88
San Luis Obispo (Eastern part), CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.22	-0.20	-1.88
San Manuel (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.04	-0.06	-0.67
San Miguel County; Telluride, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.07	-0.08	-0.77
Sanders County (part); Thompson Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.02
Santa Cruz County; Nogales planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.05	-0.08	-0.92
Seaford, DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.57	-0.91	-10.44
Seattle-Tacoma, WA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-6.12	-9.72	-111.39
Sheboygan County, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.14	-0.23	-2.60
Sheridan County; City of Sheridan, WY	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.07	-0.09	-0.96
Shoreline Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-0.13	-0.21	-2.36
Shoshone County; City of Pinehurst, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Shoshone County; Pinehurst Expansion Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.05	-0.07	-0.83
Silver Bow County; Butte, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.07	-0.11	-1.23
Somerville, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.03	-0.04	-0.46
Southern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-1.45	-2.09	-23.41
Southwest Indiana, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.09	-0.08	-0.82
Spokane County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.70	-1.11	-12.78
Spokane, WA	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.70	-1.11	-12.68
Springfield, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.28	-0.44	-5.08

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
St. Bernard Parish, LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-2.53	-2.03	-18.56
St. Clair, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.13	-0.20	-2.22
St. Lawrence County, NY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.02	-0.03	-0.34
St. Louis, MO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-3.96	-4.61	-48.86
St. Louis, MO-IL	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-10.92	-13.26	-142.18
St. Louis-St. Charles-Farmington, MO-IL	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-8.74	-11.74	-129.46
Steubenville, OH-WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.75	-0.67	-6.42
Steubenville-Weirton, OH-WV	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.53	-0.58	-5.96
Stockton, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.81	-1.26	-14.32
Sullivan County, TN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.06	-0.10	-1.10
Sutter Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.02	-0.02	-0.14
Syracuse, NY	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-1.00	-1.58	-18.13
Tacoma, WA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	-1.12	-1.74	-19.80
Tazewell County: Groveland twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.04	-0.07	-0.76
Terre Haute, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.15	-0.23	-2.59
Thurston County; Cities of Olympia, Tumwater, and Lacey, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.22	-0.35	-4.01
Titus County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.01	-0.05
Toms River, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.01	-0.15
Tooele County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	-0.27	-0.22	-1.96
Trenton, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.17	-0.27	-3.06
Trona, CA	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	-0.09	-0.07	-0.63
Tucson, AZ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-1.55	-2.48	-28.42
Tuolumne County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.11	-0.18	-2.01
Tuscan Buttes, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	-0.03
Tuscan Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal (Rural Transport)	100	0	0.00	0.00	-0.03
Uinta Basin, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-1.28	-1.09	-10.24
Union County; LaGrande, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.03	-0.32
Upper Green River Basin Area, WY	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-2.16	-1.73	-15.82
Utah County, UT	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-1.96	-2.49	-27.10

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Vancouver, WA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.65	-1.03	-11.76
Ventura County, CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-5.30	-5.42	-55.04
Ventura County, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-5.30	-5.42	-55.00
Vermillion County; Part of Clinton Township, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.04	-0.06	-0.64
Vigo County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.38	-0.52	-5.73
Walla Walla County; Wallula, WA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.01	-0.01	-0.14
Waltham, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.11	-0.17	-2.00
Warren County, NJ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.06	-0.09	-1.04
Warren County: Conewago Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.92	-0.72	-6.52
Warren County: Warren Boro, Pleasant Twp, Glade Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.95	-0.76	-6.90
Warren, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.96	-0.77	-7.04
Washington, DC-MD-VA	Ozone (2008 8-hour)	Nonattainment (DC) Maintenance (MD, VA), Marginal	50	0	-10.90	-17.30	-198.15
Washington, DC-MD-VA	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-10.90	-17.30	-198.21
Washington, DC-MD-VA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-1.38	-2.20	-25.21
Washoe County; Reno planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.52	-0.82	-9.44
Wayne County, MI	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.47	-0.46	-4.56
Wayne County: Boston, Center, Franklin, Wayne & Webster Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.14	-0.22	-2.48
West Central Pinal, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.03	-0.05	-0.59
West Silver Valley, ID	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-0.02	-0.04	-0.44
Whatcom County, WA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-2.43	-1.89	-17.04
Winston-Salem, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-1.00	-1.59	-18.27
Worcester, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.43	-0.69	-7.95
Yakima County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.20	-0.33	-3.73
Yakima, WA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.07	-0.11	-1.28
Yuba City-Marysville, CA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.39	-0.59	-6.65
Yuma, AZ	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.24	-0.38	-4.33
Yuma, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.37	-0.59	-6.72

Notes:

^a Nonattainment or maintenance status as of 2/1/2024. Source: EPA, The Green Book Nonattainment Areas for Criteria Pollutants; <http://www.epa.gov/airquality/greenbook/>. "--" indicates that no severity classification has been established for the NAAQS pollutant.

Appendix D Air Quality Nonattainment Area Results

^b Emissions thresholds in tons per year. Where the threshold differs by precursor pollutant, the smallest of the precursor thresholds is shown. These thresholds are provided for information only; a general conformity determination is not required for the Proposed Action. Source: 40 CFR 93.853.

^c Positive values are emissions increases; negative values are emissions decreases.

EPA = U.S. Environmental Protection Agency; NAAQS = National Ambient Air Quality Standard; CO = carbon monoxide; NO₂ = nitrogen dioxide; PM2.5 = particulate matter less than 2.5 microns in size; PM10 = particulate matter less than 10 microns in size; SO₂ = sulfur dioxide.

Table D-51. Changes in Emissions from U.S. Combined Passenger Cars, Light Trucks, and HDPUVs by Nonattainment or Maintenance Area and Alternative, Direct and Indirect Impacts--Volatile Organic Compounds (VOCs), 2035

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Ada County; Boise, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-7.86	-8.60	-99.97
Adams, Denver, and Boulder Counties; Denver Metropolitan area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-34.48	-37.73	-437.81
Ajo (Pima County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.02	-0.02	-0.26
Albuquerque, NM	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-10.47	-11.42	-128.85
Allegan County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.50	-0.54	-5.68
Allegheny County Air Basin: Hazelwood monitor, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.86	-0.94	-10.64
Allegheny County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	-11.38	-12.41	-140.71
Allegheny County; Liberty, Lincoln, Port Vue, Glassport, Clairton, PA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.23	-0.25	-2.90
Allegheny, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-1.77	-1.93	-22.32
Allentown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-6.67	-7.27	-82.10
Allentown-Bethlehem-Easton, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-7.11	-7.75	-86.98
Alton Township, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.44	-0.48	-5.77
Amador County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.36	-0.39	-4.23
Anchorage, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	-1.39	-1.51	-16.93
Anchorage; Eagle River, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.08	-0.09	-0.97
Anne Arundel County and Baltimore County, MD	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-8.23	-8.91	-95.15
Archuleta County; Pagosa Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.37	-1.50	-17.92
Armstrong County; Madison, Mahoning, Boggs, Washington, Pine, PA	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	-0.43	-0.48	-5.73
Aroostock County; City of Presque Isle, ME	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.04	-0.05	-0.49
Atlanta, GA	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-56.03	-60.92	-674.59
Atlanta, GA	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-45.97	-50.01	-556.78
Atlantic City, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.34	-0.37	-4.10
Bakersfield, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-4.42	-4.80	-52.93
Baltimore, MD	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	-21.33	-23.10	-248.73
Baltimore, MD	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-21.44	-23.21	-249.93
Baltimore, MD	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.09	-0.10	-1.07
Baton Rouge, LA	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-27.09	-29.71	-349.97

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Beaver, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.15	-0.16	-1.81
Benton County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.23	-0.25	-2.74
Berrien County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-2.37	-2.58	-28.82
Billings, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-5.76	-6.34	-75.70
Billings, MT	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.77	-0.84	-10.16
Birmingham, AL	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-15.34	-16.71	-187.95
Boise-Northern Ada County, ID	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-7.86	-8.60	-99.93
Bonner County; The Sandpoint Area, ID	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.11	-0.12	-1.43
Boston, MA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-13.48	-14.75	-170.68
Boyd County (part), KY	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.41	-0.46	-5.47
Brooke; Follansbee area, WV	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.03	-0.03	-0.40
Brown County: Green Bay, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.10	-0.10	-1.15
Burlington, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.06	-0.06	-0.66
Butte County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-2.10	-2.29	-25.77
Calaveras County, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.37	-0.40	-4.37
Calaveras County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.37	-0.40	-4.37
Campbell-Clermont Counties, KY-OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.25	-0.28	-3.03
Canton-Massillon, OH	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-5.90	-6.45	-74.55
Central New Hampshire, NH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-1.00	-1.08	-11.07
Central Steptoe Valley, NV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.05	-0.06	-0.68
Charleston, WV	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-2.77	-3.01	-33.39
Charlotte, NC	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-11.78	-12.77	-138.52
Charlotte-Rock Hill, NC-SC	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-23.45	-25.45	-278.73
Chicago, IL-IN-WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-61.71	-67.01	-735.94
Chicago-Naperville, IL-IN-WI	Ozone (2008 8-hour)	Maintenance, Serious	100	0	-106.50	-116.31	-1,330.69
Chico (Butte County), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-2.10	-2.29	-25.77
Chico, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.80	-0.87	-9.83
Chico, CA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	-1.99	-2.17	-24.47
Cincinnati, OH-KY (OH Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-10.26	-11.08	-116.45
Cincinnati, OH-KY (KY Portion)	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	-10.47	-11.47	-134.30

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Cincinnati, OH-KY-IN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-25.32	-27.59	-310.83
Clark County; Las Vegas planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-18.20	-19.76	-216.13
Cleveland, OH	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-32.64	-35.62	-405.47
Cleveland, OH	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-18.01	-19.71	-228.91
Cleveland, OH	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-20.64	-22.57	-260.63
Cleveland-Akron-Lorain, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-33.59	-36.66	-416.90
Cleveland-Akron-Lorain, OH	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-31.67	-34.56	-393.60
Cochise County; Paul Spur/Douglas planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.12	-0.13	-1.41
Colorado Springs, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-12.21	-13.37	-155.62
Columbus, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-20.11	-21.89	-245.05
Columbus, OH	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-17.86	-19.44	-216.78
Cook County; Lyons Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.13	-1.23	-14.16
Cook County; Southeast Chicago, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.76	-1.92	-22.28
Coshocton County; Franklin Township, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.03	-0.03	-0.33
Coso Junction, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.17	-0.18	-2.14
Cuyahoga County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-18.04	-19.75	-229.38
Cuyahoga County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-14.70	-16.09	-186.86
Dallas-Fort Worth, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-67.12	-72.85	-797.86
Dallas-Fort Worth, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-66.29	-71.96	-788.40
Dane County; Madison sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-4.59	-4.99	-55.00
Delaware County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-6.38	-6.98	-80.41
Denver Metro/North Front Range, CO	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-83.97	-91.92	-1,069.02
Denver-Boulder, CO	CO (1971 8-hour)	Maintenance, Serious	100	0	-67.18	-73.56	-857.06
Denver-Boulder-Greeley-Ft. Collins-Loveland, CO	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-83.51	-91.42	-1,063.07
Detroit, MI	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	-41.86	-45.45	-499.28
Detroit, MI	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-16.78	-18.25	-202.06
Detroit, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-2.31	-2.52	-28.24
Detroit-Ann Arbor, MI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-41.98	-45.59	-500.83
Doña Ana County; Anthony, NM	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.14	-0.15	-1.74

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Door County, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	0.00	-0.03
Door County-Revised, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	-0.19	-0.20	-2.17
Douglas (Cochise County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.10	-0.11	-1.16
Dukes County, MA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.12	-0.13	-1.46
Duluth, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-2.04	-2.23	-25.98
East Chicago, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.60	-0.66	-7.74
East Helena Area, MT	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.01	-0.01	-0.08
East Kern County, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.32	-0.35	-4.02
El Paso County, TX	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-5.24	-5.69	-62.48
El Paso, TX	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.50	-0.55	-6.10
El Paso-Las Cruces, TX-NM	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-3.92	-4.21	-42.49
Eugene-Springfield, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-1.47	-1.59	-17.12
Evangeline Parish (Partial), LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.02	-0.02	-0.22
Fairbanks, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.34	-0.37	-4.03
Fairbanks, AK	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.54	-0.59	-6.40
Flathead County; Columbia Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.22	-0.24	-2.80
Flathead County; Kalispell and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.31	-1.44	-17.03
Flathead County; Whitefish and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.21	-0.23	-2.68
Fort Collins, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-3.05	-3.33	-38.49
Freehold, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.06	-0.06	-0.68
Freestone and Anderson Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.31	-0.34	-3.96
Fremont County; Canon City Area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.52	-0.57	-6.33
Fresno, CA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-4.28	-4.64	-49.71
Gila County (part): Payson, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.08	-0.09	-0.92
Giles County, VA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.02
Grant County, NM	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.22	-0.23	-2.44
Grants Pass, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.27	-0.29	-3.20
Great Falls, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.07	-0.08	-0.95

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Greater Connecticut, CT	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-14.28	-15.53	-172.49
Greater Connecticut, CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-14.30	-15.55	-172.70
Greeley, CO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-8.77	-9.60	-111.42
Hancock County (part): Weirton, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.61	-0.67	-8.04
Hancock and Brooke Counties (Part); The city of Weirton, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.44	-0.49	-5.75
Harrisburg-Lebanon-Carlisle-York, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-9.01	-9.78	-107.07
Hartford-New Britain-Middletown, CT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-10.12	-11.01	-122.40
Hayden (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	-0.06	-0.07	-0.72
Hayden, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.11	-0.12	-1.22
Hayden, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.06	-0.07	-0.71
Henderson-Webster Counties, KY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.16	-0.18	-2.06
Hillsborough County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.26	-0.28	-3.20
Hillsborough-Polk County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.05	-0.05	-0.57
Houston-Galveston-Brazoria, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-127.58	-139.47	-1,606.74
Houston-Galveston-Brazoria, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-125.22	-136.89	-1,577.71
Howard County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.51	-0.57	-6.83
Humphreys County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.26	-0.28	-3.05
Huntington, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-1.24	-1.36	-16.13
Hutchinson County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-2.26	-2.49	-30.00
Imperial County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-2.33	-2.53	-28.28
Imperial County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-2.33	-2.53	-28.25
Imperial County, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-1.74	-1.89	-21.00
Imperial County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	-1.74	-1.89	-21.00
Imperial Valley, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-2.21	-2.41	-26.87
Indian Wells, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.52	-0.56	-6.37
Indiana, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-2.66	-2.92	-34.48
Indianapolis, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.03	-0.03	-0.31
Indianapolis, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-5.09	-5.52	-60.82
Inland Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-0.57	-0.62	-6.91
Inyo County; Owens Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.09	-0.10	-1.08

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Jackson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.56	-0.61	-6.66
Jackson County; Medford-Ashland (including White City), OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.16	-1.26	-13.65
Jamestown, NY	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-2.98	-3.26	-38.00
Jefferson County, KY	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.03	-0.04	-0.40
Jefferson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.79	-0.87	-9.79
Jefferson County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.13	-0.14	-1.71
Jefferson County; (part) Steubenville & Mingo Junction, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-1.26	-1.38	-16.21
Johnstown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-1.59	-1.73	-19.78
Josephine County; Grants Pass, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.26	-0.29	-3.15
Juneau; Mendenhall Valley area, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.08	-0.08	-0.94
Kern County (Eastern Kern), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-1.64	-1.79	-20.73
Kern County (Eastern Kern), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-1.64	-1.79	-20.73
King County; Kent, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.18	-0.20	-2.18
King County; Seattle, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.12	-0.13	-1.40
Klamath Falls, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.27	-0.29	-3.04
Klamath Falls, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.27	-0.29	-3.05
Klamath Falls, OR	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.31	-0.33	-3.50
Knoxville, TN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-9.28	-10.11	-114.03
Knoxville-Sevierville-La Follette, TN	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-10.39	-11.32	-126.77
La Porte County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.43	-0.46	-4.94
LaSalle County; Oglesby, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.27	-0.29	-3.19
Lake County (part); Lakeview, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.02
Lake County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-6.99	-7.64	-87.92
Lake County, OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-1.61	-1.74	-18.77
Lake County; (part) Eastlake, Timberlake, Lakeline, Willoughby, Mentor, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.28	-0.30	-3.24
Lake County; Cities of East Chicago, Hammond, Whiting, and Gary, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-4.67	-5.11	-58.83
Lake County; Polson, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.07	-0.08	-0.90
Lake County; Ronan, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.03	-0.04	-0.44

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Lake Tahoe North Shore, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.13	-0.15	-1.61
Lake Tahoe South Shore, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.25	-0.27	-2.91
Lake Tahoe, NV	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.26	-0.29	-3.23
Lancaster, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-5.89	-6.43	-72.71
Lancaster, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-5.89	-6.42	-72.69
Lane County (part); Oakridge, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.02
Lane County; Eugene/Springfield, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.47	-1.59	-17.13
Las Vegas, NV	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-18.20	-19.76	-216.13
Las Vegas, NV	CO (1971 8-hour)	Maintenance, Serious	100	0	-18.23	-19.79	-216.47
Laurel Area (Yellowstone County), MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	-0.91	-1.00	-12.08
Lebanon County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-1.71	-1.87	-21.26
Lemont, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-2.68	-2.93	-33.78
Liberty-Clairton, PA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.23	-0.25	-2.90
Lincoln County; Libby and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.05	-0.05	-0.61
Logan, UT-ID	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-1.22	-1.33	-14.71
Longmont, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-2.94	-3.23	-38.18
Lorain County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.49	-0.53	-5.85
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-6.49	-7.04	-77.07
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-6.49	-7.04	-77.05
Los Angeles-South Coast Air Basin, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-102.26	-110.51	-1,171.52
Los Angeles-South Coast Air Basin, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-102.21	-110.45	-1,170.93
Los Angeles-South Coast Air Basin, CA	CO (1971 8-hour)	Maintenance, Serious	100	0	-102.22	-110.47	-1,171.02
Los Angeles-South Coast Air Basin, CA	NO ₂ (1971 Annual)	Maintenance, Primary	100	0	-102.22	-110.47	-1,171.04
Los Angeles-South Coast Air Basin, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-102.26	-110.51	-1,171.56
Los Angeles-South Coast Air Basin, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-102.26	-110.51	-1,171.56
Louisville, KY-IN (IN Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-3.27	-3.57	-40.76
Louisville, KY-IN (KY Portion)	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-4.53	-4.87	-48.83
Lowell, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-1.01	-1.10	-12.29
Lucas County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-7.35	-8.06	-94.27

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Madison County; Granite City Township and Nameoki Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-2.03	-2.22	-26.33
Manchester, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.59	-0.64	-6.69
Manitowoc County, WI	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.34	-0.36	-3.82
Marathon County: Rothschild Sub-city area, Rib Mountain, Weston, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.99	-1.07	-11.30
Maricopa and Pinal Counties; Phoenix planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-34.47	-37.36	-404.41
Marion County: Lawrence, Washington, and Warrant Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-4.21	-4.57	-50.30
Mariposa County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-0.17	-0.18	-1.98
Mariposa County, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.17	-0.18	-1.99
Marshall, WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.73	-0.81	-9.59
Medford, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.70	-0.76	-8.26
Memphis, TN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-9.56	-10.37	-113.52
Memphis, TN-MS-AR	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-14.01	-15.23	-169.01
Miami (Gila County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.10	-0.11	-1.13
Miami, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.09	-0.09	-1.00
Miami, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.09	-0.10	-1.07
Millinocket AQCR 109, ME	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-1.27	-1.38	-14.77
Milwaukee, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-13.00	-14.14	-156.79
Milwaukee, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-6.79	-7.40	-82.99
Milwaukee-Racine, WI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-11.53	-12.54	-139.08
Minneapolis-St. Paul, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-32.87	-35.76	-398.04
Minneapolis-St. Paul, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-32.54	-35.41	-394.80
Missoula, MT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-3.50	-3.85	-45.68
Missoula, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-3.60	-3.96	-46.97
Modesto, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-2.12	-2.30	-24.84
Mohave County (part); Bullhead City, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.42	-0.46	-4.90
Mono Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.05	-0.05	-0.57
Mono County; Mammoth Lake planning area, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.08	-0.09	-0.96

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Morenci (Greenlee County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.01	-0.11
Morgan County, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.24	-0.26	-2.79
Morongo Band of Mission Indians, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.05	-0.05	-0.57
Morongo Band of Mission Indians, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.05	-0.05	-0.56
Morristown, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.16	-0.17	-1.89
Muscatine County, IA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.24	-0.26	-2.99
Muscatine, IA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.41	-0.45	-5.12
Muskegon County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-1.40	-1.52	-16.84
Muskingum River, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.12	-0.14	-1.62
Nashua, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.51	-0.55	-5.72
Nassau County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.05	-0.06	-0.61
Navarro County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.38	-0.42	-4.99
Nevada County (Western part), CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-0.59	-0.64	-6.80
Nevada County (Western part), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.59	-0.64	-6.83
New Haven County, CT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.27	-0.29	-3.34
New Haven-Meriden-Waterbury, CT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-10.11	-11.03	-125.10
New Madrid County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
New Manchester-Grant magisterial district in Hancock County, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.29	-0.32	-3.78
New York County, NY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-13.00	-14.26	-168.95
New York-N. New Jersey-Long Island, NY-NJ-CT	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-189.15	-206.62	-2,367.06
New York-N. New Jersey-Long Island, NY-NJ-CT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-124.49	-136.16	-1,573.64
New York-N. New Jersey-Long Island, NY-NJ-CT	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-195.03	-213.05	-2,441.89
New York-Northern New Jersey-Long Island, NY-NJ-CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-195.40	-213.50	-2,450.15
Nogales, AZ	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.13	-0.14	-1.48
Northern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-20.78	-22.65	-255.09
Oakridge, OR	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.07
Ogden, UT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.76	-0.82	-9.13
Ogden, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.76	-0.82	-9.13
Olmsted County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.24	-0.27	-2.88
Olmsted County; City of Rochester, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.89	-0.97	-10.52

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Oneida County: Rhinelander Sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.50	-0.55	-6.13
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Pekin, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.43	-0.47	-5.18
Penns Grove, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.02
Peoria County: Hollis twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.02	-0.02	-0.28
Peoria, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-1.15	-1.25	-14.12
Perth Amboy, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.83	-0.91	-10.45
Philadelphia-Camden County, PA-NJ	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-12.52	-13.66	-154.93
Philadelphia-Wilmington, PA-NJ-DE (NJ Portion)	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-11.98	-13.04	-145.54
Philadelphia-Wilmington, PA-NJ-DE (PA-DE Portion)	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-35.57	-38.73	-433.81
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-61.86	-67.32	-750.85
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-56.86	-61.81	-684.31
Phoenix, AZ	CO (1971 8-hour)	Maintenance, Serious	100	0	-33.83	-36.66	-397.05
Phoenix-Mesa, AZ	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-34.59	-37.48	-405.76
Phoenix-Mesa, AZ	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-34.88	-37.80	-409.02
Pierce County; Tacoma, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.08	-0.08	-0.98
Pima County; Ajo planning area, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.02	-0.23
Pima County; Rillito planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.29	-0.31	-3.36
Pinal County (part); West Pinal, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-1.20	-1.29	-13.37
Pitkin County; Aspen, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.67	-0.74	-8.56
Pittsburgh, PA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-2.88	-3.14	-35.44
Pittsburgh-Beaver Valley, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-26.66	-29.09	-331.19
Pittsburgh-Beaver Valley, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-24.32	-26.54	-302.17
Plumas County, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-0.03	-0.04	-0.43
Polk County, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.14	-0.16	-1.67
Portland, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-12.32	-13.39	-148.59
Power-Bannock Counties; Fort Hall Indian Reservation, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.08	-0.09	-1.02
Power-Bannock Counties; Portneuf Valley Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-2.06	-2.26	-26.65

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Provo, UT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-1.30	-1.41	-15.37
Provo, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-4.71	-5.10	-55.69
Prowers County; Lamar, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.10	-0.11	-1.18
Raleigh-Durham, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-12.89	-13.95	-149.62
Ramsey County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.21	-0.24	-2.83
Reading, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-3.84	-4.18	-46.70
Reno, NV	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-3.00	-3.28	-37.07
Rhineland, WI	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.24	-0.26	-2.94
Riverside County (Coachella Valley), CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-2.97	-3.20	-33.22
Riverside County (Coachella Valley), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-2.97	-3.20	-33.22
Riverside County; Coachella Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-3.39	-3.65	-37.85
Riverside, Los Angeles, Orange, & San Bernardino Counties; South Coast Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-101.88	-110.10	-1,167.30
Rosebud County; Lame Deer, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.02	-0.03	-0.30
Routt County (part); Steamboat Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.76	-1.93	-22.88
Rusk and Panola Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.64	-0.70	-8.47
Sacramento County, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-9.59	-10.38	-111.53
Sacramento Metro, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-18.40	-19.96	-217.08
Sacramento Metro, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-18.40	-19.95	-217.06
Sacramento, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-10.75	-11.64	-124.60
Sacramento, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-17.88	-19.38	-210.84
Salem, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-1.92	-2.08	-22.65
Salt Lake City, UT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-2.76	-3.01	-33.92
Salt Lake City, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-21.55	-23.48	-264.27
Salt Lake County, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-12.35	-13.44	-150.45
Salt Lake County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	-12.35	-13.45	-150.52
San Antonio, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-19.27	-20.95	-232.47
San Bernardino County, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-5.06	-5.49	-60.70
San Diego County, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-35.14	-38.24	-426.63
San Diego County, CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-35.08	-38.18	-425.97

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
San Diego, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-35.02	-38.11	-425.18
San Francisco Bay Area, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-49.35	-53.42	-573.56
San Francisco Bay Area, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-49.29	-53.35	-572.87
San Francisco Bay Area, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-49.42	-53.49	-574.35
San Francisco-Oakland-San Jose, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-46.55	-50.40	-541.21
San Joaquin Valley Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-32.66	-35.42	-385.81
San Joaquin Valley, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-32.66	-35.42	-385.81
San Joaquin Valley, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-32.66	-35.42	-385.82
San Joaquin Valley, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-32.66	-35.42	-385.80
San Joaquin Valley, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-32.66	-35.42	-385.80
San Luis Obispo (Eastern San Luis Obispo), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.30	-0.33	-3.83
San Luis Obispo (Eastern part), CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.30	-0.33	-3.83
San Manuel (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.12	-0.13	-1.33
San Miguel County; Telluride, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.34	-0.37	-4.39
Sanders County (part); Thompson Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.06
Santa Cruz County; Nogales planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.13	-0.14	-1.50
Seaford, DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-1.93	-2.09	-22.36
Seattle-Tacoma, WA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-29.57	-32.16	-357.81
Sheboygan County, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.67	-0.73	-8.09
Sheridan County; City of Sheridan, WY	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.29	-0.32	-3.64
Shoreline Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-0.61	-0.66	-7.35
Shoshone County; City of Pinehurst, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Shoshone County; Pinehurst Expansion Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.24	-0.26	-2.92
Silver Bow County; Butte, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.25	-0.27	-2.94
Somerville, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.15	-0.16	-1.86
Southern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-4.70	-5.10	-55.69
Southwest Indiana, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.11	-0.12	-1.42
Spokane County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-3.14	-3.41	-37.69
Spokane, WA	CO (1971 8-hour)	Maintenance, Serious	100	0	-3.11	-3.38	-37.37
Springfield, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-1.08	-1.17	-12.77

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
St. Bernard Parish, LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-3.38	-3.71	-44.54
St. Clair, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.58	-0.63	-7.01
St. Lawrence County, NY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.09	-0.10	-1.09
St. Louis, MO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-9.19	-9.99	-111.21
St. Louis, MO-IL	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-34.06	-37.13	-418.94
St. Louis-St. Charles-Farmington, MO-IL	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-34.65	-37.76	-425.38
Steubenville, OH-WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-1.46	-1.60	-18.80
Steubenville-Weirton, OH-WV	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-2.95	-3.24	-38.10
Stockton, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-2.78	-3.01	-32.46
Sullivan County, TN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.20	-0.21	-2.29
Sutter Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.02	-0.18
Syracuse, NY	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-6.61	-7.21	-82.08
Tacoma, WA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	-6.33	-6.90	-78.03
Tazewell County: Groveland twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.19	-0.21	-2.34
Terre Haute, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.44	-0.47	-5.05
Thurston County; Cities of Olympia, Tumwater, and Lacey, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.67	-0.72	-7.64
Titus County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.02	-0.02	-0.29
Toms River, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.03	-0.28
Tooele County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	-0.04	-0.04	-0.48
Trenton, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.62	-0.68	-7.31
Trona, CA	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	-0.15	-0.16	-1.97
Tucson, AZ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-5.77	-6.25	-67.81
Tuolumne County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.48	-0.52	-5.67
Tuscan Buttes, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	-0.06
Tuscan Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal (Rural Transport)	100	0	0.00	0.00	-0.06
Uinta Basin, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-3.10	-3.41	-40.72
Union County; LaGrande, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.08	-0.09	-1.03
Upper Green River Basin Area, WY	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-4.36	-4.80	-57.69
Utah County, UT	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-5.19	-5.64	-62.06

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Vancouver, WA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-2.64	-2.86	-31.34
Ventura County, CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-5.62	-6.09	-65.48
Ventura County, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-5.62	-6.08	-65.41
Vermillion County; Part of Clinton Township, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.10	-0.11	-1.23
Vigo County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.99	-1.07	-11.56
Walla Walla County; Wallula, WA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.07	-0.08	-0.91
Waltham, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.58	-0.63	-7.03
Warren County, NJ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.19	-0.20	-2.15
Warren County: Conewago Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.98	-1.07	-12.94
Warren County: Warren Boro, Pleasant Twp, Glade Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-1.79	-1.97	-23.65
Warren, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-2.10	-2.31	-27.80
Washington, DC-MD-VA	Ozone (2008 8-hour)	Nonattainment (DC) Maintenance (MD, VA), Marginal	50	0	-39.00	-42.24	-455.24
Washington, DC-MD-VA	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-33.25	-35.91	-378.74
Washington, DC-MD-VA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-4.09	-4.41	-46.24
Washoe County; Reno planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-3.02	-3.30	-37.30
Wayne County, MI	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.68	-0.74	-8.40
Wayne County: Boston, Center, Franklin, Wayne & Webster Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.36	-0.38	-3.97
West Central Pinal, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.10	-0.11	-1.13
West Silver Valley, ID	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-0.09	-0.10	-1.09
Whatcom County, WA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.20	-0.21	-2.60
Winston-Salem, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-2.71	-2.92	-30.13
Worcester, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-1.52	-1.65	-17.75
Yakima County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.55	-1.69	-19.43
Yakima, WA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.53	-0.58	-6.66
Yuba City-Marysville, CA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-1.71	-1.86	-20.73
Yuma, AZ	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-1.13	-1.23	-13.67
Yuma, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-1.75	-1.90	-21.19

Notes:

^a Nonattainment or maintenance status as of 2/1/2024. Source: EPA, The Green Book Nonattainment Areas for Criteria Pollutants; <http://www.epa.gov/airquality/greenbook/>. "--" indicates that no severity classification has been established for the NAAQS pollutant.

^b Emissions thresholds in tons per year. Where the threshold differs by precursor pollutant, the smallest of the precursor thresholds is shown. These thresholds are provided for information only; a general conformity determination is not required for the Proposed Action. Source: 40 CFR 93.853.

^c Positive values are emissions increases; negative values are emissions decreases.

EPA = U.S. Environmental Protection Agency; NAAQS = National Ambient Air Quality Standard; CO = carbon monoxide; NO₂ = nitrogen dioxide; PM_{2.5} = particulate matter less than 2.5 microns in size; PM₁₀ = particulate matter less than 10 microns in size; SO₂ = sulfur dioxide.

Table D-52. Changes in Emissions from U.S. Combined Passenger Cars, Light Trucks, and HDPUVs by Nonattainment or Maintenance Area and Alternative, Direct and Indirect Impacts—Volatile Organic Compounds (VOCs), 2050

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Ada County; Boise, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-7.26	-11.92	-153.35
Adams, Denver, and Boulder Counties; Denver Metropolitan area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-32.07	-52.46	-673.70
Ajo (Pima County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.03	-0.04	-0.46
Albuquerque, NM	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-11.56	-18.17	-224.84
Allegan County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.74	-1.09	-12.70
Allegheny County Air Basin: Hazelwood monitor, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.93	-1.47	-18.25
Allegheny County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	-12.27	-19.39	-241.12
Allegheny County; Liberty, Lincoln, Port Vue, Glassport, Clairton, PA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.23	-0.38	-4.75
Allegheny, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-1.70	-2.76	-35.14
Allentown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-7.37	-11.58	-143.29
Allentown-Bethlehem-Easton, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-8.09	-12.63	-155.36
Alton Township, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.29	-0.53	-7.29
Amador County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.46	-0.69	-8.34
Anchorage, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	-1.65	-2.57	-31.52
Anchorage; Eagle River, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.09	-0.14	-1.77
Anne Arundel County and Baltimore County, MD	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-11.86	-17.69	-207.74
Archuleta County; Pagosa Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.01	-1.76	-23.82
Armstrong County; Madison, Mahoning, Boggs, Washington, Pine, PA	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	-0.31	-0.54	-7.42
Aroostock County; City of Presque Isle, ME	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.08	-0.12	-1.34
Atlanta, GA	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-68.43	-105.25	-1,275.84
Atlanta, GA	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-54.67	-84.54	-1,030.39
Atlantic City, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.44	-0.68	-8.10
Bakersfield, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-5.70	-8.72	-105.22
Baltimore, MD	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	-29.63	-44.44	-525.33
Baltimore, MD	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-29.78	-44.67	-527.97
Baltimore, MD	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.11	-0.17	-2.06
Baton Rouge, LA	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-22.53	-37.95	-499.74
Beaver, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.16	-0.25	-3.13
Benton County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.28	-0.42	-5.16
Berrien County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-2.75	-4.27	-52.30

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Billings, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-4.49	-7.83	-106.01
Billings, MT	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.53	-0.94	-12.97
Birmingham, AL	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-17.28	-27.03	-333.11
Boise-Northern Ada County, ID	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-7.26	-11.91	-153.29
Bonner County; The Sandpoint Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.14	-0.22	-2.81
Boston, MA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-12.80	-20.84	-266.47
Boyd County (part), KY	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.28	-0.50	-6.82
Brooke; Follansbee area, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.03	-0.05	-0.61
Brown County: Green Bay, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.11	-0.17	-2.13
Burlington, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.09	-0.13	-1.54
Butte County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-2.34	-3.67	-45.31
Calaveras County, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.47	-0.71	-8.58
Calaveras County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.47	-0.71	-8.58
Campbell-Clermont Counties, KY-OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.32	-0.49	-5.93
Canton-Massillon, OH	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-5.64	-9.16	-116.94
Central New Hampshire, NH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-1.69	-2.46	-28.13
Central Steptoe Valley, NV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.18	-0.29	-3.68
Charleston, WV	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-3.36	-5.17	-62.81
Charlotte, NC	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-15.85	-23.92	-284.48
Charlotte-Rock Hill, NC-SC	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-30.38	-46.22	-554.32
Chicago, IL-IN-WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-78.54	-119.83	-1,441.05
Chicago-Naperville, IL-IN-WI	Ozone (2008 8-hour)	Maintenance, Serious	100	0	-108.63	-173.79	-2,187.44
Chico (Butte County), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-2.34	-3.67	-45.31
Chico, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.95	-1.48	-18.22
Chico, CA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-2.24	-3.51	-43.38
Cincinnati, OH-KY (OH Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-15.69	-23.14	-268.64
Cincinnati, OH-KY (KY Portion)	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	-9.16	-15.24	-198.56
Cincinnati, OH-KY-IN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-28.32	-44.38	-547.91
Clark County; Las Vegas planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-23.84	-36.24	-434.21
Cleveland, OH	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-34.33	-54.53	-681.86
Cleveland, OH	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-16.62	-27.24	-350.43
Cleveland, OH	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-19.80	-32.15	-409.97

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Cleveland-Akron-Lorain, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-35.51	-56.34	-703.69
Cleveland-Akron-Lorain, OH	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-33.20	-52.78	-660.32
Cochise County; Paul Spur/Douglas planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.17	-0.26	-3.08
Colorado Springs, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-11.26	-18.52	-239.04
Columbus, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-23.25	-36.16	-443.31
Columbus, OH	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-21.06	-32.63	-398.35
Cook County; Lyons Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.12	-1.81	-22.90
Cook County; Southeast Chicago, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.65	-2.69	-34.46
Coshocton County; Franklin Township, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.03	-0.04	-0.53
Coso Junction, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.11	-0.20	-2.64
Cuyahoga County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-16.65	-27.30	-351.15
Cuyahoga County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-13.57	-22.24	-286.02
Dallas-Fort Worth, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-86.48	-131.59	-1,578.22
Dallas-Fort Worth, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-85.23	-129.74	-1,556.71
Dane County; Madison sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-5.73	-8.77	-105.87
Delaware County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-6.21	-10.04	-127.71
Denver Metro/North Front Range, CO	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-76.89	-126.32	-1,628.16
Denver-Boulder, CO	CO (1971 8-hour)	Maintenance, Serious	100	0	-60.91	-100.39	-1,297.53
Denver-Boulder-Greeley-Ft. Collins-Loveland, CO	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-76.67	-125.93	-1,622.74
Detroit, MI	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	-53.17	-81.13	-975.75
Detroit, MI	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-20.56	-31.62	-383.26
Detroit, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-2.63	-4.10	-50.39
Detroit-Ann Arbor, MI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-53.31	-81.35	-978.52
Doña Ana County; Anthony, NM	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.13	-0.21	-2.69
Door County, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	0.00	-0.05
Door County-Revised, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	-0.27	-0.41	-4.78
Douglas (Cochise County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.14	-0.22	-2.61
Dukes County, MA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.13	-0.21	-2.57
Duluth, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-2.04	-3.35	-43.23
East Chicago, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.51	-0.85	-11.15
East Helena Area, MT	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.01	-0.02	-0.18
East Kern County, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.29	-0.46	-5.75

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
El Paso County, TX	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-6.73	-10.26	-123.27
El Paso, TX	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.59	-0.91	-11.15
El Paso-Las Cruces, TX-NM	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-6.89	-9.94	-112.64
Eugene-Springfield, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-2.15	-3.23	-38.11
Evangeline Parish (Partial), LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.02	-0.29
Fairbanks, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.59	-0.90	-10.71
Fairbanks, AK	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-1.01	-1.52	-17.97
Flathead County; Columbia Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.20	-0.34	-4.53
Flathead County; Kalispell and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.27	-2.16	-28.63
Flathead County; Whitefish and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.20	-0.33	-4.40
Fort Collins, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-3.04	-4.94	-62.92
Freehold, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.09	-0.14	-1.59
Freestone and Anderson Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.28	-0.46	-5.94
Fremont County; Canon City Area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.61	-0.94	-11.53
Fresno, CA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-6.21	-9.29	-109.42
Gila County (part): Payson, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.14	-0.20	-2.37
Giles County, VA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.04
Grant County, NM	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.35	-0.51	-5.90
Grants Pass, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.37	-0.56	-6.80
Great Falls, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.07	-0.11	-1.49
Greater Connecticut, CT	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-17.21	-26.54	-322.59
Greater Connecticut, CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-17.23	-26.57	-322.96
Greeley, CO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-8.14	-13.32	-171.14
Hancock County (part): Weirton, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.47	-0.81	-10.96
Hancock and Brooke Counties (Part); The city of Weirton, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.36	-0.61	-8.13
Harrisburg-Lebanon-Carlisle-York, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-11.61	-17.67	-211.90
Hartford-New Britain-Middletown, CT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-12.11	-18.70	-227.72
Hayden (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	-0.09	-0.14	-1.57
Hayden, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.15	-0.22	-2.57
Hayden, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.09	-0.14	-1.57
Henderson-Webster Counties, KY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.14	-0.23	-2.99
Hillsborough County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.25	-0.41	-5.16
Hillsborough-Polk County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.04	-0.07	-0.86
Houston-Galveston-Brazoria, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-124.48	-201.26	-2,557.46

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Houston-Galveston-Brazoria, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-121.83	-197.11	-2,506.26
Howard County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.34	-0.62	-8.55
Humphreys County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.34	-0.52	-6.17
Huntington, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-1.04	-1.77	-23.49
Hutchinson County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-1.61	-2.87	-39.58
Imperial County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-2.73	-4.23	-51.75
Imperial County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-2.73	-4.23	-51.67
Imperial County, CA	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	-2.17	-3.35	-40.82
Imperial County, CA	PM _{2.5} (2012 Annual)	Nonattainment, Moderate	100	0	-2.17	-3.35	-40.82
Imperial Valley, CA	PM ₁₀ (1987 24-hour)	Maintenance, Serious	100	0	-2.61	-4.05	-49.50
Indian Wells, CA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.57	-0.90	-11.11
Indiana, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-2.18	-3.69	-48.75
Indianapolis, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.03	-0.05	-0.59
Indianapolis, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-6.40	-9.78	-117.86
Inland Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-0.67	-1.04	-12.61
Inyo County; Owens Valley planning area, CA	PM ₁₀ (1987 24-hour)	Nonattainment, Serious	70	0	-0.06	-0.10	-1.26
Jackson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.74	-1.12	-13.43
Jackson County; Medford-Ashland (including White City), OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-1.64	-2.48	-29.42
Jamestown, NY	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-2.70	-4.44	-57.41
Jefferson County, KY	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.04	-0.06	-0.70
Jefferson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.87	-1.37	-17.03
Jefferson County, OH	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.11	-0.19	-2.50
Jefferson County; (part) Steubenville & Mingo Junction, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-1.08	-1.82	-23.90
Johnstown, PA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	-1.64	-2.62	-32.86
Josephine County; Grants Pass, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.36	-0.55	-6.68
Juneau; Mendenhall Valley area, AK	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.12	-0.19	-2.40
Kern County (Eastern Kern), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-1.47	-2.40	-30.67
Kern County (Eastern Kern), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-1.47	-2.40	-30.67
King County; Kent, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.22	-0.34	-4.10
King County; Seattle, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.14	-0.22	-2.62
Klamath Falls, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.48	-0.71	-8.30
Klamath Falls, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.48	-0.71	-8.31
Klamath Falls, OR	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	-0.55	-0.81	-9.47
Knoxville, TN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-10.30	-16.17	-199.90
Knoxville-Sevierville-La Follette, TN	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	-11.98	-18.64	-228.72

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
La Porte County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.63	-0.94	-11.08
LaSalle County; Oglesby, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.35	-0.54	-6.50
Lake County (part); Lakeview, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.15
Lake County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-6.90	-11.13	-141.11
Lake County, OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-2.22	-3.34	-39.50
Lake County; (part) Eastlake, Timberlake, Lakeline, Willoughby, Mentor, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.38	-0.57	-6.72
Lake County; Cities of East Chicago, Hammond, Whiting, and Gary, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-4.57	-7.39	-93.87
Lake County; Polson, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.07	-0.12	-1.57
Lake County; Ronan, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.03	-0.06	-0.79
Lake Tahoe North Shore, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.16	-0.24	-2.95
Lake Tahoe South Shore, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.37	-0.56	-6.52
Lake Tahoe, NV	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.30	-0.46	-5.69
Lancaster, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-6.42	-10.12	-125.62
Lancaster, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-6.42	-10.12	-125.59
Lane County (part); Oakridge, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.03
Lane County; Eugene/Springfield, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-2.15	-3.23	-38.14
Las Vegas, NV	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-23.84	-36.24	-434.21
Las Vegas, NV	CO (1971 8-hour)	Maintenance, Serious	100	0	-23.87	-36.29	-434.89
Laurel Area (Yellowstone County), MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	-0.64	-1.14	-15.72
Lebanon County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-1.78	-2.84	-35.55
Lemont, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-2.60	-4.21	-53.64
Liberty-Clairton, PA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.23	-0.38	-4.75
Lincoln County; Libby and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.08	-0.13	-1.64
Logan, UT-ID	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-1.51	-2.33	-28.20
Longmont, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-2.38	-4.04	-53.61
Lorain County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.59	-0.92	-11.10
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-8.10	-12.32	-147.71
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-8.09	-12.32	-147.68
Los Angeles-South Coast Air Basin, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-151.89	-225.33	-2,632.23
Los Angeles-South Coast Air Basin, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-151.81	-225.22	-2,630.93
Los Angeles-South Coast Air Basin, CA	CO (1971 8-hour)	Maintenance, Serious	100	0	-151.88	-225.30	-2,631.77

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Los Angeles-South Coast Air Basin, CA	NO2 (1971 Annual)	Maintenance, Primary	100	0	-151.88	-225.31	-2,631.81
Los Angeles-South Coast Air Basin, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-151.91	-225.36	-2,632.49
Los Angeles-South Coast Air Basin, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-151.91	-225.36	-2,632.49
Louisville, KY-IN (IN Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-3.37	-5.38	-67.56
Louisville, KY-IN (KY Portion)	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-8.09	-11.64	-131.50
Lowell, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-1.16	-1.81	-22.24
Lucas County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-6.46	-10.74	-139.72
Madison County; Granite City Township and Nameoki Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.64	-2.79	-37.10
Manchester, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.95	-1.40	-16.16
Manitowoc County, WI	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.54	-0.79	-9.15
Marathon County: Rothschild Sub-city area, Rib Mountain, Weston, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-1.51	-2.23	-25.92
Maricopa and Pinal Counties; Phoenix planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-47.05	-70.88	-841.41
Marion County: Lawrence, Washington, and Warrant Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-5.29	-8.08	-97.43
Mariposa County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-0.20	-0.31	-3.78
Mariposa County, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.20	-0.31	-3.79
Marshall, WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.57	-0.98	-13.11
Medford, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-1.00	-1.51	-17.89
Memphis, TN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-12.34	-18.77	-224.97
Memphis, TN-MS-AR	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-16.97	-26.15	-317.62
Miami (Gila County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.18	-0.26	-3.03
Miami, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.16	-0.23	-2.72
Miami, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.17	-0.25	-2.87
Millinocket AQCR 109, ME	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-1.80	-2.70	-31.74
Milwaukee, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-15.78	-24.31	-295.17
Milwaukee, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-7.76	-12.10	-148.68
Milwaukee-Racine, WI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-13.98	-21.53	-261.41
Minneapolis-St. Paul, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-39.22	-60.64	-738.81
Minneapolis-St. Paul, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-38.41	-59.49	-726.19
Missoula, MT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-2.98	-5.10	-68.21
Missoula, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-3.06	-5.25	-70.15

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Modesto, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-2.93	-4.41	-52.27
Mohave County (part); Bullhead City, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.72	-1.08	-12.67
Mono Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.04	-0.06	-0.74
Mono County; Mammoth Lake planning area, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.21	-0.31	-3.59
Morenci (Greenlee County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.02	-0.03	-0.35
Morgan County, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.32	-0.49	-5.83
Morongo Band of Mission Indians, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.06	-0.10	-1.13
Morongo Band of Mission Indians, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.06	-0.09	-1.12
Morristown, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.21	-0.32	-3.81
Muscatine County, IA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.26	-0.42	-5.28
Muscatine, IA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.44	-0.71	-8.87
Muskegon County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-1.71	-2.63	-31.97
Muskingum River, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.10	-0.16	-2.19
Nashua, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.81	-1.18	-13.70
Nassau County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.08	-0.12	-1.41
Navarro County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.27	-0.47	-6.32
Nevada County (Western part), CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-0.83	-1.24	-14.62
Nevada County (Western part), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.84	-1.25	-14.67
New Haven County, CT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.29	-0.46	-5.77
New Haven-Meriden-Waterbury, CT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-10.87	-17.19	-213.98
New Madrid County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
New Manchester-Grant magisterial district in Hancock County, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.21	-0.36	-4.91
New York County, NY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-10.34	-17.63	-234.55
New York-N. New Jersey-Long Island, NY-NJ-CT	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-191.25	-306.58	-3,865.95
New York-N. New Jersey-Long Island, NY-NJ-CT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-118.91	-193.26	-2,467.27
New York-N. New Jersey-Long Island, NY-NJ-CT	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-196.62	-315.40	-3,979.67
New York-Northern New Jersey-Long Island, NY-NJ-CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-195.41	-314.07	-3,969.77
Nogales, AZ	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.23	-0.34	-3.97
Northern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-23.42	-36.68	-452.71
Oakridge, OR	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.12
Ogden, UT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.93	-1.44	-17.41
Ogden, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.93	-1.44	-17.41
Olmsted County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.34	-0.51	-6.05
Olmsted County; City of Rochester, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-1.23	-1.86	-22.08

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Oneida County: Rhinelander Sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.59	-0.92	-11.21
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Pekin, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.53	-0.81	-9.89
Penns Grove, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.05
Peoria County: Hollis twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.02	-0.04	-0.47
Peoria, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-1.31	-2.06	-25.38
Perth Amboy, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.82	-1.32	-16.71
Philadelphia-Camden County, PA-NJ	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-13.44	-21.26	-264.62
Philadelphia-Wilmington, PA-NJ-DE (NJ Portion)	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-14.04	-21.78	-266.23
Philadelphia-Wilmington, PA-NJ-DE (PA-DE Portion)	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-40.95	-63.75	-782.18
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-72.86	-112.91	-1,378.78
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-69.55	-106.93	-1,295.87
Phoenix, AZ	CO (1971 8-hour)	Maintenance, Serious	100	0	-46.03	-69.37	-823.96
Phoenix-Mesa, AZ	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-47.14	-71.01	-843.06
Phoenix-Mesa, AZ	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-47.63	-71.73	-851.27
Pierce County; Tacoma, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.07	-0.11	-1.48
Pima County; Ajo planning area, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.04	-0.42
Pima County; Rillito planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.38	-0.57	-6.74
Pinal County (part); West Pinal, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-1.99	-2.91	-33.46
Pitkin County; Aspen, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.62	-1.02	-13.07
Pittsburgh, PA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-3.15	-4.96	-61.54
Pittsburgh-Beaver Valley, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-28.00	-44.49	-556.40
Pittsburgh-Beaver Valley, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-25.53	-40.56	-507.41
Plumas County, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-0.03	-0.05	-0.64
Polk County, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.20	-0.30	-3.58
Portland, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-15.01	-23.13	-280.86
Power-Bannock Counties; Fort Hall Indian Reservation, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.09	-0.15	-1.94
Power-Bannock Counties; Portneuf Valley Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.80	-3.03	-39.86
Provo, UT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-1.74	-2.63	-31.45
Provo, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-6.19	-9.39	-112.29

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Prowers County; Lamar, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.15	-0.23	-2.81
Raleigh-Durham, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-18.18	-27.19	-320.49
Ramsey County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.15	-0.26	-3.62
Reading, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-4.45	-6.92	-84.79
Reno, NV	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-3.40	-5.36	-66.55
Rhineland, WI	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.31	-0.48	-5.82
Riverside County (Coachella Valley), CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-4.71	-6.90	-79.52
Riverside County (Coachella Valley), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-4.71	-6.90	-79.52
Riverside County; Coachella Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-5.40	-7.91	-91.05
Riverside, Los Angeles, Orange, & San Bernardino Counties; South Coast Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-151.26	-224.41	-2,621.71
Rosebud County; Lame Deer, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.03	-0.05	-0.60
Routt County (part); Steamboat Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.39	-2.37	-31.60
Rusk and Panola Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.43	-0.77	-10.63
Sacramento County, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-13.45	-20.14	-237.61
Sacramento Metro, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-24.42	-36.94	-440.44
Sacramento Metro, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-24.42	-36.94	-440.39
Sacramento, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-15.41	-23.02	-270.97
Sacramento, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-23.84	-36.06	-429.86
Salem, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-2.59	-3.92	-46.82
Salt Lake City, UT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-3.10	-4.86	-59.94
Salt Lake City, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-24.62	-38.53	-474.88
Salt Lake County, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-14.28	-22.21	-272.26
Salt Lake County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	-14.29	-22.22	-272.38
San Antonio, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-23.30	-35.91	-436.17
San Bernardino County, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-5.74	-8.81	-106.75
San Diego County, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-41.32	-64.04	-782.36
San Diego County, CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-41.25	-63.94	-781.14
San Diego, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-41.23	-63.90	-780.57
San Francisco Bay Area, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-69.39	-103.88	-1,225.14
San Francisco Bay Area, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-69.31	-103.76	-1,223.66
San Francisco Bay Area, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-69.50	-104.04	-1,226.93

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
San Francisco-Oakland-San Jose, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-65.57	-98.17	-1,157.90
San Joaquin Valley Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-43.25	-65.49	-781.69
San Joaquin Valley, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-43.25	-65.49	-781.70
San Joaquin Valley, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-43.25	-65.50	-781.71
San Joaquin Valley, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-43.25	-65.49	-781.66
San Joaquin Valley, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-43.25	-65.49	-781.66
San Luis Obispo (Eastern San Luis Obispo), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.26	-0.42	-5.45
San Luis Obispo (Eastern part), CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.26	-0.42	-5.45
San Manuel (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.16	-0.24	-2.79
San Miguel County; Telluride, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.29	-0.48	-6.35
Sanders County (part); Thompson Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.19
Santa Cruz County; Nogales planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.23	-0.34	-4.02
Seaford, DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-2.77	-4.13	-48.50
Seattle-Tacoma, WA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-35.51	-54.87	-668.27
Sheboygan County, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.82	-1.27	-15.40
Sheridan County; City of Sheridan, WY	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.36	-0.58	-7.32
Shoreline Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-0.75	-1.15	-14.00
Shoshone County; City of Pinehurst, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Shoshone County; Pinehurst Expansion Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.28	-0.43	-5.29
Silver Bow County; Butte, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.35	-0.53	-6.28
Somerville, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.17	-0.26	-3.24
Southern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-6.19	-9.39	-112.29
Southwest Indiana, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.11	-0.18	-2.32
Spokane County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-3.93	-6.03	-73.00
Spokane, WA	CO (1971 8-hour)	Maintenance, Serious	100	0	-3.90	-5.98	-72.43
Springfield, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-1.45	-2.19	-26.12
St. Bernard Parish, LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-2.41	-4.25	-57.99
St. Clair, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.68	-1.06	-12.94
St. Lawrence County, NY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.12	-0.18	-2.20
St. Louis, MO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-10.96	-16.94	-206.41
St. Louis, MO-IL	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-37.67	-59.17	-732.05
St. Louis-St. Charles-Farmington, MO-IL	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-38.66	-60.60	-748.37
Steubenville, OH-WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-1.24	-2.09	-27.50
Steubenville-Weirton, OH-WV	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-2.46	-4.14	-54.53

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Stockton, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-3.86	-5.80	-68.69
Sullivan County, TN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.29	-0.43	-5.03
Sutter Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.02	-0.23
Syracuse, NY	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-6.94	-11.03	-137.95
Tacoma, WA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	-7.00	-11.02	-136.64
Tazewell County: Groveland twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.24	-0.37	-4.47
Terre Haute, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.65	-0.97	-11.35
Thurston County; Cities of Olympia, Tumwater, and Lacey, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-1.03	-1.52	-17.74
Titus County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.02	-0.03	-0.37
Toms River, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.04	-0.06	-0.65
Tooele County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	-0.03	-0.06	-0.74
Trenton, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.85	-1.28	-15.21
Trona, CA	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	-0.09	-0.17	-2.28
Tucson, AZ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-7.97	-12.02	-142.94
Tuolumne County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.60	-0.92	-11.04
Tuscan Buttes, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	-0.07
Tuscan Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal (Rural Transport)	100	0	0.00	0.00	-0.07
Uinta Basin, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-2.39	-4.14	-55.74
Union County; LaGrande, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.12	-0.18	-2.25
Upper Green River Basin Area, WY	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-2.88	-5.10	-69.98
Utah County, UT	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-6.52	-9.98	-120.23
Vancouver, WA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-3.43	-5.22	-62.56
Ventura County, CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-7.84	-11.76	-138.87
Ventura County, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-7.83	-11.74	-138.69
Vermillion County; Part of Clinton Township, IN	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.15	-0.23	-2.68
Vigo County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-1.36	-2.04	-24.19
Walla Walla County; Wallula, WA	PM ₁₀ (1987 24-hour)	Maintenance, Serious	100	0	-0.06	-0.10	-1.31
Waltham, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.67	-1.04	-12.73
Warren County, NJ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.27	-0.40	-4.68
Warren County: Conewago Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.67	-1.21	-16.67
Warren County: Warren Boro, Pleasant Twp, Glade Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-1.31	-2.33	-31.97
Warren, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-1.55	-2.75	-37.70

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Washington, DC-MD-VA	Ozone (2008 8-hour)	Nonattainment (DC), Maintenance (MD, VA), Marginal	50	0	-53.92	-80.96	-957.78
Washington, DC-MD-VA	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-50.14	-74.13	-862.76
Washington, DC-MD-VA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-6.30	-9.28	-107.52
Washoe County; Reno planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-3.43	-5.40	-67.00
Wayne County, MI	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.75	-1.17	-14.55
Wayne County: Boston, Center, Franklin, Wayne & Webster Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.60	-0.87	-9.99
West Central Pinal, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.14	-0.21	-2.36
West Silver Valley, ID	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-0.14	-0.23	-2.76
Whatcom County, WA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.13	-0.23	-3.24
Winston-Salem, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-4.40	-6.42	-73.73
Worcester, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-2.17	-3.25	-38.47
Yakima County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.61	-2.60	-32.99
Yakima, WA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.55	-0.89	-11.33
Yuba City-Marysville, CA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-2.05	-3.16	-38.55
Yuma, AZ	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-1.39	-2.16	-26.30
Yuma, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-2.15	-3.33	-40.58

Notes:

^a Nonattainment or maintenance status as of 2/1/2024. Source: EPA, The Green Book Nonattainment Areas for Criteria Pollutants; <http://www.epa.gov/airquality/greenbook/>. “--” indicates that no severity classification has been established for the NAAQS pollutant.

^b Emissions thresholds in tons per year. Where the threshold differs by precursor pollutant, the smallest of the precursor thresholds is shown. These thresholds are provided for information only; a general conformity determination is not required for the Proposed Action. Source: 40 CFR 93.853.

^c Positive values are emissions increases; negative values are emissions decreases.

EPA = U.S. Environmental Protection Agency; NAAQS = National Ambient Air Quality Standard; CO = carbon monoxide; NO₂ = nitrogen dioxide; PM2.5 = particulate matter less than 2.5 microns in size; PM10 = particulate matter less than 10 microns in size; SO₂ = sulfur dioxide.

Table D-53. Changes in Emissions from U.S. Combined Passenger Cars, Light Trucks, and HDPUVs by Nonattainment or Maintenance Area and Alternative, Direct and Indirect Impacts--Carbon Monoxide (CO), 2035

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Ada County; Boise, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-25.30	-26.38	-268.52
Adams, Denver, and Boulder Counties; Denver Metropolitan area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-115.26	-120.14	-1,224.60
Ajo (Pima County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.18	-0.19	-1.95
Albuquerque, NM	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-57.42	-59.88	-608.90
Allegan County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-5.11	-5.32	-54.13
Allegheny County Air Basin: Hazelwood monitor, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-4.46	-4.65	-47.35
Allegheny County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	-58.96	-61.47	-626.02
Allegheny County; Liberty, Lincoln, Port Vue, Glassport, Clairton, PA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.02	-1.06	-10.90
Allegheny, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-6.72	-6.99	-71.99
Allentown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-36.65	-38.21	-388.67
Allentown-Bethlehem-Easton, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-41.98	-43.78	-445.24
Alton Township, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.44	-0.43	-6.47
Amador County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-2.74	-2.86	-29.06
Anchorage, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	-8.68	-9.03	-92.92
Anchorage; Eagle River, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.49	-0.51	-5.24
Anne Arundel County and Baltimore County, MD	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-78.87	-82.25	-835.92
Archuleta County; Pagosa Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-2.09	-2.11	-26.04
Armstrong County; Madison, Mahoning, Boggs, Washington, Pine, PA	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	-0.45	-0.45	-5.44
Aroostock County; City of Presque Isle, ME	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.48	-0.50	-5.06
Atlanta, GA	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-388.41	-405.06	-4,117.07
Atlanta, GA	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-300.44	-313.32	-3,184.70
Atlantic City, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-2.67	-2.79	-28.34
Bakersfield, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-32.20	-33.58	-341.45
Baltimore, MD	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	-192.26	-200.48	-2,038.69
Baltimore, MD	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-193.27	-201.54	-2,049.39
Baltimore, MD	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.66	-0.69	-7.00
Baton Rouge, LA	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-57.95	-60.36	-618.45

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Beaver, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.82	-0.85	-8.69
Benton County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-1.55	-1.62	-16.43
Berrien County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-14.64	-15.26	-155.15
Billings, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-5.62	-5.84	-60.41
Billings, MT	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.34	-0.34	-4.53
Birmingham, AL	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-88.55	-92.34	-939.33
Boise-Northern Ada County, ID	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-25.29	-26.37	-268.40
Bonner County; The Sandpoint Area, ID	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.44	-0.46	-4.66
Boston, MA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-47.76	-49.81	-506.25
Boyd County (part), KY	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.38	-0.38	-4.99
Brooke; Follansbee area, WV	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.10	-0.10	-1.04
Brown County: Green Bay, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.60	-0.63	-6.41
Burlington, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.62	-0.65	-6.59
Butte County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-11.78	-12.29	-124.94
Calaveras County, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-2.79	-2.91	-29.59
Calaveras County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-2.79	-2.91	-29.60
Campbell-Clermont Counties, KY-OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-1.86	-1.94	-19.73
Canton-Massillon, OH	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-21.59	-22.51	-229.30
Central New Hampshire, NH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-12.31	-12.84	-130.53
Central Steptoe Valley, NV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.25	-0.26	-2.63
Charleston, WV	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-19.21	-20.00	-205.03
Charlotte, NC	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-99.78	-104.06	-1,057.57
Charlotte-Rock Hill, NC-SC	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-182.27	-190.08	-1,931.86
Chicago, IL-IN-WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-466.68	-486.62	-4,950.80
Chicago-Naperville, IL-IN-WI	Ozone (2008 8-hour)	Maintenance, Serious	100	0	-473.13	-493.35	-5,017.90
Chico (Butte County), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-11.78	-12.29	-124.93
Chico, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-4.62	-4.82	-48.99
Chico, CA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	-11.22	-11.70	-118.98
Cincinnati, OH-KY (OH Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-110.13	-114.85	-1,167.33
Cincinnati, OH-KY (KY Portion)	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	-27.23	-28.39	-289.09

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Cincinnati, OH-KY-IN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-142.87	-148.99	-1,514.80
Clark County; Las Vegas planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-142.68	-148.79	-1,512.24
Cleveland, OH	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-157.84	-164.60	-1,673.36
Cleveland, OH	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-58.35	-60.85	-618.45
Cleveland, OH	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-76.21	-79.48	-807.78
Cleveland-Akron-Lorain, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-164.66	-171.71	-1,745.84
Cleveland-Akron-Lorain, OH	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-151.83	-158.33	-1,609.62
Cochise County; Paul Spur/Douglas planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.92	-0.96	-9.74
Colorado Springs, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-37.77	-39.38	-401.30
Columbus, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-123.18	-128.46	-1,305.88
Columbus, OH	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-114.48	-119.39	-1,213.68
Cook County; Lyons Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-4.62	-4.82	-48.96
Cook County; Southeast Chicago, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-6.35	-6.60	-68.31
Coshocton County; Franklin Township, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.11	-0.11	-1.13
Coso Junction, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.34	-0.35	-3.74
Cuyahoga County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-58.46	-60.97	-619.64
Cuyahoga County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-47.62	-49.67	-504.79
Dallas-Fort Worth, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-521.66	-543.96	-5,532.69
Dallas-Fort Worth, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-513.00	-534.93	-5,440.87
Dane County; Madison sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-33.31	-34.74	-353.06
Delaware County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-25.17	-26.19	-269.67
Denver Metro/North Front Range, CO	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-265.01	-276.22	-2,817.33
Denver-Boulder, CO	CO (1971 8-hour)	Maintenance, Serious	100	0	-202.63	-211.19	-2,154.89
Denver-Boulder-Greeley-Ft. Collins-Loveland, CO	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-264.25	-275.43	-2,809.01
Detroit, MI	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	-315.79	-329.29	-3,349.11
Detroit, MI	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-116.41	-121.40	-1,234.19
Detroit, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-13.81	-14.40	-146.58
Detroit-Ann Arbor, MI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-316.60	-330.14	-3,357.72
Doña Ana County; Anthony, NM	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.46	-0.48	-4.99

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Door County, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	-0.02	-0.02	-0.23
Door County-Revised, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	-1.80	-1.88	-19.09
Douglas (Cochise County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.75	-0.78	-7.96
Dukes County, MA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.68	-0.71	-7.18
Duluth, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-6.35	-6.62	-67.36
East Chicago, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-1.63	-1.68	-18.28
East Helena Area, MT	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.04	-0.04	-0.44
East Kern County, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-1.62	-1.69	-17.34
El Paso County, TX	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-39.82	-41.52	-422.36
El Paso, TX	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-3.14	-3.27	-33.45
El Paso-Las Cruces, TX-NM	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-53.11	-55.38	-563.16
Eugene-Springfield, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-13.32	-13.89	-141.22
Evangeline Parish (Partial), LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.01	-0.14
Fairbanks, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	-2.53	-2.64	-26.83
Fairbanks, AK	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-4.59	-4.78	-48.66
Flathead County; Columbia Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.39	-0.41	-4.14
Flathead County; Kalispell and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-2.37	-2.48	-25.17
Flathead County; Whitefish and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.37	-0.39	-3.95
Fort Collins, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-11.32	-11.81	-120.01
Freehold, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.66	-0.68	-6.95
Freestone and Anderson Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.88	-0.92	-9.70
Fremont County; Canon City Area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-3.25	-3.39	-34.45
Fresno, CA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-39.95	-41.67	-423.47
Gila County (part): Payson, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.81	-0.85	-8.62
Giles County, VA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.02	-0.03	-0.26
Grant County, NM	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-2.55	-2.66	-27.03
Grants Pass, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-1.96	-2.05	-20.81
Great Falls, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.19	-0.20	-2.18

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Greater Connecticut, CT	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-96.11	-100.23	-1,018.80
Greater Connecticut, CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-96.21	-100.33	-1,019.83
Greeley, CO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-29.70	-30.90	-318.80
Hancock County (part): Weirton, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.76	-0.79	-8.23
Hancock and Brooke Counties (Part); The city of Weirton, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.76	-0.79	-8.20
Harrisburg-Lebanon-Carlisle-York, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-70.07	-73.07	-743.04
Hartford-New Britain-Middletown, CT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-66.85	-69.72	-708.69
Hayden (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	-0.72	-0.76	-7.68
Hayden, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-1.23	-1.29	-13.09
Hayden, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.72	-0.75	-7.65
Henderson-Webster Counties, KY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.50	-0.52	-5.38
Hillsborough County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-1.07	-1.12	-11.37
Hillsborough-Polk County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.20	-0.21	-2.10
Houston-Galveston-Brazoria, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-498.87	-520.04	-5,299.88
Houston-Galveston-Brazoria, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-485.43	-506.02	-5,157.24
Howard County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.15	-0.14	-2.13
Humphreys County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-2.12	-2.21	-22.47
Huntington, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-2.23	-2.33	-23.67
Hutchinson County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.75	-0.76	-8.93
Imperial County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-14.73	-15.36	-156.09
Imperial County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-14.71	-15.34	-155.88
Imperial County, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-11.50	-11.99	-121.90
Imperial County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	-11.50	-11.99	-121.90
Imperial Valley, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-13.94	-14.54	-147.74
Indian Wells, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-2.90	-3.02	-30.86
Indiana, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-5.65	-5.86	-62.09
Indianapolis, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.19	-0.20	-1.99
Indianapolis, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-37.50	-39.11	-397.50
Inland Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-3.82	-3.99	-40.53
Inyo County; Owens Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.54	-0.57	-5.78

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Jackson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-4.53	-4.73	-48.06
Jackson County; Medford-Ashland (including White City), OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-9.99	-10.42	-105.87
Jamestown, NY	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-9.23	-9.61	-98.98
Jefferson County, KY	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.20	-0.20	-2.07
Jefferson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-4.25	-4.43	-45.07
Jefferson County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.27	-0.28	-2.83
Jefferson County; (part) Steubenville & Mingo Junction, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-2.79	-2.91	-29.76
Johnstown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-7.57	-7.87	-81.62
Josephine County; Grants Pass, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.93	-2.01	-20.46
Juneau; Mendenhall Valley area, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.44	-0.46	-4.66
Kern County (Eastern Kern), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-6.72	-6.94	-74.40
Kern County (Eastern Kern), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-6.72	-6.94	-74.40
King County; Kent, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.21	-1.26	-12.82
King County; Seattle, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.78	-0.81	-8.24
Klamath Falls, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-2.68	-2.80	-28.45
Klamath Falls, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-2.69	-2.80	-28.49
Klamath Falls, OR	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-3.08	-3.21	-32.68
Knoxville, TN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-51.75	-53.95	-549.55
Knoxville-Sevierville-La Follette, TN	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-63.35	-66.05	-672.52
La Porte County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-4.13	-4.31	-43.75
LaSalle County; Oglesby, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-2.01	-2.10	-21.32
Lake County (part); Lakeview, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.08
Lake County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-28.18	-29.36	-299.84
Lake County, OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-14.36	-14.98	-152.25
Lake County; (part) Eastlake, Timberlake, Lakeline, Willoughby, Mentor, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-2.50	-2.60	-26.46
Lake County; Cities of East Chicago, Hammond, Whiting, and Gary, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-18.54	-19.32	-197.68
Lake County; Polson, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.11	-0.12	-1.19
Lake County; Ronan, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.06	-0.06	-0.59

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Lake Tahoe North Shore, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.93	-0.97	-9.90
Lake Tahoe South Shore, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-2.51	-2.62	-26.61
Lake Tahoe, NV	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-1.51	-1.58	-16.02
Lancaster, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-31.28	-32.62	-331.54
Lancaster, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-31.27	-32.61	-331.46
Lane County (part); Oakridge, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.15
Lane County; Eugene/Springfield, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-13.33	-13.90	-141.30
Las Vegas, NV	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-142.68	-148.79	-1,512.24
Las Vegas, NV	CO (1971 8-hour)	Maintenance, Serious	100	0	-142.90	-149.03	-1,514.67
Laurel Area (Yellowstone County), MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	-0.50	-0.50	-6.17
Lebanon County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-8.10	-8.45	-85.85
Lemont, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-10.24	-10.67	-109.56
Liberty-Clairton, PA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-1.02	-1.06	-10.90
Lincoln County; Libby and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.18	-0.19	-1.93
Logan, UT-ID	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-8.55	-8.92	-90.67
Longmont, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-5.78	-5.98	-63.76
Lorain County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-3.34	-3.48	-35.42
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-51.29	-53.43	-546.95
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-51.28	-53.42	-546.82
Los Angeles-South Coast Air Basin, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-1,035.51	-1,079.82	-10,980.36
Los Angeles-South Coast Air Basin, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-1,035.00	-1,079.29	-10,974.92
Los Angeles-South Coast Air Basin, CA	CO (1971 8-hour)	Maintenance, Serious	100	0	-1,035.70	-1,080.03	-10,982.38
Los Angeles-South Coast Air Basin, CA	NO ₂ (1971 Annual)	Maintenance, Primary	100	0	-1,035.73	-1,080.05	-10,982.62
Los Angeles-South Coast Air Basin, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-1,035.64	-1,079.96	-10,981.70
Los Angeles-South Coast Air Basin, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-1,035.64	-1,079.96	-10,981.70
Louisville, KY-IN (IN Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-14.99	-15.63	-158.92
Louisville, KY-IN (KY Portion)	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-62.96	-65.66	-667.32
Lowell, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-6.12	-6.38	-64.87
Lucas County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-19.85	-20.67	-212.08

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Madison County; Granite City Township and Nameoki Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-3.87	-4.00	-42.92
Manchester, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-6.61	-6.90	-70.09
Manitowoc County, WI	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-3.69	-3.85	-39.10
Marathon County: Rothschild Sub-city area, Rib Mountain, Weston, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-10.56	-11.01	-111.89
Maricopa and Pinal Counties; Phoenix planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-296.97	-309.70	-3,147.60
Marion County: Lawrence, Washington, and Warrant Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-30.99	-32.32	-328.52
Mariposa County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-1.17	-1.22	-12.42
Mariposa County, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-1.18	-1.23	-12.46
Marshall, WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-1.02	-1.06	-11.29
Medford, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-6.04	-6.30	-64.07
Memphis, TN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-74.51	-77.70	-789.86
Memphis, TN-MS-AR	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-94.96	-99.03	-1,006.89
Miami (Gila County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-1.00	-1.04	-10.58
Miami, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.88	-0.92	-9.35
Miami, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.95	-0.99	-10.03
Millinocket AQCR 109, ME	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-11.92	-12.43	-126.57
Milwaukee, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-88.52	-92.32	-938.25
Milwaukee, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-40.41	-42.14	-428.29
Milwaukee-Racine, WI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-78.61	-81.99	-833.24
Minneapolis-St. Paul, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-215.87	-225.08	-2,290.23
Minneapolis-St. Paul, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-209.48	-218.43	-2,222.58
Missoula, MT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-5.15	-5.37	-54.79
Missoula, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-5.30	-5.52	-56.34
Modesto, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-18.37	-19.16	-194.73
Mohave County (part); Bullhead City, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-3.95	-4.12	-41.92
Mono Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.36	-0.38	-3.82
Mono County; Mammoth Lake planning area, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.93	-0.97	-9.86

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Morenci (Greenlee County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.11	-0.12	-1.19
Morgan County, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-1.98	-2.06	-20.98
Morongo Band of Mission Indians, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.41	-0.43	-4.36
Morongo Band of Mission Indians, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.41	-0.42	-4.30
Morristown, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-1.26	-1.32	-13.39
Muscatine County, IA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-1.11	-1.16	-11.76
Muscatine, IA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-1.90	-1.98	-20.12
Muskegon County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-9.54	-9.94	-101.08
Muskingum River, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.22	-0.23	-2.39
Nashua, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-5.64	-5.88	-59.76
Nassau County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.52	-0.54	-5.50
Navarro County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.45	-0.46	-5.18
Nevada County (Western part), CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-5.59	-5.83	-59.21
Nevada County (Western part), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-5.61	-5.85	-59.42
New Haven County, CT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.41	-1.47	-14.97
New Haven-Meriden-Waterbury, CT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-51.62	-53.83	-547.13
New Madrid County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.01
New Manchester-Grant magisterial district in Hancock County, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.33	-0.34	-3.74
New York County, NY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-21.60	-22.53	-228.93
New York-N. New Jersey-Long Island, NY-NJ-CT	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-819.05	-854.14	-8,682.58
New York-N. New Jersey-Long Island, NY-NJ-CT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-452.83	-472.23	-4,800.25
New York-N. New Jersey-Long Island, NY-NJ-CT	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-837.43	-873.32	-8,877.45
New York-Northern New Jersey-Long Island, NY-NJ-CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-819.43	-854.54	-8,686.62
Nogales, AZ	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-1.36	-1.42	-14.40
Northern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-117.66	-122.69	-1,248.30
Oakridge, OR	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.05	-0.06	-0.57
Ogden, UT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-5.24	-5.47	-55.57
Ogden, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-5.24	-5.47	-55.57
Olmsted County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-2.07	-2.15	-21.95
Olmsted County; City of Rochester, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-7.55	-7.87	-80.18

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Oneida County: Rhinelander Sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-3.19	-3.32	-33.76
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Pekin, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-2.88	-3.00	-30.50
Penns Grove, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.01	-0.15
Peoria County: Hollis twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.12	-0.12	-1.25
Peoria, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-6.56	-6.84	-69.53
Perth Amboy, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-3.29	-3.43	-34.91
Philadelphia-Camden County, PA-NJ	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-64.41	-67.12	-685.18
Philadelphia-Wilmington, PA-NJ-DE (NJ Portion)	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-75.81	-79.05	-803.72
Philadelphia-Wilmington, PA-NJ-DE (PA-DE Portion)	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-216.42	-225.63	-2,297.64
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-396.26	-413.18	-4,204.06
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-397.10	-413.97	-4,217.74
Phoenix, AZ	CO (1971 8-hour)	Maintenance, Serious	100	0	-290.06	-302.50	-3,074.43
Phoenix-Mesa, AZ	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-297.96	-310.74	-3,158.15
Phoenix-Mesa, AZ	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-301.40	-314.32	-3,194.59
Pierce County; Tacoma, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.24	-0.25	-2.61
Pima County; Ajo planning area, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.17	-0.17	-1.77
Pima County; Rillito planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-2.42	-2.53	-25.68
Pinal County (part); West Pinal, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-14.14	-14.75	-149.92
Pitkin County; Aspen, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-2.22	-2.31	-23.90
Pittsburgh, PA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-15.48	-16.14	-164.17
Pittsburgh-Beaver Valley, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-129.22	-134.68	-1,373.97
Pittsburgh-Beaver Valley, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-117.67	-122.64	-1,251.13
Plumas County, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-0.13	-0.14	-1.39
Polk County, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-1.34	-1.40	-14.19
Portland, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-83.86	-87.45	-889.16
Power-Bannock Counties; Fort Hall Indian Reservation, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.24	-0.25	-2.56
Power-Bannock Counties; Portneuf Valley Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-4.49	-4.68	-47.59

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Provo, UT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-10.49	-10.94	-111.23
Provo, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-37.85	-39.46	-401.38
Prowers County; Lamar, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.61	-0.63	-6.44
Raleigh-Durham, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-119.53	-124.65	-1,266.94
Ramsey County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.29	-0.29	-4.15
Reading, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-23.74	-24.76	-251.68
Reno, NV	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-15.87	-16.55	-168.17
Rhineland, WI	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-1.53	-1.59	-16.18
Riverside County (Coachella Valley), CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-34.28	-35.75	-363.32
Riverside County (Coachella Valley), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-34.28	-35.75	-363.32
Riverside County; Coachella Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-39.41	-41.10	-417.69
Riverside, Los Angeles, Orange, & San Bernardino Counties; South Coast Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-1,030.85	-1,074.96	-10,930.93
Rosebud County; Lame Deer, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.05	-0.05	-0.54
Routt County (part); Steamboat Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-2.97	-3.08	-32.48
Rusk and Panola Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.28	-0.27	-3.73
Sacramento County, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-88.76	-92.49	-944.84
Sacramento Metro, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-152.82	-159.29	-1,624.30
Sacramento Metro, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-152.80	-159.27	-1,624.11
Sacramento, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-101.28	-105.60	-1,074.37
Sacramento, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-148.68	-154.97	-1,580.43
Salem, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-15.67	-16.34	-166.05
Salt Lake City, UT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-15.92	-16.58	-169.88
Salt Lake City, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-123.40	-128.67	-1,309.12
Salt Lake County, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-75.90	-79.13	-805.65
Salt Lake County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	-75.94	-79.17	-806.03
San Antonio, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-130.94	-136.53	-1,388.88
San Bernardino County, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-36.60	-38.11	-391.18
San Diego County, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-223.79	-233.39	-2,372.11
San Diego County, CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-223.45	-233.03	-2,368.44

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
San Diego, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-223.23	-232.81	-2,366.19
San Francisco Bay Area, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-455.07	-474.51	-4,827.33
San Francisco Bay Area, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-454.50	-473.91	-4,821.29
San Francisco Bay Area, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-455.82	-475.29	-4,835.34
San Francisco-Oakland-San Jose, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-428.71	-447.02	-4,547.95
San Joaquin Valley Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-267.99	-279.36	-2,847.42
San Joaquin Valley, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-267.99	-279.36	-2,847.43
San Joaquin Valley, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-268.00	-279.36	-2,847.46
San Joaquin Valley, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-267.98	-279.34	-2,847.29
San Joaquin Valley, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-267.98	-279.34	-2,847.29
San Luis Obispo (Eastern San Luis Obispo), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-1.21	-1.26	-13.00
San Luis Obispo (Eastern part), CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-1.21	-1.26	-13.00
San Manuel (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-1.32	-1.37	-13.96
San Miguel County; Telluride, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.80	-0.83	-8.53
Sanders County (part); Thompson Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.16
Santa Cruz County; Nogales planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-1.38	-1.44	-14.61
Seaford, DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-18.42	-19.21	-195.26
Seattle-Tacoma, WA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-194.63	-202.97	-2,062.91
Sheboygan County, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-4.47	-4.67	-47.42
Sheridan County; City of Sheridan, WY	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.11	-1.16	-11.78
Shoreline Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-4.07	-4.24	-43.10
Shoshone County; City of Pinehurst, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.02
Shoshone County; Pinehurst Expansion Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.47	-1.54	-15.61
Silver Bow County; Butte, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-2.06	-2.15	-21.82
Somerville, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.81	-0.84	-8.57
Southern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-37.84	-39.46	-401.35
Southwest Indiana, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.49	-0.51	-5.33
Spokane County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-22.10	-23.05	-234.23
Spokane, WA	CO (1971 8-hour)	Maintenance, Serious	100	0	-21.91	-22.85	-232.23
Springfield, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-8.86	-9.24	-93.89

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
St. Bernard Parish, LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-2.78	-2.84	-32.75
St. Clair, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-3.67	-3.83	-38.94
St. Lawrence County, NY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.54	-0.56	-5.74
St. Louis, MO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-60.65	-63.22	-644.80
St. Louis, MO-IL	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-188.38	-196.36	-2,001.62
St. Louis-St. Charles-Farmington, MO-IL	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-195.43	-203.76	-2,073.98
Steubenville, OH-WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-3.29	-3.42	-35.55
Steubenville-Weirton, OH-WV	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-6.41	-6.68	-68.42
Stockton, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-24.45	-25.50	-259.29
Sullivan County, TN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-1.89	-1.98	-20.08
Sutter Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	-0.01
Syracuse, NY	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-31.87	-33.24	-337.81
Tacoma, WA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	-33.87	-35.32	-359.00
Tazewell County: Groveland twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-1.31	-1.36	-13.83
Terre Haute, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-4.33	-4.51	-45.87
Thurston County; Cities of Olympia, Tumwater, and Lacey, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-6.86	-7.16	-72.76
Titus County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.03	-0.03	-0.28
Toms River, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.25	-0.27	-2.69
Tooele County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	-0.15	-0.15	-1.85
Trenton, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-5.39	-5.62	-57.08
Trona, CA	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	-0.19	-0.19	-2.14
Tucson, AZ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-48.89	-50.99	-518.20
Tuolumne County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-3.55	-3.70	-37.58
Tuscan Buttes, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	-0.01
Tuscan Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal (Rural Transport)	100	0	0.00	0.00	-0.01
Uinta Basin, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-3.38	-3.50	-36.96
Union County; LaGrande, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.45	-0.47	-4.75
Upper Green River Basin Area, WY	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-2.31	-2.38	-25.94
Utah County, UT	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-38.41	-40.05	-407.93

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Vancouver, WA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-20.49	-21.37	-217.15
Ventura County, CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-51.64	-53.80	-550.65
Ventura County, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-51.57	-53.72	-549.89
Vermillion County; Part of Clinton Township, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.91	-0.94	-9.62
Vigo County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-8.76	-9.13	-93.04
Walla Walla County; Wallula, WA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.25	-0.26	-2.65
Waltham, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-3.50	-3.65	-37.09
Warren County, NJ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-1.89	-1.97	-19.99
Warren County: Conewago Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.38	-0.38	-5.09
Warren County: Warren Boro, Pleasant Twp, Glade Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.86	-0.88	-10.20
Warren, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-1.05	-1.07	-12.18
Washington, DC-MD-VA	Ozone (2008 8-hour)	Nonattainment (DC) Maintenance (MD, VA), Marginal	50	0	-348.27	-363.20	-3,691.65
Washington, DC-MD-VA	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-348.44	-363.37	-3,693.43
Washington, DC-MD-VA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-44.49	-46.40	-471.55
Washoe County; Reno planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-16.02	-16.71	-169.82
Wayne County, MI	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-3.70	-3.85	-39.37
Wayne County: Boston, Center, Franklin, Wayne & Webster Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-4.25	-4.43	-45.04
West Central Pinal, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-1.19	-1.24	-12.61
West Silver Valley, ID	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-0.55	-0.57	-5.84
Whatcom County, WA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.14	-0.13	-2.14
Winston-Salem, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-32.25	-33.63	-341.78
Worcester, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-13.65	-14.24	-144.70
Yakima County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-6.22	-6.49	-65.93
Yakima, WA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-2.13	-2.22	-22.59
Yuba City-Marysville, CA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-11.22	-11.70	-118.91
Yuma, AZ	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-7.32	-7.64	-77.63
Yuma, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-11.47	-11.96	-121.60

Notes:

^a Nonattainment or maintenance status as of 2/1/2024. Source: EPA, The Green Book Nonattainment Areas for Criteria Pollutants; <http://www.epa.gov/airquality/greenbook/>. "--" indicates that no severity classification has been established for the NAAQS pollutant.

^b Emissions thresholds in tons per year. Where the threshold differs by precursor pollutant, the smallest of the precursor thresholds is shown. These thresholds are provided for information only; a general conformity determination is not required for the Proposed Action. Source: 40 CFR 93.853.

^c Positive values are emissions increases; negative values are emissions decreases.

EPA = U.S. Environmental Protection Agency; NAAQS = National Ambient Air Quality Standard; CO = carbon monoxide; NO₂ = nitrogen dioxide; PM_{2.5} = particulate matter less than 2.5 microns in size; PM₁₀ = particulate matter less than 10 microns in size; SO₂ = sulfur dioxide.

Table D-54. Changes in Emissions from U.S. Combined Passenger Cars, Light Trucks, and HDPUVs by Nonattainment or Maintenance Area and Alternative, Direct and Indirect Impacts--Carbon Monoxide (CO), 2050

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Ada County; Boise, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-30.69	-41.98	-583.16
Adams, Denver, and Boulder Counties; Denver Metropolitan area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-139.26	-189.61	-2,630.91
Ajo (Pima County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.19	-0.27	-3.71
Albuquerque, NM	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-69.43	-95.26	-1,324.64
Allegan County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-6.13	-8.41	-116.91
Allegheny County Air Basin: Hazelwood monitor, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-5.40	-7.36	-102.24
Allegheny County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	-71.25	-97.26	-1,350.58
Allegheny County; Liberty, Lincoln, Port Vue, Glassport, Clairton, PA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.24	-1.65	-22.83
Allegheny, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-8.10	-10.65	-146.27
Allentown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-44.30	-60.73	-844.28
Allentown-Bethlehem-Easton, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-50.75	-69.59	-967.63
Alton Township, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.49	0.39	9.67
Amador County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-3.31	-4.55	-63.35
Anchorage, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	-10.78	-14.23	-195.63
Anchorage; Eagle River, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.60	-0.77	-10.52
Anne Arundel County and Baltimore County, MD	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-95.68	-131.48	-1,829.11
Archuleta County; Pagosa Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-2.43	-1.09	-6.14
Armstrong County; Madison, Mahoning, Boggs, Washington, Pine, PA	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	-0.49	-0.26	-2.04
Aroostock County; City of Presque Isle, ME	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.68	-0.93	-12.91
Atlanta, GA	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-469.54	-645.05	-8,973.38
Atlanta, GA	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-363.20	-498.92	-6,940.40
Atlantic City, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-3.23	-4.44	-61.76
Bakersfield, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-40.16	-55.10	-766.26
Baltimore, MD	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	-232.40	-318.80	-4,433.03
Baltimore, MD	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-233.62	-320.48	-4,456.41
Baltimore, MD	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.80	-1.08	-14.93
Baton Rouge, LA	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-69.95	-93.68	-1,293.50

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Beaver, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.97	-1.33	-18.52
Benton County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-1.87	-2.57	-35.82
Berrien County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-17.69	-24.30	-338.07
Billings, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-7.18	-9.34	-127.93
Billings, MT	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.40	-0.03	1.62
Birmingham, AL	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-107.01	-146.63	-2,038.19
Boise-Northern Ada County, ID	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-30.68	-41.96	-582.92
Bonner County; The Sandpoint Area, ID	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.66	-0.90	-12.51
Boston, MA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-57.86	-79.51	-1,106.10
Boyd County (part), KY	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.42	-0.05	1.46
Brooke; Follansbee area, WV	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.12	-0.15	-2.07
Brown County: Green Bay, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.74	-1.01	-13.99
Burlington, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.76	-1.05	-14.54
Butte County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-14.24	-19.55	-271.89
Calaveras County, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-3.37	-4.64	-64.51
Calaveras County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-3.38	-4.64	-64.53
Campbell-Clermont Counties, KY-OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-2.27	-3.13	-43.48
Canton-Massillon, OH	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-26.09	-35.62	-494.54
Central New Hampshire, NH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-15.17	-20.85	-290.00
Central Steptoe Valley, NV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.98	-1.35	-18.76
Charleston, WV	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-23.18	-30.99	-427.67
Charlotte, NC	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-120.62	-165.75	-2,305.90
Charlotte-Rock Hill, NC-SC	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-221.35	-304.16	-4,231.56
Chicago, IL-IN-WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-564.58	-773.28	-10,747.80
Chicago-Naperville, IL-IN-WI	Ozone (2008 8-hour)	Maintenance, Serious	100	0	-572.09	-784.27	-10,903.53
Chico (Butte County), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-14.24	-19.55	-271.88
Chico, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-5.84	-8.02	-111.62
Chico, CA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	-13.67	-18.76	-260.87
Cincinnati, OH-KY (OH Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-133.14	-182.93	-2,544.89
Cincinnati, OH-KY (KY Portion)	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	-33.06	-45.15	-627.08

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Cincinnati, OH-KY-IN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-172.90	-237.31	-3,300.47
Clark County; Las Vegas planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-174.47	-239.74	-3,335.32
Cleveland, OH	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-190.80	-261.97	-3,643.70
Cleveland, OH	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-70.54	-96.93	-1,348.43
Cleveland, OH	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-92.13	-126.59	-1,761.15
Cleveland-Akron-Lorain, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-199.04	-273.15	-3,798.65
Cleveland-Akron-Lorain, OH	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-183.53	-251.98	-3,504.68
Cochise County; Paul Spur/Douglas planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-1.23	-1.68	-23.44
Colorado Springs, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-46.25	-63.00	-874.32
Columbus, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-148.91	-204.47	-2,844.04
Columbus, OH	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-138.39	-190.03	-2,643.10
Cook County; Lyons Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-5.60	-7.69	-106.92
Cook County; Southeast Chicago, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-7.60	-9.83	-134.28
Coshocton County; Franklin Township, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.13	-0.17	-2.34
Coso Junction, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.22	-0.22	-2.72
Cuyahoga County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-70.67	-97.11	-1,350.99
Cuyahoga County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-57.57	-79.10	-1,100.49
Dallas-Fort Worth, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-630.54	-864.37	-12,016.99
Dallas-Fort Worth, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-620.06	-849.98	-11,816.80
Dane County; Madison sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-40.27	-55.34	-769.83
Delaware County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-30.35	-40.00	-549.76
Denver Metro/North Front Range, CO	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-320.59	-435.61	-6,040.65
Denver-Boulder, CO	CO (1971 8-hour)	Maintenance, Serious	100	0	-245.67	-333.37	-4,621.15
Denver-Boulder-Greeley-Ft. Collins-Loveland, CO	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-320.36	-435.41	-6,038.38
Detroit, MI	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	-381.72	-523.36	-7,276.36
Detroit, MI	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-141.18	-193.82	-2,695.73
Detroit, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-16.61	-22.72	-315.67
Detroit-Ann Arbor, MI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-382.68	-524.68	-7,294.65
Doña Ana County; Anthony, NM	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.57	-0.71	-9.51

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Door County, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	-0.02	-0.03	-0.42
Door County-Revised, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	-2.20	-3.03	-42.09
Douglas (Cochise County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-1.04	-1.43	-19.87
Dukes County, MA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.82	-1.13	-15.66
Duluth, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-8.43	-11.53	-160.17
East Chicago, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-1.92	-2.03	-25.79
East Helena Area, MT	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.06	-0.09	-1.19
East Kern County, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-1.55	-2.06	-28.28
El Paso County, TX	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-48.46	-66.43	-923.47
El Paso, TX	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-3.82	-5.17	-71.52
El Paso-Las Cruces, TX-NM	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-64.26	-88.15	-1,225.80
Eugene-Springfield, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-16.92	-23.25	-323.52
Evangeline Parish (Partial), LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.02	-0.23
Fairbanks, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	-4.41	-6.04	-83.88
Fairbanks, AK	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-7.85	-10.76	-149.67
Flathead County; Columbia Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.55	-0.75	-10.42
Flathead County; Kalispell and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-3.45	-4.73	-65.87
Flathead County; Whitefish and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.53	-0.73	-10.11
Fort Collins, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-14.21	-19.51	-271.37
Freehold, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.80	-1.10	-15.29
Freestone and Anderson Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-1.09	-1.31	-17.40
Fremont County; Canon City Area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-3.93	-5.40	-75.10
Fresno, CA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-49.51	-68.03	-946.37
Gila County (part): Payson, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.13	-1.56	-21.68
Giles County, VA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.02	-0.03	-0.42
Grant County, NM	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-3.08	-4.24	-58.93
Grants Pass, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-2.61	-3.58	-49.83
Great Falls, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.25	-0.25	-3.16

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Greater Connecticut, CT	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-116.17	-159.57	-2,219.63
Greater Connecticut, CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-116.29	-159.73	-2,221.90
Greeley, CO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-35.80	-46.84	-642.30
Hancock County (part): Weirton, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.93	-1.17	-15.95
Hancock and Brooke Counties (Part); The city of Weirton, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.93	-1.18	-16.04
Harrisburg-Lebanon-Carlisle-York, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-84.70	-116.18	-1,615.47
Hartford-New Britain-Middletown, CT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-80.95	-111.17	-1,546.32
Hayden (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	-0.80	-1.10	-15.34
Hayden, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-1.32	-1.81	-25.20
Hayden, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.80	-1.10	-15.33
Henderson-Webster Counties, KY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.56	-0.70	-9.51
Hillsborough County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-1.29	-1.77	-24.57
Hillsborough-Polk County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.22	-0.30	-4.15
Houston-Galveston-Brazoria, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-602.78	-821.14	-11,395.37
Houston-Galveston-Brazoria, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-586.53	-798.91	-11,086.37
Howard County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.16	0.11	2.91
Humphreys County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-2.56	-3.52	-49.00
Huntington, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-2.81	-3.86	-53.66
Hutchinson County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.92	-0.68	-7.12
Imperial County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-17.80	-24.46	-340.36
Imperial County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-17.78	-24.43	-339.86
Imperial County, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-14.54	-19.98	-277.94
Imperial County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	-14.54	-19.98	-277.94
Imperial Valley, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-16.99	-23.35	-324.89
Indian Wells, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-3.48	-4.71	-65.21
Indiana, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-6.76	-8.02	-106.52
Indianapolis, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.23	-0.31	-4.36
Indianapolis, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-45.35	-62.31	-866.87
Inland Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-4.52	-6.21	-86.43
Inyo County; Owens Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.31	-0.42	-5.90

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Jackson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-5.50	-7.55	-105.03
Jackson County; Medford-Ashland (including White City), OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-12.60	-17.31	-240.79
Jamestown, NY	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-11.13	-14.63	-200.93
Jefferson County, KY	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.23	-0.32	-4.45
Jefferson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-5.16	-7.09	-98.60
Jefferson County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.33	-0.45	-6.16
Jefferson County; (part) Steubenville & Mingo Junction, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-3.46	-4.66	-64.41
Johnstown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-9.13	-11.75	-160.26
Josephine County; Grants Pass, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-2.56	-3.52	-48.98
Juneau; Mendenhall Valley area, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.77	-1.06	-14.69
Kern County (Eastern Kern), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-7.28	-8.11	-105.40
Kern County (Eastern Kern), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-7.28	-8.11	-105.40
King County; Kent, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.47	-2.02	-28.16
King County; Seattle, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.94	-1.29	-17.96
Klamath Falls, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-3.96	-5.44	-75.65
Klamath Falls, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-3.96	-5.44	-75.73
Klamath Falls, OR	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-4.51	-6.20	-86.24
Knoxville, TN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-62.57	-85.38	-1,185.41
Knoxville-Sevierville-La Follette, TN	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-76.56	-104.58	-1,452.49
La Porte County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-5.13	-7.05	-98.03
LaSalle County; Oglesby, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-2.54	-3.48	-48.37
Lake County (part); Lakeview, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.05	-0.07	-0.91
Lake County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-34.11	-46.18	-639.70
Lake County, OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-17.36	-23.86	-331.89
Lake County; (part) Eastlake, Timberlake, Lakeline, Willoughby, Mentor, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-2.97	-4.07	-56.69
Lake County; Cities of East Chicago, Hammond, Whiting, and Gary, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-22.41	-30.13	-416.54
Lake County; Polson, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.17	-0.24	-3.28
Lake County; Ronan, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.09	-0.12	-1.64

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Lake Tahoe North Shore, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-1.09	-1.49	-20.76
Lake Tahoe South Shore, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-3.07	-4.22	-58.71
Lake Tahoe, NV	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-1.83	-2.51	-34.92
Lancaster, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-37.81	-51.95	-722.72
Lancaster, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-37.80	-51.94	-722.57
Lane County (part); Oakridge, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.28
Lane County; Eugene/Springfield, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-16.93	-23.27	-323.70
Las Vegas, NV	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-174.47	-239.74	-3,335.32
Las Vegas, NV	CO (1971 8-hour)	Maintenance, Serious	100	0	-174.74	-240.12	-3,340.56
Laurel Area (Yellowstone County), MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	-0.60	-0.31	-2.20
Lebanon County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-9.79	-13.45	-187.18
Lemont, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-12.43	-16.51	-227.40
Liberty-Clairton, PA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-1.24	-1.65	-22.83
Lincoln County; Libby and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.37	-0.52	-7.17
Logan, UT-ID	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-10.43	-14.33	-199.36
Longmont, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-6.95	-8.08	-106.54
Lorain County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-4.07	-5.59	-77.72
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-59.72	-80.13	-1,107.09
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-59.70	-80.11	-1,106.83
Los Angeles-South Coast Air Basin, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-1,257.01	-1,724.50	-23,980.20
Los Angeles-South Coast Air Basin, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-1,256.40	-1,723.65	-23,968.42
Los Angeles-South Coast Air Basin, CA	CO (1971 8-hour)	Maintenance, Serious	100	0	-1,257.22	-1,724.79	-23,984.30
Los Angeles-South Coast Air Basin, CA	NO ₂ (1971 Annual)	Maintenance, Primary	100	0	-1,257.24	-1,724.82	-23,984.68
Los Angeles-South Coast Air Basin, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-1,257.20	-1,724.75	-23,983.71
Los Angeles-South Coast Air Basin, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-1,257.20	-1,724.75	-23,983.71
Louisville, KY-IN (IN Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-18.12	-24.89	-346.17
Louisville, KY-IN (KY Portion)	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-76.11	-104.59	-1,455.05
Lowell, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-7.42	-10.20	-141.85
Lucas County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-24.03	-32.02	-441.52

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Madison County; Granite City Township and Nameoki Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-4.68	-5.31	-69.46
Manchester, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-8.20	-11.27	-156.74
Manitowoc County, WI	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-4.58	-6.30	-87.61
Marathon County: Rothschild Sub-city area, Rib Mountain, Weston, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-12.76	-17.54	-243.97
Maricopa and Pinal Counties; Phoenix planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-361.03	-496.11	-6,901.95
Marion County: Lawrence, Washington, and Warrant Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-37.47	-51.49	-716.26
Mariposa County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-1.41	-1.94	-27.05
Mariposa County, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-1.42	-1.95	-27.12
Marshall, WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-1.25	-1.46	-19.29
Medford, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-7.66	-10.53	-146.45
Memphis, TN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-90.07	-123.70	-1,720.56
Memphis, TN-MS-AR	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-115.05	-157.88	-2,195.69
Miami (Gila County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-1.45	-1.99	-27.73
Miami, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-1.30	-1.79	-24.85
Miami, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-1.37	-1.89	-26.26
Millinocket AQCR 109, ME	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-14.41	-19.70	-273.60
Milwaukee, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-107.24	-147.36	-2,050.08
Milwaukee, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-48.85	-67.13	-933.88
Milwaukee-Racine, WI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-95.04	-130.59	-1,816.85
Minneapolis-St. Paul, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-261.50	-358.03	-4,975.77
Minneapolis-St. Paul, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-253.19	-346.61	-4,816.91
Missoula, MT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-6.78	-9.22	-127.81
Missoula, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-6.98	-9.48	-131.46
Modesto, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-22.52	-30.94	-430.49
Mohave County (part); Bullhead City, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-5.75	-7.90	-109.84
Mono Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.23	-0.32	-4.38
Mono County; Mammoth Lake planning area, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.86	-2.56	-35.61

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Morenci (Greenlee County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.18	-0.25	-3.53
Morgan County, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-2.45	-3.37	-46.82
Morongo Band of Mission Indians, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.48	-0.66	-9.18
Morongo Band of Mission Indians, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.47	-0.65	-9.04
Morristown, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-1.54	-2.12	-29.48
Muscatine County, IA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-1.43	-1.96	-27.26
Muscatine, IA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-2.39	-3.29	-45.79
Muskegon County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-11.64	-15.98	-222.32
Muskingum River, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.24	-0.30	-3.96
Nashua, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-6.94	-9.54	-132.74
Nassau County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.66	-0.91	-12.64
Navarro County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.48	-0.41	-4.71
Nevada County (Western part), CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-6.70	-9.20	-128.03
Nevada County (Western part), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-6.72	-9.23	-128.46
New Haven County, CT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.72	-2.36	-32.81
New Haven-Meriden-Waterbury, CT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-62.48	-85.86	-1,194.48
New Madrid County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
New Manchester-Grant magisterial district in Hancock County, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.39	-0.42	-5.38
New York County, NY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-26.11	-35.88	-499.21
New York-N. New Jersey-Long Island, NY-NJ-CT	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-990.17	-1,359.83	-18,914.94
New York-N. New Jersey-Long Island, NY-NJ-CT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-547.51	-751.97	-10,459.91
New York-N. New Jersey-Long Island, NY-NJ-CT	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-1,012.37	-1,390.35	-19,339.55
New York-Northern New Jersey-Long Island, NY-NJ-CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-990.62	-1,360.46	-18,923.69
Nogales, AZ	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-1.93	-2.66	-36.96
Northern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-143.65	-196.71	-2,733.93
Oakridge, OR	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.06	-0.08	-1.06
Ogden, UT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-6.39	-8.79	-122.24
Ogden, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-6.39	-8.79	-122.24
Olmsted County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-2.56	-3.49	-48.44
Olmsted County; City of Rochester, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-9.35	-12.73	-176.70

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Oneida County: Rhinelander Sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-3.85	-5.29	-73.61
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Pekin, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-3.55	-4.88	-67.94
Penns Grove, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.02	-0.33
Peoria County: Hollis twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.14	-0.19	-2.67
Peoria, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-8.07	-11.08	-154.19
Perth Amboy, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-3.98	-5.45	-75.69
Philadelphia-Camden County, PA-NJ	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-77.80	-105.43	-1,460.91
Philadelphia-Wilmington, PA-NJ-DE (NJ Portion)	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-91.64	-125.78	-1,749.39
Philadelphia-Wilmington, PA-NJ-DE (PA-DE Portion)	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-261.53	-357.16	-4,959.99
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-478.95	-655.79	-9,114.07
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-479.85	-654.24	-9,081.36
Phoenix, AZ	CO (1971 8-hour)	Maintenance, Serious	100	0	-352.36	-484.20	-6,736.29
Phoenix-Mesa, AZ	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-361.74	-497.09	-6,915.52
Phoenix-Mesa, AZ	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-366.05	-503.01	-6,997.97
Pierce County; Tacoma, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.29	-0.37	-5.00
Pima County; Ajo planning area, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.18	-0.25	-3.44
Pima County; Rillito planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-2.86	-3.93	-54.67
Pinal County (part); West Pinal, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-17.59	-24.17	-336.26
Pitkin County; Aspen, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-2.68	-3.48	-47.56
Pittsburgh, PA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-18.73	-25.67	-356.80
Pittsburgh-Beaver Valley, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-156.10	-211.98	-2,939.03
Pittsburgh-Beaver Valley, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-142.14	-193.02	-2,676.19
Plumas County, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-0.14	-0.20	-2.74
Polk County, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-1.62	-2.22	-30.93
Portland, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-102.05	-140.04	-1,947.54
Power-Bannock Counties; Fort Hall Indian Reservation, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.39	-0.53	-7.38
Power-Bannock Counties; Portneuf Valley Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-5.67	-7.79	-108.31

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Provo, UT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-12.91	-17.74	-246.75
Provo, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-45.96	-63.01	-876.02
Prowers County; Lamar, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.96	-1.32	-18.36
Raleigh-Durham, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-144.50	-198.54	-2,761.97
Ramsey County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.33	0.15	4.48
Reading, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-28.70	-39.43	-548.54
Reno, NV	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-19.95	-27.42	-381.44
Rhineland, WI	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-2.00	-2.75	-38.26
Riverside County (Coachella Valley), CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-41.26	-56.69	-788.71
Riverside County (Coachella Valley), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-41.26	-56.69	-788.71
Riverside County; Coachella Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-47.46	-65.22	-907.29
Riverside, Los Angeles, Orange, & San Bernardino Counties; South Coast Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-1,251.35	-1,716.72	-23,871.98
Rosebud County; Lame Deer, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.16	-0.22	-2.99
Routt County (part); Steamboat Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-3.57	-4.33	-57.96
Rusk and Panola Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.29	0.07	2.91
Sacramento County, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-107.19	-144.90	-2,006.28
Sacramento Metro, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-184.45	-250.79	-3,478.32
Sacramento Metro, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-184.43	-250.76	-3,477.94
Sacramento, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-123.32	-168.93	-2,348.01
Sacramento, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-180.16	-244.90	-3,396.44
Salem, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-19.38	-26.63	-370.42
Salt Lake City, UT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-19.25	-25.76	-355.67
Salt Lake City, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-152.25	-208.53	-2,898.37
Salt Lake County, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-91.73	-125.36	-1,741.32
Salt Lake County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	-91.77	-125.42	-1,742.10
San Antonio, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-158.26	-216.84	-3,014.28
San Bernardino County, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-40.25	-53.40	-735.36
San Diego County, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-270.54	-371.71	-5,171.10
San Diego County, CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-270.12	-371.13	-5,163.05

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
San Diego, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-270.09	-371.09	-5,162.44
San Francisco Bay Area, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-550.48	-754.10	-10,481.82
San Francisco Bay Area, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-549.81	-753.17	-10,468.88
San Francisco Bay Area, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-551.38	-755.33	-10,498.91
San Francisco-Oakland-San Jose, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-519.85	-712.01	-9,896.19
San Joaquin Valley Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-324.57	-441.94	-6,132.16
San Joaquin Valley, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-324.57	-441.94	-6,132.16
San Joaquin Valley, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-324.57	-441.95	-6,132.26
San Joaquin Valley, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-324.55	-441.92	-6,131.87
San Joaquin Valley, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-324.55	-441.92	-6,131.87
San Luis Obispo (Eastern San Luis Obispo), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-1.14	-1.44	-19.61
San Luis Obispo (Eastern part), CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-1.14	-1.44	-19.61
San Manuel (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-1.42	-1.95	-27.12
San Miguel County; Telluride, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.97	-1.30	-17.90
Sanders County (part); Thompson Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.04	-0.05	-0.70
Santa Cruz County; Nogales planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-1.96	-2.69	-37.42
Seaford, DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-22.26	-30.59	-425.62
Seattle-Tacoma, WA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-236.84	-325.42	-4,527.21
Sheboygan County, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-5.52	-7.58	-105.52
Sheridan County; City of Sheridan, WY	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.70	-2.33	-32.30
Shoreline Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-5.02	-6.89	-95.91
Shoshone County; City of Pinehurst, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.07
Shoshone County; Pinehurst Expansion Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.78	-2.45	-34.04
Silver Bow County; Butte, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-2.62	-3.60	-50.02
Somerville, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.98	-1.35	-18.81
Southern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-45.95	-63.01	-875.97
Southwest Indiana, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.61	-0.78	-10.65
Spokane County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-27.19	-37.36	-519.67
Spokane, WA	CO (1971 8-hour)	Maintenance, Serious	100	0	-26.97	-37.06	-515.61
Springfield, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-10.82	-14.87	-206.89

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
St. Bernard Parish, LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-3.29	-2.61	-28.73
St. Clair, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-4.47	-6.14	-85.38
St. Lawrence County, NY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.73	-1.01	-14.02
St. Louis, MO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-73.38	-99.71	-1,382.74
St. Louis, MO-IL	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-227.67	-309.94	-4,300.31
St. Louis-St. Charles-Farmington, MO-IL	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-236.18	-323.01	-4,487.57
Steubenville, OH-WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-4.06	-5.19	-70.72
Steubenville-Weirton, OH-WV	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-7.74	-10.38	-143.42
Stockton, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-29.93	-41.06	-571.03
Sullivan County, TN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-2.31	-3.18	-44.22
Sutter Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.02
Syracuse, NY	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-38.53	-52.93	-736.40
Tacoma, WA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-41.39	-56.85	-790.75
Tazewell County: Groveland twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-1.61	-2.21	-30.73
Terre Haute, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-5.33	-7.31	-101.61
Thurston County; Cities of Olympia, Tumwater, and Lacey, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-8.55	-11.75	-163.42
Titus County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.02	-0.03	-0.39
Toms River, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.31	-0.43	-5.98
Tooele County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	-0.19	-0.11	-1.03
Trenton, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-6.54	-8.98	-124.96
Trona, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.08	-0.03	-0.04
Tucson, AZ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-60.64	-83.33	-1,159.28
Tuolumne County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-4.29	-5.89	-81.94
Tuscan Buttes, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.01
Tuscan Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal (Rural Transport)	100	0	0.00	0.00	0.01
Uinta Basin, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-4.56	-5.59	-75.14
Union County; LaGrande, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.68	-0.94	-13.08
Upper Green River Basin Area, WY	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-2.49	-2.57	-32.45
Utah County, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-46.42	-63.34	-879.35

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Vancouver, WA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-24.98	-34.32	-477.49
Ventura County, CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-62.38	-83.81	-1,158.36
Ventura County, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-62.30	-83.69	-1,156.71
Vermillion County; Part of Clinton Township, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.16	-1.58	-21.94
Vigo County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-10.59	-14.45	-200.63
Walla Walla County; Wallula, WA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.28	-0.39	-5.36
Waltham, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-4.25	-5.84	-81.19
Warren County, NJ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-2.23	-3.06	-42.58
Warren County: Conewago Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.45	-0.03	2.01
Warren County: Warren Boro, Pleasant Twp, Glade Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-1.09	-0.87	-9.57
Warren, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-1.33	-1.18	-13.91
Washington, DC-MD-VA	Ozone (2008 8-hour)	Nonattainment (DC) Maintenance (MD, VA), Marginal	50	0	-421.02	-578.37	-8,045.63
Washington, DC-MD-VA	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-421.23	-578.65	-8,049.59
Washington, DC-MD-VA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-53.78	-73.91	-1,028.20
Washoe County; Reno planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-20.14	-27.68	-385.12
Wayne County, MI	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-4.46	-6.03	-83.55
Wayne County: Boston, Center, Franklin, Wayne & Webster Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-5.28	-7.26	-100.97
West Central Pinal, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-1.24	-1.70	-23.70
West Silver Valley, ID	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-0.93	-1.28	-17.78
Whatcom County, WA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.15	0.18	4.09
Winston-Salem, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-38.98	-53.57	-745.26
Worcester, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-16.97	-23.31	-324.35
Yakima County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-7.96	-10.94	-152.18
Yakima, WA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-2.73	-3.76	-52.26
Yuba City-Marysville, CA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-13.61	-18.70	-260.16
Yuma, AZ	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-9.23	-12.69	-176.54
Yuma, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-14.34	-19.71	-274.18

Notes:

^a Nonattainment or maintenance status as of 2/1/2024. Source: EPA, The Green Book Nonattainment Areas for Criteria Pollutants; <http://www.epa.gov/airquality/greenbook/>. "--" indicates that no severity classification has been established for the NAAQS pollutant.

Appendix D Air Quality Nonattainment Area Results

^b Emissions thresholds in tons per year. Where the threshold differs by precursor pollutant, the smallest of the precursor thresholds is shown. These thresholds are provided for information only; a general conformity determination is not required for the Proposed Action. Source: 40 CFR 93.853.

^c Positive values are emissions increases; negative values are emissions decreases.

EPA = U.S. Environmental Protection Agency; NAAQS = National Ambient Air Quality Standard; CO = carbon monoxide; NO₂ = nitrogen dioxide; PM_{2.5} = particulate matter less than 2.5 microns in size; PM₁₀ = particulate matter less than 10 microns in size; SO₂ = sulfur dioxide.

Table D-55. Changes in Emissions from U.S. Combined Passenger Cars, Light Trucks, and HDPUVs by Nonattainment or Maintenance Area and Alternative, Direct and Indirect Impacts—Acetaldehyde, 2035

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Ada County; Boise, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.02	-0.20
Adams, Denver, and Boulder Counties; Denver Metropolitan area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.07	-0.08	-0.93
Ajo (Pima County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Albuquerque, NM	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.03	-0.04	-0.45
Allegan County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.04
Allegheny County Air Basin: Hazelwood monitor, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.04
Allegheny County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	-0.04	-0.04	-0.47
Allegheny County; Liberty, Lincoln, Port Vue, Glassport, Clairton, PA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Allegheny, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.06
Allentown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.02	-0.28
Allentown-Bethlehem-Easton, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.03	-0.03	-0.33
Alton Township, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Amador County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	-0.02
Anchorage, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.01	-0.01	-0.07
Anchorage; Eagle River, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Anne Arundel County and Baltimore County, MD	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.05	-0.05	-0.61
Archuleta County; Pagosa Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Armstrong County; Madison, Mahoning, Boggs, Washington, Pine, PA	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	-0.01
Aroostock County; City of Presque Isle, ME	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Atlanta, GA	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-0.24	-0.25	-3.05
Atlanta, GA	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.18	-0.20	-2.37
Atlantic City, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.02
Bakersfield, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.02	-0.26
Baltimore, MD	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	-0.12	-0.12	-1.50
Baltimore, MD	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.12	-0.13	-1.50
Baltimore, MD	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.01
Baton Rouge, LA	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.04	-0.04	-0.51
Beaver, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.01
Benton County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	-0.01
Berrien County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.01	-0.12

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Billings, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.04
Billings, MT	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00
Birmingham, AL	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.05	-0.06	-0.70
Boise-Northern Ada County, ID	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.02	-0.20
Bonner County; The Sandpoint Area, ID	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Boston, MA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.03	-0.03	-0.37
Boyd County (part), KY	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.01
Brooke; Follansbee area, WV	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Brown County: Green Bay, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Burlington, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Butte County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.01	-0.09
Calaveras County, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	-0.02
Calaveras County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	-0.02
Campbell-Clermont Counties, KY-OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.01
Canton-Massillon, OH	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.01	-0.01	-0.17
Central New Hampshire, NH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.01	-0.10
Central Steptoe Valley, NV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Charleston, WV	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.01	-0.02	-0.19
Charlotte, NC	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.06	-0.06	-0.78
Charlotte-Rock Hill, NC-SC	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.11	-0.12	-1.42
Chicago, IL-IN-WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.28	-0.30	-3.63
Chicago-Naperville, IL-IN-WI	Ozone (2008 8-hour)	Maintenance, Serious	100	0	-0.29	-0.31	-3.68
Chico (Butte County), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.01	-0.09
Chico, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.04
Chico, CA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.09
Cincinnati, OH-KY (OH Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.07	-0.07	-0.86
Cincinnati, OH-KY (KY Portion)	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	-0.02	-0.02	-0.21
Cincinnati, OH-KY-IN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.09	-0.09	-1.11
Clark County; Las Vegas planning area, NV	PM ₁₀ (1987 24-hour)	Maintenance, Serious	100	0	-0.09	-0.09	-1.11
Cleveland, OH	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.10	-0.10	-1.23
Cleveland, OH	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.04	-0.04	-0.45
Cleveland, OH	PM _{2.5} (2012 Annual)	Maintenance, Moderate	100	0	-0.05	-0.05	-0.59

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Cleveland-Akron-Lorain, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.10	-0.11	-1.29
Cleveland-Akron-Lorain, OH	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.09	-0.10	-1.18
Cochise County; Paul Spur/Douglas planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01
Colorado Springs, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.02	-0.29
Columbus, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.07	-0.08	-0.96
Columbus, OH	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.07	-0.07	-0.89
Cook County; Lyons Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.04
Cook County; Southeast Chicago, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.05
Coshocton County; Franklin Township, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Coso Junction, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Cuyahoga County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.04	-0.04	-0.46
Cuyahoga County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.03	-0.03	-0.37
Dallas-Fort Worth, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.34	-0.36	-4.34
Dallas-Fort Worth, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.33	-0.36	-4.28
Dane County; Madison sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.02	-0.02	-0.26
Delaware County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.19
Denver Metro/North Front Range, CO	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.16	-0.17	-2.09
Denver-Boulder, CO	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.13	-0.13	-1.61
Denver-Boulder-Greeley-Ft. Collins-Loveland, CO	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.16	-0.17	-2.09
Detroit, MI	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	-0.19	-0.21	-2.47
Detroit, MI	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.07	-0.08	-0.91
Detroit, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.01	-0.11
Detroit-Ann Arbor, MI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.19	-0.21	-2.47
Doña Ana County; Anthony, NM	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01
Door County, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	0.00	0.00
Door County-Revised, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	0.00	-0.01
Douglas (Cochise County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.01
Dukes County, MA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	-0.01
Duluth, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.05
East Chicago, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.01
East Helena Area, MT	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00
East Kern County, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	-0.02

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
El Paso County, TX	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.02	-0.03	-0.32
El Paso, TX	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.03
El Paso-Las Cruces, TX-NM	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.03	-0.04	-0.43
Eugene-Springfield, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.01	-0.10
Evangeline Parish (Partial), LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Fairbanks, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.00	-0.02
Fairbanks, AK	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	-0.04
Flathead County; Columbia Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Flathead County; Kalispell and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.02
Flathead County; Whitefish and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Fort Collins, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.01	-0.09
Freehold, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.01
Freestone and Anderson Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.02
Fremont County; Canon City Area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.03
Fresno, CA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.02	-0.03	-0.31
Gila County (part): Payson, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Giles County, VA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Grant County, NM	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.02
Grants Pass, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.02
Great Falls, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Greater Connecticut, CT	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-0.06	-0.06	-0.75
Greater Connecticut, CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.06	-0.06	-0.75
Greeley, CO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.02	-0.27
Hancock County (part): Weirton, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	-0.01
Hancock and Brooke Counties (Part); The city of Weirton, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Harrisburg-Lebanon-Carlisle-York, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.04	-0.05	-0.54
Hartford-New Britain-Middletown, CT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.04	-0.04	-0.52
Hayden (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	-0.01
Hayden, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01
Hayden, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.01
Henderson-Webster Counties, KY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.01
Hillsborough County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.01
Hillsborough-Polk County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00
Houston-Galveston-Brazoria, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.32	-0.35	-4.17

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Houston-Galveston-Brazoria, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.32	-0.34	-4.06
Howard County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.02
Humphreys County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	-0.02
Huntington, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.02
Hutchinson County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.03
Imperial County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.01	-0.11
Imperial County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.01	-0.11
Imperial County, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.01	-0.09
Imperial County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	-0.01	-0.01	-0.09
Imperial Valley, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.01	-0.01	-0.11
Indian Wells, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.03
Indiana, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.01	-0.07
Indianapolis, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Indianapolis, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.02	-0.02	-0.29
Inland Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.03
Inyo County; Owens Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00
Jackson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.04
Jackson County; Medford-Ashland (including White City), OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.08
Jamestown, NY	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.01	-0.01	-0.08
Jefferson County, KY	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00
Jefferson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.03
Jefferson County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Jefferson County; (part) Steubenville & Mingo Junction, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.02
Johnstown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.08
Josephine County; Grants Pass, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.02
Juneau; Mendenhall Valley area, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Kern County (Eastern Kern), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	-0.05
Kern County (Eastern Kern), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	-0.05
King County; Kent, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
King County; Seattle, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Klamath Falls, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.02
Klamath Falls, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.02
Klamath Falls, OR	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.02
Knoxville, TN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.03	-0.03	-0.40
Knoxville-Sevierville-La Follette, TN	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.04	-0.04	-0.49

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
La Porte County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.03
LaSalle County; Oglesby, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.02
Lake County (part); Lakeview, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Lake County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.02	-0.02	-0.22
Lake County, OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.01	-0.11
Lake County; (part) Eastlake, Timberlake, Lakeline, Willoughby, Mentor, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.02
Lake County; Cities of East Chicago, Hammond, Whiting, and Gary, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.14
Lake County; Polson, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Lake County; Ronan, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Lake Tahoe North Shore, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.01
Lake Tahoe South Shore, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.02
Lake Tahoe, NV	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.01
Lancaster, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.02	-0.02	-0.24
Lancaster, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.02	-0.24
Lane County (part); Oakridge, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Lane County; Eugene/Springfield, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.10
Las Vegas, NV	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.09	-0.09	-1.11
Las Vegas, NV	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.09	-0.09	-1.11
Laurel Area (Yellowstone County), MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	0.00
Lebanon County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	-0.01	-0.06
Lemont, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.01	-0.08
Liberty-Clairton, PA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01
Lincoln County; Libby and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Logan, UT-ID	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.07
Longmont, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.01	-0.08
Lorain County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.03
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.03	-0.03	-0.40
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-0.03	-0.03	-0.40
Los Angeles-South Coast Air Basin, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-0.63	-0.67	-8.07
Los Angeles-South Coast Air Basin, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-0.63	-0.67	-8.06
Los Angeles-South Coast Air Basin, CA	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.63	-0.67	-8.07

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Los Angeles-South Coast Air Basin, CA	NO2 (1971 Annual)	Maintenance, Primary	100	0	-0.63	-0.67	-8.07
Los Angeles-South Coast Air Basin, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.63	-0.67	-8.07
Los Angeles-South Coast Air Basin, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-0.63	-0.67	-8.07
Louisville, KY-IN (IN Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.01	-0.01	-0.12
Louisville, KY-IN (KY Portion)	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.04	-0.04	-0.49
Lowell, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.05
Lucas County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.01	-0.15
Madison County; Granite City Township and Nameoki Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.03
Manchester, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.05
Manitowoc County, WI	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	-0.03
Marathon County: Rothschild Sub-city area, Rib Mountain, Weston, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.01	-0.01	-0.08
Maricopa and Pinal Counties; Phoenix planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.18	-0.19	-2.31
Marion County: Lawrence, Washington, and Warrant Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.02	-0.02	-0.24
Mariposa County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01
Mariposa County, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01
Marshall, WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.02
Medford, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.05
Memphis, TN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.05	-0.05	-0.58
Memphis, TN-MS-AR	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.06	-0.06	-0.74
Miami (Gila County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.01
Miami, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01
Miami, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.01
Millinocket AQCR 109, ME	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.01	-0.09
Milwaukee, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.05	-0.06	-0.69
Milwaukee, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.02	-0.03	-0.31
Milwaukee-Racine, WI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.05	-0.05	-0.61
Minneapolis-St. Paul, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.13	-0.14	-1.68
Minneapolis-St. Paul, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.13	-0.14	-1.63
Missoula, MT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.04
Missoula, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.04

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Modesto, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.01	-0.14
Mohave County (part); Bullhead City, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.03
Mono Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Mono County; Mammoth Lake planning area, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Morenci (Greenlee County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Morgan County, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.02
Morongo Band of Mission Indians, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	0.00
Morongo Band of Mission Indians, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00
Morristown, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.01
Muscatine County, IA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.01
Muscatine, IA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.01
Muskegon County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.01	-0.07
Muskingum River, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Nashua, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.04
Nassau County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00
Navarro County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.02
Nevada County (Western part), CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	-0.04
Nevada County (Western part), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	-0.04
New Haven County, CT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
New Haven-Meriden-Waterbury, CT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.03	-0.03	-0.40
New Madrid County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
New Manchester-Grant magisterial district in Hancock County, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
New York County, NY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.01	-0.17
New York-N. New Jersey-Long Island, NY-NJ-CT	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.50	-0.53	-6.38
New York-N. New Jersey-Long Island, NY-NJ-CT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.28	-0.29	-3.53
New York-N. New Jersey-Long Island, NY-NJ-CT	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.51	-0.54	-6.53
New York-Northern New Jersey-Long Island, NY-NJ-CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.50	-0.53	-6.39
Nogales, AZ	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Northern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.07	-0.08	-0.92
Oakridge, OR	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Ogden, UT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.04
Ogden, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.04
Olmsted County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.02
Olmsted County; City of Rochester, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.06

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Oneida County: Rhinelander Sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	-0.02
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Pekin, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.02
Penns Grove, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Peoria County: Hollis twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00
Peoria, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.05
Perth Amboy, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.03
Philadelphia-Camden County, PA-NJ	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.04	-0.04	-0.50
Philadelphia-Wilmington, PA-NJ-DE (NJ Portion)	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.05	-0.05	-0.59
Philadelphia-Wilmington, PA-NJ-DE (PA-DE Portion)	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.13	-0.14	-1.68
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.24	-0.26	-3.08
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.24	-0.26	-3.08
Phoenix, AZ	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.18	-0.19	-2.26
Phoenix-Mesa, AZ	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-0.18	-0.19	-2.32
Phoenix-Mesa, AZ	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.18	-0.20	-2.35
Pierce County; Tacoma, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Pima County; Ajo planning area, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Pima County; Rillito planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.02
Pinal County (part); West Pinal, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.01	-0.01	-0.11
Pitkin County; Aspen, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.03
Pittsburgh, PA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.01	-0.12
Pittsburgh-Beaver Valley, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.08	-0.09	-1.06
Pittsburgh-Beaver Valley, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.07	-0.08	-0.96
Plumas County, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	0.00	0.00	0.00
Polk County, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	-0.01
Portland, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.05	-0.05	-0.65
Power-Bannock Counties; Fort Hall Indian Reservation, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Power-Bannock Counties; Portneuf Valley Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.03
Provo, UT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.01	-0.01	-0.08
Provo, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.02	-0.02	-0.30

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Prowers County; Lamar, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Raleigh-Durham, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.07	-0.08	-0.93
Ramsey County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Reading, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.01	-0.02	-0.18
Reno, NV	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.01	-0.12
Rhinelander, WI	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.01
Riverside County (Coachella Valley), CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-0.02	-0.02	-0.27
Riverside County (Coachella Valley), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-0.02	-0.02	-0.27
Riverside County; Coachella Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.02	-0.03	-0.31
Riverside, Los Angeles, Orange, & San Bernardino Counties; South Coast Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.63	-0.67	-8.03
Rosebud County; Lame Deer, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Routt County (part); Steamboat Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.03
Rusk and Panola Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.05
Sacramento County, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.05	-0.06	-0.70
Sacramento Metro, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.09	-0.10	-1.20
Sacramento Metro, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.09	-0.10	-1.20
Sacramento, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.06	-0.07	-0.79
Sacramento, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.09	-0.10	-1.17
Salem, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.01	-0.12
Salt Lake City, UT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.01	-0.13
Salt Lake City, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.08	-0.08	-0.96
Salt Lake County, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.05	-0.05	-0.59
Salt Lake County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	-0.05	-0.05	-0.59
San Antonio, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.08	-0.09	-1.03
San Bernardino County, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.02	-0.02	-0.29
San Diego County, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.14	-0.14	-1.74
San Diego County, CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-0.14	-0.14	-1.74
San Diego, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.14	-0.14	-1.74
San Francisco Bay Area, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.28	-0.30	-3.55
San Francisco Bay Area, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.28	-0.30	-3.55
San Francisco Bay Area, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.28	-0.30	-3.56

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
San Francisco-Oakland-San Jose, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.26	-0.28	-3.35
San Joaquin Valley Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.16	-0.17	-2.10
San Joaquin Valley, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-0.16	-0.17	-2.10
San Joaquin Valley, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-0.16	-0.17	-2.10
San Joaquin Valley, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.16	-0.17	-2.10
San Joaquin Valley, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-0.16	-0.17	-2.10
San Luis Obispo (Eastern San Luis Obispo), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	-0.02
San Luis Obispo (Eastern part), CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	-0.02
San Manuel (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.01
San Miguel County; Telluride, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Sanders County (part); Thompson Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Santa Cruz County; Nogales planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01
Seaford, DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.01	-0.01	-0.14
Seattle-Tacoma, WA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.12	-0.13	-1.51
Sheboygan County, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.03
Sheridan County; City of Sheridan, WY	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Shoreline Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.03
Shoshone County; City of Pinehurst, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Shoshone County; Pinehurst Expansion Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Silver Bow County; Butte, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.02
Somerville, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.01
Southern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.02	-0.02	-0.30
Southwest Indiana, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.01
Spokane County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.17
Spokane, WA	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.01	-0.01	-0.17
Springfield, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.01	-0.07
St. Bernard Parish, LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.04
St. Clair, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.03
St. Lawrence County, NY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
St. Louis, MO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.04	-0.04	-0.47
St. Louis, MO-IL	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.11	-0.12	-1.46
St. Louis-St. Charles-Farmington, MO-IL	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.12	-0.13	-1.52
Steubenville, OH-WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.03
Steubenville-Weirton, OH-WV	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.01	-0.01	-0.07

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Stockton, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.02	-0.19
Sullivan County, TN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.01
Sutter Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00
Syracuse, NY	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.02	-0.25
Tacoma, WA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.02	-0.26
Tazewell County: Groveland twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.01
Terre Haute, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.03
Thurston County; Cities of Olympia, Tumwater, and Lacey, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.05
Titus County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Toms River, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Tooele County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	0.00	0.00	0.00
Trenton, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.04
Trona, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01
Tucson, AZ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.03	-0.03	-0.38
Tuolumne County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	-0.03
Tuscan Buttes, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00
Tuscan Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal (Rural Transport)	100	0	0.00	0.00	0.00
Uinta Basin, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	-0.03
Union County; LaGrande, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Upper Green River Basin Area, WY	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	-0.02
Utah County, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.03	-0.30
Vancouver, WA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.01	-0.16
Ventura County, CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-0.03	-0.03	-0.40
Ventura County, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.03	-0.03	-0.40
Vermillion County; Part of Clinton Township, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Vigo County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.01	-0.07
Walla Walla County; Wallula, WA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00
Waltham, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.03
Warren County, NJ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	-0.01
Warren County: Conewago Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.01
Warren County: Warren Boro, Pleasant Twp, Glade Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	-0.01
Warren, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.02

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Washington, DC-MD-VA	Ozone (2008 8-hour)	Nonattainment (DC) Maintenance (MD, VA), Marginal	50	0	-0.21	-0.23	-2.71
Washington, DC-MD-VA	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.21	-0.23	-2.71
Washington, DC-MD-VA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.03	-0.03	-0.35
Washoe County; Reno planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.01	-0.01	-0.12
Wayne County, MI	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.03
Wayne County: Boston, Center, Franklin, Wayne & Webster Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.03
West Central Pinal, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01
West Silver Valley, ID	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Whatcom County, WA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Winston-Salem, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.02	-0.25
Worcester, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.01	-0.11
Yakima County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.05
Yakima, WA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.02
Yuba City-Marysville, CA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.09
Yuma, AZ	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	-0.06
Yuma, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.01	-0.09

Notes:

^a Nonattainment or maintenance status as of 2/1/2024. Source: EPA, The Green Book Nonattainment Areas for Criteria Pollutants; <http://www.epa.gov/airquality/greenbook/>. “--” indicates that no severity classification has been established for the NAAQS pollutant.

^b Emissions thresholds in tons per year. Where the threshold differs by precursor pollutant, the smallest of the precursor thresholds is shown. These thresholds are provided for information only; a general conformity determination is not required for the Proposed Action. Source: 40 CFR 93.853.

^c Positive values are emissions increases; negative values are emissions decreases.

EPA = U.S. Environmental Protection Agency; NAAQS = National Ambient Air Quality Standard; CO = carbon monoxide; NO₂ = nitrogen dioxide; PM2.5 = particulate matter less than 2.5 microns in size; PM10 = particulate matter less than 10 microns in size; SO₂ = sulfur dioxide.

Table D-56. Changes in Emissions from U.S. Combined Passenger Cars, Light Trucks, and HDPUVs by Nonattainment or Maintenance Area and Alternative, Direct and Indirect Impacts--Acetaldehyde, 2050

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Ada County; Boise, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.03	-0.31
Adams, Denver, and Boulder Counties; Denver Metropolitan area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.07	-0.12	-1.45
Ajo (Pima County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Albuquerque, NM	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.04	-0.06	-0.70
Allegan County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.06
Allegheny County Air Basin: Hazelwood monitor, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.06
Allegheny County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	-0.04	-0.06	-0.73
Allegheny County; Liberty, Lincoln, Port Vue, Glassport, Clairton, PA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Allegheny, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	-0.09
Allentown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.04	-0.45
Allentown-Bethlehem-Easton, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.03	-0.04	-0.51
Alton Township, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Amador County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	-0.03
Anchorage, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.01	-0.01	-0.11
Anchorage; Eagle River, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Anne Arundel County and Baltimore County, MD	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.05	-0.08	-0.97
Archuleta County; Pagosa Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.02
Armstrong County; Madison, Mahoning, Boggs, Washington, Pine, PA	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	-0.02
Aroostock County; City of Presque Isle, ME	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Atlanta, GA	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-0.24	-0.41	-4.79
Atlanta, GA	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.19	-0.31	-3.71
Atlantic City, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.03
Bakersfield, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.03	-0.41
Baltimore, MD	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	-0.12	-0.20	-2.35
Baltimore, MD	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.12	-0.20	-2.36
Baltimore, MD	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.01
Baton Rouge, LA	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.04	-0.07	-0.79
Beaver, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.01
Benton County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	-0.02
Berrien County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.02	-0.18

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Billings, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.07
Billings, MT	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00
Birmingham, AL	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.06	-0.09	-1.09
Boise-Northern Ada County, ID	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.03	-0.31
Bonner County; The Sandpoint Area, ID	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Boston, MA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.03	-0.05	-0.59
Boyd County (part), KY	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.01
Brooke; Follansbee area, WV	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Brown County: Green Bay, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.01
Burlington, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.01
Butte County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.01	-0.14
Calaveras County, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	-0.03
Calaveras County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	-0.03
Campbell-Clermont Counties, KY-OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.02
Canton-Massillon, OH	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.01	-0.02	-0.27
Central New Hampshire, NH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.01	-0.15
Central Steptoe Valley, NV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.01
Charleston, WV	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.01	-0.02	-0.28
Charlotte, NC	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.06	-0.10	-1.22
Charlotte-Rock Hill, NC-SC	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.11	-0.19	-2.25
Chicago, IL-IN-WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.29	-0.48	-5.70
Chicago-Naperville, IL-IN-WI	Ozone (2008 8-hour)	Maintenance, Serious	100	0	-0.29	-0.49	-5.78
Chico (Butte County), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.01	-0.14
Chico, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.06
Chico, CA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.14
Cincinnati, OH-KY (OH Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.07	-0.11	-1.35
Cincinnati, OH-KY (KY Portion)	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	-0.02	-0.03	-0.33
Cincinnati, OH-KY-IN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.09	-0.15	-1.75
Clark County; Las Vegas planning area, NV	PM ₁₀ (1987 24-hour)	Maintenance, Serious	100	0	-0.09	-0.15	-1.76
Cleveland, OH	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.10	-0.16	-1.93
Cleveland, OH	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.04	-0.06	-0.71
Cleveland, OH	PM _{2.5} (2012 Annual)	Maintenance, Moderate	100	0	-0.05	-0.08	-0.93

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Cleveland-Akron-Lorain, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.10	-0.17	-2.02
Cleveland-Akron-Lorain, OH	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.09	-0.16	-1.86
Cochise County; Paul Spur/Douglas planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01
Colorado Springs, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.04	-0.47
Columbus, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.08	-0.13	-1.51
Columbus, OH	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.07	-0.12	-1.40
Cook County; Lyons Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.06
Cook County; Southeast Chicago, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.07
Coshocton County; Franklin Township, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Coso Junction, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Cuyahoga County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.04	-0.06	-0.71
Cuyahoga County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.03	-0.05	-0.58
Dallas-Fort Worth, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.34	-0.57	-6.73
Dallas-Fort Worth, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.33	-0.56	-6.63
Dane County; Madison sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.02	-0.03	-0.41
Delaware County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-0.02	-0.03	-0.30
Denver Metro/North Front Range, CO	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.17	-0.28	-3.28
Denver-Boulder, CO	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.13	-0.21	-2.52
Denver-Boulder-Greeley-Ft. Collins-Loveland, CO	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.16	-0.28	-3.28
Detroit, MI	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	-0.20	-0.33	-3.87
Detroit, MI	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.07	-0.12	-1.43
Detroit, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.01	-0.17
Detroit-Ann Arbor, MI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.20	-0.33	-3.88
Doña Ana County; Anthony, NM	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.02
Door County, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	0.00	0.00
Door County-Revised, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	0.00	-0.02
Douglas (Cochise County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.01
Dukes County, MA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	-0.01
Duluth, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.09
East Chicago, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.02
East Helena Area, MT	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00
East Kern County, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	-0.02

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
El Paso County, TX	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.03	-0.04	-0.50
El Paso, TX	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.05
El Paso-Las Cruces, TX-NM	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.03	-0.06	-0.67
Eugene-Springfield, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.01	-0.17
Evangeline Parish (Partial), LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Fairbanks, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.00	-0.04
Fairbanks, AK	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	0.00	-0.01	-0.08
Flathead County; Columbia Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Flathead County; Kalispell and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.03
Flathead County; Whitefish and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Fort Collins, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.01	-0.14
Freehold, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.01
Freestone and Anderson Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.03
Fremont County; Canon City Area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.04
Fresno, CA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.03	-0.04	-0.50
Gila County (part): Payson, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Giles County, VA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Grant County, NM	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.03
Grants Pass, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.03
Great Falls, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Greater Connecticut, CT	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-0.06	-0.10	-1.17
Greater Connecticut, CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.06	-0.10	-1.18
Greeley, CO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.03	-0.41
Hancock County (part): Weirton, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	-0.01
Hancock and Brooke Counties (Part); The city of Weirton, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Harrisburg-Lebanon-Carlisle-York, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.04	-0.07	-0.86
Hartford-New Britain-Middletown, CT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.04	-0.07	-0.82
Hayden (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	-0.01
Hayden, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01
Hayden, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.01
Henderson-Webster Counties, KY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.01
Hillsborough County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.01
Hillsborough-Polk County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00
Houston-Galveston-Brazoria, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.32	-0.54	-6.46

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Houston-Galveston-Brazoria, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.31	-0.53	-6.28
Howard County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.03
Humphreys County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	-0.03
Huntington, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.03
Hutchinson County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.04
Imperial County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.02	-0.18
Imperial County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.02	-0.18
Imperial County, CA	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.01	-0.15
Imperial County, CA	PM _{2.5} (2012 Annual)	Nonattainment, Moderate	100	0	-0.01	-0.01	-0.15
Imperial Valley, CA	PM ₁₀ (1987 24-hour)	Maintenance, Serious	100	0	-0.01	-0.01	-0.17
Indian Wells, CA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.04
Indiana, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	-0.10
Indianapolis, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Indianapolis, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.02	-0.04	-0.46
Inland Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.05
Inyo County; Owens Valley planning area, CA	PM ₁₀ (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00
Jackson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.06
Jackson County; Medford-Ashland (including White City), OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.13
Jamestown, NY	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.01	-0.01	-0.13
Jefferson County, KY	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00
Jefferson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.05
Jefferson County, OH	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Jefferson County; (part) Steubenville & Mingo Junction, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.04
Johnstown, PA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.11
Josephine County; Grants Pass, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.03
Juneau; Mendenhall Valley area, AK	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Kern County (Eastern Kern), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	-0.01	-0.07
Kern County (Eastern Kern), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	-0.01	-0.07
King County; Kent, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
King County; Seattle, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Klamath Falls, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.04
Klamath Falls, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.04
Klamath Falls, OR	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.05
Knoxville, TN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.03	-0.05	-0.63
Knoxville-Sevierville-La Follette, TN	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	-0.04	-0.07	-0.77

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
La Porte County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.05
LaSalle County; Oglesby, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.03
Lake County (part); Lakeview, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Lake County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.02	-0.03	-0.34
Lake County, OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.01	-0.18
Lake County; (part) Eastlake, Timberlake, Lakeline, Willoughby, Mentor, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.03
Lake County; Cities of East Chicago, Hammond, Whiting, and Gary, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.22
Lake County; Polson, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Lake County; Ronan, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Lake Tahoe North Shore, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.01
Lake Tahoe South Shore, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.03
Lake Tahoe, NV	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.02
Lancaster, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.02	-0.03	-0.38
Lancaster, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.03	-0.38
Lane County (part); Oakridge, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Lane County; Eugene/Springfield, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.17
Las Vegas, NV	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.09	-0.15	-1.76
Las Vegas, NV	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.09	-0.15	-1.77
Laurel Area (Yellowstone County), MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	0.00
Lebanon County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.10
Lemont, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.01	-0.12
Liberty-Clairton, PA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01
Lincoln County; Libby and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Logan, UT-ID	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.11
Longmont, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.01	-0.12
Lorain County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.04
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.03	-0.05	-0.61
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-0.03	-0.05	-0.61
Los Angeles-South Coast Air Basin, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-0.64	-1.08	-12.72
Los Angeles-South Coast Air Basin, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-0.64	-1.08	-12.71
Los Angeles-South Coast Air Basin, CA	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.64	-1.08	-12.72

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Los Angeles-South Coast Air Basin, CA	NO2 (1971 Annual)	Maintenance, Primary	100	0	-0.64	-1.08	-12.72
Los Angeles-South Coast Air Basin, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.64	-1.08	-12.72
Los Angeles-South Coast Air Basin, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-0.64	-1.08	-12.72
Louisville, KY-IN (IN Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.01	-0.02	-0.18
Louisville, KY-IN (KY Portion)	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.04	-0.07	-0.77
Lowell, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.08
Lucas County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.02	-0.24
Madison County; Granite City Township and Nameoki Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.04
Manchester, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.08
Manitowoc County, WI	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	-0.05
Marathon County: Rothschild Sub-city area, Rib Mountain, Weston, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.01	-0.01	-0.13
Maricopa and Pinal Counties; Phoenix planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.18	-0.31	-3.65
Marion County: Lawrence, Washington, and Warrant Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.02	-0.03	-0.38
Mariposa County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01
Mariposa County, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01
Marshall, WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.03
Medford, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.08
Memphis, TN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.05	-0.08	-0.91
Memphis, TN-MS-AR	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.06	-0.10	-1.16
Miami (Gila County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.01
Miami, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01
Miami, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.01
Millinocket AQCR 109, ME	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.01	-0.15
Milwaukee, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.05	-0.09	-1.08
Milwaukee, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.02	-0.04	-0.49
Milwaukee-Racine, WI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.05	-0.08	-0.96
Minneapolis-St. Paul, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.13	-0.22	-2.64
Minneapolis-St. Paul, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.13	-0.22	-2.56
Missoula, MT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.07
Missoula, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.07

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Modesto, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.02	-0.23
Mohave County (part); Bullhead City, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.06
Mono Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Mono County; Mammoth Lake planning area, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.02
Morenci (Greenlee County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Morgan County, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.02
Morongo Band of Mission Indians, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	0.00
Morongo Band of Mission Indians, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00
Morristown, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.02
Muscatine County, IA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.01
Muscatine, IA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.02
Muskegon County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.01	-0.12
Muskingum River, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Nashua, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.07
Nassau County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.01
Navarro County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.03
Nevada County (Western part), CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.00	-0.01	-0.07
Nevada County (Western part), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	-0.01	-0.07
New Haven County, CT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.02
New Haven-Meriden-Waterbury, CT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.03	-0.05	-0.63
New Madrid County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
New Manchester-Grant magisterial district in Hancock County, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.01
New York County, NY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.02	-0.26
New York-N. New Jersey-Long Island, NY-NJ-CT	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.51	-0.85	-10.02
New York-N. New Jersey-Long Island, NY-NJ-CT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.28	-0.47	-5.54
New York-N. New Jersey-Long Island, NY-NJ-CT	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.52	-0.87	-10.25
New York-Northern New Jersey-Long Island, NY-NJ-CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.51	-0.85	-10.03
Nogales, AZ	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.02
Northern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.07	-0.12	-1.45
Oakridge, OR	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Ogden, UT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.06
Ogden, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.06
Olmsted County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.03
Olmsted County; City of Rochester, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.09

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Oneida County: Rhinelander Sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	-0.04
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Pekin, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.04
Penns Grove, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Peoria County: Hollis twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00
Peoria, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.08
Perth Amboy, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.04
Philadelphia-Camden County, PA-NJ	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.04	-0.07	-0.78
Philadelphia-Wilmington, PA-NJ-DE (NJ Portion)	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.05	-0.08	-0.93
Philadelphia-Wilmington, PA-NJ-DE (PA-DE Portion)	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.13	-0.22	-2.64
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.24	-0.41	-4.84
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.24	-0.41	-4.84
Phoenix, AZ	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.18	-0.30	-3.56
Phoenix-Mesa, AZ	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-0.18	-0.31	-3.66
Phoenix-Mesa, AZ	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.19	-0.31	-3.70
Pierce County; Tacoma, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Pima County; Ajo planning area, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Pima County; Rillito planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.03
Pinal County (part); West Pinal, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.01	-0.02	-0.18
Pitkin County; Aspen, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.04
Pittsburgh, PA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.02	-0.19
Pittsburgh-Beaver Valley, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.08	-0.14	-1.64
Pittsburgh-Beaver Valley, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.07	-0.13	-1.49
Plumas County, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	0.00	0.00	0.00
Polk County, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	-0.02
Portland, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.05	-0.09	-1.03
Power-Bannock Counties; Fort Hall Indian Reservation, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Power-Bannock Counties; Portneuf Valley Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.06
Provo, UT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.01	-0.01	-0.13
Provo, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.02	-0.04	-0.47

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Prowers County; Lamar, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Raleigh-Durham, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.07	-0.12	-1.46
Ramsey County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Reading, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.01	-0.02	-0.29
Reno, NV	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.02	-0.20
Rhineland, WI	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.02
Riverside County (Coachella Valley), CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-0.02	-0.04	-0.42
Riverside County (Coachella Valley), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-0.02	-0.04	-0.42
Riverside County; Coachella Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.02	-0.04	-0.48
Riverside, Los Angeles, Orange, & San Bernardino Counties; South Coast Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.64	-1.07	-12.66
Rosebud County; Lame Deer, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Routt County (part); Steamboat Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.05
Rusk and Panola Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.06
Sacramento County, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.06	-0.09	-1.10
Sacramento Metro, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.09	-0.16	-1.88
Sacramento Metro, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.09	-0.16	-1.88
Sacramento, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.06	-0.11	-1.25
Sacramento, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.09	-0.16	-1.83
Salem, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.02	-0.20
Salt Lake City, UT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.02	-0.20
Salt Lake City, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.08	-0.13	-1.54
Salt Lake County, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.05	-0.08	-0.93
Salt Lake County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	-0.05	-0.08	-0.93
San Antonio, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.08	-0.14	-1.62
San Bernardino County, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.02	-0.03	-0.41
San Diego County, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.14	-0.23	-2.74
San Diego County, CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-0.14	-0.23	-2.73
San Diego, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.14	-0.23	-2.73
San Francisco Bay Area, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.28	-0.47	-5.58
San Francisco Bay Area, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.28	-0.47	-5.57
San Francisco Bay Area, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.28	-0.47	-5.59

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
San Francisco-Oakland-San Jose, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.27	-0.45	-5.27
San Joaquin Valley Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.17	-0.28	-3.30
San Joaquin Valley, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-0.17	-0.28	-3.30
San Joaquin Valley, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-0.17	-0.28	-3.30
San Joaquin Valley, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.17	-0.28	-3.30
San Joaquin Valley, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-0.17	-0.28	-3.30
San Luis Obispo (Eastern San Luis Obispo), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	-0.02
San Luis Obispo (Eastern part), CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	-0.02
San Manuel (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.01
San Miguel County; Telluride, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Sanders County (part); Thompson Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Santa Cruz County; Nogales planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.02
Seaford, DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.01	-0.02	-0.23
Seattle-Tacoma, WA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.12	-0.20	-2.39
Sheboygan County, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.06
Sheridan County; City of Sheridan, WY	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.02
Shoreline Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.05
Shoshone County; City of Pinehurst, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Shoshone County; Pinehurst Expansion Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.02
Silver Bow County; Butte, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.03
Somerville, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.01
Southern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.02	-0.04	-0.47
Southwest Indiana, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.01
Spokane County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.27
Spokane, WA	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.01	-0.02	-0.27
Springfield, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.01	-0.11
St. Bernard Parish, LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.06
St. Clair, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.05
St. Lawrence County, NY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.01
St. Louis, MO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.04	-0.06	-0.74
St. Louis, MO-IL	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.12	-0.19	-2.29
St. Louis-St. Charles-Farmington, MO-IL	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.12	-0.20	-2.39
Steubenville, OH-WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.05
Steubenville-Weirton, OH-WV	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	-0.01	-0.10

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Stockton, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.03	-0.30
Sullivan County, TN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.02
Sutter Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00
Syracuse, NY	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.03	-0.39
Tacoma, WA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.04	-0.42
Tazewell County: Groveland twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.02
Terre Haute, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.05
Thurston County; Cities of Olympia, Tumwater, and Lacey, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.09
Titus County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Toms River, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Tooele County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	0.00	0.00	0.00
Trenton, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.07
Trona, CA	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01
Tucson, AZ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.03	-0.05	-0.61
Tuolumne County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	-0.04
Tuscan Buttes, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00
Tuscan Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal (Rural Transport)	100	0	0.00	0.00	0.00
Uinta Basin, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	-0.05
Union County; LaGrande, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Upper Green River Basin Area, WY	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	-0.03
Utah County, UT	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.04	-0.47
Vancouver, WA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.02	-0.25
Ventura County, CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-0.03	-0.05	-0.63
Ventura County, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.03	-0.05	-0.63
Vermillion County; Part of Clinton Township, IN	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Vigo County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.01	-0.11
Walla Walla County; Wallula, WA	PM ₁₀ (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00
Waltham, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.04
Warren County, NJ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	-0.02
Warren County: Conewago Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.01
Warren County: Warren Boro, Pleasant Twp, Glade Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	-0.02
Warren, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.02

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Washington, DC-MD-VA	Ozone (2008 8-hour)	Nonattainment (DC) Maintenance (MD, VA), Marginal	50	0	-0.22	-0.36	-4.26
Washington, DC-MD-VA	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.22	-0.36	-4.26
Washington, DC-MD-VA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.03	-0.05	-0.54
Washoe County; Reno planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.01	-0.02	-0.20
Wayne County, MI	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.05
Wayne County: Boston, Center, Franklin, Wayne & Webster Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.05
West Central Pinal, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01
West Silver Valley, ID	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Whatcom County, WA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Winston-Salem, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.03	-0.39
Worcester, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.01	-0.17
Yakima County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.08
Yakima, WA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.03
Yuba City-Marysville, CA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.14
Yuma, AZ	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.01	-0.09
Yuma, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.01	-0.15

Notes:

^a Nonattainment or maintenance status as of 2/1/2024. Source: EPA, The Green Book Nonattainment Areas for Criteria Pollutants; <http://www.epa.gov/airquality/greenbook/>. "--" indicates that no severity classification has been established for the NAAQS pollutant.

^b Emissions thresholds in tons per year. Where the threshold differs by precursor pollutant, the smallest of the precursor thresholds is shown. These thresholds are provided for information only; a general conformity determination is not required for the Proposed Action. Source: 40 CFR 93.853.

^c Positive values are emissions increases; negative values are emissions decreases.

EPA = U.S. Environmental Protection Agency; NAAQS = National Ambient Air Quality Standard; CO = carbon monoxide; NO₂ = nitrogen dioxide; PM2.5 = particulate matter less than 2.5 microns in size; PM10 = particulate matter less than 10 microns in size; SO₂ = sulfur dioxide.

Table D-57. Changes in Emissions from U.S. Combined Passenger Cars, Light Trucks, and HDPUVs by Nonattainment or Maintenance Area and Alternative, Direct and Indirect Impacts--Acrolein, 2035

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Ada County; Boise, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Adams, Denver, and Boulder Counties; Denver Metropolitan area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.06
Ajo (Pima County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Albuquerque, NM	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.03
Allegan County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Allegheny County Air Basin: Hazelwood monitor, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Allegheny County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.00	0.00	-0.03
Allegheny County; Liberty, Lincoln, Port Vue, Glassport, Clairton, PA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Allegheny, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Allentown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.02
Allentown-Bethlehem-Easton, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	-0.02
Alton Township, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Amador County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00
Anchorage, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00
Anchorage; Eagle River, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Anne Arundel County and Baltimore County, MD	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.04
Archuleta County; Pagosa Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Armstrong County; Madison, Mahoning, Boggs, Washington, Pine, PA	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	0.00
Aroostock County; City of Presque Isle, ME	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Atlanta, GA	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-0.02	-0.02	-0.19
Atlanta, GA	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.01	-0.01	-0.15
Atlantic City, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Bakersfield, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.02
Baltimore, MD	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	-0.01	-0.01	-0.09
Baltimore, MD	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.01	-0.01	-0.09
Baltimore, MD	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00
Baton Rouge, LA	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	-0.03
Beaver, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Benton County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00
Berrien County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Billings, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Billings, MT	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00
Birmingham, AL	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	0.00	-0.04
Boise-Northern Ada County, ID	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.01
Bonner County; The Sandpoint Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Boston, MA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.02
Boyd County (part), KY	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Brooke; Follansbee area, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Brown County: Green Bay, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Burlington, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Butte County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	-0.01
Calaveras County, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00
Calaveras County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00
Campbell-Clermont Counties, KY-OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00
Canton-Massillon, OH	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	0.00	-0.01
Central New Hampshire, NH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.01
Central Steptoe Valley, NV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Charleston, WV	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	0.00	-0.02
Charlotte, NC	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.05
Charlotte-Rock Hill, NC-SC	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.01	-0.01	-0.09
Chicago, IL-IN-WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.02	-0.02	-0.22
Chicago-Naperville, IL-IN-WI	Ozone (2008 8-hour)	Maintenance, Serious	100	0	-0.02	-0.02	-0.23
Chico (Butte County), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	-0.01
Chico, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00
Chico, CA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Cincinnati, OH-KY (OH Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	-0.05
Cincinnati, OH-KY (KY Portion)	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Cincinnati, OH-KY-IN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.01	-0.01	-0.07
Clark County; Las Vegas planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.01	-0.01	-0.07
Cleveland, OH	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.01	-0.08
Cleveland, OH	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.03
Cleveland, OH	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	0.00	-0.04

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Cleveland-Akron-Lorain, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.01	-0.01	-0.08
Cleveland-Akron-Lorain, OH	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.01	-0.01	-0.07
Cochise County; Paul Spur/Douglas planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Colorado Springs, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.02
Columbus, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	-0.01	-0.06
Columbus, OH	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	-0.06
Cook County; Lyons Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Cook County; Southeast Chicago, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Coshocton County; Franklin Township, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Coso Junction, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Cuyahoga County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.03
Cuyahoga County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.02
Dallas-Fort Worth, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.02	-0.02	-0.30
Dallas-Fort Worth, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.02	-0.02	-0.29
Dane County; Madison sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.02
Delaware County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Denver Metro/North Front Range, CO	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.01	-0.13
Denver-Boulder, CO	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.01	-0.01	-0.10
Denver-Boulder-Greeley-Ft. Collins-Loveland, CO	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.01	-0.01	-0.13
Detroit, MI	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.15
Detroit, MI	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.06
Detroit, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.01
Detroit-Ann Arbor, MI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.01	-0.01	-0.15
Doña Ana County; Anthony, NM	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Door County, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	0.00	0.00
Door County-Revised, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	0.00	0.00
Douglas (Cochise County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Dukes County, MA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00
Duluth, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00
East Chicago, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
East Helena Area, MT	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00
East Kern County, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
El Paso County, TX	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.02
El Paso, TX	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00
El Paso-Las Cruces, TX-NM	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	-0.03
Eugene-Springfield, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.01
Evangeline Parish (Partial), LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Fairbanks, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00
Fairbanks, AK	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00
Flathead County; Columbia Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Flathead County; Kalispell and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Flathead County; Whitefish and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Fort Collins, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.01
Freehold, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Freestone and Anderson Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Fremont County; Canon City Area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Fresno, CA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.00	0.00	-0.02
Gila County (part): Payson, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Giles County, VA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Grant County, NM	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Grants Pass, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00
Great Falls, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Greater Connecticut, CT	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	-0.05
Greater Connecticut, CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	0.00	0.00	-0.05
Greeley, CO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.01
Hancock County (part): Weirton, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00
Hancock and Brooke Counties (Part); The city of Weirton, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Harrisburg-Lebanon-Carlisle-York, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.03
Hartford-New Britain-Middletown, CT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.03
Hayden (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	0.00
Hayden, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Hayden, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Henderson-Webster Counties, KY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Hillsborough County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00
Hillsborough-Polk County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00
Houston-Galveston-Brazoria, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.02	-0.02	-0.26

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Houston-Galveston-Brazoria, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.02	-0.02	-0.25
Howard County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Humphreys County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00
Huntington, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Hutchinson County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Imperial County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01
Imperial County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	-0.01
Imperial County, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01
Imperial County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01
Imperial Valley, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	-0.01
Indian Wells, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Indiana, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.01
Indianapolis, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Indianapolis, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.02
Inland Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Inyo County; Owens Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00
Jackson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00
Jackson County; Medford-Ashland (including White City), OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Jamestown, NY	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	-0.01
Jefferson County, KY	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00
Jefferson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00
Jefferson County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Jefferson County; (part) Steubenville & Mingo Junction, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Johnstown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Josephine County; Grants Pass, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Juneau; Mendenhall Valley area, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Kern County (Eastern Kern), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	0.00
Kern County (Eastern Kern), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00
King County; Kent, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
King County; Seattle, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Klamath Falls, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00
Klamath Falls, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Klamath Falls, OR	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Knoxville, TN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	-0.02
Knoxville-Sevierville-La Follette, TN	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.03

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
La Porte County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
LaSalle County; Oglesby, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Lake County (part); Lakeview, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Lake County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.01
Lake County, OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.01
Lake County; (part) Eastlake, Timberlake, Lakeline, Willoughby, Mentor, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Lake County; Cities of East Chicago, Hammond, Whiting, and Gary, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Lake County; Polson, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Lake County; Ronan, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Lake Tahoe North Shore, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Lake Tahoe South Shore, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00
Lake Tahoe, NV	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Lancaster, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	-0.02
Lancaster, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.02
Lane County (part); Oakridge, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Lane County; Eugene/Springfield, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Las Vegas, NV	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.01	-0.07
Las Vegas, NV	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.01	-0.01	-0.07
Laurel Area (Yellowstone County), MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	0.00
Lebanon County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Lemont, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00
Liberty-Clairton, PA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Lincoln County; Libby and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Logan, UT-ID	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Longmont, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00
Lorain County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	-0.02
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	-0.02
Los Angeles-South Coast Air Basin, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-0.04	-0.04	-0.50
Los Angeles-South Coast Air Basin, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-0.04	-0.04	-0.50
Los Angeles-South Coast Air Basin, CA	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.04	-0.04	-0.50

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Los Angeles-South Coast Air Basin, CA	NO2 (1971 Annual)	Maintenance, Primary	100	0	-0.04	-0.04	-0.50
Los Angeles-South Coast Air Basin, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.04	-0.04	-0.50
Los Angeles-South Coast Air Basin, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-0.04	-0.04	-0.50
Louisville, KY-IN (IN Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	-0.01
Louisville, KY-IN (KY Portion)	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.03
Lowell, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Lucas County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.01
Madison County; Granite City Township and Nameoki Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Manchester, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Manitowoc County, WI	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	0.00
Marathon County: Rothschild Sub-city area, Rib Mountain, Weston, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	-0.01
Maricopa and Pinal Counties; Phoenix planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.01	-0.01	-0.14
Marion County: Lawrence, Washington, and Warrant Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.02
Mariposa County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Mariposa County, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Marshall, WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00
Medford, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00
Memphis, TN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.04
Memphis, TN-MS-AR	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	-0.05
Miami (Gila County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Miami, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Miami, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Millinocket AQCR 109, ME	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.01
Milwaukee, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.04
Milwaukee, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.02
Milwaukee-Racine, WI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	0.00	-0.04
Minneapolis-St. Paul, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.01	-0.10
Minneapolis-St. Paul, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.01	-0.10
Missoula, MT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00
Missoula, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Modesto, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.01
Mohave County (part); Bullhead City, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Mono Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Mono County; Mammoth Lake planning area, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Morenci (Greenlee County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Morgan County, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00
Morongo Band of Mission Indians, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	0.00
Morongo Band of Mission Indians, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00
Morristown, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Muscatine County, IA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Muscatine, IA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Muskegon County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Muskingum River, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Nashua, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Nassau County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00
Navarro County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Nevada County (Western part), CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00
Nevada County (Western part), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00
New Haven County, CT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
New Haven-Meriden-Waterbury, CT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.02
New Madrid County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
New Manchester-Grant magisterial district in Hancock County, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
New York County, NY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01
New York-N. New Jersey-Long Island, NY-NJ-CT	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.03	-0.03	-0.40
New York-N. New Jersey-Long Island, NY-NJ-CT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.02	-0.02	-0.22
New York-N. New Jersey-Long Island, NY-NJ-CT	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.03	-0.03	-0.40
New York-Northern New Jersey-Long Island, NY-NJ-CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.03	-0.03	-0.40
Nogales, AZ	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Northern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.06
Oakridge, OR	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Ogden, UT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00
Ogden, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Olmsted County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Olmsted County; City of Rochester, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Oneida County: Rhinelander Sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Pekin, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00
Penns Grove, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Peoria County: Hollis twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00
Peoria, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Perth Amboy, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Philadelphia-Camden County, PA-NJ	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.03
Philadelphia-Wilmington, PA-NJ-DE (NJ Portion)	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	0.00	-0.04
Philadelphia-Wilmington, PA-NJ-DE (PA-DE Portion)	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.10
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.02	-0.02	-0.19
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.02	-0.02	-0.19
Phoenix, AZ	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.01	-0.01	-0.14
Phoenix-Mesa, AZ	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.01	-0.14
Phoenix-Mesa, AZ	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.01	-0.15
Pierce County; Tacoma, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Pima County; Ajo planning area, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Pima County; Rillito planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Pinal County (part); West Pinal, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	-0.01
Pitkin County; Aspen, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Pittsburgh, PA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.01
Pittsburgh-Beaver Valley, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.01	-0.01	-0.07
Pittsburgh-Beaver Valley, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.07
Plumas County, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	0.00	0.00	0.00
Polk County, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00
Portland, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.04
Power-Bannock Counties; Fort Hall Indian Reservation, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Power-Bannock Counties; Portneuf Valley Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Provo, UT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.00	0.00	-0.01
Provo, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	-0.02

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Prowers County; Lamar, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Raleigh-Durham, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.06
Ramsey County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Reading, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	-0.01
Reno, NV	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.01
Rhineland, WI	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00
Riverside County (Coachella Valley), CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	0.00	0.00	-0.02
Riverside County (Coachella Valley), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	-0.02
Riverside County; Coachella Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	-0.02
Riverside, Los Angeles, Orange, & San Bernardino Counties; South Coast Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.04	-0.04	-0.50
Rosebud County; Lame Deer, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Routt County (part); Steamboat Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Rusk and Panola Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.01
Sacramento County, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.04
Sacramento Metro, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.01	-0.01	-0.07
Sacramento Metro, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.01	-0.01	-0.07
Sacramento, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.05
Sacramento, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.01	-0.07
Salem, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.01
Salt Lake City, UT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.01
Salt Lake City, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	0.00	-0.01	-0.06
Salt Lake County, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.04
Salt Lake County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	0.00	0.00	-0.04
San Antonio, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.01	-0.06
San Bernardino County, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.02
San Diego County, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.01	-0.01	-0.11
San Diego County, CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-0.01	-0.01	-0.11
San Diego, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.01	-0.11
San Francisco Bay Area, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.02	-0.02	-0.22
San Francisco Bay Area, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.02	-0.02	-0.22
San Francisco Bay Area, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.02	-0.02	-0.22

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
San Francisco-Oakland-San Jose, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.02	-0.21
San Joaquin Valley Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.01	-0.01	-0.13
San Joaquin Valley, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-0.01	-0.01	-0.13
San Joaquin Valley, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-0.01	-0.01	-0.13
San Joaquin Valley, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.01	-0.01	-0.13
San Joaquin Valley, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-0.01	-0.01	-0.13
San Luis Obispo (Eastern San Luis Obispo), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00
San Luis Obispo (Eastern part), CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00
San Manuel (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
San Miguel County; Telluride, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Sanders County (part); Thompson Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Santa Cruz County; Nogales planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Seaford, DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	-0.01
Seattle-Tacoma, WA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.01	-0.01	-0.09
Sheboygan County, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Sheridan County; City of Sheridan, WY	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Shoreline Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Shoshone County; City of Pinehurst, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Shoshone County; Pinehurst Expansion Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Silver Bow County; Butte, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Somerville, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Southern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	-0.02
Southwest Indiana, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00
Spokane County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Spokane, WA	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.00	-0.01
Springfield, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
St. Bernard Parish, LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.01
St. Clair, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
St. Lawrence County, NY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
St. Louis, MO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.03
St. Louis, MO-IL	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.01	-0.09
St. Louis-St. Charles-Farmington, MO-IL	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.01	-0.01	-0.09
Steubenville, OH-WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00
Steubenville-Weirton, OH-WV	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Stockton, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.01
Sullivan County, TN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Sutter Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00
Syracuse, NY	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.02
Tacoma, WA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.02
Tazewell County: Groveland twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Terre Haute, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00
Thurston County; Cities of Olympia, Tumwater, and Lacey, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Titus County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Toms River, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Tooele County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	0.00	0.00	0.00
Trenton, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Trona, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Tucson, AZ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.02
Tuolumne County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00
Tuscan Buttes, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00
Tuscan Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal (Rural Transport)	100	0	0.00	0.00	0.00
Uinta Basin, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00
Union County; LaGrande, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Upper Green River Basin Area, WY	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00
Utah County, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.02
Vancouver, WA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.01
Ventura County, CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	-0.02
Ventura County, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	-0.02
Vermillion County; Part of Clinton Township, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Vigo County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Walla Walla County; Wallula, WA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00
Waltham, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Warren County, NJ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00
Warren County: Conewago Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Warren County: Warren Boro, Pleasant Twp, Glade Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00
Warren, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Washington, DC-MD-VA	Ozone (2008 8-hour)	Nonattainment (DC) Maintenance (MD, VA), Marginal	50	0	-0.01	-0.01	-0.17
Washington, DC-MD-VA	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.01	-0.01	-0.17
Washington, DC-MD-VA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.02
Washoe County; Reno planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	-0.01
Wayne County, MI	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Wayne County: Boston, Center, Franklin, Wayne & Webster Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
West Central Pinal, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
West Silver Valley, ID	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Whatcom County, WA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Winston-Salem, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.02
Worcester, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.01
Yakima County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Yakima, WA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Yuba City-Marysville, CA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Yuma, AZ	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00
Yuma, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01

Notes:

^a Nonattainment or maintenance status as of 2/1/2024. Source: EPA, The Green Book Nonattainment Areas for Criteria Pollutants; <http://www.epa.gov/airquality/greenbook/>. "--" indicates that no severity classification has been established for the NAAQS pollutant.

^b Emissions thresholds in tons per year. Where the threshold differs by precursor pollutant, the smallest of the precursor thresholds is shown. These thresholds are provided for information only; a general conformity determination is not required for the Proposed Action. Source: 40 CFR 93.853.

^c Positive values are emissions increases; negative values are emissions decreases.

EPA = U.S. Environmental Protection Agency; NAAQS = National Ambient Air Quality Standard; CO = carbon monoxide; NO₂ = nitrogen dioxide; PM2.5 = particulate matter less than 2.5 microns in size; PM10 = particulate matter less than 10 microns in size; SO₂ = sulfur dioxide.

Table D-58. Changes in Emissions from U.S. Combined Passenger Cars, Light Trucks, and HDPUVs by Nonattainment or Maintenance Area and Alternative, Direct and Indirect Impacts—Acrolein, 2050

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Ada County; Boise, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.02
Adams, Denver, and Boulder Counties; Denver Metropolitan area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.09
Ajo (Pima County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Albuquerque, NM	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.04
Allegan County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Allegheny County Air Basin: Hazelwood monitor, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Allegheny County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.00	0.00	-0.05
Allegheny County; Liberty, Lincoln, Port Vue, Glassport, Clairton, PA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Allegheny, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.01
Allentown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.03
Allentown-Bethlehem-Easton, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	-0.03
Alton Township, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Amador County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00
Anchorage, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.00	-0.01
Anchorage; Eagle River, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Anne Arundel County and Baltimore County, MD	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	-0.06
Archuleta County; Pagosa Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Armstrong County; Madison, Mahoning, Boggs, Washington, Pine, PA	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	0.00
Aroostock County; City of Presque Isle, ME	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Atlanta, GA	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-0.02	-0.03	-0.31
Atlanta, GA	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.01	-0.02	-0.24
Atlantic City, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Bakersfield, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.03
Baltimore, MD	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	-0.01	-0.01	-0.15
Baltimore, MD	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.01	-0.01	-0.15
Baltimore, MD	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00
Baton Rouge, LA	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	-0.05
Beaver, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Benton County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00
Berrien County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Billings, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Billings, MT	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00
Birmingham, AL	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	-0.01	-0.07
Boise-Northern Ada County, ID	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.02
Bonner County; The Sandpoint Area, ID	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Boston, MA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.04
Boyd County (part), KY	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Brooke; Follansbee area, WV	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Brown County: Green Bay, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Burlington, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Butte County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	-0.01
Calaveras County, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00
Calaveras County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00
Campbell-Clermont Counties, KY-OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00
Canton-Massillon, OH	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	0.00	-0.02
Central New Hampshire, NH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.01
Central Steptoe Valley, NV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Charleston, WV	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	0.00	-0.02
Charlotte, NC	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.08
Charlotte-Rock Hill, NC-SC	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.01	-0.01	-0.14
Chicago, IL-IN-WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.02	-0.03	-0.36
Chicago-Naperville, IL-IN-WI	Ozone (2008 8-hour)	Maintenance, Serious	100	0	-0.02	-0.03	-0.37
Chico (Butte County), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	-0.01
Chico, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00
Chico, CA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Cincinnati, OH-KY (OH Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	-0.01	-0.09
Cincinnati, OH-KY (KY Portion)	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.02
Cincinnati, OH-KY-IN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.01	-0.01	-0.11
Clark County; Las Vegas planning area, NV	PM ₁₀ (1987 24-hour)	Maintenance, Serious	100	0	-0.01	-0.01	-0.11
Cleveland, OH	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.01	-0.12
Cleveland, OH	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.05
Cleveland, OH	PM _{2.5} (2012 Annual)	Maintenance, Moderate	100	0	0.00	-0.01	-0.06

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Cleveland-Akron-Lorain, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.01	-0.01	-0.13
Cleveland-Akron-Lorain, OH	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.01	-0.01	-0.12
Cochise County; Paul Spur/Douglas planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Colorado Springs, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.03
Columbus, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	-0.01	-0.10
Columbus, OH	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	-0.01	-0.09
Cook County; Lyons Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Cook County; Southeast Chicago, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Coshocton County; Franklin Township, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Coso Junction, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Cuyahoga County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.05
Cuyahoga County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.04
Dallas-Fort Worth, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.02	-0.04	-0.46
Dallas-Fort Worth, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.02	-0.04	-0.46
Dane County; Madison sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.03
Delaware County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	0.00	-0.02
Denver Metro/North Front Range, CO	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.02	-0.21
Denver-Boulder, CO	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.01	-0.01	-0.16
Denver-Boulder-Greeley-Ft. Collins-Loveland, CO	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.01	-0.02	-0.21
Detroit, MI	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.25
Detroit, MI	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.09
Detroit, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.01
Detroit-Ann Arbor, MI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.01	-0.02	-0.25
Doña Ana County; Anthony, NM	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Door County, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	0.00	0.00
Door County-Revised, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	0.00	0.00
Douglas (Cochise County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Dukes County, MA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00
Duluth, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.01
East Chicago, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
East Helena Area, MT	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00
East Kern County, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
El Paso County, TX	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.03
El Paso, TX	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00
El Paso-Las Cruces, TX-NM	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	-0.04
Eugene-Springfield, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.01
Evangeline Parish (Partial), LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Fairbanks, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00
Fairbanks, AK	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	-0.01
Flathead County; Columbia Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Flathead County; Kalispell and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Flathead County; Whitefish and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Fort Collins, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.01
Freehold, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Freestone and Anderson Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Fremont County; Canon City Area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Fresno, CA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.00	0.00	-0.03
Gila County (part): Payson, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Giles County, VA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Grant County, NM	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Grants Pass, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00
Great Falls, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Greater Connecticut, CT	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.00	-0.01	-0.08
Greater Connecticut, CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	0.00	-0.01	-0.08
Greeley, CO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.02
Hancock County (part): Weirton, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00
Hancock and Brooke Counties (Part); The city of Weirton, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Harrisburg-Lebanon-Carlisle-York, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.05
Hartford-New Britain-Middletown, CT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.05
Hayden (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	0.00
Hayden, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Hayden, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Henderson-Webster Counties, KY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Hillsborough County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00
Hillsborough-Polk County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00
Houston-Galveston-Brazoria, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.02	-0.03	-0.41

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Houston-Galveston-Brazoria, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.02	-0.03	-0.40
Howard County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Humphreys County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00
Huntington, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Hutchinson County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Imperial County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01
Imperial County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	-0.01
Imperial County, CA	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01
Imperial County, CA	PM _{2.5} (2012 Annual)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01
Imperial Valley, CA	PM ₁₀ (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	-0.01
Indian Wells, CA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Indiana, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.01
Indianapolis, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Indianapolis, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.03
Inland Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Inyo County; Owens Valley planning area, CA	PM ₁₀ (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00
Jackson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00
Jackson County; Medford-Ashland (including White City), OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Jamestown, NY	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	-0.01
Jefferson County, KY	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00
Jefferson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00
Jefferson County, OH	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Jefferson County; (part) Steubenville & Mingo Junction, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Johnstown, PA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Josephine County; Grants Pass, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Juneau; Mendenhall Valley area, AK	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Kern County (Eastern Kern), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	0.00
Kern County (Eastern Kern), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00
King County; Kent, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
King County; Seattle, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Klamath Falls, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00
Klamath Falls, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Klamath Falls, OR	PM _{2.5} (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Knoxville, TN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	-0.04
Knoxville-Sevierville-La Follette, TN	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.05

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
La Porte County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
LaSalle County; Oglesby, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Lake County (part); Lakeview, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Lake County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.02
Lake County, OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.01
Lake County; (part) Eastlake, Timberlake, Lakeline, Willoughby, Mentor, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Lake County; Cities of East Chicago, Hammond, Whiting, and Gary, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Lake County; Polson, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Lake County; Ronan, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Lake Tahoe North Shore, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Lake Tahoe South Shore, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00
Lake Tahoe, NV	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Lancaster, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	-0.02
Lancaster, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.02
Lane County (part); Oakridge, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Lane County; Eugene/Springfield, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Las Vegas, NV	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.01	-0.11
Las Vegas, NV	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.01	-0.01	-0.11
Laurel Area (Yellowstone County), MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	0.00
Lebanon County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Lemont, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.01
Liberty-Clairton, PA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Lincoln County; Libby and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Logan, UT-ID	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Longmont, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00
Lorain County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	-0.04
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	-0.04
Los Angeles-South Coast Air Basin, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-0.04	-0.07	-0.81
Los Angeles-South Coast Air Basin, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-0.04	-0.07	-0.81
Los Angeles-South Coast Air Basin, CA	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.04	-0.07	-0.81

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Los Angeles-South Coast Air Basin, CA	NO2 (1971 Annual)	Maintenance, Primary	100	0	-0.04	-0.07	-0.81
Los Angeles-South Coast Air Basin, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.04	-0.07	-0.81
Los Angeles-South Coast Air Basin, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-0.04	-0.07	-0.81
Louisville, KY-IN (IN Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	-0.01
Louisville, KY-IN (KY Portion)	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.05
Lowell, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Lucas County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.02
Madison County; Granite City Township and Nameoki Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Manchester, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.01
Manitowoc County, WI	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	0.00
Marathon County: Rothschild Sub-city area, Rib Mountain, Weston, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	-0.01
Maricopa and Pinal Counties; Phoenix planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.01	-0.02	-0.23
Marion County: Lawrence, Washington, and Warrant Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.02
Mariposa County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Mariposa County, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Marshall, WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00
Medford, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00
Memphis, TN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.06
Memphis, TN-MS-AR	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	-0.01	-0.07
Miami (Gila County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Miami, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Miami, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Millinocket AQCR 109, ME	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.01
Milwaukee, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.07
Milwaukee, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.03
Milwaukee-Racine, WI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	-0.01	-0.06
Minneapolis-St. Paul, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.01	-0.17
Minneapolis-St. Paul, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.01	-0.16
Missoula, MT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00
Missoula, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Modesto, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.01
Mohave County (part); Bullhead City, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Mono Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Mono County; Mammoth Lake planning area, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Morenci (Greenlee County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Morgan County, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00
Morongo Band of Mission Indians, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	0.00
Morongo Band of Mission Indians, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00
Morristown, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Muscatine County, IA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Muscatine, IA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Muskegon County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01
Muskingum River, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Nashua, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Nassau County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00
Navarro County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Nevada County (Western part), CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00
Nevada County (Western part), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00
New Haven County, CT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
New Haven-Meriden-Waterbury, CT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.04
New Madrid County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
New Manchester-Grant magisterial district in Hancock County, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
New York County, NY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.02
New York-N. New Jersey-Long Island, NY-NJ-CT	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.03	-0.06	-0.64
New York-N. New Jersey-Long Island, NY-NJ-CT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.02	-0.03	-0.35
New York-N. New Jersey-Long Island, NY-NJ-CT	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.03	-0.06	-0.66
New York-Northern New Jersey-Long Island, NY-NJ-CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.03	-0.06	-0.64
Nogales, AZ	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Northern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.09
Oakridge, OR	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Ogden, UT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00
Ogden, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Olmsted County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Olmsted County; City of Rochester, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.01

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Oneida County: Rhinelander Sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Pekin, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00
Penns Grove, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Peoria County: Hollis twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00
Peoria, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.01
Perth Amboy, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Philadelphia-Camden County, PA-NJ	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.05
Philadelphia-Wilmington, PA-NJ-DE (NJ Portion)	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	-0.01	-0.06
Philadelphia-Wilmington, PA-NJ-DE (PA-DE Portion)	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.17
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.02	-0.03	-0.31
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.02	-0.03	-0.31
Phoenix, AZ	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.01	-0.02	-0.23
Phoenix-Mesa, AZ	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.02	-0.23
Phoenix-Mesa, AZ	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.02	-0.24
Pierce County; Tacoma, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Pima County; Ajo planning area, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Pima County; Rillito planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Pinal County (part); West Pinal, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	-0.01
Pitkin County; Aspen, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Pittsburgh, PA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.01
Pittsburgh-Beaver Valley, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.01	-0.01	-0.11
Pittsburgh-Beaver Valley, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.10
Plumas County, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	0.00	0.00	0.00
Polk County, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00
Portland, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.07
Power-Bannock Counties; Fort Hall Indian Reservation, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Power-Bannock Counties; Portneuf Valley Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Provo, UT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.00	0.00	-0.01
Provo, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	-0.03

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Prowers County; Lamar, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Raleigh-Durham, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.09
Ramsey County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Reading, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	-0.02
Reno, NV	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.01
Rhineland, WI	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00
Riverside County (Coachella Valley), CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	0.00	0.00	-0.03
Riverside County (Coachella Valley), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	-0.03
Riverside County; Coachella Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	-0.03
Riverside, Los Angeles, Orange, & San Bernardino Counties; South Coast Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.04	-0.07	-0.81
Rosebud County; Lame Deer, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Routt County (part); Steamboat Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Rusk and Panola Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.01
Sacramento County, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.07
Sacramento Metro, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.01	-0.01	-0.12
Sacramento Metro, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.01	-0.01	-0.12
Sacramento, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.08
Sacramento, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.01	-0.12
Salem, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.01
Salt Lake City, UT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.01
Salt Lake City, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	0.00	-0.01	-0.10
Salt Lake County, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.06
Salt Lake County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	0.00	-0.01	-0.06
San Antonio, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.01	-0.10
San Bernardino County, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.03
San Diego County, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.01	-0.02	-0.17
San Diego County, CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-0.01	-0.02	-0.17
San Diego, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.02	-0.17
San Francisco Bay Area, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.02	-0.03	-0.36
San Francisco Bay Area, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.02	-0.03	-0.36
San Francisco Bay Area, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.02	-0.03	-0.36

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
San Francisco-Oakland-San Jose, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.03	-0.34
San Joaquin Valley Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.01	-0.02	-0.21
San Joaquin Valley, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-0.01	-0.02	-0.21
San Joaquin Valley, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-0.01	-0.02	-0.21
San Joaquin Valley, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.01	-0.02	-0.21
San Joaquin Valley, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-0.01	-0.02	-0.21
San Luis Obispo (Eastern San Luis Obispo), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00
San Luis Obispo (Eastern part), CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00
San Manuel (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
San Miguel County; Telluride, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Sanders County (part); Thompson Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Santa Cruz County; Nogales planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Seaford, DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	-0.01
Seattle-Tacoma, WA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.01	-0.01	-0.15
Sheboygan County, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Sheridan County; City of Sheridan, WY	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Shoreline Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Shoshone County; City of Pinehurst, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Shoshone County; Pinehurst Expansion Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Silver Bow County; Butte, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Somerville, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Southern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	-0.03
Southwest Indiana, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00
Spokane County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.02
Spokane, WA	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.00	-0.02
Springfield, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.01
St. Bernard Parish, LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.01
St. Clair, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
St. Lawrence County, NY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
St. Louis, MO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.05
St. Louis, MO-IL	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.01	-0.15
St. Louis-St. Charles-Farmington, MO-IL	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.01	-0.01	-0.15
Steubenville, OH-WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00
Steubenville-Weirton, OH-WV	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	0.00	-0.01

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Stockton, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.02
Sullivan County, TN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Sutter Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00
Syracuse, NY	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.03
Tacoma, WA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.03
Tazewell County: Groveland twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Terre Haute, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00
Thurston County; Cities of Olympia, Tumwater, and Lacey, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Titus County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Toms River, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Tooele County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	0.00	0.00	0.00
Trenton, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Trona, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Tucson, AZ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.04
Tuolumne County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00
Tuscan Buttes, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00
Tuscan Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal (Rural Transport)	100	0	0.00	0.00	0.00
Uinta Basin, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00
Union County; LaGrande, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Upper Green River Basin Area, WY	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00
Utah County, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.03
Vancouver, WA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.02
Ventura County, CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	-0.04
Ventura County, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	-0.04
Vermillion County; Part of Clinton Township, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Vigo County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.01
Walla Walla County; Wallula, WA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00
Waltham, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Warren County, NJ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00
Warren County: Conewago Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Warren County: Warren Boro, Pleasant Twp, Glade Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00
Warren, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Washington, DC-MD-VA	Ozone (2008 8-hour)	Nonattainment (DC) Maintenance (MD, VA), Marginal	50	0	-0.01	-0.02	-0.27
Washington, DC-MD-VA	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.01	-0.02	-0.27
Washington, DC-MD-VA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.03
Washoe County; Reno planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	-0.01
Wayne County, MI	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Wayne County: Boston, Center, Franklin, Wayne & Webster Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
West Central Pinal, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
West Silver Valley, ID	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Whatcom County, WA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Winston-Salem, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.03
Worcester, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.01
Yakima County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Yakima, WA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Yuba City-Marysville, CA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Yuma, AZ	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	-0.01
Yuma, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01

Notes:

^a Nonattainment or maintenance status as of 2/1/2024. Source: EPA, The Green Book Nonattainment Areas for Criteria Pollutants; <http://www.epa.gov/airquality/greenbook/>. “--” indicates that no severity classification has been established for the NAAQS pollutant.

^b Emissions thresholds in tons per year. Where the threshold differs by precursor pollutant, the smallest of the precursor thresholds is shown. These thresholds are provided for information only; a general conformity determination is not required for the Proposed Action. Source: 40 CFR 93.853.

^c Positive values are emissions increases; negative values are emissions decreases.

EPA = U.S. Environmental Protection Agency; NAAQS = National Ambient Air Quality Standard; CO = carbon monoxide; NO₂ = nitrogen dioxide; PM2.5 = particulate matter less than 2.5 microns in size; PM10 = particulate matter less than 10 microns in size; SO₂ = sulfur dioxide.

Table D-59. Changes in Emissions from U.S. Combined Passenger Cars, Light Trucks, and HDPUVs by Nonattainment or Maintenance Area and Alternative, Direct and Indirect Impacts--Benzene, 2035

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Ada County; Boise, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.23	-0.26	-3.06
Adams, Denver, and Boulder Counties; Denver Metropolitan area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.42	-0.45	-5.36
Ajo (Pima County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Albuquerque, NM	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.14	-0.15	-1.78
Allegan County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.01	-0.13
Allegheny County Air Basin: Hazelwood monitor, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.01	-0.14
Allegheny County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	-0.15	-0.16	-1.89
Allegheny County; Liberty, Lincoln, Port Vue, Glassport, Clairton, PA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.04
Allegheny, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.03	-0.04	-0.43
Allentown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.09	-0.09	-1.08
Allentown-Bethlehem-Easton, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.10	-0.10	-1.21
Alton Township, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.04
Amador County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.01	-0.07
Anchorage, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.03	-0.03	-0.37
Anchorage; Eagle River, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.02
Anne Arundel County and Baltimore County, MD	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.15	-0.16	-1.81
Archuleta County; Pagosa Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.06
Armstrong County; Madison, Mahoning, Boggs, Washington, Pine, PA	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	-0.03
Aroostock County; City of Presque Isle, ME	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Atlanta, GA	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-0.81	-0.88	-10.13
Atlanta, GA	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.63	-0.69	-7.93
Atlantic City, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.01	-0.06
Bakersfield, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.06	-0.07	-0.80
Baltimore, MD	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	-0.36	-0.39	-4.48
Baltimore, MD	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.36	-0.39	-4.50
Baltimore, MD	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.02
Baton Rouge, LA	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.17	-0.19	-2.20

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Beaver, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.03
Benton County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	-0.04
Berrien County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.03	-0.03	-0.38
Billings, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.02	-0.29
Billings, MT	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.04
Birmingham, AL	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.21	-0.23	-2.64
Boise-Northern Ada County, ID	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.23	-0.26	-3.06
Bonner County; The Sandpoint Area, ID	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.04
Boston, MA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.10	-0.11	-1.29
Boyd County (part), KY	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.04
Brooke; Follansbee area, WV	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Brown County: Green Bay, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.02
Burlington, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.01
Butte County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.02	-0.03	-0.30
Calaveras County, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.01	-0.07
Calaveras County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.01	-0.07
Campbell-Clermont Counties, KY-OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.05
Canton-Massillon, OH	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.05	-0.06	-0.66
Central New Hampshire, NH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.02	-0.03	-0.29
Central Steptoe Valley, NV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.01
Charleston, WV	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.04	-0.05	-0.55
Charlotte, NC	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.20	-0.22	-2.49
Charlotte-Rock Hill, NC-SC	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.37	-0.40	-4.58
Chicago, IL-IN-WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.91	-0.98	-11.28
Chicago-Naperville, IL-IN-WI	Ozone (2008 8-hour)	Maintenance, Serious	100	0	-0.99	-1.07	-12.43
Chico (Butte County), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.02	-0.03	-0.30
Chico, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.01	-0.12
Chico, CA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.03	-0.29
Cincinnati, OH-KY (OH Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.21	-0.23	-2.63
Cincinnati, OH-KY (KY Portion)	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	-0.08	-0.08	-0.95

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Cincinnati, OH-KY-IN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.31	-0.34	-3.89
Clark County; Las Vegas planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.29	-0.31	-3.64
Cleveland, OH	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.37	-0.40	-4.66
Cleveland, OH	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.15	-0.16	-1.91
Cleveland, OH	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-0.19	-0.21	-2.39
Cleveland-Akron-Lorain, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.38	-0.42	-4.85
Cleveland-Akron-Lorain, OH	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.36	-0.39	-4.48
Cochise County; Paul Spur/Douglas planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.02
Colorado Springs, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.15	-0.16	-1.90
Columbus, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.26	-0.29	-3.30
Columbus, OH	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.24	-0.26	-3.05
Cook County; Lyons Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.12
Cook County; Southeast Chicago, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.02	-0.19
Coshocton County; Franklin Township, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Coso Junction, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Cuyahoga County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.15	-0.16	-1.91
Cuyahoga County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.12	-0.13	-1.56
Dallas-Fort Worth, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-1.09	-1.18	-13.60
Dallas-Fort Worth, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-1.07	-1.16	-13.39
Dane County; Madison sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.07	-0.08	-0.93
Delaware County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-0.06	-0.07	-0.81
Denver Metro/North Front Range, CO	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-1.00	-1.09	-12.88
Denver-Boulder, CO	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.78	-0.85	-10.08
Denver-Boulder-Greeley-Ft. Collins-Loveland, CO	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-1.00	-1.09	-12.84
Detroit, MI	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	-0.67	-0.73	-8.41
Detroit, MI	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.25	-0.27	-3.13
Detroit, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.03	-0.03	-0.37
Detroit-Ann Arbor, MI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.67	-0.73	-8.44
Doña Ana County; Anthony, NM	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.02

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Door County, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	0.00	0.00
Door County-Revised, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	0.00	-0.05
Douglas (Cochise County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.02
Dukes County, MA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	-0.02
Duluth, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.02	-0.21
East Chicago, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.01	-0.07
East Helena Area, MT	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00
East Kern County, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	-0.04
El Paso County, TX	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.09	-0.09	-1.09
El Paso, TX	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.01	-0.09
El Paso-Las Cruces, TX-NM	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.10	-0.11	-1.21
Eugene-Springfield, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.03	-0.03	-0.37
Evangeline Parish (Partial), LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Fairbanks, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.01	-0.01	-0.08
Fairbanks, AK	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.01	-0.01	-0.14
Flathead County; Columbia Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.02
Flathead County; Kalispell and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.10
Flathead County; Whitefish and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.02
Fort Collins, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.04	-0.04	-0.50
Freehold, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.02
Freestone and Anderson Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.06
Fremont County; Canon City Area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.11
Fresno, CA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.08	-0.08	-0.97
Gila County (part): Payson, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.02
Giles County, VA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Grant County, NM	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.01	-0.06
Grants Pass, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.05
Great Falls, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.02

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Greater Connecticut, CT	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-0.20	-0.21	-2.47
Greater Connecticut, CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.20	-0.21	-2.47
Greeley, CO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.10	-0.11	-1.28
Hancock County (part): Weirton, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	-0.04
Hancock and Brooke Counties (Part); The city of Weirton, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.04
Harrisburg-Lebanon-Carlisle-York, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.14	-0.15	-1.78
Hartford-New Britain-Middletown, CT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.14	-0.15	-1.72
Hayden (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	-0.02
Hayden, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.03
Hayden, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.02
Henderson-Webster Counties, KY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.01
Hillsborough County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.03
Hillsborough-Polk County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.01
Houston-Galveston-Brazoria, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-1.29	-1.41	-16.40
Houston-Galveston-Brazoria, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-1.27	-1.37	-16.03
Howard County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.01	-0.08
Humphreys County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	-0.05
Huntington, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.01	-0.08
Hutchinson County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.01	-0.14
Imperial County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-0.03	-0.03	-0.38
Imperial County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.03	-0.03	-0.38
Imperial County, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.02	-0.03	-0.30
Imperial County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	-0.02	-0.03	-0.30
Imperial Valley, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.03	-0.03	-0.36
Indian Wells, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.07
Indiana, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.02	-0.02	-0.24
Indianapolis, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Indianapolis, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.08	-0.08	-0.98
Inland Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.10
Inyo County; Owens Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	-0.01

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Jackson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.01	-0.12
Jackson County; Medford-Ashland (including White City), OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.02	-0.28
Jamestown, NY	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.02	-0.02	-0.27
Jefferson County, KY	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.01
Jefferson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.01	-0.11
Jefferson County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.02
Jefferson County; (part) Steubenville & Mingo Junction, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.01	-0.10
Johnstown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.02	-0.25
Josephine County; Grants Pass, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.05
Juneau; Mendenhall Valley area, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.02
Kern County (Eastern Kern), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.01	-0.01	-0.17
Kern County (Eastern Kern), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.01	-0.01	-0.17
King County; Kent, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.04
King County; Seattle, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.02
Klamath Falls, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.01	-0.07
Klamath Falls, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.07
Klamath Falls, OR	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.01	-0.08
Knoxville, TN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.11	-0.12	-1.44
Knoxville-Sevierville-La Follette, TN	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.14	-0.15	-1.73
La Porte County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.01	-0.10
LaSalle County; Oglesby, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.05
Lake County (part); Lakeview, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Lake County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.06	-0.07	-0.78
Lake County, OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.03	-0.03	-0.37
Lake County; (part) Eastlake, Timberlake, Lakeline, Willoughby, Mentor, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.01	-0.06
Lake County; Cities of East Chicago, Hammond, Whiting, and Gary, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.04	-0.04	-0.52
Lake County; Polson, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Lake County; Ronan, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Lake Tahoe North Shore, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.02
Lake Tahoe South Shore, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.06
Lake Tahoe, NV	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.04
Lancaster, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.07	-0.07	-0.84
Lancaster, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.07	-0.07	-0.84
Lane County (part); Oakridge, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Lane County; Eugene/Springfield, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.03	-0.03	-0.37
Las Vegas, NV	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.29	-0.31	-3.64
Las Vegas, NV	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.29	-0.32	-3.64
Laurel Area (Yellowstone County), MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	-0.05
Lebanon County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-0.02	-0.02	-0.22
Lemont, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.02	-0.03	-0.30
Liberty-Clairton, PA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.04
Lincoln County; Libby and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Logan, UT-ID	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.02	-0.27
Longmont, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.02	-0.27
Lorain County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.01	-0.09
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.10	-0.11	-1.27
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-0.10	-0.11	-1.27
Los Angeles-South Coast Air Basin, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-1.98	-2.14	-24.67
Los Angeles-South Coast Air Basin, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-1.98	-2.14	-24.66
Los Angeles-South Coast Air Basin, CA	CO (1971 8-hour)	Maintenance, Serious	100	0	-1.98	-2.14	-24.68
Los Angeles-South Coast Air Basin, CA	NO ₂ (1971 Annual)	Maintenance, Primary	100	0	-1.98	-2.14	-24.68
Los Angeles-South Coast Air Basin, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-1.98	-2.14	-24.68
Los Angeles-South Coast Air Basin, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-1.98	-2.14	-24.68
Louisville, KY-IN (IN Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.03	-0.04	-0.44
Louisville, KY-IN (KY Portion)	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.12	-0.12	-1.44
Lowell, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.01	-0.16
Lucas County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.05	-0.05	-0.63

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Madison County; Granite City Township and Nameoki Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.02	-0.22
Manchester, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.01	-0.16
Manitowoc County, WI	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.01	-0.01	-0.09
Marathon County: Rothschild Sub-city area, Rib Mountain, Weston, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.02	-0.02	-0.26
Maricopa and Pinal Counties; Phoenix planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.56	-0.60	-6.95
Marion County: Lawrence, Washington, and Warrant Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.06	-0.07	-0.81
Mariposa County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.03
Mariposa County, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.03
Marshall, WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.02	-0.02	-0.24
Medford, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.01	-0.17
Memphis, TN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.16	-0.17	-1.99
Memphis, TN-MS-AR	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.21	-0.22	-2.58
Miami (Gila County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.02
Miami, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.02
Miami, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.02
Millinocket AQCR 109, ME	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.02	-0.02	-0.28
Milwaukee, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.20	-0.22	-2.57
Milwaukee, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.10	-0.10	-1.20
Milwaukee-Racine, WI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.18	-0.20	-2.28
Minneapolis-St. Paul, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.48	-0.52	-5.97
Minneapolis-St. Paul, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.46	-0.50	-5.82
Missoula, MT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.02	-0.22
Missoula, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.02	-0.22
Modesto, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.04	-0.04	-0.49
Mohave County (part); Bullhead City, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.10
Mono Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01
Mono County; Mammoth Lake planning area, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.02

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Morenci (Greenlee County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Morgan County, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.05
Morongo Band of Mission Indians, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	-0.01
Morongo Band of Mission Indians, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	-0.01
Morristown, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.03
Muscatine County, IA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.03
Muscatine, IA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.05
Muskegon County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.02	-0.02	-0.25
Muskingum River, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.01
Nashua, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.01	-0.14
Nassau County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.01
Navarro County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	-0.06
Nevada County (Western part), CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-0.01	-0.01	-0.13
Nevada County (Western part), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.01	-0.01	-0.13
New Haven County, CT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.04
New Haven-Meriden-Waterbury, CT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.12	-0.13	-1.46
New Madrid County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
New Manchester-Grant magisterial district in Hancock County, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.02
New York County, NY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.06	-0.06	-0.70
New York-N. New Jersey-Long Island, NY-NJ-CT	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-1.73	-1.88	-21.71
New York-N. New Jersey-Long Island, NY-NJ-CT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.99	-1.07	-12.37
New York-N. New Jersey-Long Island, NY-NJ-CT	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-1.78	-1.92	-22.23
New York-Northern New Jersey-Long Island, NY-NJ-CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-1.76	-1.90	-22.02
Nogales, AZ	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.03
Northern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.27	-0.29	-3.39
Oakridge, OR	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Ogden, UT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.01	-0.14
Ogden, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.14
Olmsted County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.06
Olmsted County; City of Rochester, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.02	-0.02	-0.21

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Oneida County: Rhinelander Sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.01	-0.01	-0.09
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Pekin, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.01	-0.07
Penns Grove, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Peoria County: Hollis twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00
Peoria, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.01	-0.16
Perth Amboy, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.01	-0.09
Philadelphia-Camden County, PA-NJ	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.16	-0.17	-2.01
Philadelphia-Wilmington, PA-NJ-DE (NJ Portion)	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.15	-0.16	-1.90
Philadelphia-Wilmington, PA-NJ-DE (PA-DE Portion)	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.49	-0.53	-6.13
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.84	-0.91	-10.52
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.79	-0.86	-9.88
Phoenix, AZ	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.55	-0.59	-6.79
Phoenix-Mesa, AZ	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-0.56	-0.61	-6.97
Phoenix-Mesa, AZ	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.57	-0.61	-7.05
Pierce County; Tacoma, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Pima County; Ajo planning area, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Pima County; Rillito planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.06
Pinal County (part); West Pinal, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.03	-0.03	-0.33
Pitkin County; Aspen, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.08
Pittsburgh, PA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.04	-0.04	-0.44
Pittsburgh-Beaver Valley, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.32	-0.35	-4.11
Pittsburgh-Beaver Valley, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.30	-0.32	-3.77
Plumas County, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	0.00	0.00	0.00
Polk County, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	-0.04
Portland, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.21	-0.22	-2.61
Power-Bannock Counties; Fort Hall Indian Reservation, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.02
Power-Bannock Counties; Portneuf Valley Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.04	-0.04	-0.52

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Provo, UT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.02	-0.02	-0.28
Provo, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.08	-0.09	-1.00
Prowers County; Lamar, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.02
Raleigh-Durham, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.23	-0.25	-2.92
Ramsey County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.02
Reading, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.05	-0.05	-0.63
Reno, NV	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.03	-0.04	-0.43
Rhineland, WI	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.04
Riverside County (Coachella Valley), CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-0.06	-0.07	-0.79
Riverside County (Coachella Valley), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-0.06	-0.07	-0.79
Riverside County; Coachella Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.07	-0.08	-0.91
Riverside, Los Angeles, Orange, & San Bernardino Counties; South Coast Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-1.97	-2.13	-24.57
Rosebud County; Lame Deer, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Routt County (part); Steamboat Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.11
Rusk and Panola Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.01	-0.13
Sacramento County, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.17	-0.18	-2.09
Sacramento Metro, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.29	-0.32	-3.64
Sacramento Metro, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.29	-0.32	-3.64
Sacramento, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.19	-0.21	-2.41
Sacramento, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.28	-0.31	-3.54
Salem, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.03	-0.04	-0.43
Salt Lake City, UT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.04	-0.04	-0.46
Salt Lake City, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.28	-0.31	-3.54
Salt Lake County, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.17	-0.19	-2.15
Salt Lake County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	-0.17	-0.19	-2.15
San Antonio, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.28	-0.30	-3.53
San Bernardino County, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.07	-0.08	-0.92
San Diego County, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.42	-0.46	-5.28
San Diego County, CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-0.42	-0.46	-5.28

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
San Diego, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.42	-0.46	-5.27
San Francisco Bay Area, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.86	-0.93	-10.73
San Francisco Bay Area, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.86	-0.93	-10.72
San Francisco Bay Area, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.86	-0.93	-10.75
San Francisco-Oakland-San Jose, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.81	-0.88	-10.11
San Joaquin Valley Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.54	-0.58	-6.72
San Joaquin Valley, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-0.54	-0.58	-6.72
San Joaquin Valley, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-0.54	-0.58	-6.72
San Joaquin Valley, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.54	-0.58	-6.72
San Joaquin Valley, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-0.54	-0.58	-6.72
San Luis Obispo (Eastern San Luis Obispo), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	-0.03
San Luis Obispo (Eastern part), CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	-0.03
San Manuel (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.03
San Miguel County; Telluride, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.02
Sanders County (part); Thompson Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Santa Cruz County; Nogales planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.03
Seaford, DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.03	-0.04	-0.43
Seattle-Tacoma, WA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.46	-0.50	-5.84
Sheboygan County, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.01	-0.12
Sheridan County; City of Sheridan, WY	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.04
Shoreline Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.11
Shoshone County; City of Pinehurst, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Shoshone County; Pinehurst Expansion Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.11
Silver Bow County; Butte, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.06
Somerville, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.02
Southern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.08	-0.09	-0.99
Southwest Indiana, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.01
Spokane County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.05	-0.06	-0.64
Spokane, WA	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.05	-0.05	-0.63
Springfield, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.02	-0.22

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
St. Bernard Parish, LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.04	-0.04	-0.50
St. Clair, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.01	-0.10
St. Lawrence County, NY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.01
St. Louis, MO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.13	-0.14	-1.64
St. Louis, MO-IL	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.44	-0.48	-5.56
St. Louis-St. Charles-Farmington, MO-IL	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.45	-0.48	-5.62
Steubenville, OH-WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.03	-0.03	-0.34
Steubenville-Weirton, OH-WV	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.02	-0.02	-0.26
Stockton, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.05	-0.05	-0.61
Sullivan County, TN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.05
Sutter Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00
Syracuse, NY	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.06	-0.07	-0.81
Tacoma, WA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	-0.08	-0.09	-1.01
Tazewell County: Groveland twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.03
Terre Haute, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.01	-0.11
Thurston County; Cities of Olympia, Tumwater, and Lacey, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.18
Titus County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Toms River, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.01
Tooele County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	0.00	0.00	0.00
Trenton, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.01	-0.13
Trona, CA	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01
Tucson, AZ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.10	-0.11	-1.23
Tuolumne County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.01	-0.09
Tuscan Buttes, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00
Tuscan Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal (Rural Transport)	100	0	0.00	0.00	0.00
Uinta Basin, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.01	-0.08
Union County; LaGrande, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Upper Green River Basin Area, WY	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.01	-0.12
Utah County, UT	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.08	-0.09	-1.01

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Vancouver, WA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.05	-0.05	-0.57
Ventura County, CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-0.10	-0.11	-1.26
Ventura County, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.10	-0.11	-1.26
Vermillion County; Part of Clinton Township, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.02
Vigo County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.02	-0.02	-0.21
Walla Walla County; Wallula, WA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	-0.01
Waltham, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.01	-0.09
Warren County, NJ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	-0.04
Warren County: Conewago Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.04
Warren County: Warren Boro, Pleasant Twp, Glade Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.01	-0.01	-0.09
Warren, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.01	-0.11
Washington, DC-MD-VA	Ozone (2008 8-hour)	Nonattainment (DC) Maintenance (MD, VA), Marginal	50	0	-0.68	-0.74	-8.48
Washington, DC-MD-VA	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.67	-0.72	-8.28
Washington, DC-MD-VA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.09	-0.10	-1.11
Washoe County; Reno planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.03	-0.04	-0.44
Wayne County, MI	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.10
Wayne County: Boston, Center, Franklin, Wayne & Webster Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.01	-0.10
West Central Pinal, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.03
West Silver Valley, ID	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	0.00	-0.04
Whatcom County, WA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.02
Winston-Salem, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.06	-0.07	-0.76
Worcester, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.03	-0.03	-0.33
Yakima County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.19
Yakima, WA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.01	-0.06
Yuba City-Marysville, CA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.02	-0.27
Yuma, AZ	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.02	-0.19
Yuma, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.02	-0.03	-0.29

Notes:

^a Nonattainment or maintenance status as of 2/1/2024. Source: EPA, The Green Book Nonattainment Areas for Criteria Pollutants; <http://www.epa.gov/airquality/greenbook/>. "--" indicates that no severity classification has been established for the NAAQS pollutant.

^b Emissions thresholds in tons per year. Where the threshold differs by precursor pollutant, the smallest of the precursor thresholds is shown. These thresholds are provided for information only; a general conformity determination is not required for the Proposed Action. Source: 40 CFR 93.853.

^c Positive values are emissions increases; negative values are emissions decreases.

EPA = U.S. Environmental Protection Agency; NAAQS = National Ambient Air Quality Standard; CO = carbon monoxide; NO₂ = nitrogen dioxide; PM_{2.5} = particulate matter less than 2.5 microns in size; PM₁₀ = particulate matter less than 10 microns in size; SO₂ = sulfur dioxide.

Appendix D Air Quality Nonattainment Area Results

Table D-60. Changes in Emissions from U.S. Combined Passenger Cars, Light Trucks, and HDPUVs by Nonattainment or Maintenance Area and Alternative, Direct and Indirect Impacts--Benzene, 2050

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Ada County; Boise, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.18	-0.32	-4.18
Adams, Denver, and Boulder Counties; Denver Metropolitan area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.38	-0.65	-8.07
Ajo (Pima County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.01
Albuquerque, NM	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.14	-0.24	-2.90
Allegan County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.02	-0.22
Allegheny County Air Basin: Hazelwood monitor, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.02	-0.22
Allegheny County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	-0.15	-0.26	-3.05
Allegheny County; Liberty, Lincoln, Port Vue, Glassport, Clairton, PA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.07
Allegheny, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.03	-0.05	-0.62
Allentown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.09	-0.15	-1.78
Allentown-Bethlehem-Easton, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.10	-0.17	-2.00
Alton Township, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.05
Amador County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.01	-0.11
Anchorage, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.03	-0.05	-0.58
Anchorage; Eagle River, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.03
Anne Arundel County and Baltimore County, MD	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.17	-0.28	-3.19
Archuleta County; Pagosa Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.09
Armstrong County; Madison, Mahoning, Boggs, Washington, Pine, PA	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	-0.05
Aroostock County; City of Presque Isle, ME	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.02
Atlanta, GA	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-0.88	-1.47	-17.16
Atlanta, GA	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.68	-1.15	-13.39
Atlantic City, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.01	-0.11
Bakersfield, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.07	-0.12	-1.41
Baltimore, MD	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	-0.41	-0.68	-7.81
Baltimore, MD	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.41	-0.68	-7.85
Baltimore, MD	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.03
Baton Rouge, LA	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.16	-0.28	-3.42
Beaver, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.04
Benton County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	-0.01	-0.07
Berrien County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.03	-0.06	-0.64

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Billings, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.04	-0.45
Billings, MT	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.05
Birmingham, AL	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.22	-0.37	-4.33
Boise-Northern Ada County, ID	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.18	-0.31	-4.17
Bonner County; The Sandpoint Area, ID	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.07
Boston, MA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.11	-0.19	-2.17
Boyd County (part), KY	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.05
Brooke; Follansbee area, WV	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Brown County: Green Bay, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.03
Burlington, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.03
Butte County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.03	-0.04	-0.52
Calaveras County, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.01	-0.12
Calaveras County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.01	-0.12
Campbell-Clermont Counties, KY-OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.01	-0.08
Canton-Massillon, OH	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.05	-0.09	-1.07
Central New Hampshire, NH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.03	-0.04	-0.52
Central Steptoe Valley, NV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.04
Charleston, WV	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.05	-0.08	-0.91
Charlotte, NC	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.22	-0.37	-4.27
Charlotte-Rock Hill, NC-SC	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.40	-0.68	-7.87
Chicago, IL-IN-WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-1.01	-1.69	-19.51
Chicago-Naperville, IL-IN-WI	Ozone (2008 8-hour)	Maintenance, Serious	100	0	-1.07	-1.80	-21.03
Chico (Butte County), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.03	-0.04	-0.52
Chico, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.02	-0.21
Chico, CA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	-0.03	-0.04	-0.50
Cincinnati, OH-KY (OH Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.24	-0.40	-4.56
Cincinnati, OH-KY (KY Portion)	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	-0.07	-0.13	-1.52
Cincinnati, OH-KY-IN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.33	-0.56	-6.53
Clark County; Las Vegas planning area, NV	PM ₁₀ (1987 24-hour)	Maintenance, Serious	100	0	-0.32	-0.54	-6.27
Cleveland, OH	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.38	-0.65	-7.67
Cleveland, OH	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.15	-0.26	-3.07
Cleveland, OH	PM _{2.5} (2012 Annual)	Maintenance, Moderate	100	0	-0.19	-0.33	-3.88

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Cleveland-Akron-Lorain, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.40	-0.67	-7.98
Cleveland-Akron-Lorain, OH	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.37	-0.62	-7.37
Cochise County; Paul Spur/Douglas planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.04
Colorado Springs, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.13	-0.23	-2.86
Columbus, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.28	-0.47	-5.56
Columbus, OH	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.26	-0.44	-5.15
Cook County; Lyons Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.21
Cook County; Southeast Chicago, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.03	-0.31
Coshocton County; Franklin Township, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.01
Coso Junction, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Cuyahoga County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.15	-0.26	-3.08
Cuyahoga County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.12	-0.21	-2.51
Dallas-Fort Worth, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-1.18	-1.98	-23.05
Dallas-Fort Worth, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-1.16	-1.94	-22.68
Dane County; Madison sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.08	-0.13	-1.55
Delaware County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-0.06	-0.11	-1.30
Denver Metro/North Front Range, CO	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.89	-1.55	-19.28
Denver-Boulder, CO	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.70	-1.21	-15.07
Denver-Boulder-Greeley-Ft. Collins-Loveland, CO	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.89	-1.54	-19.26
Detroit, MI	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	-0.72	-1.21	-14.18
Detroit, MI	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.27	-0.45	-5.28
Detroit, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.03	-0.05	-0.62
Detroit-Ann Arbor, MI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.72	-1.22	-14.22
Doña Ana County; Anthony, NM	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.03
Door County, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	0.00	0.00
Door County-Revised, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	-0.01	-0.08
Douglas (Cochise County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.04
Dukes County, MA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	-0.03
Duluth, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.03	-0.37
East Chicago, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.10
East Helena Area, MT	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00
East Kern County, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	-0.06

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
El Paso County, TX	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.09	-0.16	-1.83
El Paso, TX	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.01	-0.15
El Paso-Las Cruces, TX-NM	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.11	-0.19	-2.13
Eugene-Springfield, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.03	-0.06	-0.65
Evangeline Parish (Partial), LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Fairbanks, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.01	-0.02	-0.18
Fairbanks, AK	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.02	-0.03	-0.32
Flathead County; Columbia Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.03
Flathead County; Kalispell and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.18
Flathead County; Whitefish and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.03
Fort Collins, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.04	-0.06	-0.79
Freehold, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.03
Freestone and Anderson Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	-0.08
Fremont County; Canon City Area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.18
Fresno, CA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.09	-0.15	-1.72
Gila County (part): Payson, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.04
Giles County, VA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Grant County, NM	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.01	-0.11
Grants Pass, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.01	-0.10
Great Falls, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.02
Greater Connecticut, CT	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-0.21	-0.36	-4.20
Greater Connecticut, CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.21	-0.36	-4.20
Greeley, CO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.09	-0.16	-1.94
Hancock County (part): Weirton, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	-0.06
Hancock and Brooke Counties (Part); The city of Weirton, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.06
Harrisburg-Lebanon-Carlisle-York, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.16	-0.26	-3.04
Hartford-New Britain-Middletown, CT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.15	-0.25	-2.93
Hayden (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	-0.03
Hayden, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.04
Hayden, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.03
Henderson-Webster Counties, KY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.02
Hillsborough County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.05
Hillsborough-Polk County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.01
Houston-Galveston-Brazoria, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-1.29	-2.19	-26.32

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Houston-Galveston-Brazoria, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-1.26	-2.14	-25.70
Howard County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	-0.10
Humphreys County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	-0.01	-0.09
Huntington, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.01	-0.14
Hutchinson County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.01	-0.19
Imperial County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-0.03	-0.06	-0.65
Imperial County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.03	-0.06	-0.65
Imperial County, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.03	-0.05	-0.53
Imperial County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	-0.03	-0.05	-0.53
Imperial Valley, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.03	-0.05	-0.62
Indian Wells, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.13
Indiana, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.02	-0.03	-0.37
Indianapolis, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.01
Indianapolis, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.08	-0.14	-1.66
Inland Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.17
Inyo County; Owens Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	-0.01
Jackson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.02	-0.20
Jackson County; Medford-Ashland (including White City), OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.04	-0.49
Jamestown, NY	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.02	-0.04	-0.44
Jefferson County, KY	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.01
Jefferson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.02	-0.19
Jefferson County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.02
Jefferson County; (part) Steubenville & Mingo Junction, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.01	-0.16
Johnstown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.03	-0.40
Josephine County; Grants Pass, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.10
Juneau; Mendenhall Valley area, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.04
Kern County (Eastern Kern), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.01	-0.02	-0.26
Kern County (Eastern Kern), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.01	-0.02	-0.26
King County; Kent, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.06
King County; Seattle, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.04
Klamath Falls, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.01	-0.15
Klamath Falls, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.15
Klamath Falls, OR	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.01	-0.17
Knoxville, TN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.12	-0.20	-2.41
Knoxville-Sevierville-La Follette, TN	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.15	-0.25	-2.90

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
La Porte County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.02	-0.18
LaSalle County; Oglesby, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.09
Lake County (part); Lakeview, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Lake County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.07	-0.11	-1.30
Lake County, OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.03	-0.05	-0.63
Lake County; (part) Eastlake, Timberlake, Lakeline, Willoughby, Mentor, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.01	-0.11
Lake County; Cities of East Chicago, Hammond, Whiting, and Gary, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.04	-0.07	-0.86
Lake County; Polson, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01
Lake County; Ronan, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Lake Tahoe North Shore, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.04
Lake Tahoe South Shore, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.01	-0.10
Lake Tahoe, NV	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.07
Lancaster, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.07	-0.12	-1.42
Lancaster, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.07	-0.12	-1.42
Lane County (part); Oakridge, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Lane County; Eugene/Springfield, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.03	-0.06	-0.66
Las Vegas, NV	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.32	-0.54	-6.27
Las Vegas, NV	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.32	-0.54	-6.28
Laurel Area (Yellowstone County), MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	-0.06
Lebanon County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-0.02	-0.03	-0.37
Lemont, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.02	-0.04	-0.49
Liberty-Clairton, PA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.07
Lincoln County; Libby and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.02
Logan, UT-ID	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.04	-0.45
Longmont, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.03	-0.40
Lorain County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.01	-0.15
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.11	-0.18	-2.10
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-0.11	-0.18	-2.09
Los Angeles-South Coast Air Basin, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-2.23	-3.73	-42.99
Los Angeles-South Coast Air Basin, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-2.23	-3.73	-42.97
Los Angeles-South Coast Air Basin, CA	CO (1971 8-hour)	Maintenance, Serious	100	0	-2.23	-3.73	-43.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Los Angeles-South Coast Air Basin, CA	NO2 (1971 Annual)	Maintenance, Primary	100	0	-2.23	-3.73	-43.00
Los Angeles-South Coast Air Basin, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-2.23	-3.73	-43.00
Los Angeles-South Coast Air Basin, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-2.23	-3.73	-43.00
Louisville, KY-IN (IN Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.04	-0.06	-0.72
Louisville, KY-IN (KY Portion)	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.13	-0.22	-2.52
Lowell, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.02	-0.27
Lucas County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.05	-0.08	-1.02
Madison County; Granite City Township and Nameoki Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.32
Manchester, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.02	-0.29
Manitowoc County, WI	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.01	-0.01	-0.16
Marathon County: Rothschild Sub-city area, Rib Mountain, Weston, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.02	-0.04	-0.45
Maricopa and Pinal Counties; Phoenix planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.63	-1.06	-12.19
Marion County: Lawrence, Washington, and Warrant Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.07	-0.12	-1.37
Mariposa County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.05
Mariposa County, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.05
Marshall, WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.02	-0.32
Medford, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.03	-0.30
Memphis, TN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.17	-0.29	-3.36
Memphis, TN-MS-AR	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.22	-0.37	-4.34
Miami (Gila County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.05
Miami, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.04
Miami, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.05
Millinocket AQCR 109, ME	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.03	-0.04	-0.49
Milwaukee, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.21	-0.36	-4.25
Milwaukee, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.10	-0.17	-1.97
Milwaukee-Racine, WI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.19	-0.32	-3.77
Minneapolis-St. Paul, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.50	-0.85	-9.99
Minneapolis-St. Paul, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.49	-0.83	-9.71
Missoula, MT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.03	-0.36
Missoula, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.03	-0.37

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Modesto, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.04	-0.07	-0.83
Mohave County (part); Bullhead City, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.20
Mono Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01
Mono County; Mammoth Lake planning area, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.06
Morenci (Greenlee County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.01
Morgan County, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.01	-0.09
Morongo Band of Mission Indians, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	-0.02
Morongo Band of Mission Indians, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	-0.02
Morristown, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.05
Muscatine County, IA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.05
Muscatine, IA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	-0.09
Muskegon County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.02	-0.04	-0.42
Muskingum River, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.02
Nashua, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.02	-0.24
Nassau County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.02
Navarro County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	-0.08
Nevada County (Western part), CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-0.01	-0.02	-0.23
Nevada County (Western part), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.01	-0.02	-0.23
New Haven County, CT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.07
New Haven-Meriden-Waterbury, CT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.12	-0.21	-2.42
New Madrid County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
New Manchester-Grant magisterial district in Hancock County, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.03
New York County, NY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.06	-0.09	-1.13
New York-N. New Jersey-Long Island, NY-NJ-CT	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-1.86	-3.14	-36.64
New York-N. New Jersey-Long Island, NY-NJ-CT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-1.05	-1.77	-20.73
New York-N. New Jersey-Long Island, NY-NJ-CT	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-1.91	-3.21	-37.51
New York-Northern New Jersey-Long Island, NY-NJ-CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-1.88	-3.16	-37.04
Nogales, AZ	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.07
Northern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.28	-0.48	-5.66
Oakridge, OR	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Ogden, UT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.02	-0.24
Ogden, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.24
Olmsted County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.10
Olmsted County; City of Rochester, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.02	-0.03	-0.35

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Oneida County: Rhinelander Sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.01	-0.01	-0.15
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Pekin, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.01	-0.12
Penns Grove, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Peoria County: Hollis twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00
Peoria, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.02	-0.28
Perth Amboy, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.01	-0.15
Philadelphia-Camden County, PA-NJ	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.16	-0.27	-3.26
Philadelphia-Wilmington, PA-NJ-DE (NJ Portion)	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.17	-0.28	-3.25
Philadelphia-Wilmington, PA-NJ-DE (PA-DE Portion)	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.51	-0.86	-10.17
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.90	-1.52	-17.74
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.87	-1.46	-16.93
Phoenix, AZ	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.62	-1.03	-11.89
Phoenix-Mesa, AZ	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-0.63	-1.06	-12.21
Phoenix-Mesa, AZ	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.64	-1.07	-12.35
Pierce County; Tacoma, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Pima County; Ajo planning area, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Pima County; Rillito planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.01	-0.10
Pinal County (part); West Pinal, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.03	-0.05	-0.59
Pitkin County; Aspen, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.12
Pittsburgh, PA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.04	-0.06	-0.73
Pittsburgh-Beaver Valley, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.33	-0.56	-6.64
Pittsburgh-Beaver Valley, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.30	-0.51	-6.08
Plumas County, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	0.00	0.00	-0.01
Polk County, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	-0.01	-0.06
Portland, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.21	-0.36	-4.27
Power-Bannock Counties; Fort Hall Indian Reservation, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.03
Power-Bannock Counties; Portneuf Valley Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.03	-0.06	-0.74
Provo, UT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.02	-0.04	-0.47
Provo, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.09	-0.14	-1.69

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Prowers County; Lamar, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.04
Raleigh-Durham, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.26	-0.44	-5.04
Ramsey County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.02
Reading, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.05	-0.09	-1.07
Reno, NV	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.04	-0.06	-0.76
Rhinelander, WI	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.01	-0.08
Riverside County (Coachella Valley), CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-0.07	-0.12	-1.38
Riverside County (Coachella Valley), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-0.07	-0.12	-1.38
Riverside County; Coachella Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.08	-0.14	-1.58
Riverside, Los Angeles, Orange, & San Bernardino Counties; South Coast Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-2.22	-3.71	-42.80
Rosebud County; Lame Deer, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01
Routt County (part); Steamboat Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.17
Rusk and Panola Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.01	-0.16
Sacramento County, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.19	-0.31	-3.63
Sacramento Metro, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.33	-0.55	-6.30
Sacramento Metro, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.33	-0.55	-6.30
Sacramento, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.22	-0.37	-4.21
Sacramento, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.32	-0.53	-6.16
Salem, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.04	-0.06	-0.74
Salt Lake City, UT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.04	-0.06	-0.76
Salt Lake City, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.30	-0.51	-5.98
Salt Lake County, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.18	-0.30	-3.57
Salt Lake County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	-0.18	-0.30	-3.57
San Antonio, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.30	-0.51	-5.93
San Bernardino County, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.07	-0.12	-1.43
San Diego County, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.48	-0.80	-9.19
San Diego County, CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-0.48	-0.80	-9.18
San Diego, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.48	-0.80	-9.18
San Francisco Bay Area, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.97	-1.62	-18.68
San Francisco Bay Area, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.97	-1.62	-18.66
San Francisco Bay Area, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.97	-1.62	-18.71

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
San Francisco-Oakland-San Jose, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.92	-1.53	-17.64
San Joaquin Valley Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.59	-0.99	-11.52
San Joaquin Valley, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-0.59	-0.99	-11.52
San Joaquin Valley, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-0.59	-0.99	-11.52
San Joaquin Valley, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.59	-0.99	-11.52
San Joaquin Valley, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-0.59	-0.99	-11.52
San Luis Obispo (Eastern San Luis Obispo), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	-0.04
San Luis Obispo (Eastern part), CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	-0.04
San Manuel (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.05
San Miguel County; Telluride, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.04
Sanders County (part); Thompson Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Santa Cruz County; Nogales planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.07
Seaford, DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.04	-0.06	-0.75
Seattle-Tacoma, WA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.48	-0.81	-9.63
Sheboygan County, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.02	-0.20
Sheridan County; City of Sheridan, WY	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.07
Shoreline Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.19
Shoshone County; City of Pinehurst, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Shoshone County; Pinehurst Expansion Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.15
Silver Bow County; Butte, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.10
Somerville, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.04
Southern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.09	-0.14	-1.69
Southwest Indiana, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.02
Spokane County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.05	-0.09	-1.07
Spokane, WA	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.05	-0.09	-1.07
Springfield, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.03	-0.38
St. Bernard Parish, LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.03	-0.05	-0.66
St. Clair, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.01	-0.16
St. Lawrence County, NY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.03
St. Louis, MO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.14	-0.23	-2.75
St. Louis, MO-IL	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.46	-0.77	-9.13
St. Louis-St. Charles-Farmington, MO-IL	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.47	-0.79	-9.30
Steubenville, OH-WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.02	-0.04	-0.47
Steubenville-Weirton, OH-WV	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.02	-0.03	-0.40

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Stockton, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.05	-0.09	-1.06
Sullivan County, TN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	-0.08
Sutter Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00
Syracuse, NY	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.07	-0.12	-1.38
Tacoma, WA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.08	-0.14	-1.67
Tazewell County: Groveland twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.06
Terre Haute, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.02	-0.18
Thurston County; Cities of Olympia, Tumwater, and Lacey, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.03	-0.32
Titus County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Toms River, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.01
Tooele County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	0.00	0.00	-0.01
Trenton, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.02	-0.22
Trona, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01
Tucson, AZ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.11	-0.19	-2.15
Tuolumne County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.01	-0.15
Tuscan Buttes, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00
Tuscan Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal (Rural Transport)	100	0	0.00	0.00	0.00
Uinta Basin, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.01	-0.16
Union County; LaGrande, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.03
Upper Green River Basin Area, WY	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.01	-0.16
Utah County, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.09	-0.15	-1.70
Vancouver, WA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.05	-0.08	-0.96
Ventura County, CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-0.11	-0.19	-2.17
Ventura County, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.11	-0.19	-2.17
Vermillion County; Part of Clinton Township, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.04
Vigo County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.02	-0.03	-0.37
Walla Walla County; Wallula, WA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	-0.01
Waltham, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.01	-0.15
Warren County, NJ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	-0.01	-0.07
Warren County: Conewago Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.06
Warren County: Warren Boro, Pleasant Twp, Glade Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.01	-0.01	-0.13
Warren, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.01	-0.16

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Washington, DC-MD-VA	Ozone (2008 8-hour)	Nonattainment (DC) Maintenance (MD, VA), Marginal	50	0	-0.76	-1.27	-14.63
Washington, DC-MD-VA	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.75	-1.25	-14.38
Washington, DC-MD-VA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.10	-0.16	-1.90
Washoe County; Reno planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.04	-0.07	-0.76
Wayne County, MI	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.17
Wayne County: Boston, Center, Franklin, Wayne & Webster Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.02	-0.18
West Central Pinal, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.04
West Silver Valley, ID	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	-0.01	-0.08
Whatcom County, WA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.02
Winston-Salem, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.07	-0.11	-1.32
Worcester, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.03	-0.05	-0.59
Yakima County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.03	-0.33
Yakima, WA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.01	-0.11
Yuba City-Marysville, CA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.04	-0.47
Yuma, AZ	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.02	-0.03	-0.33
Yuma, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.03	-0.04	-0.51

Notes:

^a Nonattainment or maintenance status as of 2/1/2024. Source: EPA, The Green Book Nonattainment Areas for Criteria Pollutants; <http://www.epa.gov/airquality/greenbook/>. "--" indicates that no severity classification has been established for the NAAQS pollutant.

^b Emissions thresholds in tons per year. Where the threshold differs by precursor pollutant, the smallest of the precursor thresholds is shown. These thresholds are provided for information only; a general conformity determination is not required for the Proposed Action. Source: 40 CFR 93.853.

^c Positive values are emissions increases; negative values are emissions decreases.

EPA = U.S. Environmental Protection Agency; NAAQS = National Ambient Air Quality Standard; CO = carbon monoxide; NO₂ = nitrogen dioxide; PM2.5 = particulate matter less than 2.5 microns in size; PM10 = particulate matter less than 10 microns in size; SO₂ = sulfur dioxide.

Table D-61. Changes in Emissions from U.S. Combined Passenger Cars, Light Trucks, and HDPUVs by Nonattainment or Maintenance Area and Alternative, Direct and Indirect Impacts--1,3-Butadiene, 2035

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Ada County; Boise, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.08
Adams, Denver, and Boulder Counties; Denver Metropolitan area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.03	-0.03	-0.37
Ajo (Pima County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Albuquerque, NM	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.02	-0.18
Allegan County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.02
Allegheny County Air Basin: Hazelwood monitor, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.01
Allegheny County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	-0.01	-0.02	-0.19
Allegheny County; Liberty, Lincoln, Port Vue, Glassport, Clairton, PA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Allegheny, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.02
Allentown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.12
Allentown-Bethlehem-Easton, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.01	-0.01	-0.13
Alton Township, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Amador County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	-0.01
Anchorage, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.00	-0.03
Anchorage; Eagle River, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Anne Arundel County and Baltimore County, MD	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.02	-0.02	-0.25
Archuleta County; Pagosa Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Armstrong County; Madison, Mahoning, Boggs, Washington, Pine, PA	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	0.00
Aroostock County; City of Presque Isle, ME	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Atlanta, GA	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-0.10	-0.10	-1.24
Atlanta, GA	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.07	-0.08	-0.96
Atlantic City, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.01
Bakersfield, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.01	-0.10
Baltimore, MD	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	-0.05	-0.05	-0.61
Baltimore, MD	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.05	-0.05	-0.62
Baltimore, MD	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00
Baton Rouge, LA	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.01	-0.02	-0.19
Beaver, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Benton County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00
Berrien County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.05

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Billings, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.03
Billings, MT	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.01
Birmingham, AL	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.02	-0.02	-0.28
Boise-Northern Ada County, ID	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.01	-0.08
Bonner County; The Sandpoint Area, ID	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Boston, MA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.01	-0.15
Boyd County (part), KY	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Brooke; Follansbee area, WV	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Brown County: Green Bay, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Burlington, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Butte County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	-0.04
Calaveras County, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	-0.01
Calaveras County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	-0.01
Campbell-Clermont Counties, KY-OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.01
Canton-Massillon, OH	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.01	-0.01	-0.07
Central New Hampshire, NH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.04
Central Steptoe Valley, NV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Charleston, WV	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	-0.01	-0.06
Charlotte, NC	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.03	-0.32
Charlotte-Rock Hill, NC-SC	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.04	-0.05	-0.58
Chicago, IL-IN-WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.12	-0.12	-1.50
Chicago-Naperville, IL-IN-WI	Ozone (2008 8-hour)	Maintenance, Serious	100	0	-0.12	-0.13	-1.53
Chico (Butte County), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	-0.04
Chico, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.01
Chico, CA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.04
Cincinnati, OH-KY (OH Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.03	-0.03	-0.35
Cincinnati, OH-KY (KY Portion)	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.09
Cincinnati, OH-KY-IN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.04	-0.04	-0.46
Clark County; Las Vegas planning area, NV	PM ₁₀ (1987 24-hour)	Maintenance, Serious	100	0	-0.04	-0.04	-0.46
Cleveland, OH	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.04	-0.04	-0.50
Cleveland, OH	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.02	-0.19
Cleveland, OH	PM _{2.5} (2012 Annual)	Maintenance, Moderate	100	0	-0.02	-0.02	-0.24

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Cleveland-Akron-Lorain, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.04	-0.04	-0.53
Cleveland-Akron-Lorain, OH	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.04	-0.04	-0.49
Cochise County; Paul Spur/Douglas planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Colorado Springs, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.01	-0.12
Columbus, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.03	-0.03	-0.39
Columbus, OH	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.03	-0.03	-0.37
Cook County; Lyons Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Cook County; Southeast Chicago, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.03
Coshocton County; Franklin Township, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Coso Junction, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Cuyahoga County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.19
Cuyahoga County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.01	-0.15
Dallas-Fort Worth, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.13	-0.14	-1.67
Dallas-Fort Worth, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.13	-0.14	-1.64
Dane County; Madison sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.01	-0.11
Delaware County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.08
Denver Metro/North Front Range, CO	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.06	-0.07	-0.84
Denver-Boulder, CO	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.05	-0.05	-0.64
Denver-Boulder-Greeley-Ft. Collins-Loveland, CO	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.06	-0.07	-0.84
Detroit, MI	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	-0.08	-0.08	-1.01
Detroit, MI	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.03	-0.03	-0.38
Detroit, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.05
Detroit-Ann Arbor, MI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.08	-0.08	-1.02
Doña Ana County; Anthony, NM	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Door County, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	0.00	0.00
Door County-Revised, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	0.00	-0.01
Douglas (Cochise County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Dukes County, MA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00
Duluth, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.02
East Chicago, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.01
East Helena Area, MT	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00
East Kern County, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	-0.01

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
El Paso County, TX	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.01	-0.13
El Paso, TX	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.01
El Paso-Las Cruces, TX-NM	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.01	-0.17
Eugene-Springfield, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.04
Evangeline Parish (Partial), LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Fairbanks, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.00	-0.01
Fairbanks, AK	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	-0.01
Flathead County; Columbia Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Flathead County; Kalispell and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Flathead County; Whitefish and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Fort Collins, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.04
Freehold, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Freestone and Anderson Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Fremont County; Canon City Area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Fresno, CA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.01	-0.01	-0.13
Gila County (part): Payson, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Giles County, VA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Grant County, NM	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.01
Grants Pass, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.01
Great Falls, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Greater Connecticut, CT	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-0.02	-0.03	-0.31
Greater Connecticut, CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.02	-0.03	-0.31
Greeley, CO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.01	-0.09
Hancock County (part): Weirton, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00
Hancock and Brooke Counties (Part); The city of Weirton, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Harrisburg-Lebanon-Carlisle-York, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.02	-0.22
Hartford-New Britain-Middletown, CT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.02	-0.21
Hayden (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	0.00
Hayden, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Hayden, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Henderson-Webster Counties, KY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Hillsborough County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00
Hillsborough-Polk County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00
Houston-Galveston-Brazoria, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.16	-0.17	-2.03

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Houston-Galveston-Brazoria, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.15	-0.16	-1.98
Howard County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Humphreys County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	-0.01
Huntington, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.01
Hutchinson County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Imperial County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.05
Imperial County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	-0.05
Imperial County, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.04
Imperial County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.00	0.00	-0.04
Imperial Valley, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	-0.04
Indian Wells, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Indiana, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.02
Indianapolis, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Indianapolis, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.01	-0.12
Inland Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Inyo County; Owens Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00
Jackson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.01
Jackson County; Medford-Ashland (including White City), OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.03
Jamestown, NY	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	-0.03
Jefferson County, KY	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00
Jefferson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.01
Jefferson County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Jefferson County; (part) Steubenville & Mingo Junction, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.01
Johnstown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.02
Josephine County; Grants Pass, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Juneau; Mendenhall Valley area, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Kern County (Eastern Kern), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	-0.02
Kern County (Eastern Kern), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	-0.02
King County; Kent, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
King County; Seattle, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Klamath Falls, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.01
Klamath Falls, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Klamath Falls, OR	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01
Knoxville, TN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.01	-0.01	-0.16
Knoxville-Sevierville-La Follette, TN	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.02	-0.20

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
La Porte County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.01
LaSalle County; Oglesby, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Lake County (part); Lakeview, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Lake County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.01	-0.10
Lake County, OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.05
Lake County; (part) Eastlake, Timberlake, Lakeline, Willoughby, Mentor, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.01
Lake County; Cities of East Chicago, Hammond, Whiting, and Gary, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.07
Lake County; Polson, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Lake County; Ronan, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Lake Tahoe North Shore, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Lake Tahoe South Shore, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.01
Lake Tahoe, NV	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Lancaster, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.01	-0.01	-0.10
Lancaster, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.10
Lane County (part); Oakridge, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Lane County; Eugene/Springfield, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.04
Las Vegas, NV	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.04	-0.04	-0.46
Las Vegas, NV	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.04	-0.04	-0.46
Laurel Area (Yellowstone County), MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	-0.01
Lebanon County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	0.00	-0.03
Lemont, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.03
Liberty-Clairton, PA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Lincoln County; Libby and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Logan, UT-ID	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.03
Longmont, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.02
Lorain County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.01
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.01	-0.01	-0.16
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-0.01	-0.01	-0.16
Los Angeles-South Coast Air Basin, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-0.26	-0.27	-3.32
Los Angeles-South Coast Air Basin, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-0.26	-0.27	-3.32
Los Angeles-South Coast Air Basin, CA	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.26	-0.27	-3.32

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Los Angeles-South Coast Air Basin, CA	NO2 (1971 Annual)	Maintenance, Primary	100	0	-0.26	-0.27	-3.32
Los Angeles-South Coast Air Basin, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.26	-0.27	-3.32
Los Angeles-South Coast Air Basin, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-0.26	-0.27	-3.32
Louisville, KY-IN (IN Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	-0.05
Louisville, KY-IN (KY Portion)	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.02	-0.02	-0.20
Lowell, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.02
Lucas County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.06
Madison County; Granite City Township and Nameoki Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.02
Manchester, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.02
Manitowoc County, WI	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	-0.01
Marathon County: Rothschild Sub-city area, Rib Mountain, Weston, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	-0.03
Maricopa and Pinal Counties; Phoenix planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.08	-0.08	-0.99
Marion County: Lawrence, Washington, and Warrant Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.01	-0.10
Mariposa County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Mariposa County, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Marshall, WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00
Medford, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.02
Memphis, TN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.02	-0.24
Memphis, TN-MS-AR	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.02	-0.03	-0.31
Miami (Gila County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Miami, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Miami, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Millinocket AQCR 109, ME	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.04
Milwaukee, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.02	-0.02	-0.28
Milwaukee, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.01	-0.13
Milwaukee-Racine, WI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.02	-0.02	-0.25
Minneapolis-St. Paul, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.05	-0.06	-0.69
Minneapolis-St. Paul, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.05	-0.06	-0.67
Missoula, MT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.02
Missoula, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.02

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Modesto, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.06
Mohave County (part); Bullhead City, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Mono Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Mono County; Mammoth Lake planning area, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Morenci (Greenlee County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Morgan County, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.01
Morongo Band of Mission Indians, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	0.00
Morongo Band of Mission Indians, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00
Morristown, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Muscatine County, IA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Muscatine, IA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.01
Muskegon County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.03
Muskingum River, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Nashua, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.02
Nassau County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00
Navarro County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Nevada County (Western part), CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	-0.02
Nevada County (Western part), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	-0.02
New Haven County, CT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
New Haven-Meriden-Waterbury, CT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.01	-0.17
New Madrid County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
New Manchester-Grant magisterial district in Hancock County, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
New York County, NY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.01	-0.07
New York-N. New Jersey-Long Island, NY-NJ-CT	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.20	-0.22	-2.62
New York-N. New Jersey-Long Island, NY-NJ-CT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.11	-0.12	-1.45
New York-N. New Jersey-Long Island, NY-NJ-CT	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.21	-0.22	-2.68
New York-Northern New Jersey-Long Island, NY-NJ-CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.20	-0.22	-2.62
Nogales, AZ	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Northern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.03	-0.03	-0.38
Oakridge, OR	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Ogden, UT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.02
Ogden, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.02
Olmsted County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Olmsted County; City of Rochester, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.02

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Oneida County: Rhinelander Sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	-0.01
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Pekin, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.01
Penns Grove, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Peoria County: Hollis twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00
Peoria, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.02
Perth Amboy, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.01
Philadelphia-Camden County, PA-NJ	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.02	-0.20
Philadelphia-Wilmington, PA-NJ-DE (NJ Portion)	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.02	-0.02	-0.24
Philadelphia-Wilmington, PA-NJ-DE (PA-DE Portion)	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.05	-0.06	-0.69
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.10	-0.10	-1.27
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.10	-0.10	-1.27
Phoenix, AZ	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.07	-0.08	-0.97
Phoenix-Mesa, AZ	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-0.08	-0.08	-0.99
Phoenix-Mesa, AZ	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.08	-0.08	-1.00
Pierce County; Tacoma, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Pima County; Ajo planning area, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Pima County; Rillito planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01
Pinal County (part); West Pinal, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	-0.05
Pitkin County; Aspen, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Pittsburgh, PA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.05
Pittsburgh-Beaver Valley, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.03	-0.03	-0.41
Pittsburgh-Beaver Valley, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.03	-0.03	-0.38
Plumas County, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	0.00	0.00	0.00
Polk County, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00
Portland, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.02	-0.27
Power-Bannock Counties; Fort Hall Indian Reservation, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Power-Bannock Counties; Portneuf Valley Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Provo, UT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.00	0.00	-0.03
Provo, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.01	-0.01	-0.12

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Prowers County; Lamar, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Raleigh-Durham, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.03	-0.03	-0.38
Ramsey County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Reading, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.01	-0.01	-0.08
Reno, NV	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.05
Rhinelander, WI	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00
Riverside County (Coachella Valley), CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-0.01	-0.01	-0.11
Riverside County (Coachella Valley), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-0.01	-0.01	-0.11
Riverside County; Coachella Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.01	-0.01	-0.13
Riverside, Los Angeles, Orange, & San Bernardino Counties; South Coast Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.25	-0.27	-3.31
Rosebud County; Lame Deer, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Routt County (part); Steamboat Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Rusk and Panola Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Sacramento County, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.02	-0.28
Sacramento Metro, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.04	-0.04	-0.49
Sacramento Metro, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.04	-0.04	-0.49
Sacramento, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.03	-0.32
Sacramento, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.04	-0.04	-0.47
Salem, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.05
Salt Lake City, UT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.05
Salt Lake City, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.03	-0.03	-0.40
Salt Lake County, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.02	-0.24
Salt Lake County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	-0.02	-0.02	-0.24
San Antonio, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.03	-0.03	-0.42
San Bernardino County, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.01	-0.12
San Diego County, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.06	-0.06	-0.72
San Diego County, CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-0.06	-0.06	-0.71
San Diego, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.06	-0.06	-0.71
San Francisco Bay Area, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.11	-0.12	-1.46
San Francisco Bay Area, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.11	-0.12	-1.46
San Francisco Bay Area, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.11	-0.12	-1.46

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
San Francisco-Oakland-San Jose, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.11	-0.11	-1.37
San Joaquin Valley Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.07	-0.07	-0.86
San Joaquin Valley, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-0.07	-0.07	-0.86
San Joaquin Valley, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-0.07	-0.07	-0.86
San Joaquin Valley, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.07	-0.07	-0.86
San Joaquin Valley, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-0.07	-0.07	-0.86
San Luis Obispo (Eastern San Luis Obispo), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00
San Luis Obispo (Eastern part), CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00
San Manuel (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
San Miguel County; Telluride, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Sanders County (part); Thompson Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Santa Cruz County; Nogales planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Seaford, DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	-0.06
Seattle-Tacoma, WA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.05	-0.05	-0.62
Sheboygan County, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01
Sheridan County; City of Sheridan, WY	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Shoreline Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Shoshone County; City of Pinehurst, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Shoshone County; Pinehurst Expansion Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Silver Bow County; Butte, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Somerville, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Southern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.01	-0.12
Southwest Indiana, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00
Spokane County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.07
Spokane, WA	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.01	-0.01	-0.07
Springfield, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.03
St. Bernard Parish, LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.01
St. Clair, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.01
St. Lawrence County, NY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
St. Louis, MO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.02	-0.19
St. Louis, MO-IL	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.05	-0.05	-0.64
St. Louis-St. Charles-Farmington, MO-IL	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.05	-0.05	-0.65
Steubenville, OH-WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.01
Steubenville-Weirton, OH-WV	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	0.00	-0.02

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Stockton, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.01	-0.08
Sullivan County, TN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.01
Sutter Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00
Syracuse, NY	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.01	-0.10
Tacoma, WA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.11
Tazewell County: Groveland twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Terre Haute, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.01
Thurston County; Cities of Olympia, Tumwater, and Lacey, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.02
Titus County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Toms River, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Tooele County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	0.00	0.00	0.00
Trenton, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.02
Trona, CA	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Tucson, AZ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.01	-0.16
Tuolumne County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	-0.01
Tuscan Buttes, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00
Tuscan Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal (Rural Transport)	100	0	0.00	0.00	0.00
Uinta Basin, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	-0.01
Union County; LaGrande, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Upper Green River Basin Area, WY	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	-0.01
Utah County, UT	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.12
Vancouver, WA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.01	-0.07
Ventura County, CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-0.01	-0.01	-0.16
Ventura County, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.01	-0.01	-0.16
Vermillion County; Part of Clinton Township, IN	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Vigo County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.03
Walla Walla County; Wallula, WA	PM ₁₀ (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00
Waltham, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.01
Warren County, NJ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	-0.01
Warren County: Conewago Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Warren County: Warren Boro, Pleasant Twp, Glade Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00
Warren, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Washington, DC-MD-VA	Ozone (2008 8-hour)	Nonattainment (DC) Maintenance (MD, VA), Marginal	50	0	-0.09	-0.09	-1.11
Washington, DC-MD-VA	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.09	-0.09	-1.11
Washington, DC-MD-VA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.01	-0.14
Washoe County; Reno planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	-0.05
Wayne County, MI	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.02
Wayne County: Boston, Center, Franklin, Wayne & Webster Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.01
West Central Pinal, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
West Silver Valley, ID	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Whatcom County, WA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Winston-Salem, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.01	-0.10
Worcester, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.04
Yakima County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.02
Yakima, WA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.01
Yuba City-Marysville, CA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.04
Yuma, AZ	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	-0.02
Yuma, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.04

Notes:

^a Nonattainment or maintenance status as of 2/1/2024. Source: EPA, The Green Book Nonattainment Areas for Criteria Pollutants; <http://www.epa.gov/airquality/greenbook/>. "--" indicates that no severity classification has been established for the NAAQS pollutant.

^b Emissions thresholds in tons per year. Where the threshold differs by precursor pollutant, the smallest of the precursor thresholds is shown. These thresholds are provided for information only; a general conformity determination is not required for the Proposed Action. Source: 40 CFR 93.853.

^c Positive values are emissions increases; negative values are emissions decreases.

EPA = U.S. Environmental Protection Agency; NAAQS = National Ambient Air Quality Standard; CO = carbon monoxide; NO₂ = nitrogen dioxide; PM2.5 = particulate matter less than 2.5 microns in size; PM10 = particulate matter less than 10 microns in size; SO₂ = sulfur dioxide.

Table D-62. Changes in Emissions from U.S. Combined Passenger Cars, Light Trucks, and HDPUVs by Nonattainment or Maintenance Area and Alternative, Direct and Indirect Impacts--1,3-Butadiene, 2050

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Ada County; Boise, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.12
Adams, Denver, and Boulder Counties; Denver Metropolitan area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.03	-0.05	-0.56
Ajo (Pima County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Albuquerque, NM	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.02	-0.28
Allegan County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.02
Allegheny County Air Basin: Hazelwood monitor, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.02
Allegheny County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	-0.01	-0.02	-0.29
Allegheny County; Liberty, Lincoln, Port Vue, Glassport, Clairton, PA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Allegheny, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.03
Allentown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.18
Allentown-Bethlehem-Easton, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.01	-0.02	-0.20
Alton Township, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Amador County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	-0.01
Anchorage, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.00	-0.04
Anchorage; Eagle River, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Anne Arundel County and Baltimore County, MD	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.02	-0.03	-0.38
Archuleta County; Pagosa Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Armstrong County; Madison, Mahoning, Boggs, Washington, Pine, PA	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	0.00
Aroostock County; City of Presque Isle, ME	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Atlanta, GA	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-0.10	-0.16	-1.89
Atlanta, GA	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.07	-0.12	-1.46
Atlantic City, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.01
Bakersfield, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.01	-0.16
Baltimore, MD	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	-0.05	-0.08	-0.93
Baltimore, MD	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.05	-0.08	-0.94
Baltimore, MD	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00
Baton Rouge, LA	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.01	-0.02	-0.29

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Beaver, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Benton County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	-0.01
Berrien County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.07
Billings, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.04
Billings, MT	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.02
Birmingham, AL	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.02	-0.04	-0.43
Boise-Northern Ada County, ID	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.01	-0.12
Bonner County; The Sandpoint Area, ID	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Boston, MA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.02	-0.23
Boyd County (part), KY	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Brooke; Follansbee area, WV	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Brown County: Green Bay, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Burlington, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Butte County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	-0.06
Calaveras County, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	-0.01
Calaveras County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	-0.01
Campbell-Clermont Counties, KY-OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.01
Canton-Massillon, OH	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.01	-0.01	-0.10
Central New Hampshire, NH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.01	-0.06
Central Steptoe Valley, NV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Charleston, WV	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	-0.01	-0.09
Charlotte, NC	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.04	-0.48
Charlotte-Rock Hill, NC-SC	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.05	-0.07	-0.89
Chicago, IL-IN-WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.12	-0.19	-2.28
Chicago-Naperville, IL-IN-WI	Ozone (2008 8-hour)	Maintenance, Serious	100	0	-0.12	-0.19	-2.32
Chico (Butte County), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	-0.06
Chico, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.02
Chico, CA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.05
Cincinnati, OH-KY (OH Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.03	-0.04	-0.53
Cincinnati, OH-KY (KY Portion)	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.13

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Cincinnati, OH-KY-IN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.04	-0.06	-0.69
Clark County; Las Vegas planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.04	-0.06	-0.70
Cleveland, OH	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.04	-0.06	-0.77
Cleveland, OH	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.02	-0.28
Cleveland, OH	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-0.02	-0.03	-0.37
Cleveland-Akron-Lorain, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.04	-0.07	-0.80
Cleveland-Akron-Lorain, OH	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.04	-0.06	-0.74
Cochise County; Paul Spur/Douglas planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Colorado Springs, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.02	-0.18
Columbus, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.03	-0.05	-0.60
Columbus, OH	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.03	-0.05	-0.56
Cook County; Lyons Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.02
Cook County; Southeast Chicago, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.04
Coshocton County; Franklin Township, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Coso Junction, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Cuyahoga County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.28
Cuyahoga County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.02	-0.23
Dallas-Fort Worth, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.13	-0.21	-2.54
Dallas-Fort Worth, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.13	-0.21	-2.49
Dane County; Madison sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.01	-0.16
Delaware County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.12
Denver Metro/North Front Range, CO	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.06	-0.11	-1.28
Denver-Boulder, CO	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.05	-0.08	-0.98
Denver-Boulder-Greeley-Ft. Collins-Loveland, CO	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.06	-0.11	-1.28
Detroit, MI	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	-0.08	-0.13	-1.54
Detroit, MI	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.03	-0.05	-0.57
Detroit, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	-0.01	-0.07
Detroit-Ann Arbor, MI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.08	-0.13	-1.54
Doña Ana County; Anthony, NM	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Door County, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	0.00	0.00
Door County-Revised, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	0.00	-0.01
Douglas (Cochise County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Dukes County, MA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00
Duluth, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.03
East Chicago, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.02
East Helena Area, MT	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00
East Kern County, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	-0.01
El Paso County, TX	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.02	-0.19
El Paso, TX	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.02
El Paso-Las Cruces, TX-NM	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.02	-0.26
Eugene-Springfield, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.07
Evangeline Parish (Partial), LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Fairbanks, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.00	-0.02
Fairbanks, AK	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	-0.03
Flathead County; Columbia Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Flathead County; Kalispell and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Flathead County; Whitefish and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Fort Collins, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.06
Freehold, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Freestone and Anderson Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Fremont County; Canon City Area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.02
Fresno, CA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.01	-0.02	-0.20
Gila County (part): Payson, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Giles County, VA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Grant County, NM	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.01
Grants Pass, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.01
Great Falls, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Greater Connecticut, CT	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-0.02	-0.04	-0.47
Greater Connecticut, CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.02	-0.04	-0.47
Greeley, CO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.01	-0.14
Hancock County (part): Weirton, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00
Hancock and Brooke Counties (Part); The city of Weirton, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Harrisburg-Lebanon-Carlisle-York, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.03	-0.34
Hartford-New Britain-Middletown, CT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.03	-0.32
Hayden (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	0.00
Hayden, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01
Hayden, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Henderson-Webster Counties, KY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Hillsborough County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.01
Hillsborough-Polk County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00
Houston-Galveston-Brazoria, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.14	-0.24	-2.97
Houston-Galveston-Brazoria, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.14	-0.23	-2.90
Howard County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Humphreys County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	-0.01
Huntington, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.01
Hutchinson County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Imperial County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.07
Imperial County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.01	-0.07
Imperial County, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.06
Imperial County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.00	0.00	-0.06
Imperial Valley, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	-0.01	-0.07
Indian Wells, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Indiana, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.03
Indianapolis, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Indianapolis, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.02	-0.18
Inland Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.02
Inyo County; Owens Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Jackson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.02
Jackson County; Medford-Ashland (including White City), OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.05
Jamestown, NY	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	-0.04
Jefferson County, KY	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00
Jefferson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.02
Jefferson County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Jefferson County; (part) Steubenville & Mingo Junction, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.01
Johnstown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.04
Josephine County; Grants Pass, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Juneau; Mendenhall Valley area, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Kern County (Eastern Kern), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	-0.03
Kern County (Eastern Kern), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	-0.03
King County; Kent, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
King County; Seattle, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Klamath Falls, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.02
Klamath Falls, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.02
Klamath Falls, OR	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.02
Knoxville, TN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.01	-0.02	-0.25
Knoxville-Sevierville-La Follette, TN	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.03	-0.31
La Porte County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.02
LaSalle County; Oglesby, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Lake County (part); Lakeview, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Lake County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.01	-0.14
Lake County, OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.01	-0.07
Lake County; (part) Eastlake, Timberlake, Lakeline, Willoughby, Mentor, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.01
Lake County; Cities of East Chicago, Hammond, Whiting, and Gary, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.10
Lake County; Polson, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Lake County; Ronan, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Lake Tahoe North Shore, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Lake Tahoe South Shore, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.01
Lake Tahoe, NV	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.01
Lancaster, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.01	-0.01	-0.15
Lancaster, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.15
Lane County (part); Oakridge, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Lane County; Eugene/Springfield, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.07
Las Vegas, NV	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.04	-0.06	-0.70
Las Vegas, NV	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.04	-0.06	-0.70
Laurel Area (Yellowstone County), MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	-0.02
Lebanon County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	0.00	-0.04
Lemont, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.05
Liberty-Clairton, PA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Lincoln County; Libby and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Logan, UT-ID	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.04
Longmont, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.03
Lorain County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.02
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.01	-0.02	-0.24
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-0.01	-0.02	-0.24
Los Angeles-South Coast Air Basin, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-0.26	-0.42	-5.06
Los Angeles-South Coast Air Basin, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-0.26	-0.42	-5.06
Los Angeles-South Coast Air Basin, CA	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.26	-0.42	-5.06
Los Angeles-South Coast Air Basin, CA	NO ₂ (1971 Annual)	Maintenance, Primary	100	0	-0.26	-0.42	-5.06
Los Angeles-South Coast Air Basin, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.26	-0.42	-5.06
Los Angeles-South Coast Air Basin, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-0.26	-0.42	-5.06
Louisville, KY-IN (IN Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	-0.01	-0.07
Louisville, KY-IN (KY Portion)	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.02	-0.03	-0.31
Lowell, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.03
Lucas County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.10

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Madison County; Granite City Township and Nameoki Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.02
Manchester, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.03
Manitowoc County, WI	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	-0.02
Marathon County: Rothschild Sub-city area, Rib Mountain, Weston, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	-0.05
Maricopa and Pinal Counties; Phoenix planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.08	-0.12	-1.50
Marion County: Lawrence, Washington, and Warrant Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.01	-0.15
Mariposa County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01
Mariposa County, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01
Marshall, WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00
Medford, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.03
Memphis, TN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.03	-0.36
Memphis, TN-MS-AR	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.02	-0.04	-0.46
Miami (Gila County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.01
Miami, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01
Miami, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.01
Millinocket AQCR 109, ME	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.06
Milwaukee, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.02	-0.04	-0.43
Milwaukee, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.02	-0.20
Milwaukee-Racine, WI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.02	-0.03	-0.38
Minneapolis-St. Paul, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.05	-0.09	-1.05
Minneapolis-St. Paul, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.05	-0.08	-1.02
Missoula, MT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.03
Missoula, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.03
Modesto, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.09
Mohave County (part); Bullhead City, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.02
Mono Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Mono County; Mammoth Lake planning area, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Morenci (Greenlee County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Morgan County, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.01
Morongo Band of Mission Indians, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	0.00
Morongo Band of Mission Indians, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00
Morristown, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.01
Muscatine County, IA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.01
Muscatine, IA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.01
Muskegon County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.05
Muskingum River, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Nashua, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.03
Nassau County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00
Navarro County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Nevada County (Western part), CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	-0.03
Nevada County (Western part), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	-0.03
New Haven County, CT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
New Haven-Meriden-Waterbury, CT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.02	-0.25
New Madrid County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
New Manchester-Grant magisterial district in Hancock County, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
New York County, NY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.01	-0.10
New York-N. New Jersey-Long Island, NY-NJ-CT	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.20	-0.33	-3.97
New York-N. New Jersey-Long Island, NY-NJ-CT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.11	-0.18	-2.20
New York-N. New Jersey-Long Island, NY-NJ-CT	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.21	-0.34	-4.06
New York-Northern New Jersey-Long Island, NY-NJ-CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.20	-0.33	-3.98
Nogales, AZ	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Northern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.03	-0.05	-0.58
Oakridge, OR	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Ogden, UT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.03
Ogden, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.03
Olmsted County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Olmsted County; City of Rochester, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.04

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Oneida County: Rhinelander Sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	-0.02
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Pekin, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.01
Penns Grove, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Peoria County: Hollis twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00
Peoria, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.03
Perth Amboy, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.02
Philadelphia-Camden County, PA-NJ	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.03	-0.31
Philadelphia-Wilmington, PA-NJ-DE (NJ Portion)	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.02	-0.03	-0.37
Philadelphia-Wilmington, PA-NJ-DE (PA-DE Portion)	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.05	-0.09	-1.05
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.10	-0.16	-1.92
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.10	-0.16	-1.92
Phoenix, AZ	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.07	-0.12	-1.46
Phoenix-Mesa, AZ	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-0.08	-0.12	-1.50
Phoenix-Mesa, AZ	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.08	-0.13	-1.52
Pierce County; Tacoma, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Pima County; Ajo planning area, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Pima County; Rillito planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01
Pinal County (part); West Pinal, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	-0.01	-0.07
Pitkin County; Aspen, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Pittsburgh, PA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.08
Pittsburgh-Beaver Valley, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.03	-0.05	-0.63
Pittsburgh-Beaver Valley, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.03	-0.05	-0.57
Plumas County, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	0.00	0.00	0.00
Polk County, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	-0.01
Portland, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.03	-0.41
Power-Bannock Counties; Fort Hall Indian Reservation, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Power-Bannock Counties; Portneuf Valley Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.02

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Provo, UT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.00	0.00	-0.05
Provo, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.01	-0.02	-0.18
Prowers County; Lamar, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Raleigh-Durham, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.03	-0.05	-0.58
Ramsey County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Reading, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.01	-0.01	-0.12
Reno, NV	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.08
Rhineland, WI	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.01
Riverside County (Coachella Valley), CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-0.01	-0.01	-0.17
Riverside County (Coachella Valley), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-0.01	-0.01	-0.17
Riverside County; Coachella Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.01	-0.02	-0.19
Riverside, Los Angeles, Orange, & San Bernardino Counties; South Coast Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.26	-0.42	-5.04
Rosebud County; Lame Deer, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Routt County (part); Steamboat Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Rusk and Panola Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Sacramento County, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.04	-0.43
Sacramento Metro, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.04	-0.06	-0.74
Sacramento Metro, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.04	-0.06	-0.74
Sacramento, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.03	-0.04	-0.49
Sacramento, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.04	-0.06	-0.72
Salem, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.08
Salt Lake City, UT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.08
Salt Lake City, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.03	-0.05	-0.61
Salt Lake County, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.03	-0.37
Salt Lake County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	-0.02	-0.03	-0.37
San Antonio, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.03	-0.05	-0.63
San Bernardino County, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.01	-0.16
San Diego County, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.06	-0.09	-1.09
San Diego County, CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-0.06	-0.09	-1.08

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
San Diego, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.06	-0.09	-1.08
San Francisco Bay Area, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.11	-0.18	-2.21
San Francisco Bay Area, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.11	-0.18	-2.21
San Francisco Bay Area, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.11	-0.18	-2.22
San Francisco-Oakland-San Jose, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.11	-0.17	-2.09
San Joaquin Valley Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.07	-0.11	-1.30
San Joaquin Valley, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-0.07	-0.11	-1.30
San Joaquin Valley, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-0.07	-0.11	-1.30
San Joaquin Valley, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.07	-0.11	-1.30
San Joaquin Valley, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-0.07	-0.11	-1.30
San Luis Obispo (Eastern San Luis Obispo), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00
San Luis Obispo (Eastern part), CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00
San Manuel (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.01
San Miguel County; Telluride, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Sanders County (part); Thompson Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Santa Cruz County; Nogales planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01
Seaford, DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	-0.01	-0.09
Seattle-Tacoma, WA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.05	-0.08	-0.95
Sheboygan County, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.02
Sheridan County; City of Sheridan, WY	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Shoreline Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.02
Shoshone County; City of Pinehurst, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Shoshone County; Pinehurst Expansion Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Silver Bow County; Butte, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Somerville, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Southern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.02	-0.18
Southwest Indiana, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00
Spokane County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.11
Spokane, WA	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.01	-0.01	-0.11
Springfield, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.04

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
St. Bernard Parish, LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.02
St. Clair, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.02
St. Lawrence County, NY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
St. Louis, MO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.02	-0.30
St. Louis, MO-IL	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.05	-0.08	-0.96
St. Louis-St. Charles-Farmington, MO-IL	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.05	-0.08	-0.97
Steubenville, OH-WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.02
Steubenville-Weirton, OH-WV	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	0.00	-0.03
Stockton, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.01	-0.12
Sullivan County, TN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.01
Sutter Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00
Syracuse, NY	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.01	-0.15
Tacoma, WA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.17
Tazewell County: Groveland twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.01
Terre Haute, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.02
Thurston County; Cities of Olympia, Tumwater, and Lacey, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.03
Titus County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Toms River, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Tooele County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	0.00	0.00	0.00
Trenton, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.03
Trona, CA	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Tucson, AZ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.02	-0.24
Tuolumne County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	-0.02
Tuscan Buttes, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00
Tuscan Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal (Rural Transport)	100	0	0.00	0.00	0.00
Uinta Basin, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	-0.02
Union County; LaGrande, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Upper Green River Basin Area, WY	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	-0.01
Utah County, UT	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.19

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Vancouver, WA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.01	-0.10
Ventura County, CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-0.01	-0.02	-0.25
Ventura County, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.01	-0.02	-0.25
Vermillion County; Part of Clinton Township, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Vigo County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.04
Walla Walla County; Wallula, WA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00
Waltham, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.02
Warren County, NJ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	-0.01
Warren County: Conewago Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Warren County: Warren Boro, Pleasant Twp, Glade Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00
Warren, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Washington, DC-MD-VA	Ozone (2008 8-hour)	Nonattainment (DC) Maintenance (MD, VA), Marginal	50	0	-0.09	-0.14	-1.69
Washington, DC-MD-VA	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.09	-0.14	-1.69
Washington, DC-MD-VA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.02	-0.22
Washoe County; Reno planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	-0.01	-0.08
Wayne County, MI	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.02
Wayne County: Boston, Center, Franklin, Wayne & Webster Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.02
West Central Pinal, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
West Silver Valley, ID	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Whatcom County, WA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Winston-Salem, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.01	-0.16
Worcester, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.07
Yakima County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.03
Yakima, WA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.01
Yuba City-Marysville, CA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.05
Yuma, AZ	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	-0.04
Yuma, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.06

Notes:

^a Nonattainment or maintenance status as of 2/1/2024. Source: EPA, The Green Book Nonattainment Areas for Criteria Pollutants; <http://www.epa.gov/airquality/greenbook/>. "--" indicates that no severity classification has been established for the NAAQS pollutant.

Appendix D Air Quality Nonattainment Area Results

^b Emissions thresholds in tons per year. Where the threshold differs by precursor pollutant, the smallest of the precursor thresholds is shown. These thresholds are provided for information only; a general conformity determination is not required for the Proposed Action. Source: 40 CFR 93.853.

^c Positive values are emissions increases; negative values are emissions decreases.

EPA = U.S. Environmental Protection Agency; NAAQS = National Ambient Air Quality Standard; CO = carbon monoxide; NO₂ = nitrogen dioxide; PM_{2.5} = particulate matter less than 2.5 microns in size; PM₁₀ = particulate matter less than 10 microns in size; SO₂ = sulfur dioxide.

Table D-63. Changes in Emissions from U.S. Combined Passenger Cars, Light Trucks, and HDPUVs by Nonattainment or Maintenance Area and Alternative, Direct and Indirect Impacts--Diesel Particulate Matter (DPM), 2035

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Ada County; Boise, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.03	-0.03	-0.40
Adams, Denver, and Boulder Counties; Denver Metropolitan area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.54	-0.57	-7.45
Ajo (Pima County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Albuquerque, NM	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.03
Allegan County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.02
Allegheny County Air Basin: Hazelwood monitor, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.01	-0.09
Allegheny County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	-0.12	-0.13	-1.70
Allegheny County; Liberty, Lincoln, Port Vue, Glassport, Clairton, PA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.08
Allegheny, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.09	-0.09	-1.20
Allentown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.03	-0.03	-0.41
Allentown-Bethlehem-Easton, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.03	-0.03	-0.41
Alton Township, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-1.00	-1.06	-13.80
Amador County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00
Anchorage, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.02	-0.02	-0.23
Anchorage; Eagle River, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.02	-0.23
Anne Arundel County and Baltimore County, MD	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.01
Archuleta County; Pagosa Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.15	-0.16	-2.02
Armstrong County; Madison, Mahoning, Boggs, Washington, Pine, PA	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	-0.05	-0.05	-0.65
Aroostock County; City of Presque Isle, ME	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Atlanta, GA	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-0.01	0.00	-0.16
Atlanta, GA	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.01	-0.01	-0.16
Atlantic City, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Bakersfield, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.18	-0.20	-2.54
Baltimore, MD	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	-0.13	-0.13	-1.70
Baltimore, MD	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.12	-0.13	-1.70
Baltimore, MD	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.05
Baton Rouge, LA	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-3.43	-3.65	-47.33
Beaver, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.02
Benton County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00
Berrien County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.05

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Billings, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.82	-0.87	-11.32
Billings, MT	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.82	-0.87	-11.32
Birmingham, AL	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.26	-0.27	-3.54
Boise-Northern Ada County, ID	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.03	-0.03	-0.40
Bonner County; The Sandpoint Area, ID	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Boston, MA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.06
Boyd County (part), KY	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-1.01	-1.07	-13.92
Brooke; Follansbee area, WV	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.02
Brown County: Green Bay, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Burlington, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Butte County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	-0.01
Calaveras County, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00
Calaveras County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00
Campbell-Clermont Counties, KY-OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00
Canton-Massillon, OH	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.67	-0.71	-9.21
Central New Hampshire, NH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00
Central Steptoe Valley, NV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Charleston, WV	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.05	-0.05	-0.64
Charlotte, NC	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.01
Charlotte-Rock Hill, NC-SC	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	-0.01
Chicago, IL-IN-WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-9.94	-10.57	-137.10
Chicago-Naperville, IL-IN-WI	Ozone (2008 8-hour)	Maintenance, Serious	100	0	-5.05	-5.36	-69.55
Chico (Butte County), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	-0.01
Chico, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00
Chico, CA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Cincinnati, OH-KY (OH Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.01	0.00	-0.07
Cincinnati, OH-KY (KY Portion)	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	-0.17	-0.18	-2.33
Cincinnati, OH-KY-IN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.18	-0.19	-2.49
Clark County; Las Vegas planning area, NV	PM ₁₀ (1987 24-hour)	Maintenance, Serious	100	0	-0.21	-0.22	-2.84
Cleveland, OH	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.43	-0.45	-5.90
Cleveland, OH	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00
Cleveland, OH	PM _{2.5} (2012 Annual)	Maintenance, Moderate	100	0	0.00	0.00	-0.01

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Cleveland-Akron-Lorain, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.44	-0.46	-6.00
Cleveland-Akron-Lorain, OH	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.43	-0.45	-5.89
Cochise County; Paul Spur/Douglas planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Colorado Springs, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.04	-0.05	-0.61
Columbus, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.04	-0.04	-0.50
Columbus, OH	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.04	-0.04	-0.49
Cook County; Lyons Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.02
Cook County; Southeast Chicago, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-2.82	-3.00	-38.84
Coshocton County; Franklin Township, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.04
Coso Junction, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.15	-0.16	-2.04
Cuyahoga County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Cuyahoga County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Dallas-Fort Worth, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.26	-0.26	-3.52
Dallas-Fort Worth, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.26	-0.26	-3.52
Dane County; Madison sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Delaware County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-4.12	-4.38	-56.82
Denver Metro/North Front Range, CO	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-1.49	-1.57	-20.45
Denver-Boulder, CO	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.55	-0.58	-7.53
Denver-Boulder-Greeley-Ft. Collins-Loveland, CO	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.80	-0.84	-10.95
Detroit, MI	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	-1.48	-1.57	-20.38
Detroit, MI	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.24	-0.25	-3.28
Detroit, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.23	-0.24	-3.12
Detroit-Ann Arbor, MI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-1.48	-1.57	-20.38
Doña Ana County; Anthony, NM	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.43	-0.46	-5.94
Door County, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	0.00	0.00
Door County-Revised, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	0.00	0.00
Douglas (Cochise County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Dukes County, MA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00
Duluth, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.02	-0.29
East Chicago, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-2.81	-2.99	-38.82
East Helena Area, MT	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00
East Kern County, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.15	-0.16	-2.07

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
El Paso County, TX	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.43	-0.46	-5.99
El Paso, TX	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.43	-0.46	-5.95
El Paso-Las Cruces, TX-NM	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.86	-0.92	-11.88
Eugene-Springfield, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Evangeline Parish (Partial), LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.01
Fairbanks, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.02	-0.02	-0.28
Fairbanks, AK	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.02	-0.02	-0.28
Flathead County; Columbia Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Flathead County; Kalispell and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Flathead County; Whitefish and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Fort Collins, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.01	-0.12
Freehold, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Freestone and Anderson Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.01	-0.19
Fremont County; Canon City Area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Fresno, CA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.08	-0.08	-1.07
Gila County (part): Payson, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Giles County, VA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Grant County, NM	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Grants Pass, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00
Great Falls, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.13	-0.13	-1.75
Greater Connecticut, CT	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.01
Greater Connecticut, CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	0.00	0.00	0.01
Greeley, CO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-1.45	-1.55	-20.06
Hancock County (part): Weirton, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.04	-0.04	-0.53
Hancock and Brooke Counties (Part); The city of Weirton, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.04	-0.04	-0.53
Harrisburg-Lebanon-Carlisle-York, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Hartford-New Britain-Middletown, CT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.02
Hayden (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	0.00
Hayden, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Hayden, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Henderson-Webster Counties, KY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.06
Hillsborough County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.01	-0.13
Hillsborough-Polk County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.01	-0.13
Houston-Galveston-Brazoria, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-10.56	-11.22	-145.61

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Houston-Galveston-Brazoria, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-10.55	-11.21	-145.47
Howard County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.45	-0.47	-6.14
Humphreys County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00
Huntington, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Hutchinson County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.66	-0.70	-9.10
Imperial County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Imperial County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00
Imperial County, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Imperial County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Imperial Valley, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00
Indian Wells, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.14	-0.15	-1.99
Indiana, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.14	-0.15	-1.95
Indianapolis, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Indianapolis, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.02
Inland Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Inyo County; Owens Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.02	-0.02	-0.24
Jackson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.01
Jackson County; Medford-Ashland (including White City), OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Jamestown, NY	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.42	-0.44	-5.76
Jefferson County, KY	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00
Jefferson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00
Jefferson County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.02
Jefferson County; (part) Steubenville & Mingo Junction, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.04	-0.04	-0.53
Johnstown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.09	-0.09	-1.20
Josephine County; Grants Pass, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Juneau; Mendenhall Valley area, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Kern County (Eastern Kern), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-3.67	-3.90	-50.56
Kern County (Eastern Kern), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-3.67	-3.90	-50.56
King County; Kent, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
King County; Seattle, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Klamath Falls, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.01
Klamath Falls, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Klamath Falls, OR	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.02
Knoxville, TN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	0.00
Knoxville-Sevierville-La Follette, TN	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
La Porte County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
LaSalle County; Oglesby, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.04
Lake County (part); Lakeview, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Lake County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-2.82	-3.00	-38.95
Lake County, OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.01
Lake County; (part) Eastlake, Timberlake, Lakeline, Willoughby, Mentor, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Lake County; Cities of East Chicago, Hammond, Whiting, and Gary, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-2.82	-3.00	-38.91
Lake County; Polson, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Lake County; Ronan, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Lake Tahoe North Shore, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Lake Tahoe South Shore, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00
Lake Tahoe, NV	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Lancaster, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	-0.04
Lancaster, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.04
Lane County (part); Oakridge, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Lane County; Eugene/Springfield, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Las Vegas, NV	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.21	-0.22	-2.84
Las Vegas, NV	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.21	-0.22	-2.84
Laurel Area (Yellowstone County), MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	-0.82	-0.87	-11.32
Lebanon County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Lemont, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-2.14	-2.28	-29.55
Liberty-Clairton, PA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.01	-0.08
Lincoln County; Libby and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Logan, UT-ID	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Longmont, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.15	-0.16	-2.12
Lorain County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-3.66	-3.89	-50.48
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-3.66	-3.89	-50.48
Los Angeles-South Coast Air Basin, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-3.77	-3.98	-51.81
Los Angeles-South Coast Air Basin, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-3.77	-3.98	-51.81
Los Angeles-South Coast Air Basin, CA	CO (1971 8-hour)	Maintenance, Serious	100	0	-3.76	-3.97	-51.79

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Los Angeles-South Coast Air Basin, CA	NO2 (1971 Annual)	Maintenance, Primary	100	0	-3.76	-3.97	-51.79
Los Angeles-South Coast Air Basin, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-3.77	-3.98	-51.81
Los Angeles-South Coast Air Basin, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-3.77	-3.98	-51.81
Louisville, KY-IN (IN Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	-0.02
Louisville, KY-IN (KY Portion)	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.01
Lowell, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Lucas County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-1.23	-1.31	-16.96
Madison County; Granite City Township and Nameoki Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.00	-1.07	-13.86
Manchester, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Manitowoc County, WI	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	0.00
Marathon County: Rothschild Sub-city area, Rib Mountain, Weston, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00
Maricopa and Pinal Counties; Phoenix planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.01	0.04
Marion County: Lawrence, Washington, and Warrant Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.02
Mariposa County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.02	-0.20
Mariposa County, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.02	-0.20
Marshall, WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.03	-0.03	-0.42
Medford, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00
Memphis, TN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.40	-0.42	-5.50
Memphis, TN-MS-AR	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.40	-0.42	-5.51
Miami (Gila County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Miami, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Miami, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Millinocket AQCR 109, ME	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Milwaukee, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.01
Milwaukee, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.01
Milwaukee-Racine, WI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	0.00	0.01
Minneapolis-St. Paul, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.91	-0.96	-12.56
Minneapolis-St. Paul, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.91	-0.96	-12.56
Missoula, MT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00
Missoula, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Modesto, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.05	-0.06	-0.74
Mohave County (part); Bullhead City, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.03
Mono Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.02	-0.20
Mono County; Mammoth Lake planning area, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.20
Morenci (Greenlee County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Morgan County, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00
Morongo Band of Mission Indians, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	0.00
Morongo Band of Mission Indians, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00
Morristown, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Muscatine County, IA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Muscatine, IA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Muskegon County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01
Muskingum River, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.01	-0.17
Nashua, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Nassau County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00
Navarro County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.02	-0.02	-0.25
Nevada County (Western part), CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00
Nevada County (Western part), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00
New Haven County, CT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
New Haven-Meriden-Waterbury, CT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.01
New Madrid County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
New Manchester-Grant magisterial district in Hancock County, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.04	-0.05	-0.60
New York County, NY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
New York-N. New Jersey-Long Island, NY-NJ-CT	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.86	-0.89	-11.72
New York-N. New Jersey-Long Island, NY-NJ-CT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.76	-0.80	-10.44
New York-N. New Jersey-Long Island, NY-NJ-CT	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.85	-0.88	-11.65
New York-Northern New Jersey-Long Island, NY-NJ-CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.86	-0.89	-11.75
Nogales, AZ	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Northern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.56	-0.59	-7.70
Oakridge, OR	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Ogden, UT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00
Ogden, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Olmsted County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Olmsted County; City of Rochester, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Oneida County: Rhinelander Sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Pekin, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00
Penns Grove, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Peoria County: Hollis twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00
Peoria, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.01	-0.13
Perth Amboy, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.01	-0.08
Philadelphia-Camden County, PA-NJ	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-3.22	-3.43	-44.46
Philadelphia-Wilmington, PA-NJ-DE (NJ Portion)	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.63	-0.66	-8.63
Philadelphia-Wilmington, PA-NJ-DE (PA-DE Portion)	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-3.61	-3.84	-49.79
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-4.24	-4.50	-58.41
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-9.59	-10.19	-132.25
Phoenix, AZ	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.01	0.04
Phoenix-Mesa, AZ	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.01	0.04
Phoenix-Mesa, AZ	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.01	0.04
Pierce County; Tacoma, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.03	-0.03	-0.37
Pima County; Ajo planning area, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Pima County; Rillito planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Pinal County (part); West Pinal, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00
Pitkin County; Aspen, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.04	-0.04	-0.49
Pittsburgh, PA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.01	-0.15
Pittsburgh-Beaver Valley, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.38	-0.40	-5.24
Pittsburgh-Beaver Valley, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.35	-0.37	-4.87
Plumas County, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	0.00	0.00	0.00
Polk County, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00
Portland, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.06	-0.07	-0.88
Power-Bannock Counties; Fort Hall Indian Reservation, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Power-Bannock Counties; Portneuf Valley Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Provo, UT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.00	0.00	0.00
Provo, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.35	-0.37	-4.82

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Prowers County; Lamar, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Raleigh-Durham, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.02
Ramsey County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.90	-0.96	-12.38
Reading, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	-0.02
Reno, NV	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00
Rhinelander, WI	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00
Riverside County (Coachella Valley), CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	0.00	0.00	0.00
Riverside County (Coachella Valley), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	0.00
Riverside County; Coachella Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00
Riverside, Los Angeles, Orange, & San Bernardino Counties; South Coast Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-3.77	-3.98	-51.81
Rosebud County; Lame Deer, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Routt County (part); Steamboat Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.49	-0.52	-6.74
Rusk and Panola Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.05	-0.05	-0.62
Sacramento County, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-4.99	-5.31	-68.80
Sacramento Metro, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-5.09	-5.42	-70.25
Sacramento Metro, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-5.09	-5.42	-70.25
Sacramento, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.35	-0.37	-4.84
Sacramento, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-5.09	-5.42	-70.25
Salem, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Salt Lake City, UT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.56	-0.59	-7.71
Salt Lake City, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.56	-0.59	-7.70
Salt Lake County, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.56	-0.59	-7.71
Salt Lake County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	-0.56	-0.59	-7.71
San Antonio, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.08	-0.09	-1.14
San Bernardino County, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-3.66	-3.89	-50.47
San Diego County, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.01	0.00	-0.08
San Diego County, CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-0.01	0.00	-0.08
San Diego, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	0.00	-0.08
San Francisco Bay Area, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-5.22	-5.55	-72.00
San Francisco Bay Area, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-5.22	-5.55	-72.00
San Francisco Bay Area, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-5.22	-5.55	-72.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
San Francisco-Oakland-San Jose, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-5.28	-5.60	-72.77
San Joaquin Valley Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-8.79	-9.35	-121.26
San Joaquin Valley, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-8.79	-9.35	-121.26
San Joaquin Valley, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-8.79	-9.35	-121.26
San Joaquin Valley, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-8.79	-9.35	-121.26
San Joaquin Valley, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-8.79	-9.35	-121.26
San Luis Obispo (Eastern San Luis Obispo), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.21	-0.22	-2.84
San Luis Obispo (Eastern part), CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.21	-0.22	-2.84
San Manuel (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
San Miguel County; Telluride, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.02	-0.24
Sanders County (part); Thompson Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Santa Cruz County; Nogales planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Seaford, DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00
Seattle-Tacoma, WA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.03	-0.02	-0.35
Sheboygan County, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Sheridan County; City of Sheridan, WY	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.04
Shoreline Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Shoshone County; City of Pinehurst, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Shoshone County; Pinehurst Expansion Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Silver Bow County; Butte, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Somerville, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Southern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.35	-0.37	-4.82
Southwest Indiana, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.05
Spokane County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Spokane, WA	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.00	-0.01
Springfield, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.01
St. Bernard Parish, LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-1.22	-1.30	-16.84
St. Clair, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.01
St. Lawrence County, NY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
St. Louis, MO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-1.02	-1.09	-14.10
St. Louis, MO-IL	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-2.06	-2.18	-28.32
St. Louis-St. Charles-Farmington, MO-IL	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-1.05	-1.11	-14.47
Steubenville, OH-WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.11	-0.11	-1.47
Steubenville-Weirton, OH-WV	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.10	-0.10	-1.32

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Stockton, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.02	-0.22
Sullivan County, TN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Sutter Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	-0.01
Syracuse, NY	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00
Tacoma, WA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	-0.03	-0.03	-0.37
Tazewell County: Groveland twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Terre Haute, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.01
Thurston County; Cities of Olympia, Tumwater, and Lacey, WA	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Titus County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.01
Toms River, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Tooele County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	-0.35	-0.37	-4.83
Trenton, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Trona, CA	PM ₁₀ (1987 24-hour)	Nonattainment, Moderate	100	0	-0.14	-0.15	-1.93
Tucson, AZ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.01
Tuolumne County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.02	-0.02	-0.21
Tuscan Buttes, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00
Tuscan Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal (Rural Transport)	100	0	0.00	0.00	0.00
Uinta Basin, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.14	-0.15	-1.97
Union County; LaGrande, OR	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Upper Green River Basin Area, WY	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.24	-0.25	-3.26
Utah County, UT	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	-0.41	-0.44	-5.66
Vancouver, WA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.01
Ventura County, CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-3.66	-3.89	-50.45
Ventura County, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-3.66	-3.89	-50.45
Vermillion County; Part of Clinton Township, IN	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Vigo County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.01	-0.07
Walla Walla County; Wallula, WA	PM ₁₀ (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00
Waltham, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Warren County, NJ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00
Warren County: Conewago Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.42	-0.44	-5.72
Warren County: Warren Boro, Pleasant Twp, Glade Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.43	-0.46	-5.95
Warren, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.44	-0.47	-6.04

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Washington, DC-MD-VA	Ozone (2008 8-hour)	Nonattainment (DC) Maintenance (MD, VA), Marginal	50	0	0.00	0.01	0.00
Washington, DC-MD-VA	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	0.00	0.01	0.03
Washington, DC-MD-VA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.01
Washoe County; Reno planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00
Wayne County, MI	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.22	-0.24	-3.09
Wayne County: Boston, Center, Franklin, Wayne & Webster Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
West Central Pinal, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
West Silver Valley, ID	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Whatcom County, WA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.44	-0.47	-6.13
Winston-Salem, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00
Worcester, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Yakima County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Yakima, WA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Yuba City-Marysville, CA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Yuma, AZ	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00
Yuma, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00

Notes:

^a Nonattainment or maintenance status as of 2/1/2024. Source: EPA, The Green Book Nonattainment Areas for Criteria Pollutants; <http://www.epa.gov/airquality/greenbook/>. "--" indicates that no severity classification has been established for the NAAQS pollutant.

^b Emissions thresholds in tons per year. Where the threshold differs by precursor pollutant, the smallest of the precursor thresholds is shown. These thresholds are provided for information only; a general conformity determination is not required for the Proposed Action. Source: 40 CFR 93.853.

^c Positive values are emissions increases; negative values are emissions decreases.

EPA = U.S. Environmental Protection Agency; NAAQS = National Ambient Air Quality Standard; CO = carbon monoxide; NO₂ = nitrogen dioxide; PM2.5 = particulate matter less than 2.5 microns in size; PM10 = particulate matter less than 10 microns in size; SO₂ = sulfur dioxide.

Appendix D Air Quality Nonattainment Area Results

Table D-64. Changes in Emissions from U.S. Combined Passenger Cars, Light Trucks, and HDPUVs by Nonattainment or Maintenance Area and Alternative, Direct and Indirect Impacts--Diesel Particulate Matter (DPM), 2050

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Ada County; Boise, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.03	-0.05	-0.58
Adams, Denver, and Boulder Counties; Denver Metropolitan area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.62	-0.83	-10.57
Ajo (Pima County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Albuquerque, NM	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.05
Allegan County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.03
Allegheny County Air Basin: Hazelwood monitor, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.01	-0.13
Allegheny County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	-0.14	-0.19	-2.41
Allegheny County; Liberty, Lincoln, Port Vue, Glassport, Clairton, PA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.11
Allegheny, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.10	-0.13	-1.71
Allentown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.03	-0.05	-0.59
Allentown-Bethlehem-Easton, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.03	-0.05	-0.59
Alton Township, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-1.14	-1.54	-19.55
Amador County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00
Anchorage, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.02	-0.03	-0.33
Anchorage; Eagle River, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.03	-0.33
Anne Arundel County and Baltimore County, MD	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Archuleta County; Pagosa Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.17	-0.22	-2.86
Armstrong County; Madison, Mahoning, Boggs, Washington, Pine, PA	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	-0.05	-0.07	-0.92
Aroostock County; City of Presque Isle, ME	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Atlanta, GA	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-0.02	-0.02	-0.29
Atlanta, GA	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.02	-0.02	-0.28
Atlantic City, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Bakersfield, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.21	-0.28	-3.63
Baltimore, MD	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	-0.14	-0.19	-2.45
Baltimore, MD	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.14	-0.19	-2.44
Baltimore, MD	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.07
Baton Rouge, LA	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-3.92	-5.27	-67.05
Beaver, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.02
Benton County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00
Berrien County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.07

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Billings, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.94	-1.26	-16.04
Billings, MT	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.94	-1.26	-16.04
Birmingham, AL	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.29	-0.40	-5.04
Boise-Northern Ada County, ID	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.03	-0.05	-0.58
Bonner County; The Sandpoint Area, ID	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Boston, MA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.01	-0.09
Boyd County (part), KY	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-1.15	-1.55	-19.71
Brooke; Follansbee area, WV	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.03
Brown County: Green Bay, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Burlington, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Butte County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	-0.02
Calaveras County, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	-0.01
Calaveras County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	-0.01
Campbell-Clermont Counties, KY-OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00
Canton-Massillon, OH	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.76	-1.03	-13.05
Central New Hampshire, NH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00
Central Steptoe Valley, NV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Charleston, WV	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.05	-0.07	-0.91
Charlotte, NC	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Charlotte-Rock Hill, NC-SC	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	-0.04
Chicago, IL-IN-WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-11.36	-15.26	-194.29
Chicago-Naperville, IL-IN-WI	Ozone (2008 8-hour)	Maintenance, Serious	100	0	-5.76	-7.74	-98.60
Chico (Butte County), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	-0.02
Chico, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00
Chico, CA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.02
Cincinnati, OH-KY (OH Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.01	-0.01	-0.12
Cincinnati, OH-KY (KY Portion)	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	-0.19	-0.26	-3.30
Cincinnati, OH-KY-IN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.21	-0.28	-3.56
Clark County; Las Vegas planning area, NV	PM ₁₀ (1987 24-hour)	Maintenance, Serious	100	0	-0.24	-0.32	-4.09
Cleveland, OH	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.49	-0.66	-8.38
Cleveland, OH	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.01
Cleveland, OH	PM _{2.5} (2012 Annual)	Maintenance, Moderate	100	0	0.00	0.00	-0.03

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Cleveland-Akron-Lorain, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.50	-0.67	-8.53
Cleveland-Akron-Lorain, OH	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.49	-0.66	-8.38
Cochise County; Paul Spur/Douglas planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Colorado Springs, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.05	-0.07	-0.87
Columbus, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.04	-0.06	-0.73
Columbus, OH	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.04	-0.06	-0.71
Cook County; Lyons Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.04
Cook County; Southeast Chicago, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-3.22	-4.32	-55.02
Coshocton County; Franklin Township, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.06
Coso Junction, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.17	-0.23	-2.90
Cuyahoga County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Cuyahoga County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.01
Dallas-Fort Worth, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.30	-0.40	-5.08
Dallas-Fort Worth, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.30	-0.40	-5.08
Dane County; Madison sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Delaware County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-4.71	-6.32	-80.50
Denver Metro/North Front Range, CO	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-1.70	-2.28	-29.03
Denver-Boulder, CO	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.63	-0.84	-10.71
Denver-Boulder-Greeley-Ft. Collins-Loveland, CO	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.92	-1.23	-15.65
Detroit, MI	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	-1.69	-2.27	-28.93
Detroit, MI	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.27	-0.37	-4.67
Detroit, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.26	-0.35	-4.42
Detroit-Ann Arbor, MI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-1.69	-2.27	-28.93
Doña Ana County; Anthony, NM	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.49	-0.66	-8.42
Door County, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	0.00	0.00
Door County-Revised, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	0.00	0.00
Douglas (Cochise County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Dukes County, MA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00
Duluth, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.03	-0.42
East Chicago, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-3.21	-4.32	-54.99
East Helena Area, MT	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00
East Kern County, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.17	-0.23	-2.93

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
El Paso County, TX	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.50	-0.67	-8.50
El Paso, TX	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.49	-0.66	-8.43
El Paso-Las Cruces, TX-NM	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.98	-1.32	-16.84
Eugene-Springfield, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Evangeline Parish (Partial), LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.01
Fairbanks, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.02	-0.03	-0.40
Fairbanks, AK	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.02	-0.03	-0.40
Flathead County; Columbia Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Flathead County; Kalispell and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Flathead County; Whitefish and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Fort Collins, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.01	-0.18
Freehold, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Freestone and Anderson Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.02	-0.02	-0.27
Fremont County; Canon City Area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Fresno, CA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.09	-0.12	-1.55
Gila County (part): Payson, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Giles County, VA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Grant County, NM	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Grants Pass, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00
Great Falls, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.14	-0.19	-2.47
Greater Connecticut, CT	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	-0.01
Greater Connecticut, CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	0.00	0.00	-0.01
Greeley, CO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-1.66	-2.23	-28.42
Hancock County (part): Weirton, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.04	-0.06	-0.75
Hancock and Brooke Counties (Part); The city of Weirton, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.04	-0.06	-0.75
Harrisburg-Lebanon-Carlisle-York, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Hartford-New Britain-Middletown, CT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.04
Hayden (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	0.00
Hayden, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Hayden, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Henderson-Webster Counties, KY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.01	-0.09
Hillsborough County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.01	-0.19
Hillsborough-Polk County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.01	-0.19
Houston-Galveston-Brazoria, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-12.06	-16.21	-206.35

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Houston-Galveston-Brazoria, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-12.05	-16.19	-206.15
Howard County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.51	-0.68	-8.70
Humphreys County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00
Huntington, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Hutchinson County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.75	-1.01	-12.89
Imperial County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Imperial County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00
Imperial County, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Imperial County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Imperial Valley, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00
Indian Wells, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.16	-0.22	-2.81
Indiana, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.16	-0.22	-2.77
Indianapolis, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Indianapolis, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.04
Inland Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Inyo County; Owens Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.02	-0.03	-0.34
Jackson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.01
Jackson County; Medford-Ashland (including White City), OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Jamestown, NY	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.48	-0.64	-8.16
Jefferson County, KY	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00
Jefferson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00
Jefferson County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.03
Jefferson County; (part) Steubenville & Mingo Junction, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.04	-0.06	-0.75
Johnstown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.10	-0.13	-1.70
Josephine County; Grants Pass, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Juneau; Mendenhall Valley area, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Kern County (Eastern Kern), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-4.19	-5.62	-71.60
Kern County (Eastern Kern), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-4.19	-5.62	-71.60
King County; Kent, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
King County; Seattle, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Klamath Falls, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.03
Klamath Falls, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.03
Klamath Falls, OR	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.03
Knoxville, TN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	-0.01
Knoxville-Sevierville-La Follette, TN	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.03

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
La Porte County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
LaSalle County; Oglesby, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.06
Lake County (part); Lakeview, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Lake County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-3.23	-4.33	-55.18
Lake County, OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.01
Lake County; (part) Eastlake, Timberlake, Lakeline, Willoughby, Mentor, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Lake County; Cities of East Chicago, Hammond, Whiting, and Gary, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-3.22	-4.33	-55.11
Lake County; Polson, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Lake County; Ronan, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Lake Tahoe North Shore, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Lake Tahoe South Shore, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00
Lake Tahoe, NV	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Lancaster, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	-0.01	-0.07
Lancaster, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.07
Lane County (part); Oakridge, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Lane County; Eugene/Springfield, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Las Vegas, NV	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.24	-0.32	-4.09
Las Vegas, NV	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.24	-0.32	-4.10
Laurel Area (Yellowstone County), MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	-0.94	-1.26	-16.04
Lebanon County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Lemont, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-2.45	-3.29	-41.86
Liberty-Clairton, PA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.01	-0.11
Lincoln County; Libby and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Logan, UT-ID	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Longmont, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.18	-0.24	-3.01
Lorain County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-4.18	-5.62	-71.50
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-4.18	-5.62	-71.50
Los Angeles-South Coast Air Basin, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-4.30	-5.78	-73.61
Los Angeles-South Coast Air Basin, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-4.30	-5.78	-73.61
Los Angeles-South Coast Air Basin, CA	CO (1971 8-hour)	Maintenance, Serious	100	0	-4.30	-5.78	-73.58

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Los Angeles-South Coast Air Basin, CA	NO2 (1971 Annual)	Maintenance, Primary	100	0	-4.30	-5.78	-73.58
Los Angeles-South Coast Air Basin, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-4.30	-5.78	-73.61
Los Angeles-South Coast Air Basin, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-4.30	-5.78	-73.61
Louisville, KY-IN (IN Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	-0.03
Louisville, KY-IN (KY Portion)	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Lowell, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.01
Lucas County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-1.40	-1.89	-24.03
Madison County; Granite City Township and Nameoki Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.15	-1.54	-19.63
Manchester, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Manitowoc County, WI	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	0.00
Marathon County: Rothschild Sub-city area, Rib Mountain, Weston, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00
Maricopa and Pinal Counties; Phoenix planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	0.00
Marion County: Lawrence, Washington, and Warrant Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.03
Mariposa County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-0.02	-0.02	-0.29
Mariposa County, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.02	-0.02	-0.29
Marshall, WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.03	-0.05	-0.59
Medford, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00
Memphis, TN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.46	-0.61	-7.80
Memphis, TN-MS-AR	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.46	-0.61	-7.83
Miami (Gila County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Miami, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Miami, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Millinocket AQCR 109, ME	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Milwaukee, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Milwaukee, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Milwaukee-Racine, WI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	0.00	0.00	0.00
Minneapolis-St. Paul, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-1.04	-1.40	-17.83
Minneapolis-St. Paul, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-1.04	-1.40	-17.83
Missoula, MT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00
Missoula, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Modesto, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.06	-0.08	-1.07
Mohave County (part); Bullhead City, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.05
Mono Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.02	-0.02	-0.29
Mono County; Mammoth Lake planning area, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.02	-0.29
Morenci (Greenlee County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Morgan County, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00
Morongo Band of Mission Indians, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	0.00
Morongo Band of Mission Indians, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00
Morristown, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Muscatine County, IA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Muscatine, IA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Muskegon County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.02
Muskingum River, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.02	-0.24
Nashua, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Nassau County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00
Navarro County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.02	-0.03	-0.35
Nevada County (Western part), CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00
Nevada County (Western part), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00
New Haven County, CT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
New Haven-Meriden-Waterbury, CT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
New Madrid County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
New Manchester-Grant magisterial district in Hancock County, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.05	-0.07	-0.85
New York County, NY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
New York-N. New Jersey-Long Island, NY-NJ-CT	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.98	-1.32	-16.76
New York-N. New Jersey-Long Island, NY-NJ-CT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.87	-1.17	-14.87
New York-N. New Jersey-Long Island, NY-NJ-CT	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.97	-1.31	-16.65
New York-Northern New Jersey-Long Island, NY-NJ-CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.98	-1.32	-16.80
Nogales, AZ	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Northern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.64	-0.86	-10.93
Oakridge, OR	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Ogden, UT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00
Ogden, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Olmsted County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Olmsted County; City of Rochester, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Oneida County: Rhinelander Sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Pekin, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.01
Penns Grove, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Peoria County: Hollis twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	-0.01
Peoria, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.01	-0.18
Perth Amboy, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.01	-0.11
Philadelphia-Camden County, PA-NJ	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-3.68	-4.95	-62.99
Philadelphia-Wilmington, PA-NJ-DE (NJ Portion)	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.72	-0.96	-12.24
Philadelphia-Wilmington, PA-NJ-DE (PA-DE Portion)	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-4.13	-5.54	-70.57
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-4.84	-6.50	-82.81
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-10.96	-14.72	-187.40
Phoenix, AZ	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00
Phoenix-Mesa, AZ	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Phoenix-Mesa, AZ	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01
Pierce County; Tacoma, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.03	-0.04	-0.53
Pima County; Ajo planning area, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Pima County; Rillito planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Pinal County (part); West Pinal, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	-0.01
Pitkin County; Aspen, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.04	-0.05	-0.69
Pittsburgh, PA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.02	-0.21
Pittsburgh-Beaver Valley, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.44	-0.59	-7.45
Pittsburgh-Beaver Valley, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.40	-0.54	-6.93
Plumas County, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	0.00	0.00	0.00
Polk County, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00
Portland, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.07	-0.10	-1.27
Power-Bannock Counties; Fort Hall Indian Reservation, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Power-Bannock Counties; Portneuf Valley Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Provo, UT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.00	0.00	0.00
Provo, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.40	-0.54	-6.84

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Prowers County; Lamar, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Raleigh-Durham, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00
Ramsey County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-1.03	-1.38	-17.54
Reading, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	-0.03
Reno, NV	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00
Rhinelander, WI	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00
Riverside County (Coachella Valley), CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	0.00	0.00	-0.01
Riverside County (Coachella Valley), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	-0.01
Riverside County; Coachella Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	-0.01
Riverside, Los Angeles, Orange, & San Bernardino Counties; South Coast Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-4.30	-5.78	-73.61
Rosebud County; Lame Deer, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Routt County (part); Steamboat Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.56	-0.75	-9.55
Rusk and Panola Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.05	-0.07	-0.88
Sacramento County, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-5.70	-7.66	-97.47
Sacramento Metro, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-5.82	-7.82	-99.52
Sacramento Metro, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-5.82	-7.82	-99.52
Sacramento, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.40	-0.54	-6.87
Sacramento, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-5.82	-7.82	-99.52
Salem, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Salt Lake City, UT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.64	-0.86	-10.93
Salt Lake City, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.64	-0.86	-10.93
Salt Lake County, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.64	-0.86	-10.93
Salt Lake County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	-0.64	-0.86	-10.93
San Antonio, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.10	-0.13	-1.64
San Bernardino County, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-4.18	-5.61	-71.48
San Diego County, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.01	-0.01	-0.16
San Diego County, CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-0.01	-0.01	-0.16
San Diego, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.01	-0.16
San Francisco Bay Area, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-5.97	-8.02	-102.08
San Francisco Bay Area, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-5.97	-8.02	-102.08
San Francisco Bay Area, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-5.97	-8.02	-102.08

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
San Francisco-Oakland-San Jose, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-6.03	-8.10	-103.19
San Joaquin Valley Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-10.04	-13.49	-171.83
San Joaquin Valley, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-10.04	-13.49	-171.83
San Joaquin Valley, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-10.04	-13.49	-171.83
San Joaquin Valley, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-10.04	-13.49	-171.83
San Joaquin Valley, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-10.04	-13.49	-171.83
San Luis Obispo (Eastern San Luis Obispo), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.24	-0.32	-4.03
San Luis Obispo (Eastern part), CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.24	-0.32	-4.03
San Manuel (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
San Miguel County; Telluride, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.03	-0.35
Sanders County (part); Thompson Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Santa Cruz County; Nogales planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Seaford, DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00
Seattle-Tacoma, WA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.03	-0.04	-0.53
Sheboygan County, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Sheridan County; City of Sheridan, WY	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.08
Shoreline Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Shoshone County; City of Pinehurst, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Shoshone County; Pinehurst Expansion Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Silver Bow County; Butte, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Somerville, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Southern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.40	-0.54	-6.84
Southwest Indiana, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.01	-0.08
Spokane County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.02
Spokane, WA	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.00	-0.02
Springfield, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.01
St. Bernard Parish, LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-1.39	-1.87	-23.86
St. Clair, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.01
St. Lawrence County, NY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
St. Louis, MO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-1.17	-1.57	-19.99
St. Louis, MO-IL	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-2.35	-3.15	-40.15
St. Louis-St. Charles-Farmington, MO-IL	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-1.20	-1.61	-20.53
Steubenville, OH-WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.12	-0.16	-2.08
Steubenville-Weirton, OH-WV	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.11	-0.15	-1.87

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Stockton, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.02	-0.32
Sullivan County, TN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Sutter Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	-0.01
Syracuse, NY	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00
Tacoma, WA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.03	-0.04	-0.53
Tazewell County: Groveland twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Terre Haute, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.01
Thurston County; Cities of Olympia, Tumwater, and Lacey, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Titus County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.01
Toms River, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Tooele County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	-0.40	-0.54	-6.84
Trenton, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Trona, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.16	-0.21	-2.74
Tucson, AZ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Tuolumne County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.02	-0.02	-0.29
Tuscan Buttes, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00
Tuscan Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal (Rural Transport)	100	0	0.00	0.00	0.00
Uinta Basin, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.16	-0.22	-2.79
Union County; LaGrande, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Upper Green River Basin Area, WY	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.27	-0.36	-4.61
Utah County, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.47	-0.63	-8.03
Vancouver, WA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.02
Ventura County, CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-4.18	-5.61	-71.47
Ventura County, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-4.18	-5.61	-71.47
Vermillion County; Part of Clinton Township, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Vigo County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.01	-0.10
Walla Walla County; Wallula, WA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00
Waltham, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Warren County, NJ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00
Warren County: Conewago Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.47	-0.64	-8.12
Warren County: Warren Boro, Pleasant Twp, Glade Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.50	-0.67	-8.47
Warren, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.50	-0.68	-8.60

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Washington, DC-MD-VA	Ozone (2008 8-hour)	Nonattainment (DC) Maintenance (MD, VA), Marginal	50	0	0.00	0.00	-0.06
Washington, DC-MD-VA	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	0.00	0.00	-0.03
Washington, DC-MD-VA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00
Washoe County; Reno planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00
Wayne County, MI	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.26	-0.34	-4.38
Wayne County: Boston, Center, Franklin, Wayne & Webster Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
West Central Pinal, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
West Silver Valley, ID	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Whatcom County, WA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.51	-0.68	-8.68
Winston-Salem, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00
Worcester, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Yakima County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Yakima, WA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Yuba City-Marysville, CA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Yuma, AZ	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00
Yuma, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00

Notes:

^a Nonattainment or maintenance status as of 2/1/2024. Source: EPA, The Green Book Nonattainment Areas for Criteria Pollutants; <http://www.epa.gov/airquality/greenbook/>. "--" indicates that no severity classification has been established for the NAAQS pollutant.

^b Emissions thresholds in tons per year. Where the threshold differs by precursor pollutant, the smallest of the precursor thresholds is shown. These thresholds are provided for information only; a general conformity determination is not required for the Proposed Action. Source: 40 CFR 93.853.

^c Positive values are emissions increases; negative values are emissions decreases.

EPA = U.S. Environmental Protection Agency; NAAQS = National Ambient Air Quality Standard; CO = carbon monoxide; NO₂ = nitrogen dioxide; PM2.5 = particulate matter less than 2.5 microns in size; PM10 = particulate matter less than 10 microns in size; SO₂ = sulfur dioxide.

Table D-65. Changes in Emissions from U.S. Combined Passenger Cars, Light Trucks, and HDPUVs by Nonattainment or Maintenance Area and Alternative, Direct and Indirect Impacts--Formaldehyde, 2035

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Ada County; Boise, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.11
Adams, Denver, and Boulder Counties; Denver Metropolitan area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.06	-0.06	-0.71
Ajo (Pima County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Albuquerque, NM	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.02	-0.26
Allegan County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.03
Allegheny County Air Basin: Hazelwood monitor, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.03
Allegheny County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	-0.03	-0.04	-0.42
Allegheny County; Liberty, Lincoln, Port Vue, Glassport, Clairton, PA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.02
Allegheny, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.01	-0.16
Allentown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.16
Allentown-Bethlehem-Easton, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.02	-0.02	-0.19
Alton Township, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Amador County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	-0.01
Anchorage, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.00	-0.04
Anchorage; Eagle River, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Anne Arundel County and Baltimore County, MD	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.03	-0.03	-0.35
Archuleta County; Pagosa Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Armstrong County; Madison, Mahoning, Boggs, Washington, Pine, PA	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	-0.01	-0.01	-0.12
Aroostock County; City of Presque Isle, ME	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Atlanta, GA	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-0.17	-0.18	-2.10
Atlanta, GA	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.13	-0.14	-1.69
Atlantic City, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.01
Bakersfield, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.02	-0.28
Baltimore, MD	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	-0.07	-0.07	-0.86
Baltimore, MD	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.07	-0.07	-0.87
Baltimore, MD	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	0.00
Baton Rouge, LA	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.05	-0.06	-0.68
Beaver, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.01
Benton County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	-0.01
Berrien County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.01	-0.10

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Billings, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.02
Billings, MT	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00
Birmingham, AL	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.04	-0.05	-0.54
Boise-Northern Ada County, ID	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.01	-0.11
Bonner County; The Sandpoint Area, ID	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Boston, MA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.02	-0.21
Boyd County (part), KY	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.04
Brooke; Follansbee area, WV	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Brown County: Green Bay, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Burlington, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Butte County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.01	-0.06
Calaveras County, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	-0.01
Calaveras County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	-0.01
Campbell-Clermont Counties, KY-OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.01
Canton-Massillon, OH	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.01	-0.01	-0.15
Central New Hampshire, NH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.06
Central Steptoe Valley, NV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Charleston, WV	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.04	-0.05	-0.58
Charlotte, NC	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.04	-0.04	-0.45
Charlotte-Rock Hill, NC-SC	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.07	-0.07	-0.86
Chicago, IL-IN-WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.17	-0.18	-2.11
Chicago-Naperville, IL-IN-WI	Ozone (2008 8-hour)	Maintenance, Serious	100	0	-0.17	-0.18	-2.14
Chico (Butte County), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.01	-0.06
Chico, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.02
Chico, CA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.06
Cincinnati, OH-KY (OH Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.04	-0.04	-0.49
Cincinnati, OH-KY (KY Portion)	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.12
Cincinnati, OH-KY-IN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.05	-0.06	-0.64
Clark County; Las Vegas planning area, NV	PM ₁₀ (1987 24-hour)	Maintenance, Serious	100	0	-0.05	-0.06	-0.64
Cleveland, OH	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.06	-0.06	-0.72
Cleveland, OH	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.02	-0.26
Cleveland, OH	PM _{2.5} (2012 Annual)	Maintenance, Moderate	100	0	-0.03	-0.03	-0.34

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Cleveland-Akron-Lorain, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.06	-0.07	-0.79
Cleveland-Akron-Lorain, OH	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.06	-0.06	-0.69
Cochise County; Paul Spur/Douglas planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Colorado Springs, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.01	-0.17
Columbus, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.05	-0.05	-0.58
Columbus, OH	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.04	-0.05	-0.54
Cook County; Lyons Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.02
Cook County; Southeast Chicago, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.03
Coshocton County; Franklin Township, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Coso Junction, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.13
Cuyahoga County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.02	-0.26
Cuyahoga County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.02	-0.02	-0.21
Dallas-Fort Worth, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.34	-0.37	-4.34
Dallas-Fort Worth, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.34	-0.36	-4.30
Dane County; Madison sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.01	-0.15
Delaware County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.14
Denver Metro/North Front Range, CO	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.11	-0.12	-1.38
Denver-Boulder, CO	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.09	-0.09	-1.09
Denver-Boulder-Greeley-Ft. Collins-Loveland, CO	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.11	-0.12	-1.37
Detroit, MI	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	-0.13	-0.14	-1.60
Detroit, MI	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.05	-0.05	-0.62
Detroit, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.01	-0.15
Detroit-Ann Arbor, MI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.13	-0.14	-1.61
Doña Ana County; Anthony, NM	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.01	-0.08
Door County, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	0.00	0.00
Door County-Revised, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	0.00	-0.01
Douglas (Cochise County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Dukes County, MA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	0.00
Duluth, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.03
East Chicago, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.01
East Helena Area, MT	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00
East Kern County, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.01	-0.01	-0.14

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
El Paso County, TX	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.02	-0.02	-0.26
El Paso, TX	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.01	-0.09
El Paso-Las Cruces, TX-NM	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.03	-0.03	-0.39
Eugene-Springfield, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.06
Evangeline Parish (Partial), LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Fairbanks, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.00	-0.01
Fairbanks, AK	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	-0.02
Flathead County; Columbia Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Flathead County; Kalispell and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Flathead County; Whitefish and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Fort Collins, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.05
Freehold, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Freestone and Anderson Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.01	-0.12
Fremont County; Canon City Area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.02
Fresno, CA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.01	-0.02	-0.18
Gila County (part): Payson, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Giles County, VA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Grant County, NM	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.01
Grants Pass, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.01
Great Falls, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Greater Connecticut, CT	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-0.03	-0.04	-0.43
Greater Connecticut, CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.03	-0.04	-0.43
Greeley, CO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.03	-0.03	-0.33
Hancock County (part): Weirton, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	-0.01
Hancock and Brooke Counties (Part); The city of Weirton, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Harrisburg-Lebanon-Carlisle-York, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.03	-0.03	-0.32
Hartford-New Britain-Middletown, CT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.03	-0.30
Hayden (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	0.00
Hayden, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01
Hayden, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Henderson-Webster Counties, KY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.01
Hillsborough County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00
Hillsborough-Polk County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00
Houston-Galveston-Brazoria, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.28	-0.30	-3.49

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Houston-Galveston-Brazoria, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.26	-0.28	-3.30
Howard County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.02	-0.02	-0.24
Humphreys County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	-0.01
Huntington, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.01
Hutchinson County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.02	-0.02	-0.21
Imperial County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.01	-0.07
Imperial County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.01	-0.07
Imperial County, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.05
Imperial County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.00	0.00	-0.05
Imperial Valley, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.01	-0.01	-0.06
Indian Wells, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.14
Indiana, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.03	-0.03	-0.39
Indianapolis, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Indianapolis, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.02	-0.02	-0.20
Inland Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.02
Inyo County; Owens Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	-0.01
Jackson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.02
Jackson County; Medford-Ashland (including White City), OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.04
Jamestown, NY	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.01	-0.02	-0.19
Jefferson County, KY	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00
Jefferson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.02
Jefferson County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Jefferson County; (part) Steubenville & Mingo Junction, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.02
Johnstown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.02	-0.27
Josephine County; Grants Pass, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Juneau; Mendenhall Valley area, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Kern County (Eastern Kern), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.02	-0.02	-0.21
Kern County (Eastern Kern), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.02	-0.02	-0.21
King County; Kent, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
King County; Seattle, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Klamath Falls, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.01
Klamath Falls, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Klamath Falls, OR	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01
Knoxville, TN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.02	-0.02	-0.23
Knoxville-Sevierville-La Follette, TN	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.03	-0.29

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
La Porte County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.02
LaSalle County; Oglesby, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Lake County (part); Lakeview, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Lake County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.01	-0.13
Lake County, OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.01	-0.07
Lake County; (part) Eastlake, Timberlake, Lakeline, Willoughby, Mentor, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.01
Lake County; Cities of East Chicago, Hammond, Whiting, and Gary, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.09
Lake County; Polson, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Lake County; Ronan, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Lake Tahoe North Shore, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Lake Tahoe South Shore, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.01
Lake Tahoe, NV	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.01
Lancaster, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.01	-0.01	-0.15
Lancaster, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.15
Lane County (part); Oakridge, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Lane County; Eugene/Springfield, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.06
Las Vegas, NV	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.05	-0.06	-0.64
Las Vegas, NV	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.05	-0.06	-0.64
Laurel Area (Yellowstone County), MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	0.00
Lebanon County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	0.00	-0.04
Lemont, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.05
Liberty-Clairton, PA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.02
Lincoln County; Libby and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Logan, UT-ID	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.04
Longmont, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.02	-0.21
Lorain County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.01
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.03	-0.04	-0.43
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-0.03	-0.04	-0.43
Los Angeles-South Coast Air Basin, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-0.42	-0.45	-5.26
Los Angeles-South Coast Air Basin, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-0.42	-0.45	-5.25
Los Angeles-South Coast Air Basin, CA	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.42	-0.45	-5.25

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Los Angeles-South Coast Air Basin, CA	NO2 (1971 Annual)	Maintenance, Primary	100	0	-0.42	-0.45	-5.25
Los Angeles-South Coast Air Basin, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.42	-0.45	-5.26
Los Angeles-South Coast Air Basin, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-0.42	-0.45	-5.26
Louisville, KY-IN (IN Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.01	-0.01	-0.08
Louisville, KY-IN (KY Portion)	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.02	-0.02	-0.28
Lowell, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.03
Lucas County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.01	-0.11
Madison County; Granite City Township and Nameoki Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.02
Manchester, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.03
Manitowoc County, WI	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	-0.02
Marathon County: Rothschild Sub-city area, Rib Mountain, Weston, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	-0.05
Maricopa and Pinal Counties; Phoenix planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.11	-0.11	-1.33
Marion County: Lawrence, Washington, and Warrant Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.01	-0.17
Mariposa County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01
Mariposa County, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01
Marshall, WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.02	-0.02	-0.21
Medford, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.03
Memphis, TN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.03	-0.03	-0.34
Memphis, TN-MS-AR	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.04	-0.04	-0.44
Miami (Gila County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Miami, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Miami, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Millinocket AQCR 109, ME	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.05
Milwaukee, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.03	-0.03	-0.40
Milwaukee, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.02	-0.18
Milwaukee-Racine, WI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.03	-0.03	-0.35
Minneapolis-St. Paul, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.08	-0.08	-0.98
Minneapolis-St. Paul, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.08	-0.08	-0.95
Missoula, MT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.02
Missoula, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.02

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Modesto, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.01	-0.08
Mohave County (part); Bullhead City, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.03
Mono Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Mono County; Mammoth Lake planning area, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Morenci (Greenlee County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Morgan County, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.01
Morongo Band of Mission Indians, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	0.00
Morongo Band of Mission Indians, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00
Morristown, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.01
Muscatine County, IA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Muscatine, IA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.01
Muskegon County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.04
Muskingum River, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.01
Nashua, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.03
Nassau County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00
Navarro County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.01	-0.15
Nevada County (Western part), CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	-0.02
Nevada County (Western part), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	-0.03
New Haven County, CT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
New Haven-Meriden-Waterbury, CT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.02	-0.23
New Madrid County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
New Manchester-Grant magisterial district in Hancock County, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.01
New York County, NY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.01	-0.10
New York-N. New Jersey-Long Island, NY-NJ-CT	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.31	-0.33	-3.77
New York-N. New Jersey-Long Island, NY-NJ-CT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.17	-0.18	-2.10
New York-N. New Jersey-Long Island, NY-NJ-CT	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.31	-0.33	-3.85
New York-Northern New Jersey-Long Island, NY-NJ-CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.31	-0.33	-3.77
Nogales, AZ	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Northern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.06	-0.06	-0.70
Oakridge, OR	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Ogden, UT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.02
Ogden, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.02
Olmsted County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Olmsted County; City of Rochester, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.03

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Oneida County: Rhinelander Sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	-0.01
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Pekin, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.01
Penns Grove, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Peoria County: Hollis twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00
Peoria, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.03
Perth Amboy, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.01
Philadelphia-Camden County, PA-NJ	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.03	-0.03	-0.32
Philadelphia-Wilmington, PA-NJ-DE (NJ Portion)	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.03	-0.03	-0.35
Philadelphia-Wilmington, PA-NJ-DE (PA-DE Portion)	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.08	-0.09	-1.01
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.15	-0.16	-1.83
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.15	-0.16	-1.84
Phoenix, AZ	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.11	-0.11	-1.30
Phoenix-Mesa, AZ	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-0.11	-0.12	-1.33
Phoenix-Mesa, AZ	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.11	-0.12	-1.35
Pierce County; Tacoma, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Pima County; Ajo planning area, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Pima County; Rillito planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01
Pinal County (part); West Pinal, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.01	-0.01	-0.06
Pitkin County; Aspen, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.08
Pittsburgh, PA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.01	-0.08
Pittsburgh-Beaver Valley, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.11	-0.11	-1.35
Pittsburgh-Beaver Valley, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.09	-0.10	-1.22
Plumas County, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	0.00	0.00	0.00
Polk County, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	-0.01
Portland, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.03	-0.03	-0.37
Power-Bannock Counties; Fort Hall Indian Reservation, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Power-Bannock Counties; Portneuf Valley Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.02
Provo, UT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.00	0.00	-0.05
Provo, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.02	-0.02	-0.23

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Prowers County; Lamar, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Raleigh-Durham, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.04	-0.05	-0.53
Ramsey County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Reading, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.01	-0.01	-0.12
Reno, NV	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.01	-0.07
Rhineland, WI	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.01
Riverside County (Coachella Valley), CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-0.01	-0.01	-0.16
Riverside County (Coachella Valley), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-0.01	-0.01	-0.16
Riverside County; Coachella Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.01	-0.02	-0.18
Riverside, Los Angeles, Orange, & San Bernardino Counties; South Coast Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.42	-0.45	-5.24
Rosebud County; Lame Deer, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Routt County (part); Steamboat Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.09
Rusk and Panola Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.03	-0.04	-0.44
Sacramento County, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.07	-0.08	-0.91
Sacramento Metro, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.09	-0.10	-1.19
Sacramento Metro, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.09	-0.10	-1.19
Sacramento, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.04	-0.04	-0.48
Sacramento, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.09	-0.10	-1.17
Salem, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.01	-0.07
Salt Lake City, UT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.02	-0.24
Salt Lake City, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.06	-0.06	-0.72
Salt Lake County, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.04	-0.04	-0.51
Salt Lake County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	-0.04	-0.04	-0.51
San Antonio, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.06	-0.06	-0.71
San Bernardino County, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.03	-0.03	-0.36
San Diego County, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.08	-0.09	-1.00
San Diego County, CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-0.08	-0.09	-1.00
San Diego, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.08	-0.09	-1.00
San Francisco Bay Area, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.20	-0.22	-2.54
San Francisco Bay Area, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.20	-0.22	-2.54
San Francisco Bay Area, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.20	-0.22	-2.54

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
San Francisco-Oakland-San Jose, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.19	-0.21	-2.42
San Joaquin Valley Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.15	-0.16	-1.89
San Joaquin Valley, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-0.15	-0.16	-1.89
San Joaquin Valley, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-0.15	-0.16	-1.89
San Joaquin Valley, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.15	-0.16	-1.89
San Joaquin Valley, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-0.15	-0.16	-1.89
San Luis Obispo (Eastern San Luis Obispo), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.01	-0.14
San Luis Obispo (Eastern part), CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.01	-0.14
San Manuel (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.01
San Miguel County; Telluride, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Sanders County (part); Thompson Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Santa Cruz County; Nogales planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01
Seaford, DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.01	-0.01	-0.08
Seattle-Tacoma, WA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.07	-0.08	-0.87
Sheboygan County, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.02
Sheridan County; City of Sheridan, WY	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Shoreline Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.02
Shoshone County; City of Pinehurst, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Shoshone County; Pinehurst Expansion Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Silver Bow County; Butte, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Somerville, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Southern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.02	-0.02	-0.23
Southwest Indiana, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.02
Spokane County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.10
Spokane, WA	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.01	-0.01	-0.10
Springfield, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.04
St. Bernard Parish, LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.02	-0.03	-0.33
St. Clair, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.02
St. Lawrence County, NY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
St. Louis, MO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.02	-0.28
St. Louis, MO-IL	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.07	-0.07	-0.87
St. Louis-St. Charles-Farmington, MO-IL	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.07	-0.08	-0.90
Steubenville, OH-WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.01	-0.14
Steubenville-Weirton, OH-WV	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.02	-0.02	-0.20

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Stockton, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.01	-0.11
Sullivan County, TN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.01
Sutter Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00
Syracuse, NY	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.02	-0.19
Tacoma, WA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.15
Tazewell County: Groveland twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.01
Terre Haute, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.02
Thurston County; Cities of Olympia, Tumwater, and Lacey, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.03
Titus County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Toms River, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Tooele County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	0.00	-0.01	-0.06
Trenton, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.02
Trona, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.01	-0.13
Tucson, AZ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.02	-0.22
Tuolumne County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	-0.02
Tuscan Buttes, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00
Tuscan Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal (Rural Transport)	100	0	0.00	0.00	0.00
Uinta Basin, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	-0.04
Union County; LaGrande, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Upper Green River Basin Area, WY	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.01	-0.07
Utah County, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.02	-0.25
Vancouver, WA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.01	-0.09
Ventura County, CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-0.03	-0.04	-0.42
Ventura County, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.03	-0.04	-0.42
Vermillion County; Part of Clinton Township, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Vigo County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.01	-0.06
Walla Walla County; Wallula, WA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00
Waltham, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.02
Warren County, NJ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	-0.01
Warren County: Conewago Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.01	-0.11
Warren County: Warren Boro, Pleasant Twp, Glade Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.01	-0.01	-0.11
Warren, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.01	-0.11

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Washington, DC-MD-VA	Ozone (2008 8-hour)	Nonattainment (DC) Maintenance (MD, VA), Marginal	50	0	-0.13	-0.14	-1.57
Washington, DC-MD-VA	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.13	-0.13	-1.56
Washington, DC-MD-VA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.02	-0.20
Washoe County; Reno planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.01	-0.01	-0.07
Wayne County, MI	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.11
Wayne County: Boston, Center, Franklin, Wayne & Webster Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.02
West Central Pinal, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01
West Silver Valley, ID	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Whatcom County, WA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.03
Winston-Salem, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.01	-0.14
Worcester, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.06
Yakima County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.03
Yakima, WA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.01
Yuba City-Marysville, CA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.05
Yuma, AZ	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	-0.03
Yuma, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.05

Notes:

^a Nonattainment or maintenance status as of 2/1/2024. Source: EPA, The Green Book Nonattainment Areas for Criteria Pollutants; <http://www.epa.gov/airquality/greenbook/>. "--" indicates that no severity classification has been established for the NAAQS pollutant.

^b Emissions thresholds in tons per year. Where the threshold differs by precursor pollutant, the smallest of the precursor thresholds is shown. These thresholds are provided for information only; a general conformity determination is not required for the Proposed Action. Source: 40 CFR 93.853.

^c Positive values are emissions increases; negative values are emissions decreases.

EPA = U.S. Environmental Protection Agency; NAAQS = National Ambient Air Quality Standard; CO = carbon monoxide; NO₂ = nitrogen dioxide; PM2.5 = particulate matter less than 2.5 microns in size; PM10 = particulate matter less than 10 microns in size; SO₂ = sulfur dioxide.

Appendix D Air Quality Nonattainment Area Results

Table D-66. Changes in Emissions from U.S. Combined Passenger Cars, Light Trucks, and HDPUVs by Nonattainment or Maintenance Area and Alternative, Direct and Indirect Impacts--Formaldehyde, 2050

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Ada County; Boise, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.20
Adams, Denver, and Boulder Counties; Denver Metropolitan area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.05	-0.10	-1.14
Ajo (Pima County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Albuquerque, NM	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.04	-0.45
Allegan County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.05
Allegheny County Air Basin: Hazelwood monitor, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.05
Allegheny County, PA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	-0.03	-0.06	-0.65
Allegheny County; Liberty, Lincoln, Port Vue, Glassport, Clairton, PA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.02
Allegheny, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.02	-0.22
Allentown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.03	-0.28
Allentown-Bethlehem-Easton, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.02	-0.03	-0.33
Alton Township, IL	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Amador County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	-0.02
Anchorage, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	-0.01	-0.07
Anchorage; Eagle River, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Anne Arundel County and Baltimore County, MD	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.03	-0.06	-0.61
Archuleta County; Pagosa Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Armstrong County; Madison, Mahoning, Boggs, Washington, Pine, PA	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	-0.01	-0.01	-0.15
Aroostock County; City of Presque Isle, ME	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Atlanta, GA	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	-0.17	-0.30	-3.48
Atlanta, GA	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.13	-0.24	-2.77
Atlantic City, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.02
Bakersfield, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.04	-0.43
Baltimore, MD	Ozone (2008 8-hour)	Nonattainment, Moderate	50	0	-0.07	-0.13	-1.50
Baltimore, MD	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.08	-0.14	-1.50
Baltimore, MD	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.01
Baton Rouge, LA	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.04	-0.08	-0.98

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Beaver, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.01
Benton County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	-0.01
Berrien County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.01	-0.15
Billings, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.05
Billings, MT	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00
Birmingham, AL	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.04	-0.08	-0.87
Boise-Northern Ada County, ID	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.02	-0.20
Bonner County; The Sandpoint Area, ID	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Boston, MA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.03	-0.37
Boyd County (part), KY	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.06
Brooke; Follansbee area, WV	PM ₁₀ (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Brown County: Green Bay, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Burlington, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Butte County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.01	-0.10
Calaveras County, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	-0.02
Calaveras County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	-0.02
Campbell-Clermont Counties, KY-OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.01
Canton-Massillon, OH	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.01	-0.02	-0.23
Central New Hampshire, NH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.01	-0.10
Central Steptoe Valley, NV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.01
Charleston, WV	PM _{2.5} (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.03	-0.06	-0.78
Charlotte, NC	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.04	-0.07	-0.77
Charlotte-Rock Hill, NC-SC	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.07	-0.13	-1.48
Chicago, IL-IN-WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.18	-0.33	-3.65
Chicago-Naperville, IL-IN-WI	Ozone (2008 8-hour)	Maintenance, Serious	100	0	-0.18	-0.33	-3.70
Chico (Butte County), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.01	-0.10
Chico, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.04
Chico, CA	PM _{2.5} (2006 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.10
Cincinnati, OH-KY (OH Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.04	-0.08	-0.85
Cincinnati, OH-KY (KY Portion)	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.21

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Cincinnati, OH-KY-IN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.06	-0.10	-1.12
Clark County; Las Vegas planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.06	-0.10	-1.13
Cleveland, OH	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.06	-0.11	-1.25
Cleveland, OH	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.04	-0.46
Cleveland, OH	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-0.03	-0.05	-0.60
Cleveland-Akron-Lorain, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.07	-0.12	-1.35
Cleveland-Akron-Lorain, OH	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.06	-0.11	-1.20
Cochise County; Paul Spur/Douglas planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01
Colorado Springs, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.03	-0.30
Columbus, OH	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.05	-0.09	-0.99
Columbus, OH	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.05	-0.08	-0.92
Cook County; Lyons Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.04
Cook County; Southeast Chicago, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.05
Coshocton County; Franklin Township, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Coso Junction, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.17
Cuyahoga County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.04	-0.46
Cuyahoga County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.02	-0.03	-0.37
Dallas-Fort Worth, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.30	-0.55	-6.59
Dallas-Fort Worth, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.30	-0.54	-6.52
Dane County; Madison sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.02	-0.26
Delaware County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.23
Denver Metro/North Front Range, CO	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.11	-0.20	-2.31
Denver-Boulder, CO	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.09	-0.16	-1.81
Denver-Boulder-Greeley-Ft. Collins-Loveland, CO	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.11	-0.20	-2.30
Detroit, MI	Ozone (2015 8-hour)	Maintenance, Moderate	100	0	-0.13	-0.24	-2.70
Detroit, MI	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.05	-0.09	-1.04
Detroit, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.02	-0.22
Detroit-Ann Arbor, MI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.13	-0.24	-2.70
Doña Ana County; Anthony, NM	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.10

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Door County, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	0.00	0.00
Door County-Revised, WI	Ozone (2015 8-hour)	Maintenance, Marginal (Rural Transport)	100	0	0.00	0.00	-0.01
Douglas (Cochise County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.01
Dukes County, MA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	0.00	0.00	-0.01
Duluth, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.06
East Chicago, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.01
East Helena Area, MT	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00
East Kern County, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.01	-0.01	-0.18
El Paso County, TX	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.02	-0.04	-0.41
El Paso, TX	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.12
El Paso-Las Cruces, TX-NM	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.03	-0.05	-0.60
Eugene-Springfield, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.01	-0.11
Evangeline Parish (Partial), LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Fairbanks, AK	CO (1971 8-hour)	Maintenance, Serious	100	0	0.00	0.00	-0.03
Fairbanks, AK	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	-0.05
Flathead County; Columbia Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Flathead County; Kalispell and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.02
Flathead County; Whitefish and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Fort Collins, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	-0.01	-0.09
Freehold, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.01
Freestone and Anderson Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.01	-0.16
Fremont County; Canon City Area, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.03
Fresno, CA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.02	-0.03	-0.32
Gila County (part): Payson, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Giles County, VA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Grant County, NM	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.02
Grants Pass, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.02
Great Falls, MT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Greater Connecticut, CT	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-0.04	-0.07	-0.75
Greater Connecticut, CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.04	-0.07	-0.75
Greeley, CO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.04	-0.48
Hancock County (part): Weirton, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	-0.02
Hancock and Brooke Counties (Part); The city of Weirton, WV	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.02
Harrisburg-Lebanon-Carlisle-York, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.03	-0.05	-0.55
Hartford-New Britain-Middletown, CT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.03	-0.05	-0.52
Hayden (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	-0.01
Hayden, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01
Hayden, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.01
Henderson-Webster Counties, KY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.02
Hillsborough County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.01
Hillsborough-Polk County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00
Houston-Galveston-Brazoria, TX	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.26	-0.46	-5.46
Houston-Galveston-Brazoria, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.24	-0.44	-5.20
Howard County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.02	-0.30
Humphreys County; (part) TVA Johnsonville, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	-0.02
Huntington, IN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.02
Hutchinson County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.02	-0.27
Imperial County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-0.01	-0.01	-0.11
Imperial County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.01	-0.11
Imperial County, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.09
Imperial County, CA	PM2.5 (2012 Annual)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.09
Imperial Valley, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.01	-0.01	-0.11
Indian Wells, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.19
Indiana, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.02	-0.04	-0.50
Indianapolis, IN	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Indianapolis, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.02	-0.03	-0.33
Inland Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.03
Inyo County; Owens Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	0.00	0.00	-0.01

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Jackson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.04
Jackson County; Medford-Ashland (including White City), OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.08
Jamestown, NY	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.01	-0.02	-0.26
Jefferson County, KY	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00
Jefferson County, MO	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.03
Jefferson County, OH	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Jefferson County; (part) Steubenville & Mingo Junction, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.03
Johnstown, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.03	-0.35
Josephine County; Grants Pass, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.02
Juneau; Mendenhall Valley area, AK	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Kern County (Eastern Kern), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.01	-0.02	-0.27
Kern County (Eastern Kern), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.01	-0.02	-0.27
King County; Kent, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
King County; Seattle, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Klamath Falls, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.03
Klamath Falls, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.03
Klamath Falls, OR	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.03
Knoxville, TN	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.02	-0.04	-0.40
Knoxville-Sevierville-La Follette, TN	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.03	-0.04	-0.50
La Porte County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.03
LaSalle County; Oglesby, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.02
Lake County (part); Lakeview, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Lake County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.02	-0.23
Lake County, OH	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.01	-0.11
Lake County; (part) Eastlake, Timberlake, Lakeline, Willoughby, Mentor, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.02
Lake County; Cities of East Chicago, Hammond, Whiting, and Gary, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.15
Lake County; Polson, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Lake County; Ronan, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Lake Tahoe North Shore, CA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.01
Lake Tahoe South Shore, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.02
Lake Tahoe, NV	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.01
Lancaster, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.01	-0.02	-0.26
Lancaster, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.26
Lane County (part); Oakridge, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Lane County; Eugene/Springfield, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.11
Las Vegas, NV	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.06	-0.10	-1.13
Las Vegas, NV	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.06	-0.10	-1.13
Laurel Area (Yellowstone County), MT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary	100	0	0.00	0.00	0.00
Lebanon County, PA	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	-0.01	-0.06
Lemont, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	-0.01	-0.08
Liberty-Clairton, PA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.02
Lincoln County; Libby and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Logan, UT-ID	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.07
Longmont, CO	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.02	-0.28
Lorain County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.03
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.03	-0.05	-0.64
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-0.03	-0.05	-0.64
Los Angeles-South Coast Air Basin, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-0.44	-0.78	-8.87
Los Angeles-South Coast Air Basin, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-0.43	-0.78	-8.87
Los Angeles-South Coast Air Basin, CA	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.44	-0.78	-8.87
Los Angeles-South Coast Air Basin, CA	NO ₂ (1971 Annual)	Maintenance, Primary	100	0	-0.44	-0.78	-8.87
Los Angeles-South Coast Air Basin, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.44	-0.78	-8.87
Los Angeles-South Coast Air Basin, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-0.44	-0.78	-8.87
Louisville, KY-IN (IN Portion)	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	-0.01	-0.01	-0.13
Louisville, KY-IN (KY Portion)	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.02	-0.04	-0.49
Lowell, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.05
Lucas County, OH	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.02	-0.18

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Madison County; Granite City Township and Nameoki Township, IL	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.03
Manchester, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.05
Manitowoc County, WI	Ozone (2015 8-hour)	Maintenance, Marginal	100	0	0.00	0.00	-0.03
Marathon County: Rothschild Sub-city area, Rib Mountain, Weston, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	-0.01	-0.08
Maricopa and Pinal Counties; Phoenix planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.12	-0.21	-2.32
Marion County: Lawrence, Washington, and Warrant Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.02	-0.28
Mariposa County, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01
Mariposa County, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01
Marshall, WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.02	-0.27
Medford, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.05
Memphis, TN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.03	-0.05	-0.59
Memphis, TN-MS-AR	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.04	-0.07	-0.76
Miami (Gila County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.01
Miami, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01
Miami, AZ	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.01
Millinocket AQCR 109, ME	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.09
Milwaukee, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.03	-0.06	-0.69
Milwaukee, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.02	-0.03	-0.31
Milwaukee-Racine, WI	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.03	-0.05	-0.61
Minneapolis-St. Paul, MN	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.08	-0.15	-1.70
Minneapolis-St. Paul, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.08	-0.15	-1.64
Missoula, MT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.04
Missoula, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.04
Modesto, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.01	-0.15
Mohave County (part); Bullhead City, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.06
Mono Basin, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Mono County; Mammoth Lake planning area, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Morenci (Greenlee County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	0.00
Morgan County, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.02
Morongo Band of Mission Indians, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	0.00	0.00	0.00
Morongo Band of Mission Indians, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	0.00
Morristown, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.01
Muscatine County, IA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.01
Muscatine, IA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.02
Muskegon County, MI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.08
Muskingum River, OH	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.02
Nashua, NH	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.04
Nassau County, FL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	0.00
Navarro County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.01	-0.20
Nevada County (Western part), CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	-0.04
Nevada County (Western part), CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	0.00	0.00	-0.04
New Haven County, CT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
New Haven-Meriden-Waterbury, CT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.04	-0.40
New Madrid County, MO	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
New Manchester-Grant magisterial district in Hancock County, WV	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.01
New York County, NY	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.02	-0.17
New York-N. New Jersey-Long Island, NY-NJ-CT	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.32	-0.58	-6.49
New York-N. New Jersey-Long Island, NY-NJ-CT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.18	-0.32	-3.61
New York-N. New Jersey-Long Island, NY-NJ-CT	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.33	-0.59	-6.63
New York-Northern New Jersey-Long Island, NY-NJ-CT	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.32	-0.58	-6.50
Nogales, AZ	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Northern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.05	-0.10	-1.14
Oakridge, OR	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Ogden, UT	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	0.00	0.00	-0.04
Ogden, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.04
Olmsted County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.02
Olmsted County; City of Rochester, MN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.06

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Oneida County: Rhinelander Sub-city area, WI	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	-0.02
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation, CA	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Pekin, IL	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.02
Penns Grove, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Peoria County: Hollis twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	0.00
Peoria, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.05
Perth Amboy, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.03
Philadelphia-Camden County, PA-NJ	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.03	-0.05	-0.53
Philadelphia-Wilmington, PA-NJ-DE (NJ Portion)	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.03	-0.05	-0.60
Philadelphia-Wilmington, PA-NJ-DE (PA-DE Portion)	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.09	-0.16	-1.74
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.16	-0.28	-3.14
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.16	-0.28	-3.16
Phoenix, AZ	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.11	-0.20	-2.26
Phoenix-Mesa, AZ	Ozone (2008 8-hour)	Nonattainment, Moderate	100	0	-0.12	-0.21	-2.32
Phoenix-Mesa, AZ	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.12	-0.21	-2.35
Pierce County; Tacoma, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Pima County; Ajo planning area, AZ	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Pima County; Rillito planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.02
Pinal County (part); West Pinal, AZ	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.01	-0.01	-0.11
Pitkin County; Aspen, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.10
Pittsburgh, PA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.01	-0.14
Pittsburgh-Beaver Valley, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.09	-0.16	-1.98
Pittsburgh-Beaver Valley, PA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.08	-0.14	-1.79
Plumas County, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	0.00	0.00	0.00
Polk County, TN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	-0.01
Portland, OR	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.03	-0.06	-0.65
Power-Bannock Counties; Fort Hall Indian Reservation, ID	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Power-Bannock Counties; Portneuf Valley Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.04

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Provo, UT	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	0.00	-0.01	-0.08
Provo, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.02	-0.03	-0.38
Prowers County; Lamar, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Raleigh-Durham, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.05	-0.08	-0.93
Ramsey County, MN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Reading, PA	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.01	-0.02	-0.20
Reno, NV	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.01	-0.13
Rhineland, WI	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.01
Riverside County (Coachella Valley), CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-0.01	-0.02	-0.27
Riverside County (Coachella Valley), CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-0.01	-0.02	-0.27
Riverside County; Coachella Valley planning area, CA	PM10 (1987 24-hour)	Nonattainment, Serious	70	0	-0.02	-0.03	-0.31
Riverside, Los Angeles, Orange, & San Bernardino Counties; South Coast Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.43	-0.78	-8.83
Rosebud County; Lame Deer, MT	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	0.00
Routt County (part); Steamboat Springs, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.12
Rusk and Panola Counties, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.02	-0.04	-0.56
Sacramento County, CA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.06	-0.11	-1.33
Sacramento Metro, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.08	-0.15	-1.83
Sacramento Metro, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.08	-0.15	-1.83
Sacramento, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.04	-0.07	-0.82
Sacramento, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.08	-0.15	-1.80
Salem, OR	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.01	-0.12
Salt Lake City, UT	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.03	-0.34
Salt Lake City, UT	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.06	-0.10	-1.19
Salt Lake County, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.04	-0.07	-0.81
Salt Lake County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	-0.04	-0.07	-0.81
San Antonio, TX	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.06	-0.10	-1.17
San Bernardino County, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.02	-0.04	-0.50
San Diego County, CA	Ozone (2008 8-hour)	Nonattainment, Severe 15	25	0	-0.09	-0.16	-1.74
San Diego County, CA	Ozone (2015 8-hour)	Nonattainment, Severe 15	25	0	-0.09	-0.16	-1.74

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
San Diego, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.09	-0.16	-1.74
San Francisco Bay Area, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.20	-0.36	-4.17
San Francisco Bay Area, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.20	-0.36	-4.17
San Francisco Bay Area, CA	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	-0.20	-0.36	-4.18
San Francisco-Oakland-San Jose, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.19	-0.35	-3.98
San Joaquin Valley Air Basin, CA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.14	-0.25	-2.96
San Joaquin Valley, CA	Ozone (2008 8-hour)	Nonattainment, Extreme	10	0	-0.14	-0.25	-2.96
San Joaquin Valley, CA	Ozone (2015 8-hour)	Nonattainment, Extreme	10	0	-0.14	-0.25	-2.96
San Joaquin Valley, CA	PM2.5 (2006 24-hour)	Nonattainment, Serious	70	0	-0.14	-0.25	-2.96
San Joaquin Valley, CA	PM2.5 (2012 Annual)	Nonattainment, Serious	70	0	-0.14	-0.25	-2.96
San Luis Obispo (Eastern San Luis Obispo), CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.01	-0.18
San Luis Obispo (Eastern part), CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.01	-0.01	-0.18
San Manuel (Pinal County), AZ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.01
San Miguel County; Telluride, CO	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Sanders County (part); Thompson Falls and vicinity, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Santa Cruz County; Nogales planning area, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01
Seaford, DE	Ozone (2008 8-hour)	Nonattainment, Marginal	50	0	-0.01	-0.01	-0.14
Seattle-Tacoma, WA	CO (1971 8-hour)	Maintenance, Moderate > 12.7ppm	100	0	-0.08	-0.14	-1.52
Sheboygan County, WI	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.04
Sheridan County; City of Sheridan, WY	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Shoreline Sheboygan County, WI	Ozone (2008 8-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.03
Shoshone County; City of Pinehurst, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Shoshone County; Pinehurst Expansion Area, ID	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Silver Bow County; Butte, MT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.02
Somerville, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.01
Southern Wasatch Front, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	-0.02	-0.03	-0.38
Southwest Indiana, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.03
Spokane County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.17
Spokane, WA	CO (1971 8-hour)	Maintenance, Serious	100	0	-0.01	-0.02	-0.17
Springfield, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	-0.01	-0.07

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
St. Bernard Parish, LA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.02	-0.03	-0.42
St. Clair, MI	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.04
St. Lawrence County, NY	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
St. Louis, MO	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.04	-0.48
St. Louis, MO-IL	Ozone (2015 8-hour)	Nonattainment, Moderate	100	0	-0.07	-0.13	-1.49
St. Louis-St. Charles-Farmington, MO-IL	Ozone (2008 8-hour)	Maintenance, Marginal	100	0	-0.08	-0.14	-1.55
Steubenville, OH-WV	SO ₂ (2010 1-hour)	Maintenance, --	100	0	-0.01	-0.01	-0.18
Steubenville-Weirton, OH-WV	PM2.5 (2006 24-hour)	Maintenance, Former Subpart 1	100	0	-0.01	-0.02	-0.27
Stockton, CA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.02	-0.20
Sullivan County, TN	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.02
Sutter Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00
Syracuse, NY	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.03	-0.31
Tacoma, WA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.02	-0.27
Tazewell County: Groveland twp, IL	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.01
Terre Haute, IN	SO ₂ (2010 1-hour)	Maintenance, --	100	0	0.00	0.00	-0.04
Thurston County; Cities of Olympia, Tumwater, and Lacey, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.05
Titus County, TX	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	0.00
Toms River, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	0.00
Tooele County, UT	SO ₂ (1971 24-hour/Annual)	Nonattainment, Primary, Secondary	100	0	0.00	-0.01	-0.08
Trenton, NJ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.04
Trona, CA	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	-0.01	-0.01	-0.17
Tucson, AZ	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.02	-0.04	-0.39
Tuolumne County, CA	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	-0.03
Tuscan Buttes, CA	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	0.00	0.00
Tuscan Buttes, CA	Ozone (2015 8-hour)	Nonattainment, Marginal (Rural Transport)	100	0	0.00	0.00	0.00
Uinta Basin, UT	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.01	-0.06
Union County; LaGrande, OR	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	0.00
Upper Green River Basin Area, WY	Ozone (2008 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.01	-0.10
Utah County, UT	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.02	-0.03	-0.39

Appendix D Air Quality Nonattainment Area Results

Nonattainment or Maintenance Area	NAAQS Pollutant (Standard)	Status, Severity Classification ^a	General Conformity Threshold ^b	Emission Changes by Alternative (tons per year) ^c			
				No-Action	PC2LT002 + HDPUV4	PC2LT002 + HDPUV108	PC6LT8 + HDPUV14
Vancouver, WA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.01	-0.16
Ventura County, CA	Ozone (2008 8-hour)	Nonattainment, Serious	50	0	-0.03	-0.05	-0.64
Ventura County, CA	Ozone (2015 8-hour)	Nonattainment, Serious	50	0	-0.03	-0.05	-0.64
Vermillion County; Part of Clinton Township, IN	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Vigo County, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	-0.01	-0.10
Walla Walla County; Wallula, WA	PM10 (1987 24-hour)	Maintenance, Serious	100	0	0.00	0.00	0.00
Waltham, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.03
Warren County, NJ	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	0.00	0.00	-0.01
Warren County: Conewago Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	-0.01	-0.01	-0.14
Warren County: Warren Boro, Pleasant Twp, Glade Twp, PA	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary, Secondary	100	0	-0.01	-0.01	-0.14
Warren, PA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	-0.01	-0.01	-0.15
Washington, DC-MD-VA	Ozone (2008 8-hour)	Nonattainment (DC) Maintenance (MD, VA), Marginal	50	0	-0.14	-0.24	-2.72
Washington, DC-MD-VA	Ozone (2015 8-hour)	Nonattainment, Moderate	50	0	-0.14	-0.24	-2.71
Washington, DC-MD-VA	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.02	-0.03	-0.35
Washoe County; Reno planning area, NV	PM10 (1987 24-hour)	Maintenance, Serious	100	0	-0.01	-0.01	-0.13
Wayne County, MI	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	-0.01	-0.01	-0.14
Wayne County: Boston, Center, Franklin, Wayne & Webster Townships, IN	SO ₂ (1971 24-hour/Annual)	Maintenance, Primary	100	0	0.00	0.00	-0.03
West Central Pinal, AZ	PM2.5 (2006 24-hour)	Nonattainment, Moderate	100	0	0.00	0.00	-0.01
West Silver Valley, ID	PM2.5 (2012 Annual)	Maintenance, Moderate	100	0	0.00	0.00	-0.01
Whatcom County, WA	SO ₂ (2010 1-hour)	Nonattainment, --	100	0	0.00	0.00	-0.04
Winston-Salem, NC	CO (1971 8-hour)	Maintenance, Moderate <= 12.7ppm	100	0	-0.01	-0.02	-0.25
Worcester, MA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	-0.01	-0.01	-0.11
Yakima County, WA	PM10 (1987 24-hour)	Maintenance, Moderate	100	0	0.00	0.00	-0.05
Yakima, WA	CO (1971 8-hour)	Maintenance, Not Classified	100	0	0.00	0.00	-0.02
Yuba City-Marysville, CA	PM2.5 (2006 24-hour)	Maintenance, Moderate	100	0	0.00	-0.01	-0.09
Yuma, AZ	Ozone (2015 8-hour)	Nonattainment, Marginal	100	0	0.00	-0.01	-0.06
Yuma, AZ	PM10 (1987 24-hour)	Nonattainment, Moderate	100	0	0.00	-0.01	-0.09

Notes:

^a Nonattainment or maintenance status as of 2/1/2024. Source: EPA, The Green Book Nonattainment Areas for Criteria Pollutants; <http://www.epa.gov/airquality/greenbook/>. "--" indicates that no severity classification has been established for the NAAQS pollutant.

Appendix D Air Quality Nonattainment Area Results

^b Emissions thresholds in tons per year. Where the threshold differs by precursor pollutant, the smallest of the precursor thresholds is shown. These thresholds are provided for information only; a general conformity determination is not required for the Proposed Action. Source: 40 CFR 93.853.

^c Positive values are emissions increases; negative values are emissions decreases.

EPA = U.S. Environmental Protection Agency; NAAQS = National Ambient Air Quality Standard; CO = carbon monoxide; NO₂ = nitrogen dioxide; PM_{2.5} = particulate matter less than 2.5 microns in size; PM₁₀ = particulate matter less than 10 microns in size; SO₂ = sulfur dioxide.

APPENDIX E

Air Quality Modeling and Health Impacts Assessment

APPENDIX E PHOTOCHEMICAL MODELING

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Acronyms and Abbreviations

$\mu\text{g}/\text{m}^3$	micrograms per cubic meter
AMET	Atmospheric Model Evaluation Tool
AQS	Air Quality System
BenMAP-CE	Environmental Benefits Mapping and Analysis Program—Community Edition
CAFE	Corporate Average Fuel Economy
CB6R5AE7	Carbon Bond Chemical Mechanism Version 6 Revision 5 Aerosol Mechanism 7
CMAQ	Community Multiscale Air Quality
CO	carbon monoxide
CSN	Chemical Speciation Network
E85	blend of 15 percent gasoline and 85 percent ethanol, by volume
EGU	electric generating unit
EIS	Environmental Impact Statement
EMP	emissions modeling platform
EPA	U.S. Environmental Protection Agency
FB	fractional bias
FE	fractional error
FRM	Federal reference method
REET	Greenhouse Gas, Regulated Emissions and Energy Used in Transportation
IMPROVE	Interagency Monitoring of Protected Visual Environments
LML	lowest measured level
MCIP	Meteorology-Chemistry Interface Processor
MDA8	daily maximum 8-hour average
MOVES	Motor Vehicle Emission Simulator
MPE	model performance evaluation
MY	model year
NAAQS	National Ambient Air Quality Standards
NCL	NCAR Command Language
ng/m^3	nanograms per cubic meter
NH_3	ammonia
NHTSA	National Highway Traffic Safety Administration
NMB	normalized mean bias
NME	normalized mean error
NO_x	nitrogen oxides
PM	particulate matter
PM10	Coarse particulates (particulate matter 10 microns or less in diameter)
PM2.5	Fine particulates (particulate matter 2.5 microns or less in diameter)
ppb	parts per billion
ppt	parts per trillion
SAFE	Safer Affordable Fuel-Efficient

SCC	source classification code
SEARCH	Southeastern Aerosol Research and Characterization
SMOKE	Sparse-Matrix Operator Kernel Emissions
SEIS	Supplemental Environmental Impact Statement
SO ₂	sulfur dioxide
VOC	volatile organic compound
Volpe	Volpe National Transportation Systems Center
WRF	Weather Research and Forecasting

E.1 Introduction

This appendix summarizes the application of air quality modeling tools to assess the impacts on air quality and the related health effects of the National Highway Traffic Safety Administration's (NHTSA) final Corporate Average Fuel Economy (CAFE) standards for passenger cars and light-duty (LD) trucks, model year (MY) 2027–2032¹ and fuel efficiency (FE) standards for heavy-duty pickup trucks and vans (HDPUV) for MY 2030–2035, as part of the Final Environmental Impact Statement (hereafter, 2027–2032 CAFE and 2030–2035 HDPUV Final EIS). The air quality modeling and health effects analysis focused on ozone and fine particulate matter of 2.5 microns or less in diameter (PM_{2.5}). This modeling provides insight into the uncertainties associated with the use of benefit-per-ton estimates.

As shown in the Draft Environmental Impact Statement (Draft EIS) (NHTSA 2023), NHTSA indicated that photochemical air quality modeling would be performed based on the inputs and emissions forecasts used in the Draft EIS. To accommodate the substantial time required to complete the air quality modeling analysis, NHTSA initiated air quality modeling before the inputs and emissions forecasts for the Final EIS were finalized. Therefore, NHTSA used the inputs and emissions forecasts from the Draft EIS for the Proposed Action and alternatives as stated in the Draft EIS. Although the photochemical modeling does not reflect the health effects that would be associated with the Final EIS alternatives, it documents how the analysis is performed and how the spatial distributions of emissions sources and populations influence the results. The analysis illustrates how predicted health effects change with different assumptions and indicates the magnitudes of predicted changes in health effects to be expected from changes in emissions.² This approach has been used in the last several NHTSA EIS analyses, which include the Phase 2 Fuel Efficiency Standard for Medium- and Heavy-Duty Engines and Vehicles (NHTSA 2016), the Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Year 2021–2026 Passenger Cars and Light Trucks (NHTSA 2020) and the 2022 Light Duty CAFE Standards Supplemental EIS (NHTSA 2022). In contrast, the benefits per ton approach uses nationwide estimates and does not consider location of air pollutants and populations.

E.1.1 Objective

The objective of this study is to use air quality modeling and health-related benefits analysis tools to quantify the expected future air quality and health-related benefits and consequences associated with a range of potential CAFE and FE standards. To support this objective, NHTSA estimated air quality changes and health-related benefits at the national scale based on a detailed analysis of air quality and health effects throughout the contiguous United States.

Different regions of the country could experience either a net increase or a net decrease in emissions because of the Proposed Action and alternatives, depending on the relative magnitude of the changes in emissions from increased fuel economy, increased vehicle use, increased electricity production from power plants, and decreased fuel production and distribution under each alternative. The air quality analysis in this appendix addresses regional differences using grid-based air quality modeling and analysis techniques, which account for local and regional differences in emissions and many of the other

¹ Analysis presented in this Appendix E is based on the Draft EIS data and reflects MY 2027–2031 CAFE standards and MY 2032 augural standards.

² EPA uses this same approach in their proposed rulemaking efforts. A recent example is the April 2023 Illustrative Air Quality Analysis for the Light and Medium Duty Vehicle Multipollutant Proposed Rule, EPA-420-D-23-002.

factors (e.g., meteorology, atmospheric processes) that affect air quality and the resulting health effects at any given location.

This photochemical air quality modeling analysis is intended as a screening-level analysis by using both the Community Multiscale Air Quality (CMAQ) model and the Environmental Benefits Mapping and Analysis Program—Community Edition (BenMAP-CE) for quantifying and comparing the air quality and health-related benefits of the Proposed Action and alternatives as described in the Draft EIS.

E.1.2 Methodology

To examine and quantify the air quality and health-related benefits associated with the CAFE standards for 2027–2032 CAFE standards for passenger cars and light-duty (LD) trucks and FE standards for 2030–2035 HDPUVs for the Draft EIS Proposed Action and alternatives, NHTSA performed a national-scale photochemical air quality modeling and health benefit assessment with the following key steps:

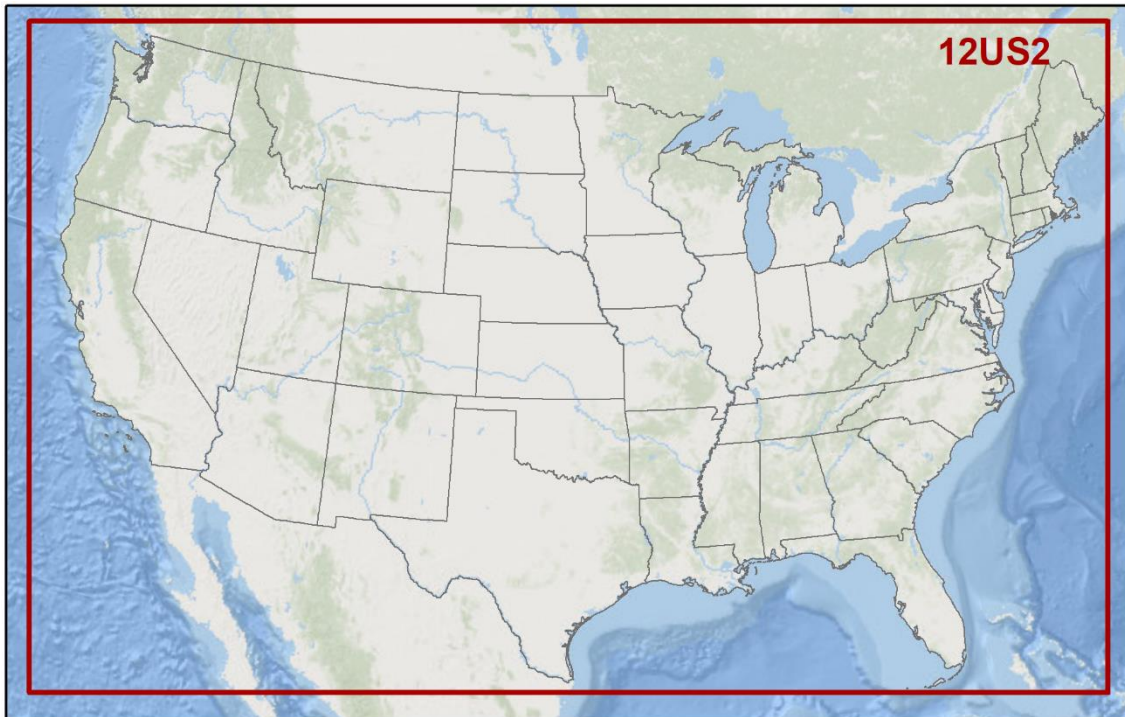
- Preparing emissions inventories
- Modeling air quality
- Assessing air quality-related health impacts

NHTSA applied the following widely used tools for the air quality and health effects assessment:

- Sparse-Matrix Operator Kernel Emissions (SMOKE) processing tool (version 5.0, released June 2023) to prepare model-ready emissions.
- Community Multiscale Air Quality (CMAQ) model (version 5.4, released October 2022) to quantify air quality changes for the different fuel economy alternatives.
- Benefits Mapping and Analysis Program Community Edition (BenMAP-CE) tool (version 1.5, released August 2023) to assess the health-related impacts of the simulated changes in air quality.

The national-scale modeling analysis employed the standard 12-kilometer CMAQ continental modeling domain (12US2), shown in Figure E-1. The horizontal resolution of the grid for this modeling domain is 12 kilometers (7.45 miles) with 396 cells east-west and 246 north-south. NHTSA calculated air quality and health-related impacts for each grid cell in the entire contiguous United States. Although the modeling domain does not include all 50 states, nearly all of the affected emissions and population are included in the domain; therefore, the results are expected to represent those for a national-scale analysis. The modeling domain does include emissions from Mexico, Canada, and a small portion of the Caribbean, but these locations are not included in the health-related impact analysis.

Figure E-1. Community Multiscale Air Quality Modeling Domain



NHTSA applied the CMAQ model for an annual simulation period using meteorological inputs provided by the U.S. Environmental Protection Agency (EPA) for a base year of 2016.

NHTSA performed the modeling analysis for both the 2027–2032 CAFE and 2030–2035 HDPUV for the year 2050. NHTSA chose 2050 for analysis of the Proposed Action and alternatives because by 2050, vehicles produced in MY 2027 through 2035 and beyond will comply with this rule and account for almost all of the on-road fleet’s vehicle emissions. EPA provided up-to-date projected, national-scale emissions data for 2055, which was the best available projection data closest to NHTSA’s year 2050 analysis. NHTSA processed emissions for the 12-kilometer resolution modeling domain using SMOKE. The resulting model-ready inventories contain emissions for all criteria pollutants (as required for photochemical modeling) for multiple source categories (sectors), including on-road mobile sources, nonroad mobile sources (e.g., construction equipment, locomotives, ships, aircraft), electric generating unit (EGU) point sources, non-EGU point sources, area sources, and biogenic sources.

NHTSA developed a baseline emissions inventory for the No-Action Alternative (Alternative 0). Following preparation of baseline emissions inventories, NHTSA replaced the baseline emissions for the LD vehicles and HDPUVs portion of the on-road mobile emissions and the relevant upstream categories with data reflecting the alternatives analyzed in Draft EIS. NHTSA calculated national estimates of on-road emissions for these vehicle classes for 2050. Downstream (tailpipe) emissions from LD vehicles and HDPUVs were estimated using EPA’s Motor Vehicle Emissions Simulator (MOVES3³) model based on a variety of inputs, including vehicle type, vehicle age, fuel type, and vehicle technology. To estimate upstream emissions changes resulting from decreased downstream fuel consumption, the analysis uses emissions factors from the Greenhouse Gases, Regulated Emissions, and Energy Use in Transportation

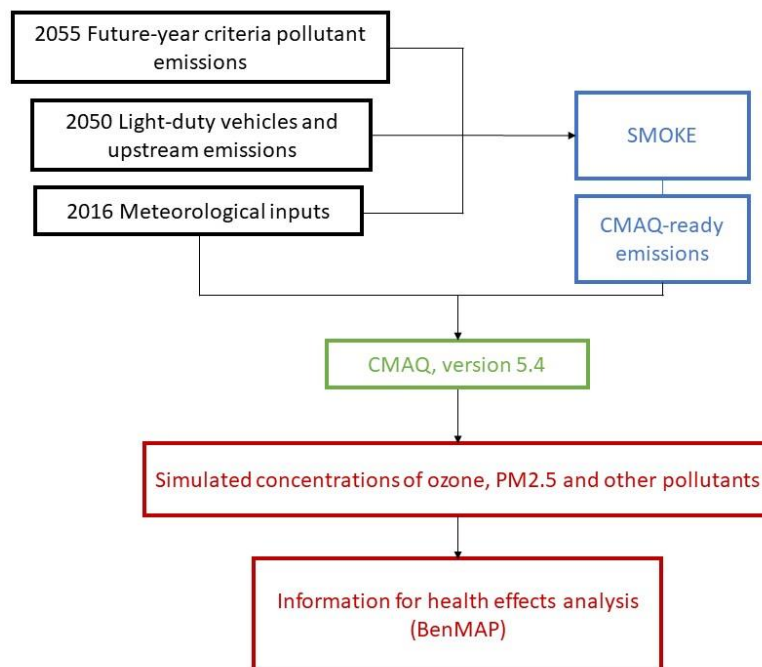
³ The Draft EIS used MOVES3 as MOVES4 was not available when the early analysis was performed in spring 2023. MOVES4 was released in August 2023.

(GREET) model (version 2022 developed by the U.S. Department of Energy, Argonne National Laboratory). Upstream emissions factors for gasoline, diesel, E85 (a blend of 15 percent gasoline and 85 percent ethanol, by volume), and electricity were taken from the GREET model in 5-year increments beginning in 2020 and ending in 2050, which included effects determined by EPA from the Inflation Reduction Act of 2022.

NHTSA then applied CMAQ for each alternative from the Draft EIS using the emissions specific to each alternative. The simulated difference in air quality between the No-Action Alternative and each action alternative represents the change in air quality associated with that alternative. Following the application of CMAQ, NHTSA processed the CMAQ outputs for input to the BenMAP-CE health effects analysis tool and used BenMAP-CE to estimate the health impacts with the changes in air quality simulated by CMAQ for each of the action alternatives. The BenMAP-CE tool includes health impact functions, which relate a change in the concentration of a pollutant to a change in the incidence health endpoint. For this study, the health effects analysis considered the effects of ozone and PM_{2.5}. The PM_{2.5} analysis includes sulfate and nitrate particulates (secondary PM_{2.5}) formed from emissions of sulfur dioxide (SO₂) and nitrogen oxides (NO_x), respectively. BenMAP-CE does not estimate health impacts associated with changes in directly emitted SO₂, carbon monoxide (CO), and other emissions. NHTSA calculated health effects at the 12-kilometer scale (grid cell size) and aggregated the effects nationally to determine overall impact.

Figure E-2 shows the components of the NHTSA air quality modeling and health-related benefits analysis. Note that both the emissions and meteorological inputs are used by SMOKE.

Figure E-2. Diagram of Air Quality Modeling and Health-Related Benefits Analysis Components



SMOKE = Sparse-Matrix Operator Kernel Emissions; CMAQ = Community Multiscale Air Quality; PM_{2.5} = particulate matter 2.5 microns or less in diameter; BenMAP = Environmental Benefits Mapping and Analysis Program

E.1.3 Model Applications

NHTSA designed this analysis to examine the air quality impacts and related health benefits associated with selected alternatives to support the development of the 2027–2032 CAFE and 2030–2035 HDPUV Final EIS to set CAFE standards for MY 2027–2032 and FE standards for MY 2030–2035 HDPUVs. This analysis examines the impacts for the No-Action Alternative and three action alternatives included in the 2027–2032 CAFE and 2030–2035 HDPUV Draft EIS (NHTSA 2023).

For this analysis, the No-Action Alternative is the reference baseline—this alternative assumes that the standards established in the CAFE standards finalized in 2022 for MY 2026 and FE standards finalized in the Phase 2 program for MY 2027 HDPUVs continue in perpetuity.

The specific actions for each action alternative are as follows:

- **Alternative 1.** A 1 percent increase in fuel economy for passenger cars and 3 percent increase in fuel economy for light trucks for MYs 2027–2032. A 4 percent increase in fuel efficiency for HDPUVs for MYs 2030–2035.
- **Alternative 2.** A 2 percent increase in fuel economy for passenger cars and 4 percent increase in fuel economy for light trucks for MYs 2027–2032. A 10 percent increase in fuel efficiency for HDPUVs for MYs 2030–2035.
- **Alternative 3.** A 6 percent increase in fuel economy for passenger cars and 8 percent increase in fuel economy for light trucks for MYs 2027–2032. A 14 percent increase in fuel efficiency for HDPUVs for MYs 2030–2035.

For the purposes of its analysis, NHTSA assumes that the MY 2032 CAFE and MY 2035 FE standards for each alternative would continue indefinitely. For the analysis, NHTSA calculated the health effects associated with each alternative in relation to the reference baseline of the No-Action Alternative.

E.2 Emissions Inventory Preparation

This section describes input data and procedures used to develop emissions inputs for air quality modeling analysis to support the 2027–2032 CAFE and 2030–2035 HDPUV Final EIS. NHTSA conducted the air quality modeling using CMAQ.

In September 2023, EPA released an updated 2016 emissions modeling platform (EMP), referred to as 2016v3 EMP, that included using the Integrated Planning Model 2022 post-Inflation Reduction Act emissions that can be used with the CMAQ model (EPA 2023). The 2016v3 EMP includes a full suite of base year (2016) and future year emissions inventories (2023, 2026, and 2055), ancillary data, and processing scripts. The 2016v3 platform is the basis for the national emissions for the 2027–2032 CAFE and 2030–2035 HDPUV Final EIS, incorporating data from MOVES3, the 2017 National Emissions Inventory, the 2019 National Emission Inventory (NEI) point source inventory, the Western Regional Air Partnership oil and gas inventory, and inventories for Canada and Mexico.

The Volpe National Transportation Systems Center (Volpe), operated by the U.S. Department of Transportation, supports NHTSA’s CAFE program. For the 2027–2032 CAFE and 2030–2035 HDPUV Final EIS, Volpe developed national emissions estimates for 2050 and four distinct alternatives: the No-Action Alternative (Alt 0) and three action alternatives as described in the Draft EIS. These alternatives include emissions from tailpipes, brake wear and tire wear for the 2027–2032 CAFE and 2030–2035 HDPUV FE changes, as well as changes to the upstream emissions estimates. Upstream emissions consider

activities associated with crude oil extraction and transportation, and with the production, refining, transportation, storage, and distribution of fuel.

To facilitate air quality modeling, NHTSA created a national, model-ready emissions inventory for each alternative. This involved substituting emissions data developed by Volpe for tailpipe, brake, and tire wear emissions and associated upstream emissions in EPA's 2055 inventory. Modeling simulations were conducted for an annual period, and this section provides an overview of the emissions, processing steps, and quality assurance checks.

E.2.1 Emissions Data and Methods

The CMAQ model requires input of hourly criteria pollutant emissions from anthropogenic and biogenic sources, spatially allocated to the modeling grid cells, and chemically speciated for the Carbon Bond Chemical Mechanism Version 6 Revision 5 Aerosol Mechanism 7 (CB6R5AE7) chemical mechanism. NHTSA processed and prepared the modeling emissions for CMAQ using EPA's SMOKE software. NHTSA derived the model-ready emissions from 2016 and 2055 emissions data in the 2016v3 platform.

The SMOKE emissions input files include the following sectors.

- Particulate emissions from fugitive dust sources
- Agricultural ammonia emissions
- Agricultural burning emissions
- Emissions from Category 1 and 2 commercial marine vessel sources in ports and navigable waterways as well as offshore emissions in the Atlantic and Pacific Oceans and the Gulf of Mexico
- Railway emissions
- Aircraft and ground support equipment emissions within the airport sector
- Ocean-going Class 3 marine vessel port and underway emissions within or close to the U.S. mainland
- Area-source emissions not included in other sectors
- Off-highway mobile source emissions
- On-highway mobile source emissions
- Area-source oil and gas emissions
- Particulate emissions from fugitive dust sources in Canada
- Area-source emissions from Canada and Mexico
- Mobile-source emissions from Canada and Mexico
- Point-source emissions from Canada, Mexico, and offshore areas
- Point-source emissions from EGUs
- Point-source emissions from industrial activities
- Point-source emissions from year-specific controlled burning and wildfires
- Point-source oil and gas emissions
- Area-source residential wood combustion emissions
- Biogenic emissions generated using the Biogenic Emission Inventory System model (version 4.0)

These files included emissions data for the contiguous United States and portions of Canada, Mexico, and offshore areas within the modeling domain. The emissions inventories include the following

pollutants: volatile organic compounds (VOC), NO_x, CO, SO₂, PM_{2.5}, coarse particulate matter 10 microns or less in diameter (PM₁₀), and ammonia (NH₃).

Volpe calculated the expected changes in on-road mobile emissions for LD vehicles and HDPUVs, and upstream emissions associated with these vehicle classes (Volpe 2023a). Total emissions for the contiguous United States were developed for the No-Action Alternative and action alternatives for each pollutant. As part of the emissions processing, NHTSA incorporated this information into the modeling input files for each simulation, as detailed in Section E.2.2, *Emissions Processing Procedures*.

E.2.2 Emissions Processing Procedures

The 2016v3 platform includes CMAQ model-ready emissions for the 12-kilometer contiguous United States domain (12US2). NHTSA leveraged the 2016v3 EMP gridded, pre-merged emissions files generated by EPA. The 2016 model-ready emissions were used “as is” for air quality modeling of the base year. To analyze future year impacts for the 2027–2032 CAFE and 2030–2035 HDPUV Final EIS, NHTSA created four distinct model-ready emissions datasets, one dataset for each alternative from the Draft EIS. For emissions categories affected by the alternatives, Volpe’s 2050 emissions data were used in place of the EPA 2055 inventory data, while emissions from the remaining sources remained unaltered. As noted previously, NHTSA processed and developed the modeling emissions for CMAQ using the latest version of SMOKE software. NHTSA undertook the following steps to create the CMAQ model-ready emissions:

1. Substitute the on-road mobile and upstream emissions to reflect the No-Action Alternative and action alternatives.
2. Process the emissions for modified source sectors using the SMOKE programs and inputs.
3. Review and perform quality assurance checks.

E.2.2.1 Preparation of On-Road Mobile Emissions Inputs

To incorporate Volpe emissions estimates, NHTSA modified the 2055 on-road inventory files provided by EPA. EPA’s on-road inventory files contained monthly, county-level emissions for criteria pollutants by MOVES source (vehicle) type, roadway type, and process type. For this modification, NHTSA substituted Volpe’s emissions data for LD vehicles and HDPUVs in place of the existing data within the 2055 SMOKE on-road inventory files.

The Volpe emissions account for tailpipe emissions during running and start operations, as well as brake and tire wear emissions for MOVES regulatory classes 20 (passenger car), 30 (light truck), and 41 (HDPUVs). Emissions not related to tailpipe processes or brake and tire wear, such as refueling and evaporation from parked vehicles, remained unaltered in the modified SMOKE input files. Similarly, emissions for other MOVES regulatory classes were also not adjusted.

To integrate Volpe emissions into the on-road inventory, NHTSA mapped MOVES regulatory classes 20, 30, and 41 to MOVES source types shown in Table E-1 using fractions provided by Volpe (Volpe 2023b) by completing the following steps.

- **Step 1. Calculate the national-level total 2055 emissions.**
 - Calculate the national-level total 2055 tailpipe emissions for LD vehicles, including both cars and light trucks, and HDPUVs with Source Classification Codes (SCC) as outlined in Table E-1. This calculation includes NO_x, VOC, CO, SO₂, and PM_{2.5} emissions.

- Calculate the brake and tire wear emissions specifically for PM2.5 and PM10.
- Utilize fractions provided by Volpe to map MOVES source types to regulatory classes. This mapping helps summarize EPA 2055 emissions for regulatory classes 20, 30, and 41.
- **Step 2. Calculate adjustment factors.**
 - Calculate adjustment factors for affected LD and HDPUV vehicles for the different alternatives.
 - Determine the ratios of national-level emissions for each alternative relative to EPA 2055 on-road mobile emissions from Step 1.
- **Step 3. Apply the adjustment factors.**
 - Apply the adjustment factors derived in Step 2 to the EPA 2055 on-road mobile SMOKE input file for each alternative.
 - Utilize the national-level adjustment factors from Step 2 to modify the EPA 2055 on-road mobile SMOKE input files, resulting in updated SMOKE input files for each alternative.

Table E-1. List of Six-Digit SCCs for Light-Duty and HDPUV Vehicles

Vehicle Type	6-Digit SCC
Passenger Car; Gasoline	220121
Passenger Truck; Gasoline	220131
Light Commercial Truck; Gasoline	220132
Single Unit Short-haul Truck; Gasoline	220152
Single Unit Long-haul Truck; Gasoline	220153
Passenger Car; Diesel Fuel	220221
Passenger Truck; Diesel Fuel	220231
Light Commercial Truck; Diesel Fuel	220232
Single Unit Short-haul Truck; Diesel Fuel	220252
Single Unit Long-haul Truck; Diesel Fuel	220253
Passenger Car; Ethanol (E85)	220521
Passenger Truck; Ethanol (E85)	220531
Light Commercial Truck; Ethanol (E85)	220532

SCC = Source Classification Code

E.2.2.2 Preparation of Upstream Emissions Inputs

As discussed in Section E.1.2, *Methodology*, the Proposed Action will have an impact on upstream emissions associated with the extraction of crude oil and fuel production. This includes activities like extracting and transporting raw materials, refining raw materials into fuel, and distributing the end products. In simple terms, this covers everything from the equipment used in oil fields, such as drills and pumps, to the processes involved in refining oil, such as boilers and heaters, and the distribution of the final product.

In the emissions analysis, Volpe’s upstream emissions were attributed to inventory sources based on the list of SCCs used in previous CAFE assessments (NHTSA 2022). These SCCs were categorized under the label “upstream SCC” and encompass sources from four sectors of the 2016v3 platform: nonpoint, non-EGU point, point oil and gas, and nonpoint oil and gas.

In each alternative scenario, Volpe calculated estimates of upstream emissions specifically related to LD vehicles and HDPUVs. The 2016v3 EMP emissions related to upstream SCCs encompass all emissions produced by these SCCs, regardless of their ultimate end use.

NHTSA incorporated upstream emissions estimates for each alternative from the Draft EIS based on assumptions consistent with previous CAFE analyses. NHTSA assumed that 50 percent of the total 2016v3 EMP emissions pertain to the production of fuel for LD and HDPUV vehicles. These were substituted with the upstream emissions specific to each alternative, as developed by Volpe. The CAFE standards do not affect locomotive and marine vessel emissions, similar to the previous CAFE EIS, the Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Year 2021–2026 Passenger Cars and Light Trucks (NHTSA 2020) and the 2022 Light Duty CAFE standards Supplemental EIS (NHTSA 2022).

In the assessment of upstream emissions for each alternative, NHTSA considered only criteria emissions occurring domestically. Criteria emissions from the transport of crude oil or refined gasoline to the United States were not included.

NHTSA's emissions estimates were based on the following assumptions.

- 100 percent of the fuel use reduction in the alternatives would result in a decline in imports of refined gasoline, and therefore would reduce domestic criteria emissions only during fuel transportation, storage, and distribution but not from feedstock recovery, feedstock transportation, and fuel refining.
- 90 percent of the reduction in domestic fuel refining would result in reduced imports of crude petroleum, without reducing domestic emissions from feedstock recovery and feedstock transportation.
- 10 percent of the reduction in domestic fuel refining would result in reduced domestic production of crude petroleum, reducing domestic emissions from feedstock recovery and feedstock transportation.

The additional assumptions on crude petroleum imports (second bullet) are provided as they were included in the Draft EIS since NHTSA was still considering reducing the 100 percent assumption (first bullet) for the final rule during Draft EIS preparation. If NHTSA were to change from the 100 percent assumption, there would need to be a specific assumption for the additional import of crude petroleum in order to conduct the analysis.

NHTSA estimated these percentages using several scenarios from the Energy Information Administration Annual Energy Outlook (EIA 2022).

E.2.2.3 Emissions Processing and Quality Assurance Procedures

After developing modified mobile source and upstream-related SMOKE input files as detailed in previous sections, these files underwent processing and merging with other source category files to create model-ready inputs for CMAQ. The following steps outline the general procedures for preparing modeling inventories using various SMOKE programs.

- Modify on-road mobile source SMOKE input files using relevant emissions data and related information.
- Modify upstream-related SMOKE input files using emissions data and related information.

- Chemically speciate input criteria pollutants into the CB6R5AE7 chemical mechanism species, as required by CMAQ.
- Temporally distribute the input annual and monthly emissions into hourly emissions.
- Spatially distribute input emissions to the modeling grid.
- Merge emissions from all source categories into the CMAQ model-ready files.
- Review and ensure the quality of the inventory processing procedures and results.

The emissions processing quality assurance procedures included the development and examination of tabular emissions summaries and graphical display products. NHTSA prepared tabular summaries to examine emissions totals for various steps of emissions processing. Summaries for input emissions were based on the input inventory data: monthly emissions for the on-road and nonroad mobile sectors and annual emissions for other sectors for criteria pollutants. Summaries for output emissions were based on the SMOKE output reports, which report daily emissions for each species included in the chemical mechanism for each sector. The output daily emissions were summed over all days in the year and the species were summed for the criteria pollutants. The emissions were summarized for each alternative by state and sector, and comparisons were made between the input emissions and output emissions for each sector to ensure consistency.

In addition to the tabular summaries, NHTSA prepared various graphical displays for one day of each month to examine the spatial distribution and temporal variation for each sector and the final merged emissions using the National Center for Atmospheric Research Command Language (NCL) graphical plotting package.⁴ NHTSA randomly selected the 15th of each month as the one day each month. Examples of these emissions maps are provided in Section E.2.3, *Emissions Summaries*.

E.2.3 Emissions Summaries

As described in Section E.1.3, *Model Applications*, for this air quality analysis NHTSA modeled four alternatives: the No-Action Alternative (Alternative 0)⁵, and Alternatives 1 through 3. Thus, four sets of modeling inventories were prepared. Using the original and modified inputs for future years, NHTSA used the SMOKE emissions processing system to prepare the CMAQ model-ready hourly emissions inventory inputs for each simulation for the 12-kilometer resolution national grid. Although the processed emissions inventories were prepared for the full list of CB6R5AE7 emissions species, most of the presentation and discussion that follows focuses on VOC, NO_x, SO₂, and primary PM_{2.5} emissions since these emissions have associated National Ambient Air Quality Standards (NAAQS) or are important precursor pollutants.

Table E-2 lists national (contiguous United States) annual anthropogenic emissions totals for the criteria pollutants. Emissions are categorized based on inventory sectors and provided separately for each alternative for a side-by-side comparison. The nonroad sector includes airports, rail, commercial marine vessels, and nonroad engines.

Table E-3 lists national annual emissions totals for all sectors combined for each alternative. The emissions totals reflect the expected emissions changes from on-road motor vehicles and upstream

⁴ NCL is available from the National Center for Atmospheric Research at <https://www.ncl.ucar.edu/>

⁵ Alternative 0 is referred to as the No-Action Alternative in the text. In tables and figures, Alternatives 0 through 3 are abbreviated as Alt. 0 through Alt. 3.

sources based on the stringency of the alternatives. The greatest emissions changes, relative to the No-Action Alternative occur under Alternative 3.

To illustrate and check the reasonableness of the spatial distribution of emissions throughout the modeling domain, NHTSA prepared and examined daily emissions density plots for the 15th of each month. NHTSA used emissions associated with the No-Action Alternative to check the reasonableness of the spatial distribution of emissions. Figures E-3 through E-6 show daily emissions for July 15, 2055, for VOC, NO_x, SO₂, and PM2.5 for a 12-kilometer resolution, respectively.⁶ The dates appearing on these and all subsequent figures refer to the meteorological base year (2016) for the selected day or averaging period. The maximum value in the domain is also provided along with its grid cell (x,y) location. NHTSA selected a summer day for display because it is included in both the ozone season and the annual simulation period. The plots show the spatial distribution of 2055 emissions under the No-Action Alternative, with larger emissions in the more populated areas of the eastern United States and California, and smaller emissions in the less-populated areas of the interior western United States and areas of Canada and Mexico. The VOC emissions plots also include biogenic emissions, with larger emissions associated with the more forested regions of the southeastern United States and California. The PM2.5 emissions are associated with various anthropogenic mobile and industrial sources, agricultural burning, and wildfires.

Table E-2. National Emissions by Sector for the NHTSA Future-Year Modeling Analyses, by Alternative (thousands tons/year)

Pollutant	Sector	Alt. 0 (No-Action)	Alt. 1	Alt. 2	Alt. 3
VOC	EGU	17	17	17	17
	Non-EGU point	1,011	1,010	1,010	1,008
	Nonpoint (area)	6,758	6,757	6,754	6,745
	Nonroad	1,084	1,084	1,084	1,084
	On-road	444	443	439	430
NO _x	EGU	96	96	96	96
	Non-EGU point	1,229	1,229	1,228	1,227
	Nonpoint (area)	1,279	1,279	1,279	1,279
	Nonroad	2,009	2,009	2,009	2,009
	On-road	320	320	319	317
CO	EGU	134	134	134	134
	Non-EGU point	1,603	1,602	1,602	1,602
	Nonpoint (area)	4,884	4,884	4,884	4,884
	Nonroad	15,756	15,756	15,756	15,756
	On-road	3,062	3,045	2,991	2,884
SO ₂	EGU	17	17	17	17
	Non-EGU point	552	552	552	551
	Nonpoint (area)	230	230	230	230
	Nonroad	92	92	92	92
	On-road	4	4	4	4

⁶ Other 15th day of each month were reviewed by NHTSA but July 15 was chosen to illustrate emissions densities.

Pollutant	Sector	Alt. 0 (No-Action)	Alt. 1	Alt. 2	Alt. 3
PM10	EGU	28	28	28	28
	Non-EGU point	393	393	393	393
	Nonpoint (area)	7,381	7,381	7,381	7,381
	Nonroad	109	109	109	109
	On-road	173	173	173	173
PM2.5	EGU	26	26	26	26
	Non-EGU point	251	251	251	251
	Nonpoint (area)	1,719	1,719	1,719	1,719
	Nonroad	102	102	102	102
	On-road	30	30	30	30
NH ₃	EGU	12	12	12	12
	Non-EGU point	69	69	69	69
	Nonpoint (area)	4,204	4,204	4,204	4,204
	Nonroad	4	4	4	4
	On-road	119	119	119	119

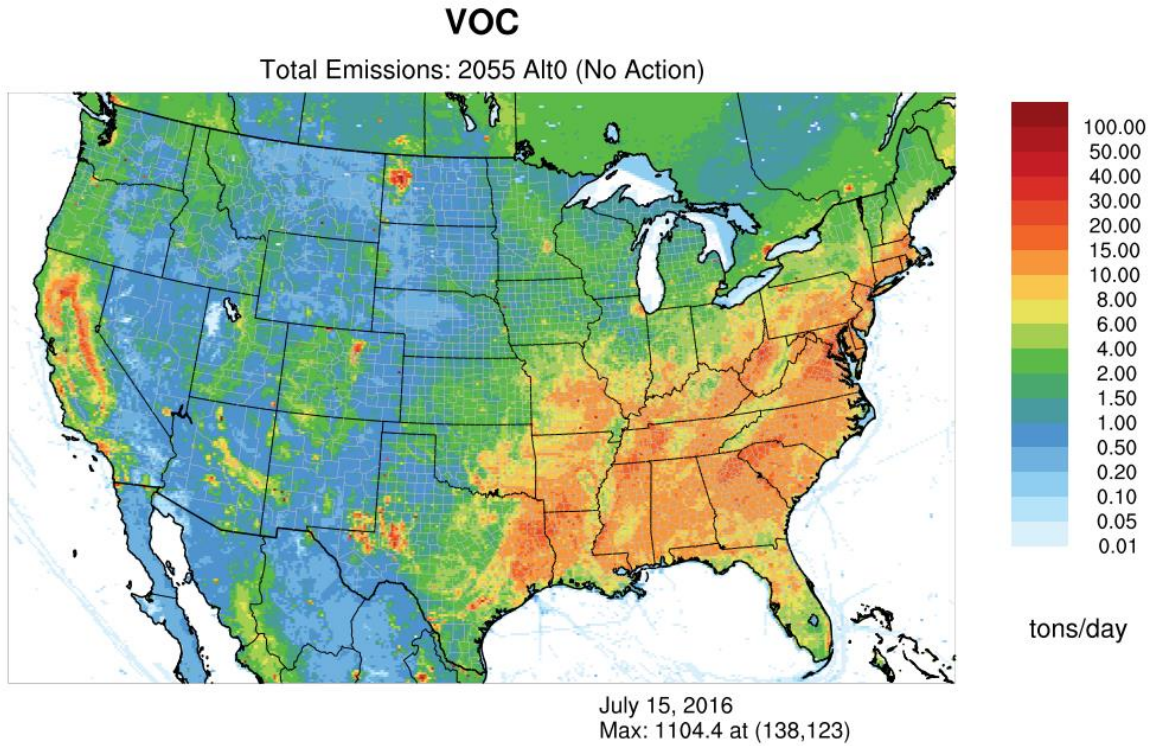
CO = carbon monoxide; EGU = electric generating unit; NH₃ = ammonia; NO_x = oxides of nitrogen; PM10 = particulate matter 10 microns or less in diameter; PM2.5 = particulate matter 2.5 microns or less in diameter; SO₂ = sulfur dioxide; VOC = volatile organic compounds.

Table E-3. National Emissions for All Sectors Combined for the NHTSA Future-Year Modeling Analyses, by Alternative (thousands tons/year)

Pollutant	Alt. 0 (No-Action)	Alt. 1	Alt. 2	Alt. 3
VOC	9,314	9,311	9,303	9,284
NO _x	4,934	4,934	4,932	4,929
CO	25,438	25,422	25,368	25,260
SO ₂	896	896	895	895
PM10	8,085	8,085	8,085	8,085
PM2.5	2,129	2,128	2,128	2,128
NH ₃	4,408	4,408	4,408	4,408

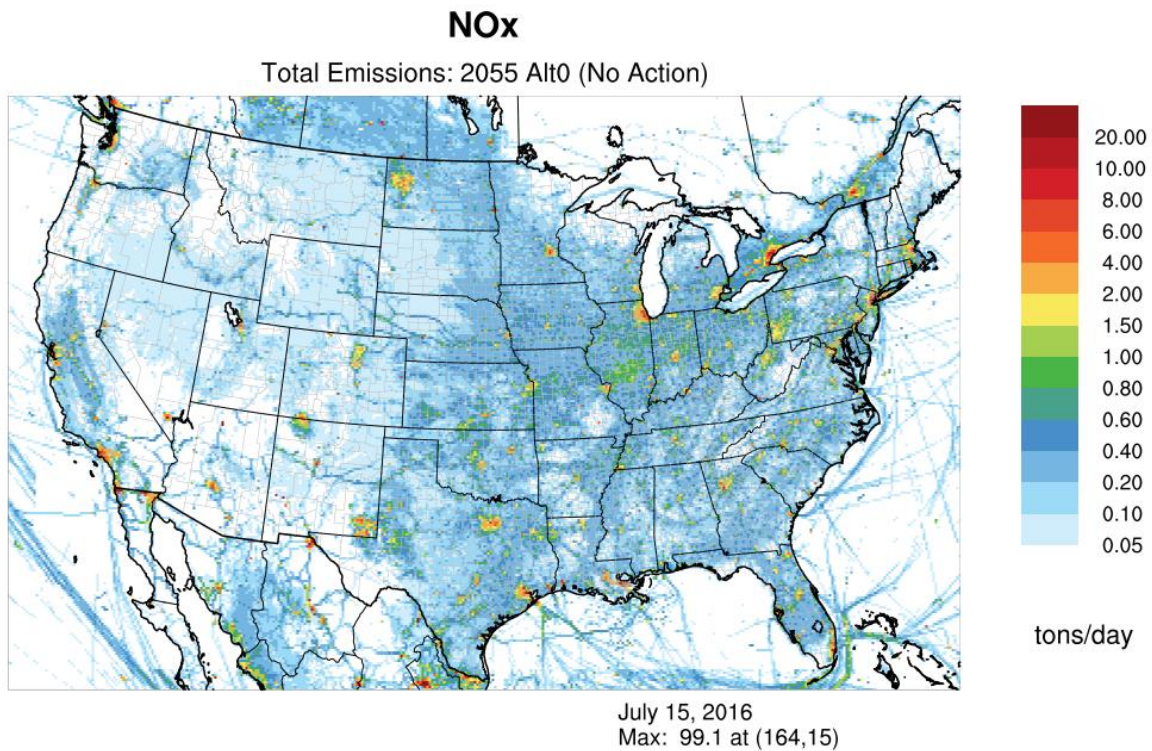
CO = carbon monoxide; NH₃ = ammonia; NO_x = oxides of nitrogen; PM10 = particulate matter 10 microns or less in diameter; PM2.5 = particulate matter 2.5 microns or less in diameter; SO₂ = sulfur dioxide; VOC = volatile organic compounds

Figure E-3. Daily Volatile Organic Compound Emissions for July 15: No-Action Alternative



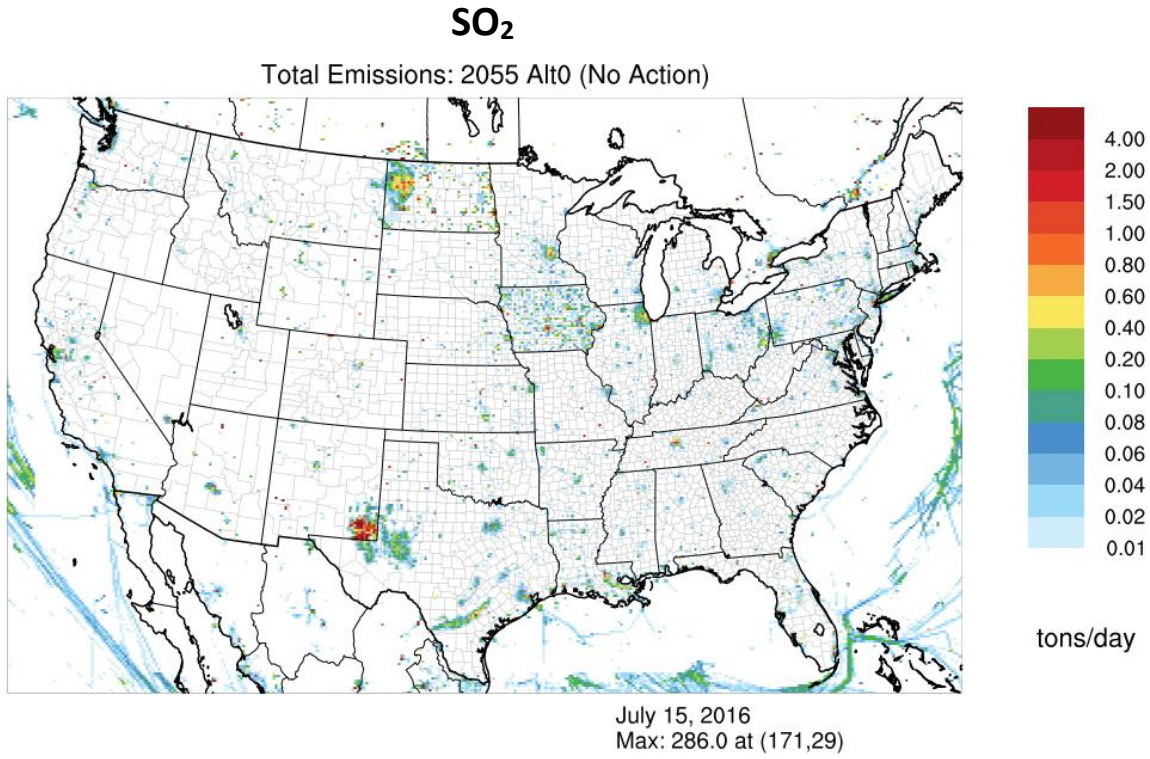
VOC = volatile organic compounds

Figure E-4. Daily Oxides of Nitrogen Emissions for July 15: No-Action Alternative



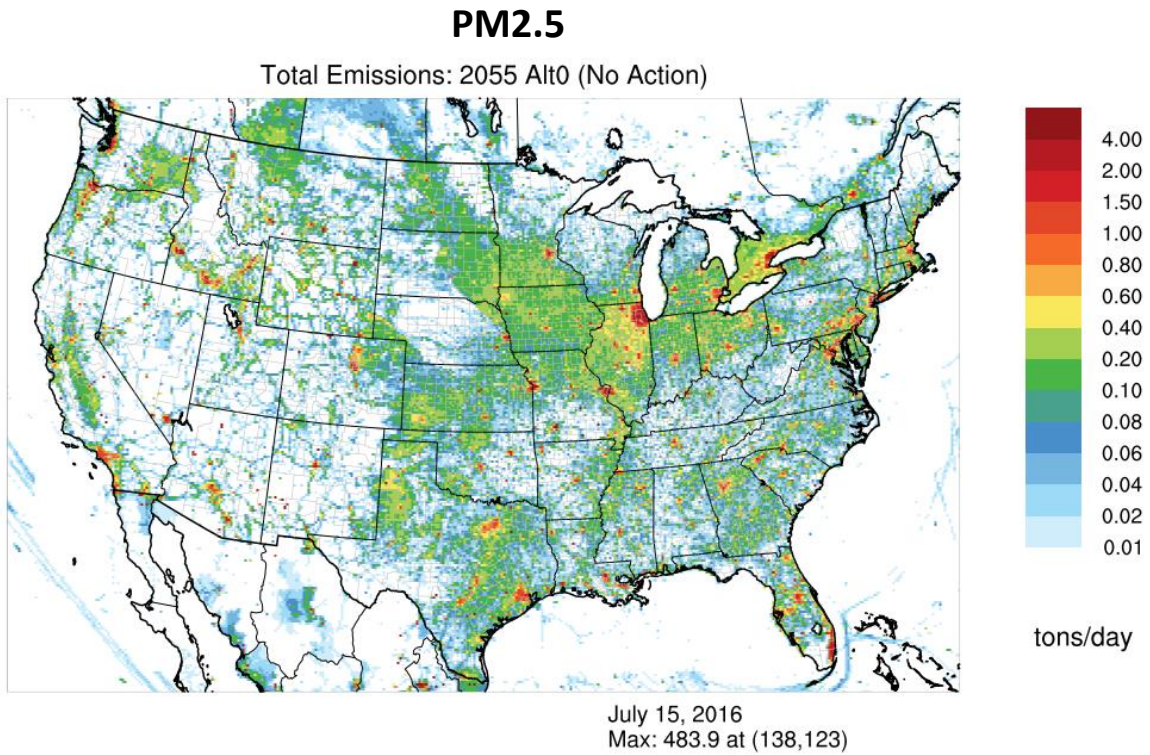
NO_x = nitrogen oxides

Figure E-5. Daily Sulfur Dioxide Emissions for July 15: No-Action Alternative



SO₂ = sulfur dioxide

Figure E-6. Daily PM_{2.5} Emissions for July 15: No-Action Alternative

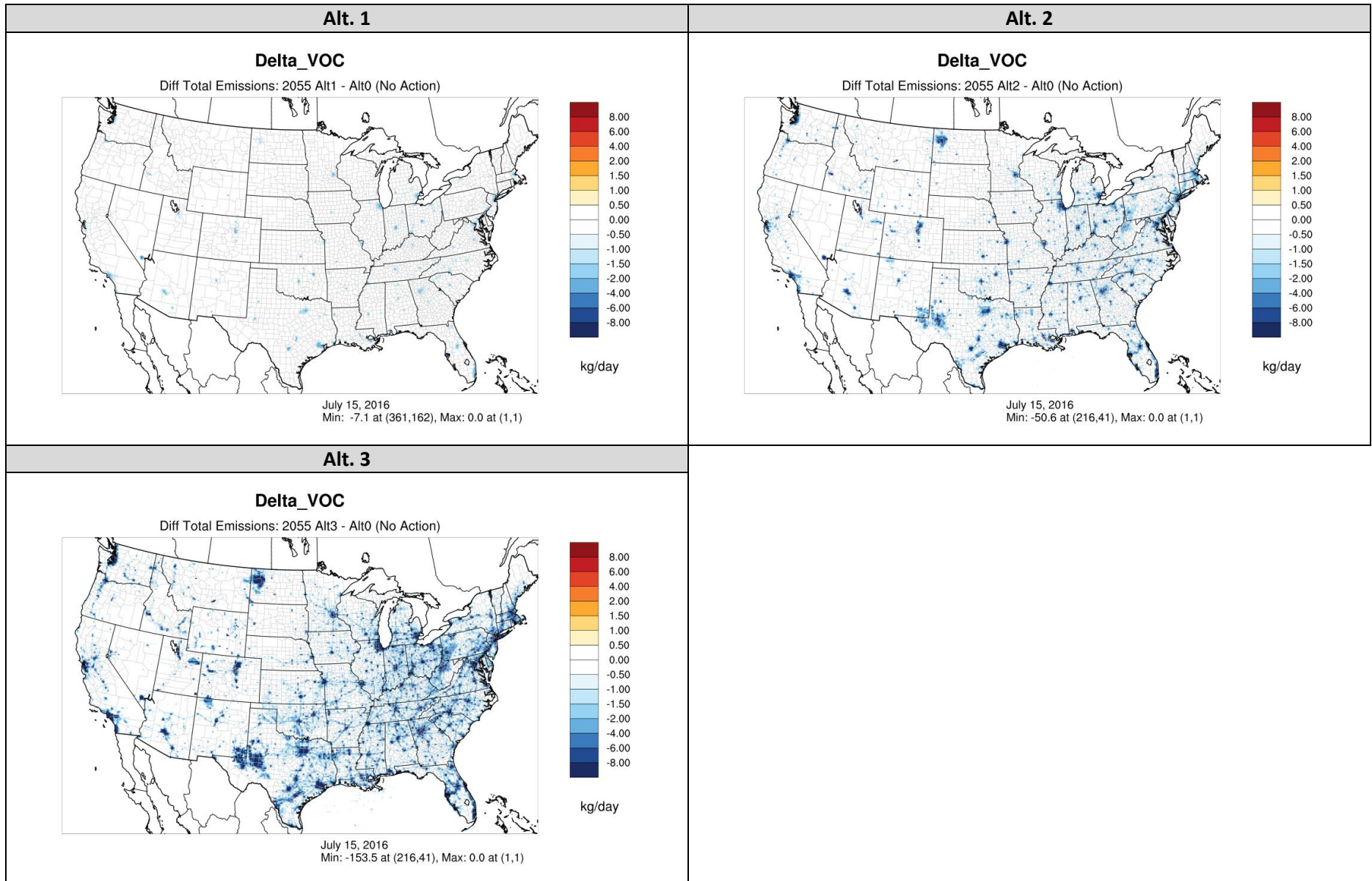


PM_{2.5} = particulate matter 2.5 microns or less in diameter

Figures E-7 through E-10 illustrate the spatial distribution of emissions differences (or changes) for the action alternatives compared to the No-Action Alternative for VOC, NO_x, SO₂, and PM_{2.5}, respectively. The different plots illustrate where the changes in emissions are expected to occur throughout the 12-kilometer resolution modeling domain. The white area indicates zero or negligible change in emissions. The VOC difference plots indicate an overall decline in VOC emissions primarily due to the reduction associated with the upstream sources. These upstream VOC emissions decreases are concentrated over major oil and gas basins. The changes in NO_x emissions reflect the combination of reductions from upstream sources and on-road mobile sources⁷ (LD vehicles and HDPUVs). Similarly, the changes in SO₂ emissions reflect the combination of reductions from upstream and on-road mobile sources evident from the plot. The particulate matter changes between the alternatives are relatively small.

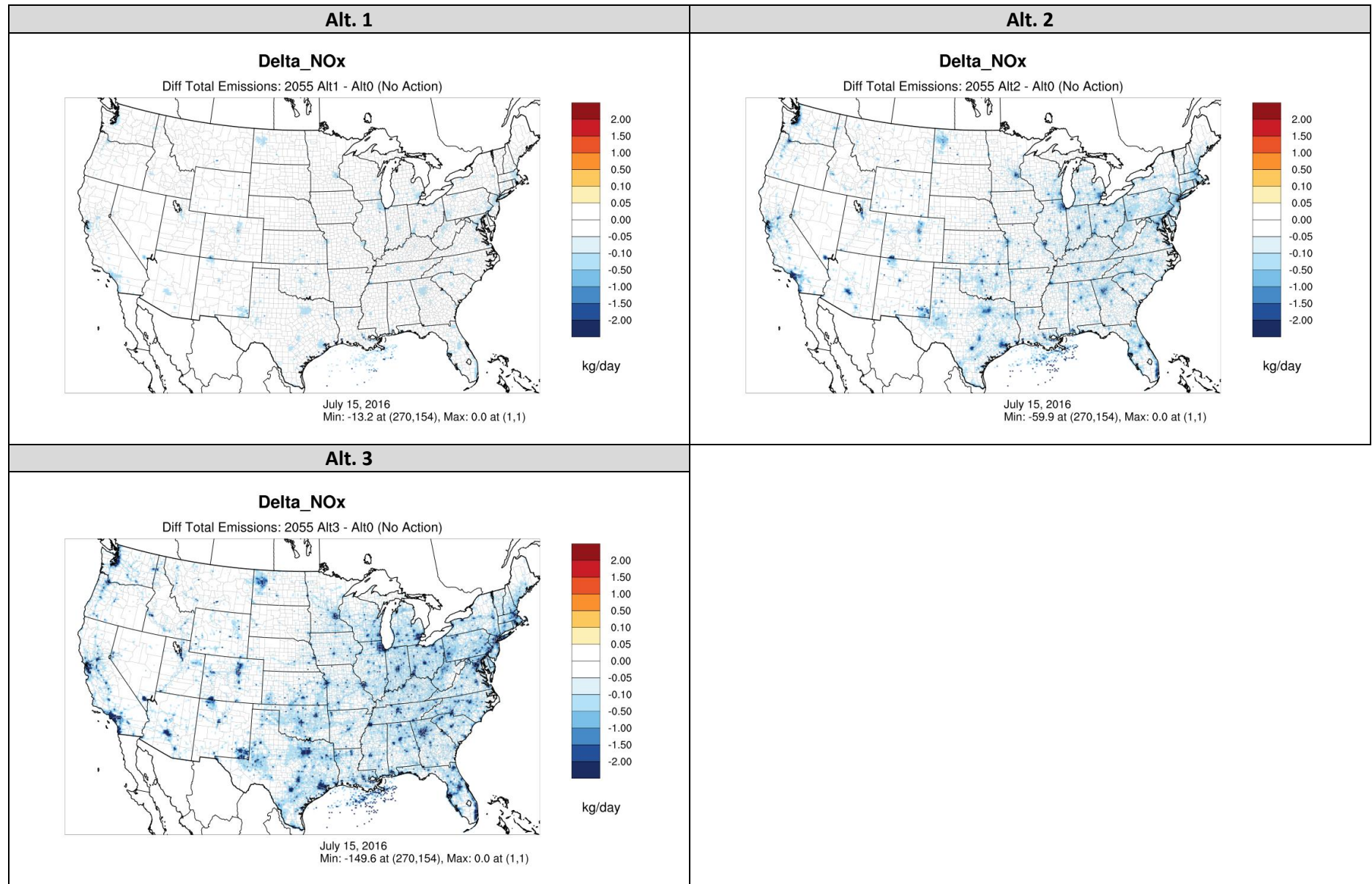
⁷ No increases were seen in the on-road mobile sources as by 2050 each alternative shows lower overall emissions relative to the No-Action Alternative. These lower overall emissions are likely due to the large penetration of EVs and hybrid vehicles by 2050. NHTSA anticipates that this penetration lowers the overall fleet criteria pollutant emissions factor per mile driven, which overwhelms the rebound effect. The rebound effect is the increase in vehicle use that results from improved fuel economy.

Figure E-7. Differences in Daily Volatile Organic Compound Emissions for July 15 for Alternatives 1, 2, and 3 Compared to the No-Action Alternative



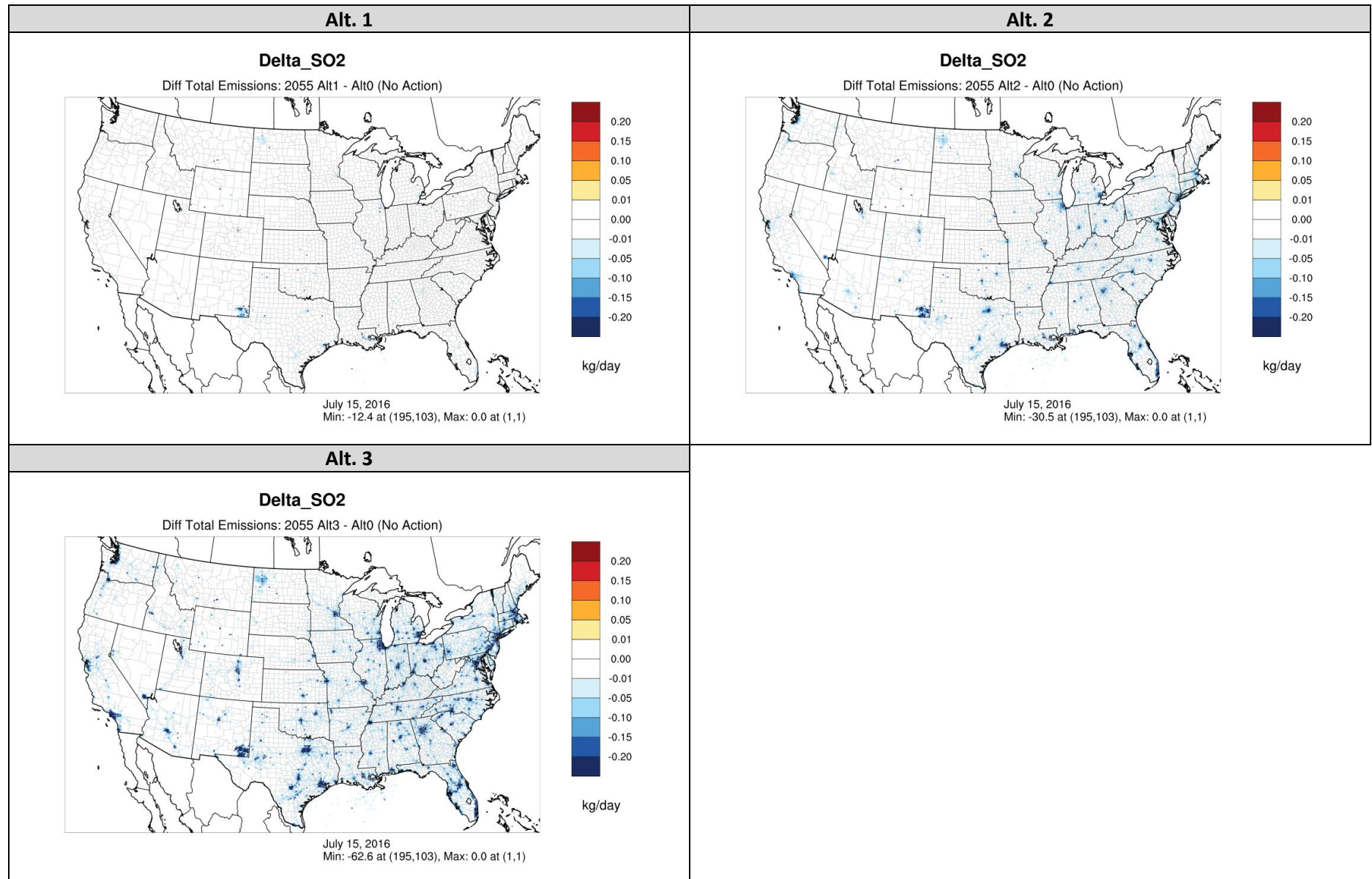
VOC = volatile organic compounds

Figure E-8. Differences in Daily Oxide of Nitrogen Emissions for July 15 for Alternatives 1, 2, and 3 Compared to the No-Action Alternative



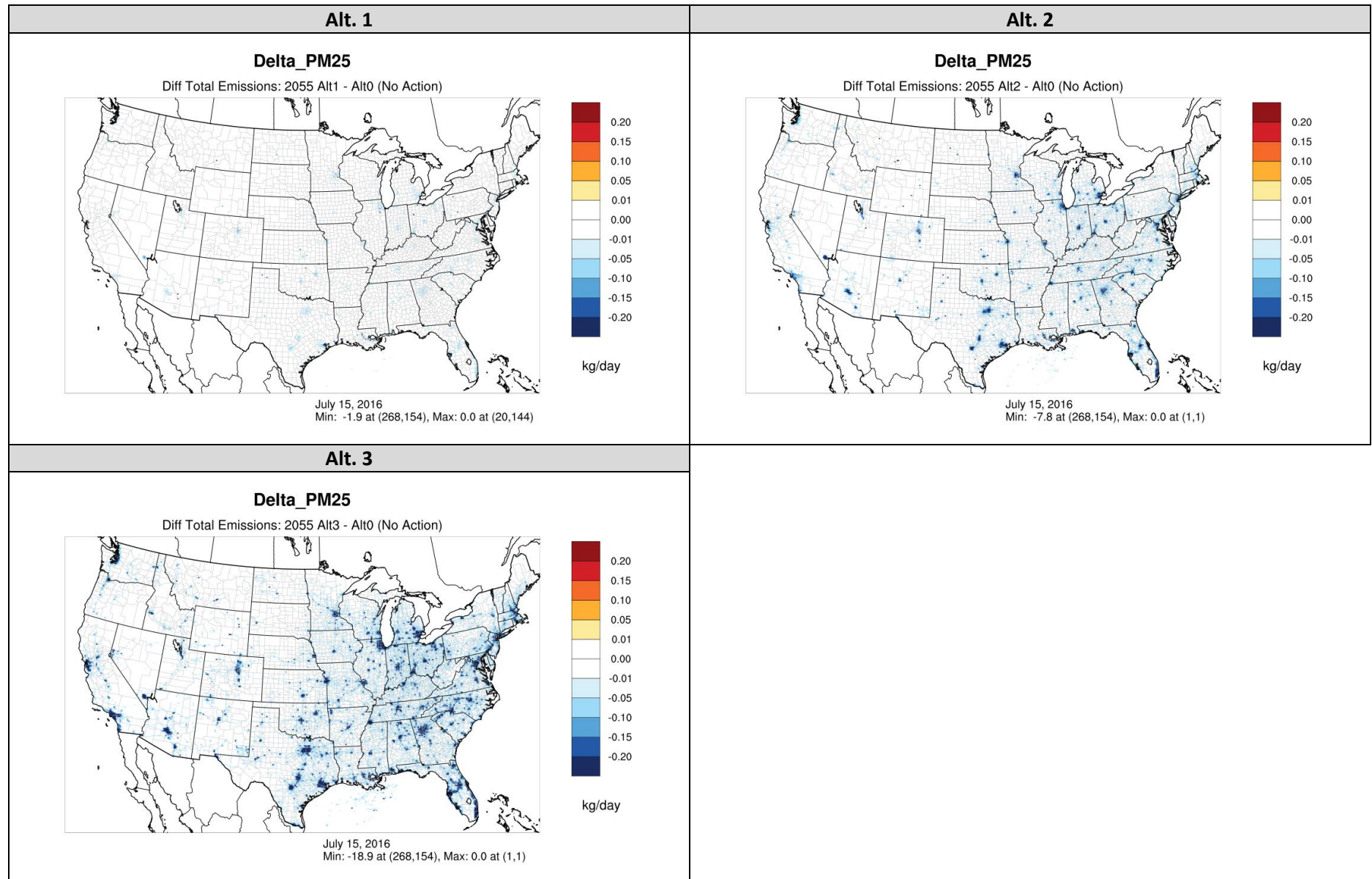
NO_x = nitrogen oxides

Figure E-9. Differences in Daily Sulfur Dioxide Emissions for July 15 for Alternatives 1, 2, and 3 Compared to No-Action Alternative



SO₂ = sulfur dioxide

Figure E-10. Differences in Daily PM2.5 Emissions for July 15 for Alternatives 1, 2, and 3 Compared to No-Action Alternative



PM2.5 = particulate matter 2.5 microns or less in diameter

On a national scale, anthropogenic VOC emissions are primarily from area (nonpoint) sources, which include oil and gas production sources; NO_x emissions come from all source categories; SO₂ emissions primarily derive from nonpoint and non-EGU industrial point sources; and PM_{2.5} emissions come primarily from area (nonpoint) sources, which include road dust and other anthropogenic fugitive dust such as construction and agricultural dust, and residential wood combustion. For the action alternatives, the expected changes in emissions for LD vehicles and HDPUVs are reflected in the on-road mobile source category, while the expected changes in upstream emissions are reflected in the nonpoint (area) and non-EGU point source categories. The estimated NO_x decreases in mobile emissions are distributed nationwide but concentrated in urban areas, while most of the declines in upstream emissions are in petroleum development and fuel production states, including Texas, Oklahoma, Louisiana, New Mexico, and North Dakota.

A comparison of the No-Action Alternative to the action alternatives indicates that national-scale on-road mobile NO_x, VOC, and SO₂ emissions for action alternatives are all expected to decrease, with the largest decrease under Alternative 3 and smallest decrease under Alternative 1. On a national scale, upstream VOC, SO₂, NO_x, and PM_{2.5} emissions show a decrease or no change across action alternatives compared to the No-Action Alternative. For VOCs, large decreases in oil and gas extraction and production result in widespread VOC emissions reductions. On a local scale, depending on source makeup, distribution, and population, the expected decreases in emissions could be larger or smaller than these national-scale trends.

E.3 Air Quality Modeling

This section presents the air quality modeling methods and results. NHTSA used the CMAQ model to simulate the air quality impacts of the No-Action Alternative and the action alternatives. The model was applied using a 12-kilometer resolution grid at the national scale for an annual simulation period. The CMAQ model requires information on the emissions, meteorology, and land-use characteristics of the modeling domain. Information about the emissions changes associated with alternatives was incorporated into the model through the emissions input files for the future MY 2055. Because air quality impacts are calculated at the grid-cell level, the CMAQ model can account for regional differences in the relative magnitudes of the changes in emissions from increased fuel economy, increased vehicle use, and decreased fuel production and distribution potentially resulting from the Proposed Action and alternatives. CMAQ modeling results provide the basis for the health effects and benefits modeling analysis.

E.3.1 CMAQ Modeling System

The CMAQ model is a state-of-the-science, regional air quality modeling system that can be used to simulate the physical and chemical processes that govern the formation, transport, and deposition of gaseous and particulate species in the atmosphere (Byun and Ching 1999; Byun and Schere 2006; EPA 2022a). The CMAQ model was designed to improve the understanding of air quality issues (including the physical and chemical processes that influence air quality) and to support the development of effective emissions control strategies at the regional and local scales. The CMAQ model was designed as a “one-atmosphere” model. This concept refers to the ability of the model to dynamically simulate ozone, particulate matter, and other species (such as mercury) in a single simulation. In addition to addressing a variety of pollutants, CMAQ can be applied to a variety of regions (with varying geographical, land-use, and emissions characteristics) and for a range of space and time scales.

Numerous recent applications of the model, for both research and regulatory air quality planning purposes, have focused on the simulation of ozone and PM_{2.5}. NHTSA used the CMAQ model to support the previous analyses of the MY 2012–2016 standards (NHTSA 2010), the Phase 1 Medium- and Heavy-Duty Fuel Efficiency Improvement Program (NHTSA 2011), the MY 2017–2025 CAFE standards (NHTSA 2012), the Phase 2 Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles (NHTSA 2016), the Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Year 2021–2026 Passenger Cars and Light Trucks (NHTSA 2020), and the 2022 Light Duty CAFE standards Supplemental EIS, Appendix E (NHTSA 2022).

The CMAQ model numerically simulates the physical processes that determine the magnitude, temporal variation, and spatial distribution of the concentrations of ozone and particulate species in the atmosphere, as well as the amount, timing, and distribution of their deposition to Earth's surface. The simulation processes include advection, dispersion (or turbulent mixing), chemical transformation, cloud processes, and wet and dry deposition. Byun and Ching (1999) describe the CMAQ science algorithms in detail.

This model requires a number of input files. Gridded, hourly emissions inventories characterize the release of anthropogenic, biogenic and, in some cases, geogenic emissions from sources in the modeling domain. The emissions represent low-level and elevated sources and a variety of source categories (including, for example, point, on-road mobile, nonroad mobile, area, and biogenic). The amount and spatial and temporal distribution of each emitted pollutant or precursor species are key determinants of the resulting simulated air quality values.

The CMAQ model also requires hourly, gridded input fields of meteorological parameters, including wind, temperature, mixing ratio, pressure, solar radiation, fractional cloud cover, cloud depth, and precipitation. Byun and Ching (1999) provide a full list of the meteorological input parameters. These parameters are typically prepared using a data-assimilating prognostic meteorological model, the output of which is processed for input to the CMAQ model using the Meteorology-Chemistry Interface Processor (MCIP). The prescribed meteorological conditions influence the transport and vertical mixing and resulting distribution of the simulated pollutant concentrations. Certain meteorological parameters, such as mixing ratio, can also influence the simulated chemical reaction rates. Rainfall and near-surface meteorological characteristics govern wet and dry deposition, respectively, of the simulated atmospheric constituents.

Initial- and boundary-condition files provide information on pollutant concentrations throughout the domain for the first hour of the first day of the simulation and along the lateral boundaries of the domain for each hour of the simulation. Photolysis rates and other chemistry-related input files supply information needed by the gas-phase and particulate chemistry algorithms.

NHTSA used CMAQ for this study—the latest version of the model available at the time the modeling was conducted. This version supports several options for the gas-phase chemical mechanism, particle treatment, aerosol deposition, and cloud treatment (Fahey et al. 2017). All simulations conducted as part of this study used the CB6R5AE7 chemical mechanism (Yarwood et al. 2020). For particles, NHTSA applied the AERO7 (Xu et al. 2018) particle treatment, which includes sea salt. In addition, NHTSA used the “inline” point-source option, in which point-source data are read directly by CMAQ and plume rise is calculated internally based on local meteorological conditions.

E.3.2 CMAQ Application Procedures for the NHTSA Modeling Analysis

This section discusses the application of CMAQ, including the modeling domain, simulation period, input files (with the exception of the emissions inventories discussed in Section E.2, *Emissions Inventory Preparation*), and post-processing and quality assurance procedures.

E.3.2.1 Modeling Domain and Simulation Period

Figure E-1 shows the modeling domain used for this analysis. The 12-kilometer resolution modeling domain (12US2) includes 396 × 246 horizontal grid cells and 35 vertical layers. For this domain, NHTSA ran the model for an entire calendar year. The base-year simulation used emissions that represent 2016 (EPA 2023a). The simulations for the alternatives used emissions for 2055, as available from EPA; for certain emissions specific to NHTSA's analysis (nonroad mobile sources, electric generating unit point sources, non-electric generation unit point sources, area sources, and biogenic sources and on-road mobile sources not affected by the Proposed Action), NHTSA used emissions for 2050. The annual simulation period was divided into four quarters: January through March, April through June, July through September, and October through December. NHTSA started each quarter's analysis 10 days prior to the start of the quarter to allow for the model to reach a steady-state condition and eliminate the influence of the initial conditions on the modeling results. This approach to run CMAQ over four quarters instead of one full year allows for faster completion of the simulations by using more computational nodes with each node using identical hardware. The meteorological conditions correspond to 2016 and are used in all the simulations in this study.

E.3.2.2 Meteorological and Other Input Files

EPA provided input files for the application of the CMAQ model. The EPA input files included the initial conditions, boundary conditions, and land-use input files for the selected modeling domain and simulation period. In CMAQ, photolysis rates are calculated within the model. NHTSA used standard processing procedures to convert the EPA input files to the modeling domain and grid resolution used for this study.

EPA prepared the meteorological input files for the base year (2016) using the Weather Research and Forecasting (WRF) model version 3.8 (Skamarock et al. 2008). WRF is a state-of-the-science atmospheric modeling system designed for use in simulating meteorological fields for a broad range of scales and applications. EPA applied the WRF model at a 12-kilometer resolution. A summary of the meteorological model configuration and performance is available from EPA (EPA 2019a). EPA converted the WRF output to 12-kilometer resolution meteorology (CMAQ-ready) using the MCIP tool version 4.3. NHTSA used the same vertical resolution as EPA, which consisted of 35 vertical layers.

E.3.2.3 Model Performance Evaluation

NHTSA conducted a limited model performance evaluation (MPE) for the 12-kilometer modeling domain. The MPE was conducted following EPA guidance (EPA 2007, 2014). NHTSA prepared base-case emissions inputs for 2016, based on data provided by EPA and conducted CMAQ modeling for the base year.

NHTSA evaluated the base-year CMAQ simulation results using graphical and statistical analysis. Specifically, NHTSA compared simulated ozone and PM_{2.5} concentrations with observed data, using a variety of graphical and statistical analysis products. The analysis was conducted using the Atmospheric

Model Evaluation Tool (AMET) version 1.4 (Appel et al. 2011; UNC 2008). AMET generates a wide variety of statistical measures and graphical analysis products to facilitate the evaluation of CMAQ model performance. Table E-4 summarizes key statistical measures that NHTSA used to quantify model performance.

Table E-4. Metrics for CMAQ Model Performance Evaluation for the Air Quality Modeling Analysis

Metric	Definition
# of data pairs	The number of observation/simulation data pairs
Mean observation value	The average observed concentration
Mean simulation value	The average simulated concentration
Normalized bias (NMB)	$\sum_{l=1}^N (S_l - O_l) / O_l \cdot 100\%$ <p>where N is the number of data pairs, and S_l and O_l are the simulated and observed values at site l, respectively, over a given time interval.</p>
Median bias (MdnB)	$median(S_l - O_l)_N$
Fractional bias (FB)	$\left(\frac{1}{N}\right) \sum_{l=1}^N (S_l - O_l) / 0.5 (S_l + O_l) \cdot 100\%$
Normalized error (NME)	$\sum_{l=1}^N S_l - O_l / O_l \cdot 100\%$
Median error (MdnE)	$median S_l - O_l _N$ <p>where the vertical bars denote the absolute value between the simulated and observed values.</p>
Fractional error (FE)	$\left(\frac{1}{N}\right) \sum_{l=1}^N S_l - O_l / 0.5(S_l + O_l) \cdot 100\%$
Index of agreement (IofA)	A measure of how well the model represents the pattern of perturbation about the mean value; ranges from 0 to 1 where higher values indicate better agreement.

In calculating the statistical measures, AMET pairs the CMAQ model output with the observed data for the appropriate locations and time intervals. These modeled and observed pairs are used to analyze the model performance. The normalized mean bias (NMB) and normalized mean error (NME) statistical measures are compared to numerical goals and criteria benchmarks⁸ recommended by Emery et al. (2017). Another set of widely used benchmarks was established by the U.S. Regional Planning Organizations based on fractional bias (FB) and fractional error (FE) (Boylan and Russell 2006). The purpose of MPE benchmarks is not to give a passing or failing grade to a model application, but rather to

⁸ *Goal benchmarks* indicate statistical values that about a third of top-performing past applications have met. *Criteria benchmarks* indicate statistical values that about two-thirds of past applications have met.

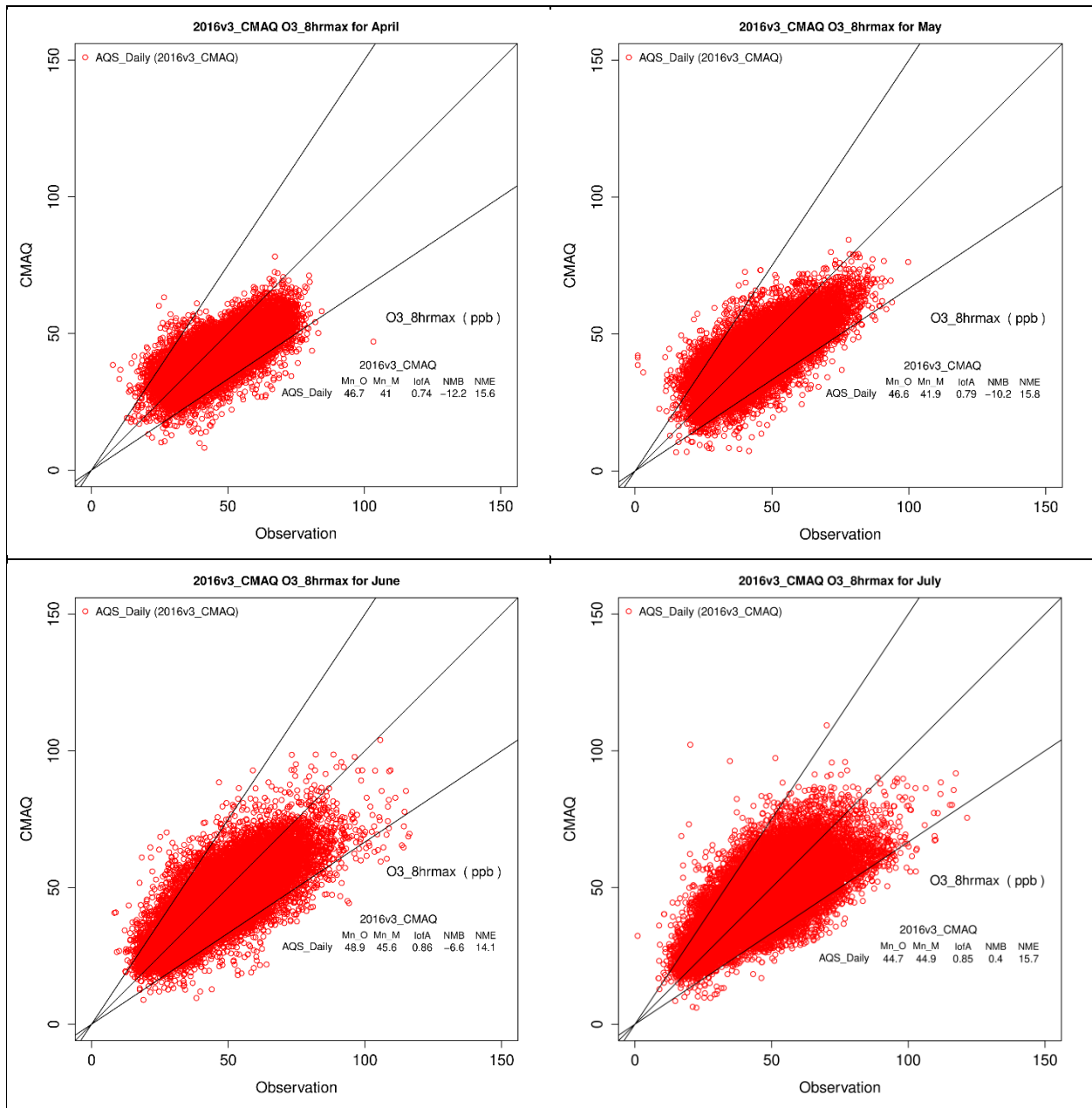
put its results into context of previous applications that establish what level of performance can be realistically expected.

Ozone

NHTSA evaluated CMAQ's base-year model performance for ozone and this section summarizes the results. The evaluation focused on daily maximum 8-hour average (MDA8) ozone concentration and the typical ozone season months of April through October. The observed values are based on EPA's Air Quality System (AQS) monitoring data for the base year (2016). The units are parts per billion (ppb).

Scatter plots comparing simulated and observed MDA8 ozone concentrations for all monitoring sites in the contiguous United States for the months of April through October are presented in Figure E-11. The solid lines on the plot are for visual reference and are drawn with slopes of 1:1 (center), 1.5:1 (upper), and 1:1.5 (lower). The scatter plots provide a visual representation of how well the simulated values match the observations, as shown by the fact that most circles are within ± 50 percent. This also can reveal biases toward over- or underestimation of the observed values. Additional model performance statistics are included in the scatter plots. These statistical measures are calculated using the MDA8 ozone concentrations.

Figure E-11. Simulated and Observed Daily Maximum 8-Hour Average Ozone Concentration (ppb), April through October, for the U.S. Portion of the NHTSA CMAQ Modeling Domain



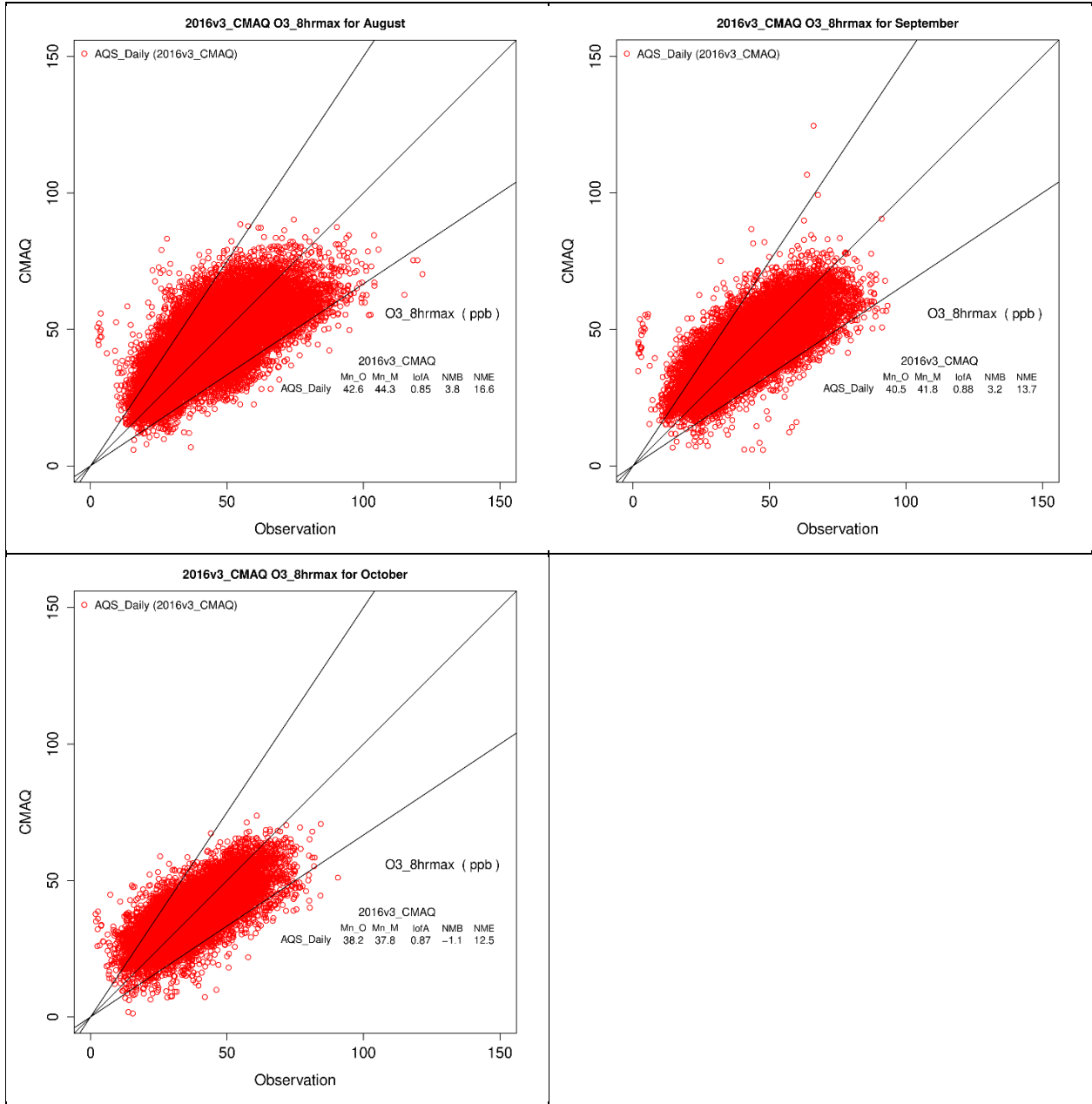


Table E-5. Model Performance Statistics for Daily Maximum 8-Hour Average Ozone Concentration for the Contiguous United States Portion of the NHTSA CMAQ Modeling Domain: 40 ppb Lower Bound

Metric	Apr	May	Jun	Jul	Aug	Sep	Oct	Average Apr–Oct	Goal	Criteria
Mean observed (ppb)	50.4	51.8	54.2	52.7	52.4	50.0	47.4	51.6		
Mean simulated (ppb)	42.8	44.7	49.3	50.2	50.6	48.3	43.6	47.1		
Mean Bias (ppb)	-7.7	-7.1	-4.9	-2.6	-1.8	-1.7	-3.7	-4.5		
Mean Error (ppb)	8.0	8.0	7.2	7.5	7.2	5.6	5.1	7.2		
Normalized mean bias (%)	-15.2	-13.7	-9.0	-4.8	-3.4	-3.5	-7.9	-8.8	±5%	±15%
Normalized mean error (%)	15.9	15.4	13.3	14.2	13.7	11.2	10.8	13.9	<15%	<25%
Fractional bias (%)	-16.4	-14.8	-9.6	-5.0	-3.3	-3.6	-8.4	-9.4		
Fractional error (%)	17.2	16.6	14.0	14.5	13.9	11.3	11.3	14.5		
RMSE (ppb)	9.4	9.5	9.1	9.8	9.5	7.5	6.8	9.0		
Index of Agreement	0.66	0.67	0.75	0.71	0.70	0.76	0.69	0.72		

CMAQ = Community Multiscale Air Quality; ppb = parts per billion

Table E-6. Model Performance Statistics for Daily Maximum 8-Hour Average Ozone Concentration for the Contiguous United States Portion of the NHTSA CMAQ Modeling Domain: 60 ppb Lower Bound

Metric	Apr	May	Jun	Jul	Aug	Sep	Oct	Average Apr–Oct	Goal	Criteria
Mean observed (ppb)	64.9	65.7	67.4	68.5	68.6	66.9	65.2	67.1		
Mean simulated (ppb)	51.2	52.9	57.5	57.7	57.9	57.6	52.2	55.9		
Mean Bias (ppb)	-13.7	-12.8	-10.0	-10.8	-10.6	-9.3	-13.1	-11.2		
Mean Error (ppb)	13.7	12.9	10.7	12.4	11.9	10.6	13.2	12.0		
Normalized mean bias (%)	-21.1	-19.5	-14.8	-15.8	-15.5	-14.0	-20.0	-16.7	±5%	±15%
Normalized mean error (%)	21.2	19.7	15.8	18.1	17.3	15.8	20.3	17.9	<15%	<25%
Fractional bias (%)	-23.9	-22.0	-16.3	-17.8	-17.2	-15.5	-22.8	-18.7		
Fractional error (%)	24.0	22.2	17.4	20.1	19.0	17.3	23.1	19.9		
RMSE (ppb)	14.8	14.1	12.8	14.9	14.3	12.9	15.4	14.0		
Index of Agreement	0.32	0.40	0.51	0.47	0.46	0.41	0.31	0.46		

CMAQ = Community Multiscale Air Quality; ppb = parts per billion

The scatter plots indicate good agreement between the simulated and the full range of observed values. There is a general tendency for CMAQ to underestimate the ozone concentrations, including some of the highest concentrations (June through August). The good overall agreement is characterized by an index of agreement statistic⁹ above 0.8 for most months (ranging from 0.74 in April to 0.88 in September).

Summary metrics and statistical measures calculated using MDA8 ozone concentrations for all sites within the contiguous United States are presented in Tables E-6 and E-7. Statistics were calculated for the individual months of the traditional ozone season (April through October) and the full ozone season. The recommended ranges for the NMB and NME error shown in this table are based on recent regional-

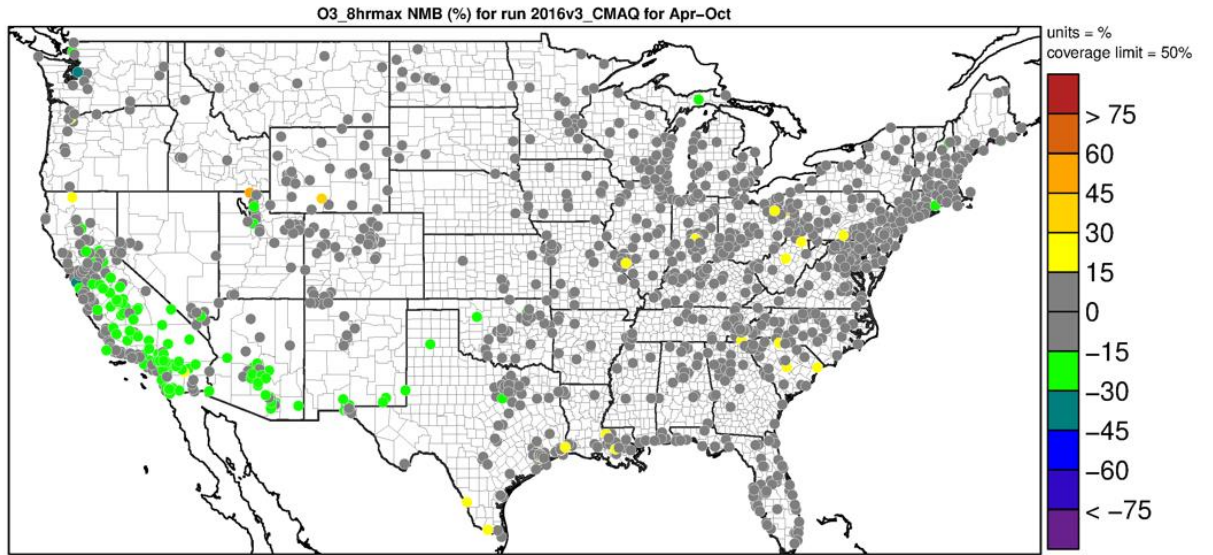
⁹ Index of agreement statistic (IofA) taken from the summary statistics in Figure E-15.

scale MPE metrics (Emery et al. 2017). The NMB and NME statistics were calculated using a lower bound of 40 ppb (Table E-5) and a lower bound of 60 ppb (Table E-6). Simulation-observation pairs were not included in the calculation if the observed value is less than the lower bound.

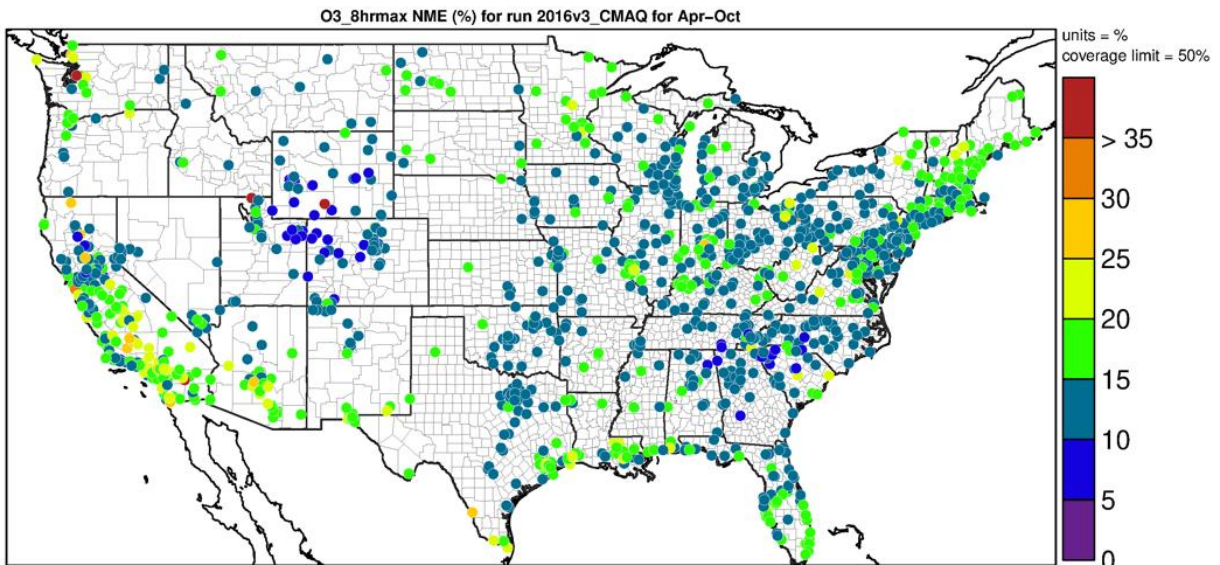
Using the MDA8 ozone concentrations and a lower bound of 40 ppb (Table E-6), the overall NMB is within ± 15 percent, and the NME is well within 25 percent criteria benchmarks for the period that encompasses the ozone season (April through October). Ozone is underestimated each month, with April showing the largest underprediction (NMB of -15.2 percent) and August showing the smallest underprediction (NMB of -3.4 percent). Only about 10 percent of the observed concentrations are larger than 60 ppb. The statistics calculated using a lower bound of 60 ppb (Table E-6) indicate that higher ozone concentrations are systematically underestimated during all months in the ozone season. The NMB is only within the criteria benchmark of ± 15 percent during June and September. The NME is well within the criteria threshold of 25 percent, but the goal benchmark of 15 percent is exceeded for all months. Overall, model performance is generally reasonable considering the full range of ozone observations, but the model exhibits a consistent and systematic underprediction during the ozone season for concentrations larger than 40 ppb and this underprediction is more pronounced for concentrations larger than 60 ppb.

The statistical measures were calculated for the contiguous United States, but it is expected that these will vary from region to region. To illustrate the spatial variation in the agreement between the simulated and observed values, Figure E-12 depicts NMB and NME averages from April through October for all sites within the contiguous United States, based on MDA8 ozone concentrations. Each monitoring site is represented by a circle and the shading of the circle provides information about how well on average the observed ozone concentrations are represented by the simulation results. For the NMB, gray shaded circles indicate that the bias is within ± 15 percent and this corresponds to model performance within the criteria benchmark. Blue and green shading indicate underestimation of observed concentrations and yellow, orange, and red shading indicate overestimation. For the NME, blue and green shading represent the smaller errors, while orange and red indicate errors larger than 25 percent.

Figure E-12. Site-Specific Normalized Mean Bias (%; Top) and Normalized Mean Error (%; Bottom) Based on Daily Maximum 8-Hour Average Simulated and Observed Ozone Concentrations (April through October Combined)



CIRCLE=AQS_Daily_O3



CIRCLE=AQS_Daily_O3

These plots indicate that overall model performance with the full range of observations is consistently good throughout the contiguous United States. For most monitoring sites, the normalized bias is within ± 15 percent (as indicated by the gray shading in the top part of the figure). Ozone is underestimated in the western United States region, especially in California and southern Arizona and New Mexico. Ozone is overestimated at a few isolated sites, mostly in the eastern United States, with good performance throughout the remaining sites in the modeling domain. The NME as shown in the bottom figure is less than 25 percent for nearly all monitoring sites except at isolated sites in Southern California, Arizona, Washington, northern Utah, southern Wyoming, and southern Texas.

PM_{2.5}

NHTSA evaluated CMAQ's base-year model performance for total PM_{2.5} and this section summarizes the results. The evaluation focused on 24-hour average PM_{2.5} concentrations. The observed values for the base year (2016) are based on monitoring data from multiple air quality networks, including EPA's AQS database, the Chemical Speciation Network (CSN), the Interagency Monitoring of Protected Visual Environments (IMPROVE) network, and the South-Eastern Aerosol Research and Characterization (SEARCH) network. SEARCH and State or Local Air Monitoring Stations networks use the Federal reference method (FRM) or Federal equivalent method. IMPROVE monitors are capable of supplementing FRM data in association with PM_{2.5} standards. Speciation samplers do not measure PM_{2.5} the same way as FRM measures (Frank 2006) and thus without adjustment, CSN and FRM PM_{2.5} measurements differ. However, the CSN monitoring data were not adjusted but were reported separately in the MPE.

Scatter plots in Figures E-13a through E-13f compare simulated and observed 24-hour PM_{2.5} concentrations for all monitoring sites in the contiguous United States for each month of the annual simulation period. This included all source-oriented monitoring types.

Figure E-13a. Comparison of Simulated and Observed 24-Hour Average PM_{2.5} Concentration ($\mu\text{g}/\text{m}^3$) by Month for the U.S. Portion of the NHTSA CMAQ Modeling Domain

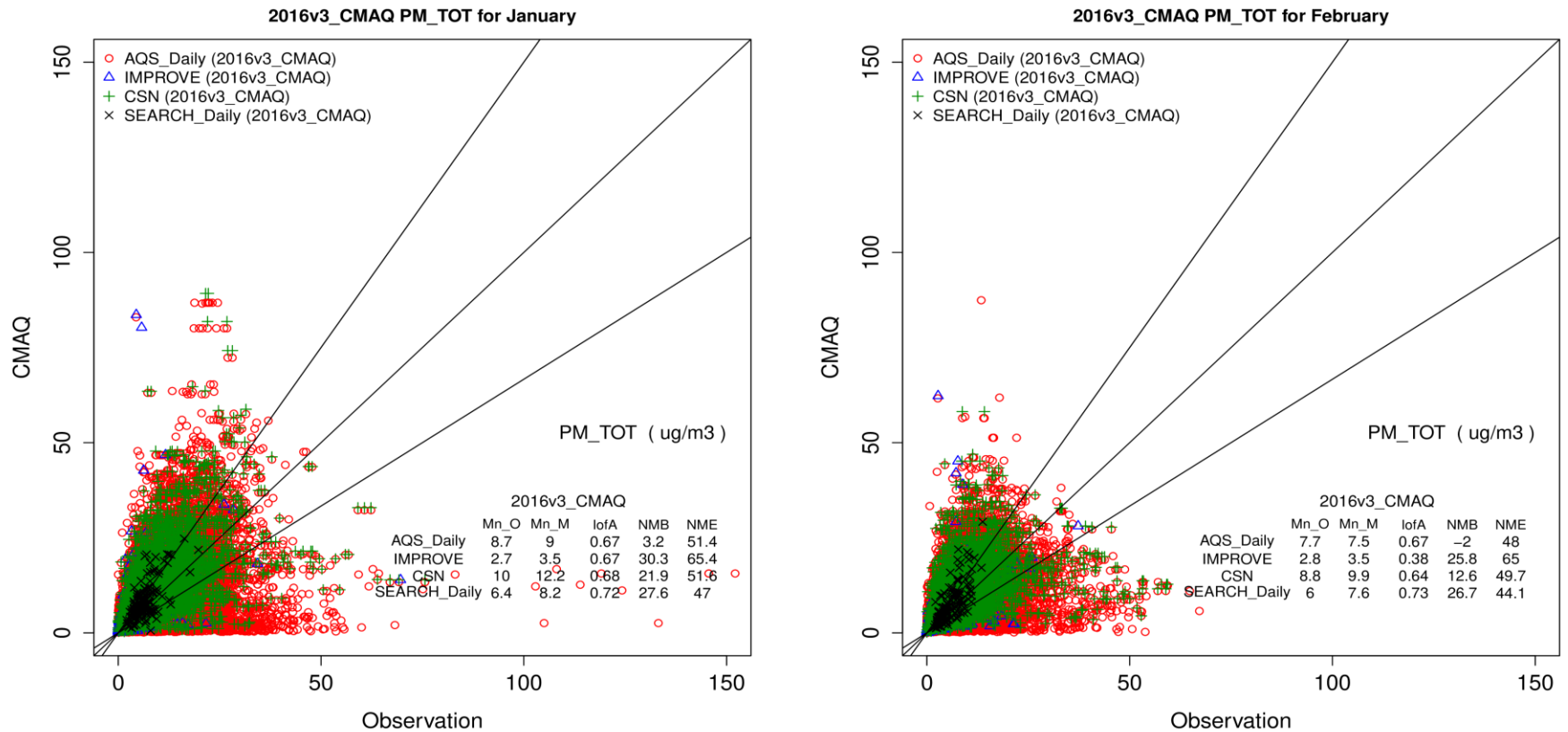


Figure E-13b. Comparison of Simulated and Observed 24-Hour Average PM_{2.5} Concentration ($\mu\text{g}/\text{m}^3$) by Month for the U.S. Portion of the NHTSA CMAQ Modeling Domain

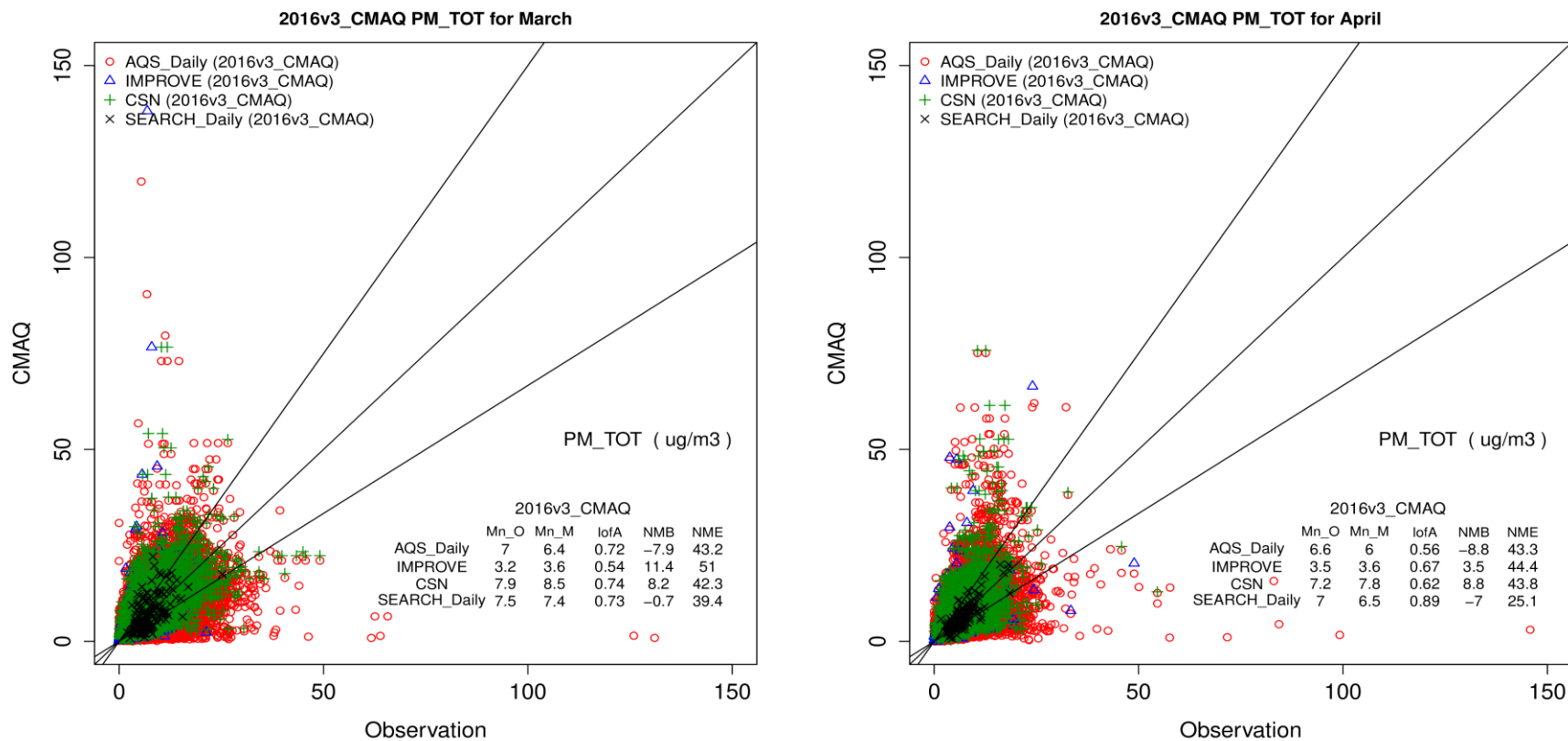


Figure E-13c. Comparison of Simulated and Observed 24-Hour Average PM_{2.5} Concentration ($\mu\text{g}/\text{m}^3$) by Month for the U.S. Portion of the NHTSA CMAQ Modeling Domain

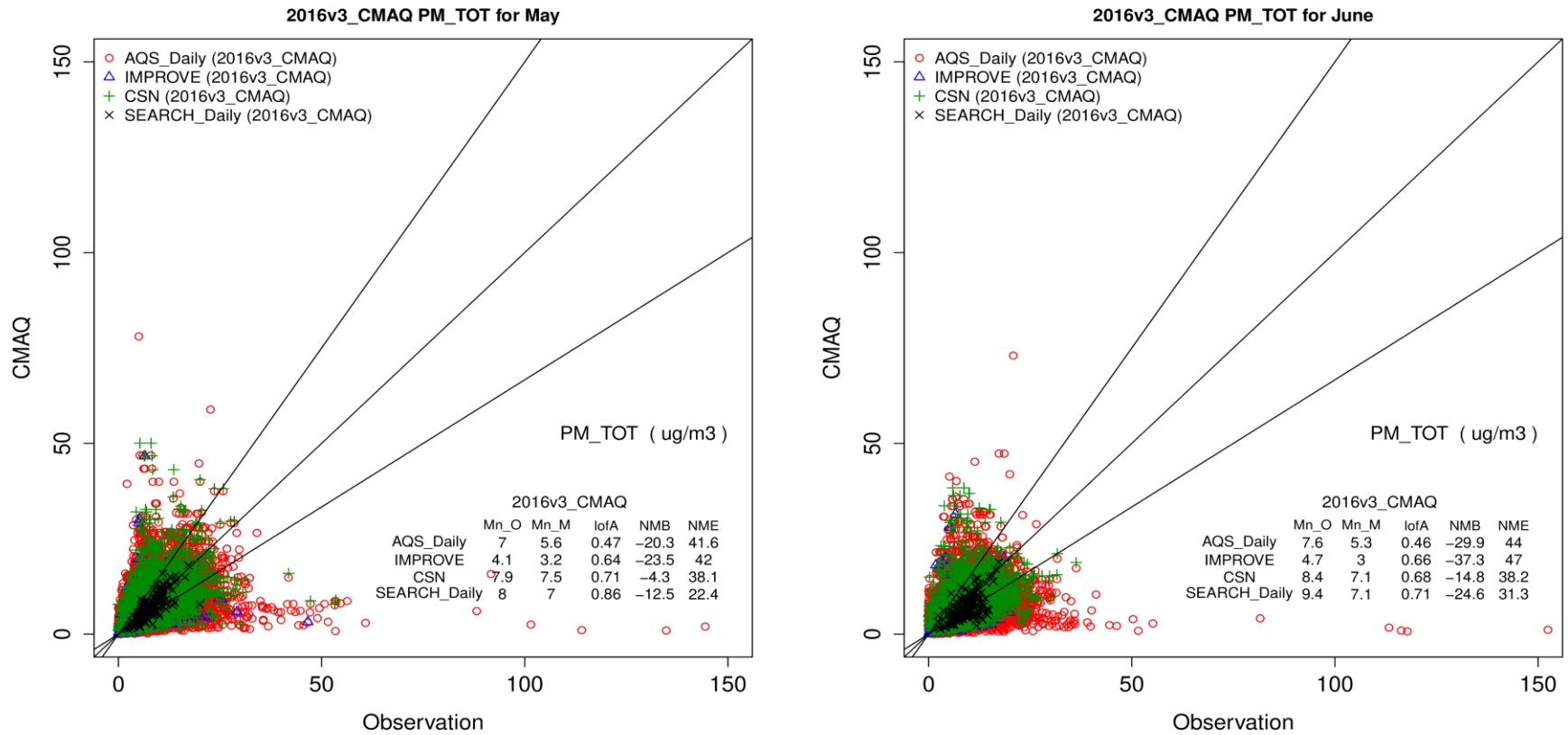


Figure E-13d. Comparison of Simulated and Observed 24-Hour Average PM2.5 Concentration ($\mu\text{g}/\text{m}^3$) by Month for the U.S. Portion of the NHTSA CMAQ Modeling Domain

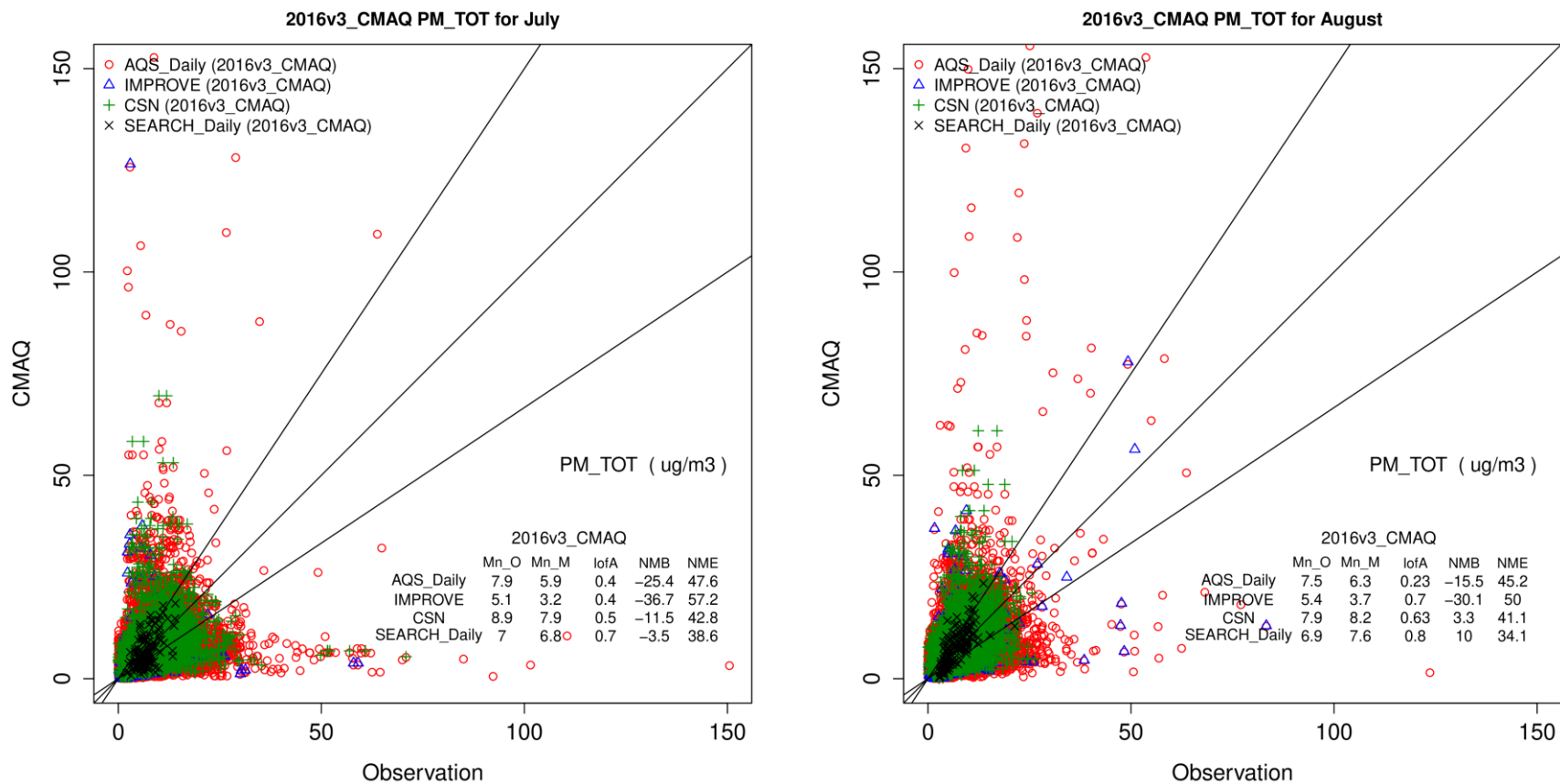


Figure E-13e. Comparison of Simulated and Observed 24-Hour Average PM_{2.5} Concentration ($\mu\text{g}/\text{m}^3$) by Month for the U.S. Portion of the NHTSA CMAQ Modeling Domain

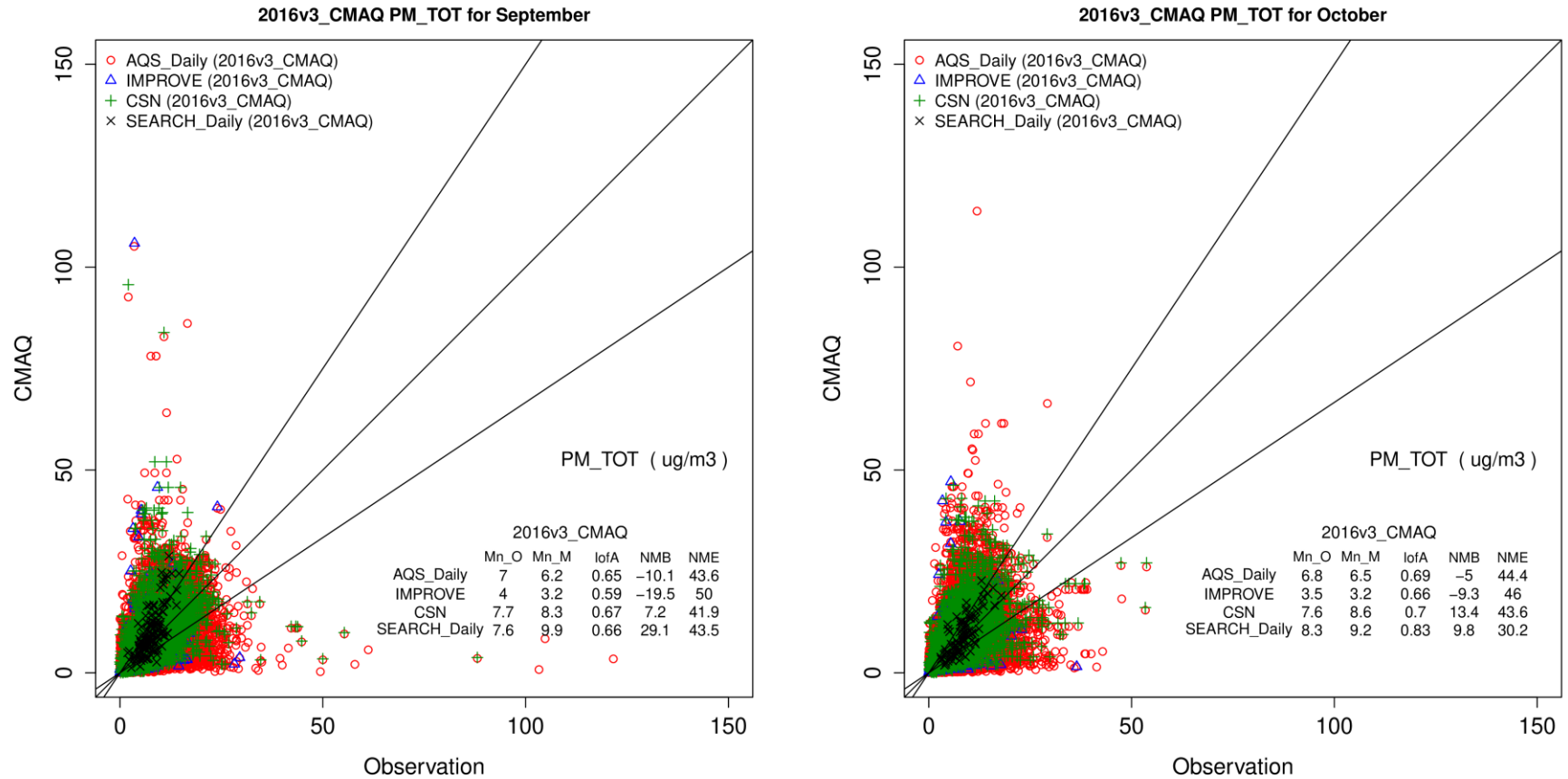
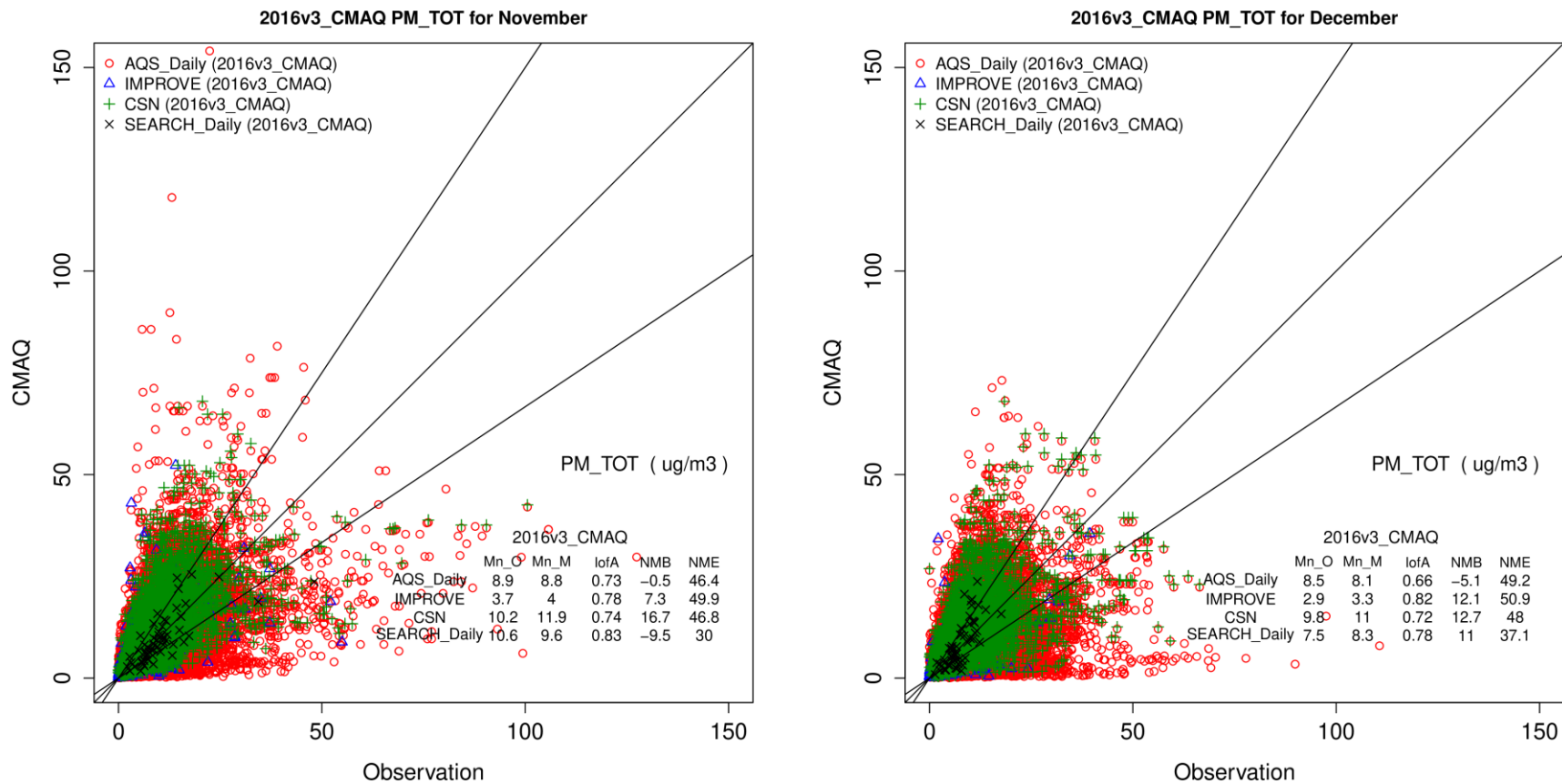


Figure E-13f. Comparison of Simulated and Observed 24-Hour Average PM_{2.5} Concentration ($\mu\text{g}/\text{m}^3$) by Month for the U.S. Portion of the NHTSA CMAQ Modeling Domain



The scatter plots indicate a mix of under- and overestimation of total PM_{2.5} concentration for most months. There is a general tendency for CMAQ to underestimate the higher concentrations (illustrated by circles displayed below the reference line), especially during May through August. Also, CMAQ tends to overestimate (illustrated by circles displaying above the reference line) lower concentrations (less than 25 micrograms per cubic meter [$\mu\text{g}/\text{m}^3$]), especially during July and August. Overall model performance when compared with AQS observations is characterized by an index of agreement that ranges from 0.23 in August to 0.73 in November. The index of agreement varies significantly both among the networks and within each month.

Summary metrics and statistical measures calculated using daily 24-hour average PM_{2.5} concentrations for all sites within the contiguous United States are presented in Tables E-7 through E-10.

Statistics for each month and the full annual simulation period were calculated separately for each air quality network. Because the observed concentrations can be quite small and there is no accepted minimum threshold, normalized bias and error are not well suited to characterize model performance for PM_{2.5}. However, the FB and FE are better suited for the PM_{2.5} analysis as they are less subject to small observed values leading to large impacts on these two statistical measures. The recommended ranges for the FB and FE are based on Boylan (2005) and are widely used for regional-scale MPE for PM_{2.5}. No lower bound was applied in calculating the statistics. While statistics are presented for multiple air quality networks, the MPE focused on the AQS database due to the large number of data pairs and wide spatial distribution of sites within the contiguous United States.

Table E-7. Model Performance Statistics for Daily 24-Hour Average PM2.5 Concentration for the U.S. Portion of the NHTSA CMAQ Modeling Domain, AQ5 Database

Metric	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	Goal	Criteria
Mean observed ($\mu\text{g}/\text{m}^3$)	8.7	7.7	7.0	6.6	7.0	7.6	7.9	7.5	7.0	6.8	8.9	8.5	7.6		
Mean simulated ($\mu\text{g}/\text{m}^3$)	9.0	7.5	6.4	6.0	5.6	5.3	5.9	6.3	6.2	6.5	8.8	8.1	6.8		
Mean Error ($\mu\text{g}/\text{m}^3$)	4.5	3.7	3.0	2.9	2.9	3.3	3.8	3.4	3.0	3.0	4.1	4.2	3.5		
Mean Bias ($\mu\text{g}/\text{m}^3$)	0.3	-0.2	-0.5	-0.6	-1.4	-2.3	-2.0	-1.2	-0.7	-0.3	0.0	-0.4	-0.8		
Normalized mean bias (%)	3.2	-2.0	-7.9	-8.8	-20.3	-29.9	-25.4	-15.5	-10.1	-5.0	-0.5	-5.1	-10.3		
Normalized mean error (%)	51.4	48.0	43.2	43.3	41.6	44.0	47.6	45.2	43.6	44.4	46.4	49.2	45.9		
Fractional bias (%)	-1.7	-4.7	-11.6	-11.9	-23.4	-35.9	-32.3	-21.7	-19.3	-13.6	-7.4	-8.9	-16.0	< ± 30	< ± 60
Fractional error (%)	50.8	48.6	47.0	44.6	46.6	52.9	54.8	49.0	49.2	47.7	47.2	50.3	49.1	< 50	< 75
RMSE ($\mu\text{g}/\text{m}^3$)	7.3	5.8	4.6	5.7	6.9	6.9	8.1	13.0	5.1	4.6	6.7	6.8	7.2		
Index of Agreement	0.67	0.67	0.73	0.56	0.47	0.46	0.40	0.23	0.65	0.69	0.73	0.66	0.56		

AQS = Air Quality System; CMAQ = Community Multiscale Air Quality; $\mu\text{g}/\text{m}^3$ = micrograms per cubic meter; PM2.5 = particulate matter 2.5 microns or less in diameter

Table E-8. Model Performance Statistics for Daily 24-Hour Average PM2.5 Concentration for the U.S. Portion of the NHTSA CMAQ Modeling Domain, CSN

Metric	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	Goal	Criteria
Mean observed (mg/m^3)	10.0	8.8	7.9	7.2	7.9	8.4	8.9	7.9	7.7	7.6	10.2	9.8	8.5		
Mean simulated (mg/m^3)	12.2	9.9	8.5	7.8	7.5	7.1	7.9	8.2	8.3	8.6	11.9	11.0	9.1		
Mean Error (mg/m^3)	5.2	4.4	3.3	3.1	3.0	3.2	3.8	3.3	3.2	3.3	4.8	4.7	3.8		
Mean Bias (mg/m^3)	2.2	1.1	0.7	0.6	-0.3	-1.2	-1.0	0.3	0.6	1.0	1.7	1.2	0.6		
Normalized mean bias (%)	21.9	12.6	8.2	8.8	-4.3	-14.8	-11.5	3.3	7.2	13.4	16.7	12.7	6.6		
Normalized mean error (%)	51.6	49.7	42.3	43.8	38.1	38.2	42.8	41.1	41.9	43.6	46.8	48.0	44.3		
Fractional bias (%)	17.9	12.6	6.2	4.6	-5.4	-18.2	-15.5	-1.7	0.2	7.6	12.0	11.2	2.6	< ± 30	< ± 60
Fractional error (%)	44.8	44.8	41.2	40.2	38.7	42.4	44.5	40.7	40.6	40.3	42.0	43.6	42.0	< 50	< 75
RMSE (mg/m^3)	7.8	6.8	5.1	5.5	4.6	4.5	6.3	4.9	5.4	5.0	7.3	7.1	6.0		
Index of Agreement	0.67	0.67	0.73	0.56	0.47	0.46	0.40	0.23	0.65	0.69	0.73	0.66	0.56		

CMAQ = Community Multiscale Air Quality; CSN = Chemical Speciation Network; $\mu\text{g}/\text{m}^3$ = micrograms per cubic meter; PM2.5 = particulate matter 2.5 microns or less in diameter

Table E-9. Model Performance Statistics for Daily 24-Hour Average PM_{2.5} Concentration for the U.S. Portion of the NHTSA CMAQ Modeling Domain, IMPROVE Network

Metric	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	Goal	Criteria
Mean observed (ppb)	2.7	2.8	3.2	3.5	4.1	4.7	5.1	5.4	4.0	3.5	3.7	2.9	3.8		
Mean simulated (ppb)	3.5	3.5	3.6	3.6	3.2	3.0	3.2	3.7	3.2	3.2	4.0	3.3	3.4		
Mean Error (ppb)	1.8	1.8	1.6	1.5	1.7	2.2	2.9	2.7	2.0	1.6	1.9	1.5	1.9		
Mean Bias (ppb)	0.8	0.7	0.4	0.1	-1.0	-1.8	-1.9	-1.6	-0.8	-0.3	0.3	0.4	-0.4		
Normalized mean bias (%)	30.3	25.8	11.4	3.5	-23.5	-37.3	-36.7	-30.1	-19.5	-9.3	7.3	12.1	-10.3		
Normalized mean error (%)	65.4	65.0	51.0	44.4	42.0	47.0	57.2	50.0	50.0	46.0	49.9	50.9	51.0		
Fractional bias (%)	27.4	25.2	12.8	3.8	-25.7	-47.9	-53.8	-49.3	-41.1	-17.5	6.9	18.8	-11.9	< ±30	< ± 60
Fractional error (%)	55.6	51.7	46.4	39.6	44.4	56.9	67.6	61.4	57.4	46.6	46.5	49.7	52.1	< 50	< 75
RMSE (ppb)	4.4	7.6	4.8	3.4	3.3	3.1	5.7	4.7	4.4	3.3	3.9	2.7	4.4		
Index of Agreement	0.67	0.38	0.54	0.67	0.64	0.66	0.40	0.70	0.59	0.66	0.78	0.82	0.61		

CMAQ = Community Multiscale Air Quality; IMPROVE = Interagency Monitoring of Protected Visual Environments; $\mu\text{g}/\text{m}^3$ = micrograms per cubic meter; PM_{2.5} = particulate matter 2.5 microns or less in diameter

Table E-10. Model Performance Statistics for Daily 24-Hour Average PM_{2.5} Concentration for the U.S. Portion of the NHTSA CMAQ Modeling Domain, SEARCH Network

Metric	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	Goal	Criteria
Mean observed (ppb)	6.4	6.0	7.5	7.0	8.0	9.4	7.0	6.9	7.6	8.3	10.6	7.5	7.5		
Mean simulated (ppb)	8.2	7.6	7.4	6.5	7.0	7.1	6.8	7.6	9.9	9.2	9.6	8.3	7.8		
Mean Error (ppb)	3.0	2.6	3.0	1.8	1.8	2.9	2.7	2.4	3.3	2.5	3.2	2.8	2.6		
Mean Bias (ppb)	1.8	1.6	-0.1	-0.5	-1.0	-2.3	-0.2	0.7	2.2	0.8	-1.0	0.8	0.3		
Normalized mean bias (%)	27.6	26.7	-0.7	-7.1	-12.5	-24.6	-3.5	10.0	29.1	9.8	-9.5	11.0	3.3		
Normalized mean error (%)	47.0	44.1	39.4	25.1	22.4	31.3	38.6	34.1	43.5	30.2	30.0	37.1	34.9		
Fractional bias (%)	16.2	12.9	-10.8	-13.7	-18.2	-31.6	-14.6	-3.8	15.7	1.1	-12.1	-3.2	-5.0	< ±30	< ± 60
Fractional error (%)	39.8	35.1	41.4	30.3	27.2	39.7	42.5	37.0	35.1	29.5	31.6	36.5	35.7	< 50	< 75
RMSE (ppb)	4.0	3.9	3.8	2.2	2.4	3.7	3.4	3.1	4.7	3.2	5.1	3.9	3.6		
Index of Agreement	0.72	0.73	0.73	0.89	0.86	0.71	0.70	0.80	0.66	0.83	0.83	0.78	0.77		

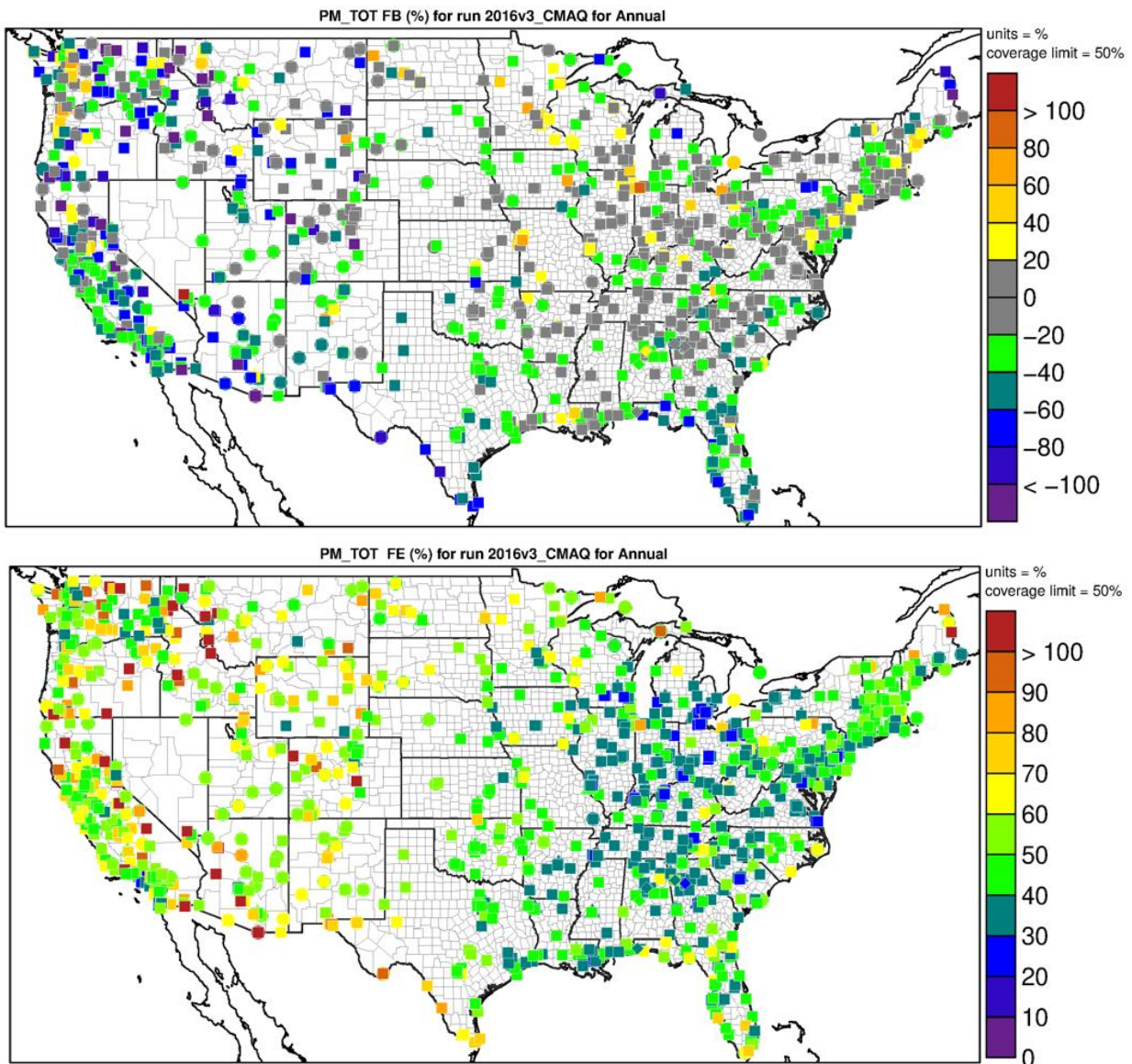
CMAQ = Community Multiscale Air Quality; $\mu\text{g}/\text{m}^3$ = micrograms per cubic meter; PM_{2.5} = particulate matter 2.5 microns or less in diameter; SEARCH = South-Eastern Aerosol Research and Characterization

The statistical measures based on AQS indicate that model performance is reasonable. The FB is within the criteria of ± 60 percent and the FE within the criteria of 75 percent for each month and the annual average. The model is also within the goal benchmark for FE except for January, June, July, and December. There is a general tendency for CMAQ to underestimate PM_{2.5} concentrations throughout the year. The bias is largest during May, June, July, and August, and lowest during the fall and winter months. FB values based on the CSN, IMPROVE, and SEARCH networks indicate that the model tends to overestimate PM_{2.5} concentrations during fall and winter months, but they also show a systematic underprediction during the summer months, particularly for June and July.

To illustrate the spatial agreement between the simulated and observed values, Figure E-14 depicts the FB and FE statistics for the AQS, SEARCH, IMPROVE, and CSN sites within the contiguous United States. The annual average statistics in the figure were calculated using 24-hour average PM_{2.5} concentrations. Each network's monitoring sites are represented by different symbols and the shading of each symbol provides information about how well the 24-hour observed PM_{2.5} concentrations are represented by the simulation results. For the FB, gray-shaded symbols indicate that the FB is within ± 20 percent, values within ± 60 percent (lighter colors) correspond to acceptable model performance. Blue and green shading indicate underestimation of the observed concentrations, while yellow, orange, and red shading indicate overestimation. For the FE, blue and green shading represent smaller errors, while red indicates errors larger than 100 percent. Values less than 75 percent are considered to represent reasonable model performance for PM_{2.5}.

These plots indicate that overall model performance is good to very good for most of the eastern United States. For areas in the western United States, along the United States-Mexico border and Florida, the model performance is characterized by underestimation of PM_{2.5} concentrations. This could be due to the influence of regional wildfires in the western United States, which affect the observed concentrations in those states but are difficult to model and capture in the emissions inventory. While wildfires can be excluded from the observational dataset as exceptional events, measurements affected by wildfire impacts are typically included in the observational dataset given the effort to identify and obtain approval to exclude them. Despite this, for most monitoring sites, the FB is within ± 60 percent (as indicated by the gray, yellow, light orange, and green shading). The FE is less than 75 percent for most monitoring sites, with some exceptions in California, along the southwestern United States border, and in the mountainous western states.

Figure E-14. Site-Specific Fractional Bias (%; Top) and Fractional Error (%; Bottom) Based on Daily 24-Hour Average Simulated and Observed PM_{2.5} Concentrations (Annual). Sites shown are from the following networks: AQS (squares), CSN (triangles), IMPROVE (circles), and SEARCH (diamonds).



PM_{2.5} = particulate matter 2.5 microns or less in diameter; AQS = Air Quality System; CSN = Chemical Speciation Network; IMPROVE = Interagency Monitoring of Protected Visual Environments; SEARCH = Southeastern Aerosol Research and Characterization

E.3.2.4 Post-Processing and Quality Assurance Procedures

Quality assurance of the CMAQ runs included the following steps. NHTSA routinely checked scripts to ensure that the correct input files and output file names were used. NHTSA checked and reconciled any error messages CMAQ generated. NHTSA prepared plots of ozone and PM_{2.5} for the No-Action Alternative as well as the differences in concentrations for these species between each alternative and the No-Action Alternative. For example, these included MDA8 ozone concentration and 24-hour average PM_{2.5} concentration on July 15 and annual average PM_{2.5} concentrations. To be consistent

with the NAAQS, NHTSA also plotted the fourth-highest MDA8 concentration and the 98th percentile 24-hour average PM_{2.5} concentration in 2050 for the No-Action Alternative. Additionally, NHTSA plotted the maximum changes in 24-hour average PM_{2.5} concentrations and MDA8 ozone concentrations between each action alternative and the No-Action Alternative. These difference plots were examined and compared with the results for other runs. Because of differences in the form of the NAAQS, maximum changes in MDA8 ozone concentrations were paired in space and time, while maximum changes in 24-hour average PM_{2.5} concentrations were paired in space but not in time. NHTSA checked the concentration patterns and values for reasonableness and compared the results for each alternative to ensure that differences in the CMAQ results were consistent with the emissions changes.

Following these actions to ensure the quality of the modeling results, NHTSA post-processed the CMAQ results for input to the health impacts and benefits modeling, as discussed in Section E.4, *Health Effects and Benefits Modeling*.

E.3.3 CMAQ Modeling Results

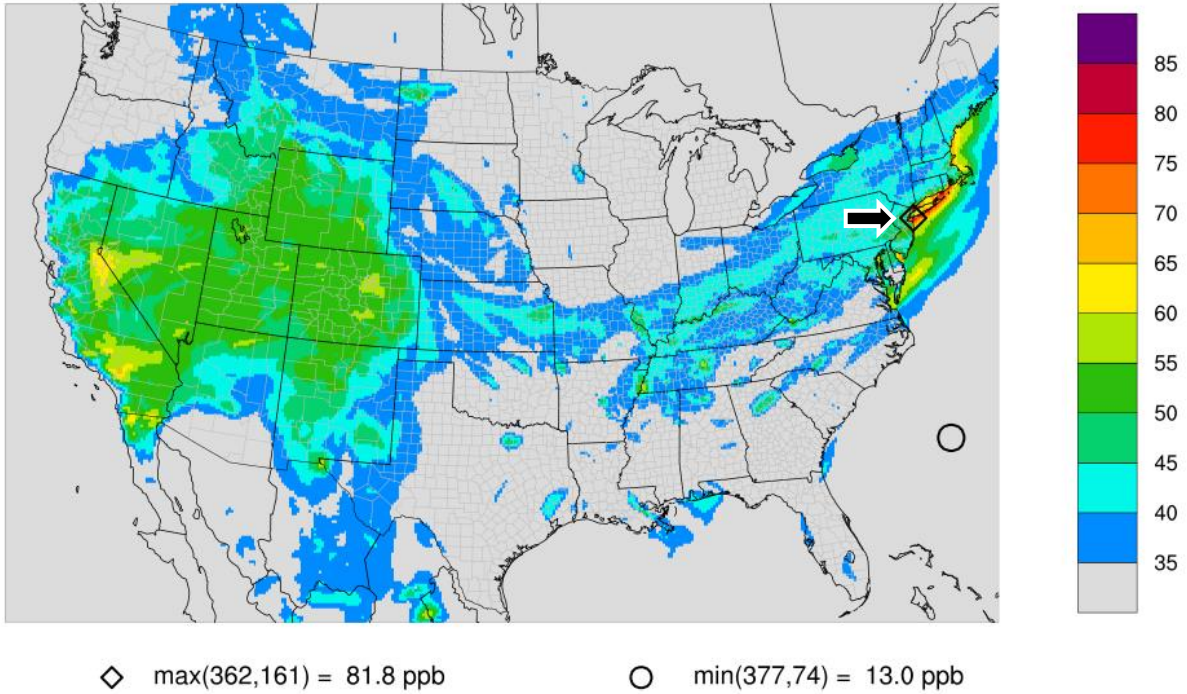
This section presents the CMAQ modeling results for ozone and PM_{2.5} used to calculate health effects and monetized health-related benefits provided in Section E.4, *Health Effects and Benefits Modeling*. Ozone results are discussed first, followed by PM_{2.5}.

E.3.3.1 Ozone

Figure E-15 shows the MDA8 modeled ozone concentrations (ppb) for July 15 for the future-year 2050 No-Action Alternative. NHTSA selected this summer day as an example for an ozone season to display ozone concentrations (for all simulations), primarily because clear summertime conditions prevail across the contiguous United States with relatively high ozone. The minimum and maximum concentrations in the domain are also provided along with their grid cell location (x,y coordinates are provided relative to the modeling domain shown in Figure E-1).

Figure E-15 indicates that MDA8 ozone concentrations for this day are generally less than 70 ppb (the current 8-hour ozone NAAQS) throughout the domain except at few locations in the northeastern United States where ozone exceeds 70 ppb. The maximum concentration of 81.8 ppb occurs near the New York metropolitan region. Single-day concentrations are not fully representative of modeled ozone-season concentrations and do not necessarily represent the annual fourth-highest MDA8 value; therefore, they should not be considered a violation of the standard.

Figure E-15. Simulated Daily Maximum 8-Hour Ozone Concentration (ppb) for July 15, 2050: No-Action Alternative

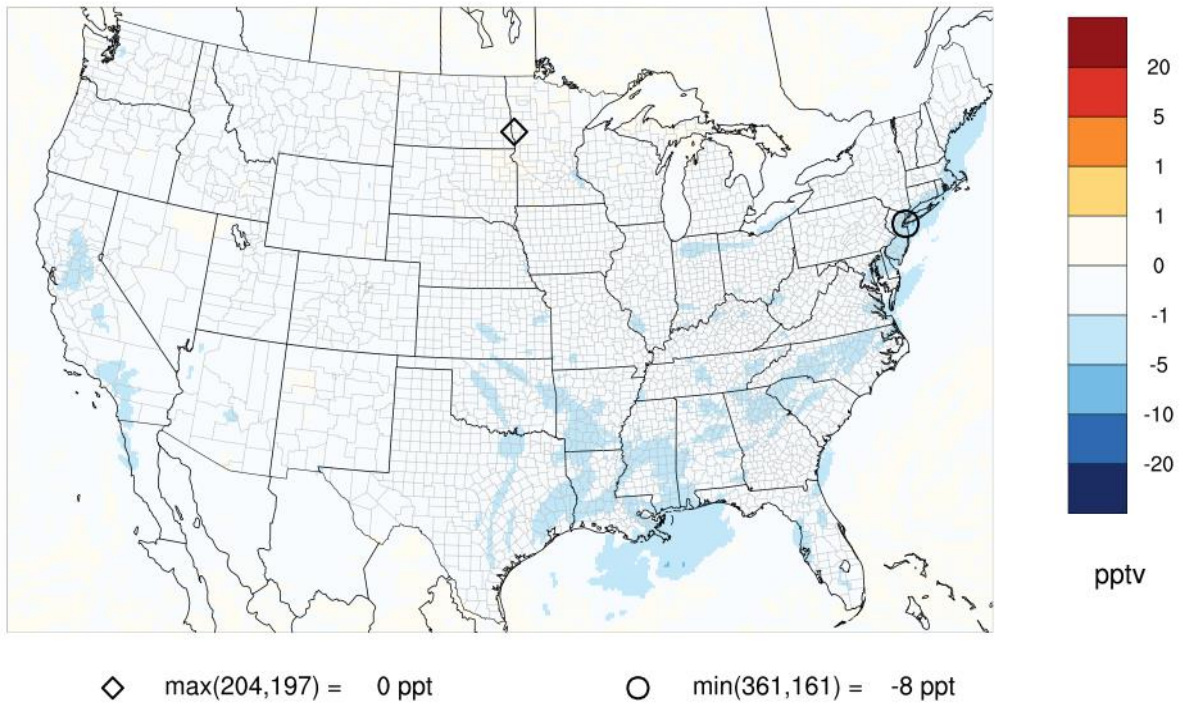


From a meteorological perspective, the modeled ozone concentration patterns on July 15, 2016, were affected by local and large-scale weather patterns situated over the contiguous United States (NOAA 2016). The modeled ozone concentrations are relatively high in the western and northeastern United States, consistent with above-average temperatures and below-average precipitation widespread across the southern half of the United States and along the East Coast for July 15, 2016. The modeled concentrations are not as high over the northern portion of the United States, consistent with near- to below-average temperatures and above-average precipitation observed across the Northwest, Northern Plains, and parts of the Midwest.

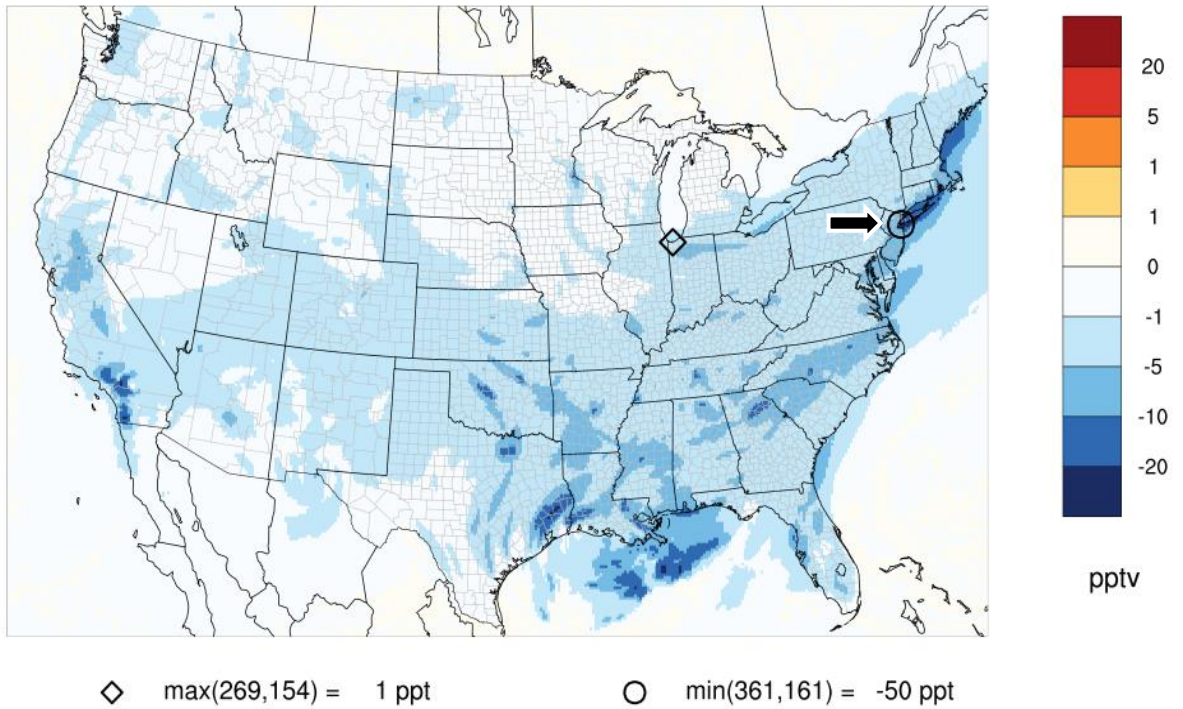
Figure E-16 illustrates the differences in MDA8 modeled ozone between each action alternative and the No-Action Alternative for July 15. To enable the reader to see the very small spatial differences between the alternatives and the No-Action Alternative, ozone concentration differences are presented in units of parts per trillion (ppt), which is 1/1,000 of a ppb. The current NAAQS ozone standard is 70 ppb. In general, for all alternatives ozone concentrations tend to decrease substantially relative to the No-Action Alternative in Texas and Louisiana (Gulf Coast region), California, the East Coast and the Northeastern Coastal regions. The largest difference in ozone concentrations is observed for Alternative 3 followed by Alternative 2. For Alternative 3, ozone concentrations decrease throughout the modeling domain, especially at all major urban areas and with the largest differences in Texas, California, and states in the East Coast.

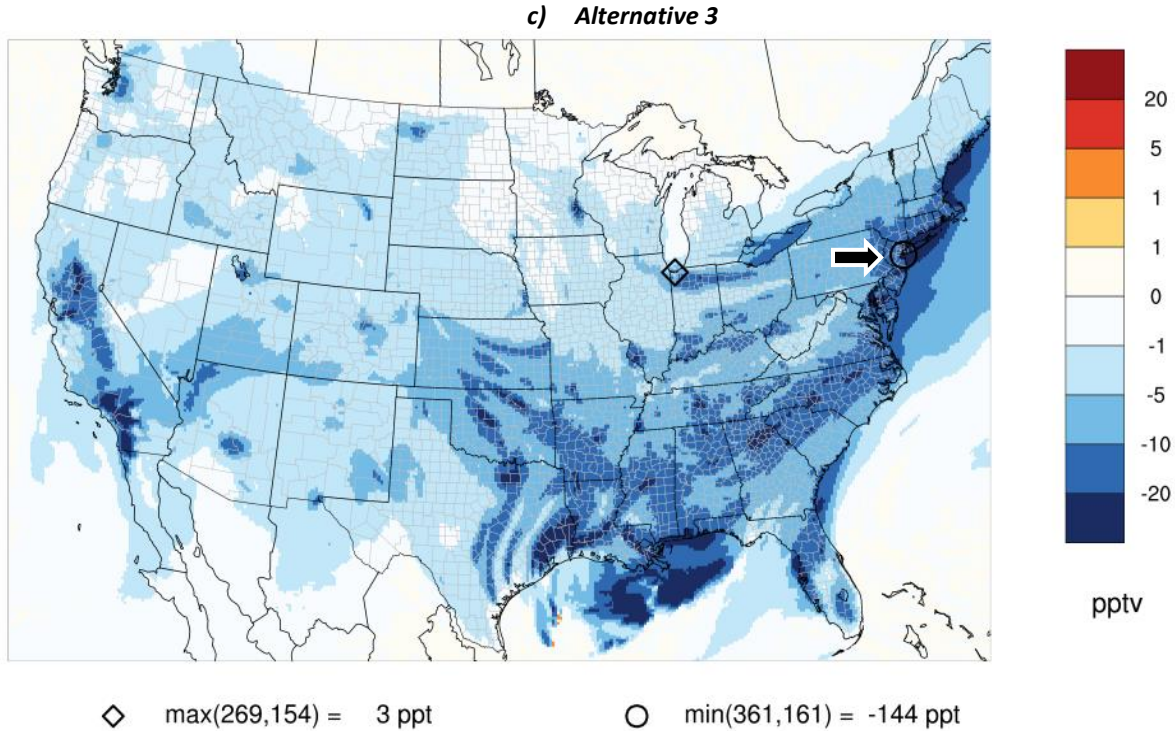
Figure E-16. Difference in Simulated Daily Maximum 8-hour Ozone Concentration (ppt) for July 15, 2050: Between the Action Alternatives Compared to the No-Action Alternative

a) Alternative 1



b) Alternative 2





The location, extent, and magnitude of the impacts on ozone concentrations are consistent with the emissions changes. The key precursor pollutants for ozone are VOC and NO_x . The largest reductions in NO_x emissions (Figure E-8) and VOC emissions (Figure E-7) occur at all major urban areas and eastern half of the United States, where the largest decrease in ozone concentration is observed for Alternative 3 (Figure E-20). The largest decrease in ozone concentration for any grid cell on July 15 ranges from approximately 144 ppt (0.144 ppb) under Alternative 3 to 8 ppt (0.008 ppb) under Alternative 1. For all alternatives, the largest decrease occurs near the New York metropolitan region.

The response of the model to changes in emissions is influenced by the complex photochemistry represented by the model. Overall, the reduction in both NO_x and VOC emissions throughout the domain leads to reductions in ozone concentrations.

The response of the model varies from region to region and is influenced by the amount and spatial distribution of the emissions changes and the relative changes in emissions for the different pollutant species (VOC versus NO_x).

E.3.3.2 Ozone Maximum Impacts

Figure E-17 shows a spatial representation of 2050 future-year annual fourth-highest MDA8 modeled ozone concentrations (ppb) for the No-Action Alternative scenario. The annual fourth-highest MDA8 ozone concentrations are calculated for 1 year but the calculation is consistent with the form of the current NAAQS. The minimum and maximum concentrations of the fourth-highest MDA8 metric in the domain are also provided, along with their grid cell locations (x, y coordinates are provided relative to the modeling domain shown in Figure E-1).

Figure E-17 indicates that 8-hour ozone concentrations in the future year do not exceed 70 ppb throughout the contiguous United States except at a few areas such as San Francisco, Los Angeles,

Chicago, and New York as shown by the red and purple colors in the figure. The highest ozone concentrations of 108.5 ppb are predicted to occur in California (San Francisco). The ozone concentrations in most of the United States are well below the 70-ppb standard. As shown in Figure E-17, while most areas of the country are predicted to be in attainment of the 8-hour ozone standard by 2050, ozone concentrations exceeding the NAAQS would still occur in a few locations.

Figure E-17. Simulated Fourth-Highest Daily Maximum 8-hour Ozone Concentration (ppb) for 2050: No-Action Alternative

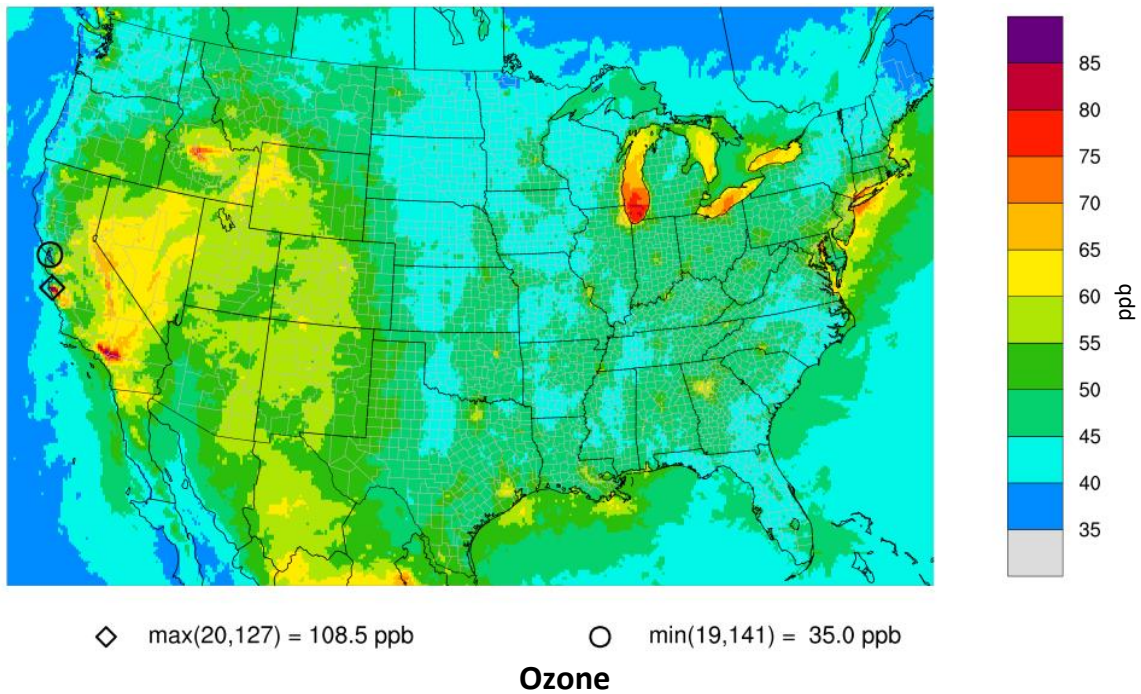
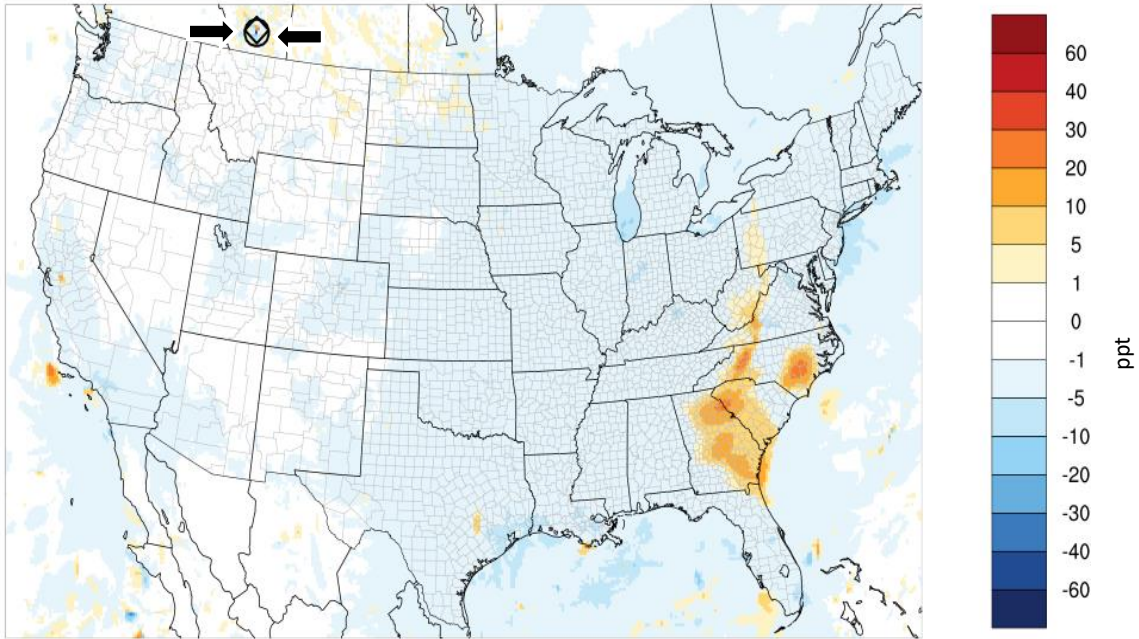


Figure E-22 illustrates the maximum differences in MDA8 modeled ozone concentrations between each action alternative and the No-Action Alternative. To enable the reader to clearly see the very small spatial differences between the alternatives and the No-Action Alternative, ozone concentration differences are presented in units of ppt, which is 1/1,000 of a ppb. In general, ozone concentrations tend to decrease throughout the domain for all three alternatives when compared to the No-Action Alternative. However, ozone concentrations increase in some regions of southeastern states (Georgia, South Carolina and North Carolina) for Alternative 1 and 2. Similar to the results presented above for July 15, modeled ozone concentrations decrease at major urban areas with the largest differences in Texas, California, and states in the East Coast. These observed decreases in ozone concentration are due to the reduction in NO_x and VOC emissions sources (Figures E-7 and E-8). MDA8 ozone concentration maximum differences for a given alternative relative to the No-Action Alternative are a factor of 2 to 5 times larger than the differences in July 15. Thus, while 8-hour ozone concentrations on July 15 may be representative of a typical day during the ozone season, acute changes in ozone are larger than those observed in July 15. Figure E-18 also shows the location of the overall maximum and overall minimum occurs just 12 kilometers apart in Alberta, Canada.¹⁰

¹⁰ These maximum and minimum concentrations likely occurred on different days with changes more likely due to differences in upstream emissions associated with crude oil extraction.

Figure E-18. Maximum Difference in Simulated Daily Maximum 8-hour Ozone Concentration (ppt) for 2050: Between the Action Alternatives minus the No-Action Alternative

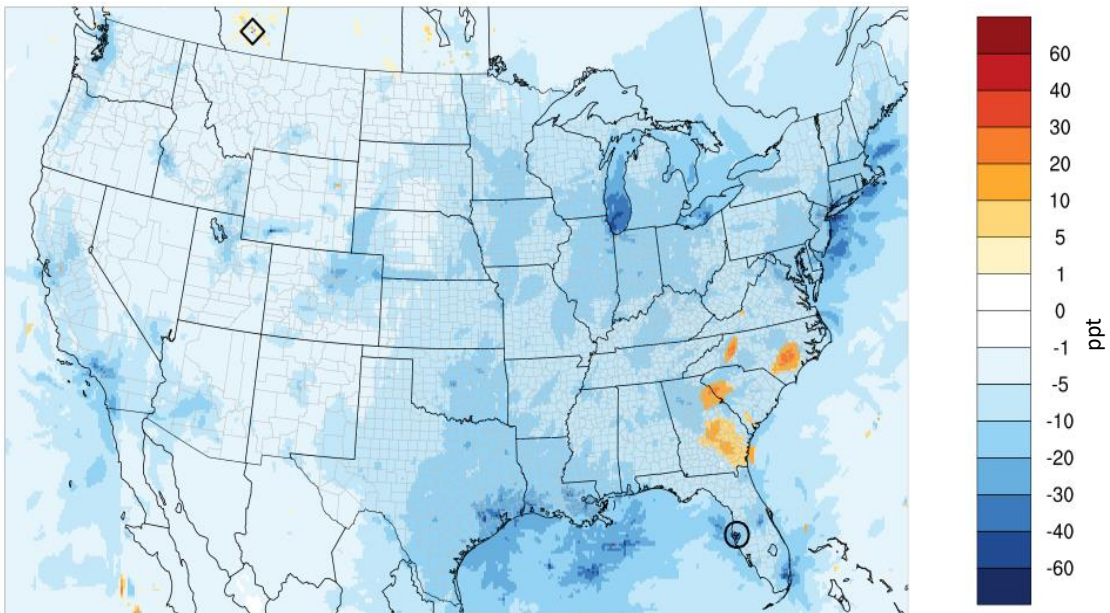
(a) Alternative 1



◇ max(109,236) = 38 ppt

○ min(109,235) = -45 ppt

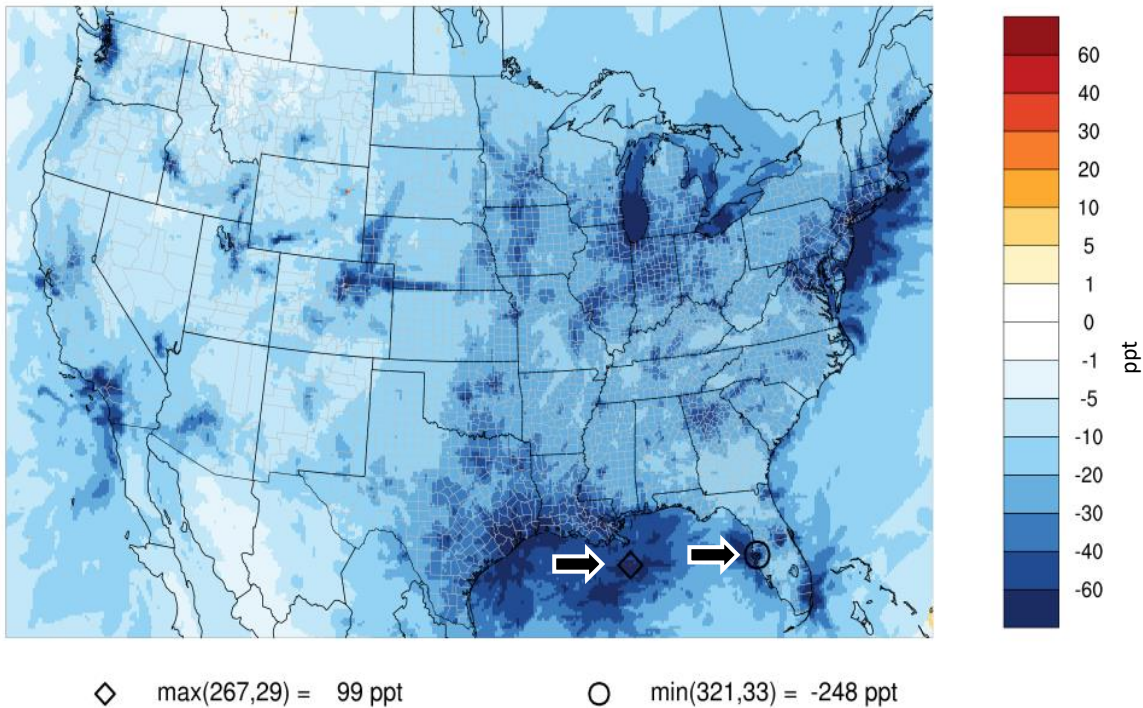
(b) Alternative 2



◇ max(109,236) = 42 ppt

○ min(321,33) = -84 ppt

(c) Alternative 3

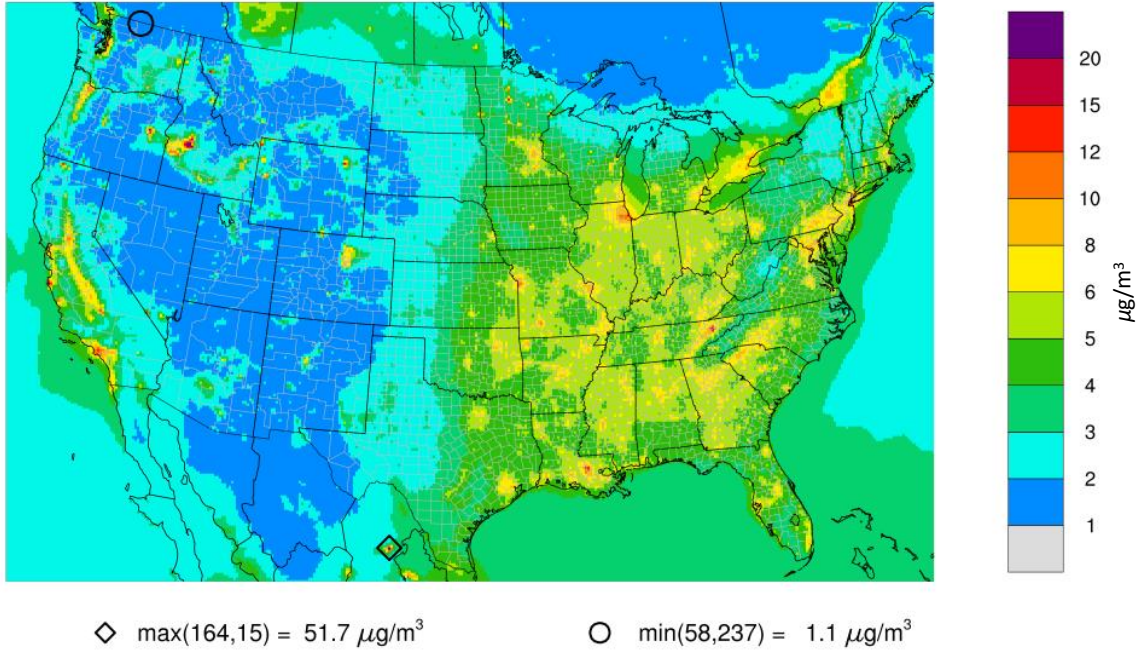


Similar to July 15, the differences in ozone concentration between each action alternative and the No-Action Alternative are the smallest under Alternative 1 and the largest under Alternative 3. In general, the magnitude and spatial extent of the differences in ozone concentration between each action alternative and the No-Action Alternative tend to increase from Alternative 1 to Alternative 3. The largest decrease in ozone concentration for any grid cell ranges from approximately 248 ppt (0.248 ppb) under Alternative 3 to 45 ppt (0.045 ppb) under Alternative 1. The largest increase in ozone concentration ranges from approximately 38 ppt (0.038 ppb) under Alternative 1 to 99 ppt (0.099 ppb) under Alternative 3. For Alternatives 1 and 2, a few isolated regions in Georgia and the Carolinas show slight increases in ozone concentrations likely due to nonlinear ozone chemistry and the localized ratio of VOC to NO_x concentration.

E.3.3.3 Annual Average PM_{2.5}

Figure E-19 displays 2050 future-year annual average modeled PM_{2.5} concentrations ($\mu\text{g}/\text{m}^3$) for the No-Action Alternative. This plot indicates that areas of higher PM_{2.5} concentrations are in the eastern half of the United States, California, and a few isolated areas in the western states. Except for a few isolated grid cells, many of them located in urban areas, the annual average concentrations throughout the contiguous United States are, at the time of analysis, less than the annual primary NAAQS of 12 $\mu\text{g}/\text{m}^3$. The minimum and maximum concentrations in the domain are provided on each figure, along with their grid cell locations (x, y coordinates are provided relative to the modeling domain shown in Figure E-1). The maximum concentration of 51.7 $\mu\text{g}/\text{m}^3$ occurs in Mexico.

Figure E-19. Simulated Annual Average PM2.5 Concentration ($\mu\text{g}/\text{m}^3$) for 2050: No-Action Alternative



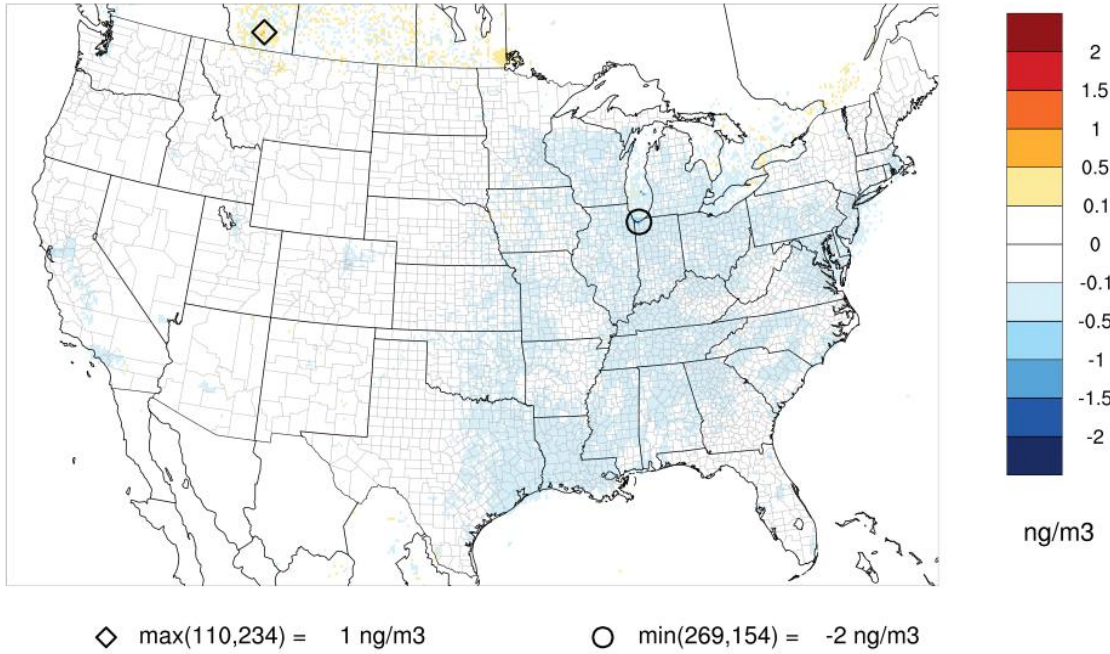
PM2.5

PM2.5 = particulate matter 2.5 microns or less in diameter; $\mu\text{g}/\text{m}^3$ = micrograms per cubic meter

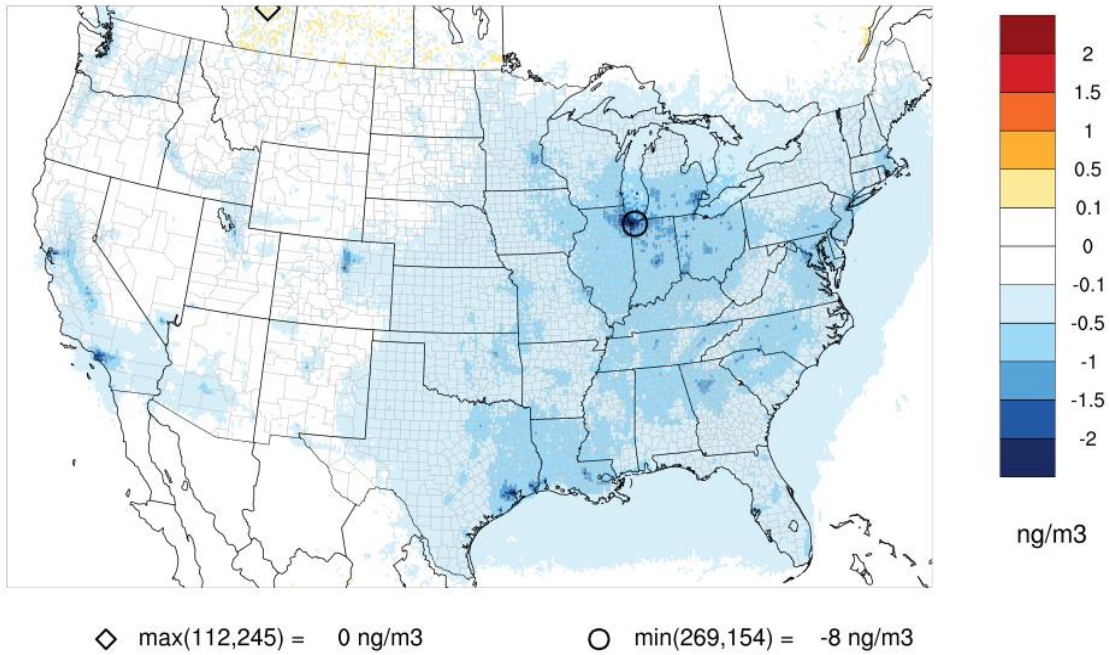
Figure E-20 displays the difference in annual average PM2.5 modeled concentration for each alternative compared to the No-Action Alternative (i.e., Alternative 1 minus the No-Action Alternative, Alternative 2 minus the No-Action Alternative, and Alternative 3 minus the No-Action Alternative). To enable the reader to see the very small spatial differences between the alternatives and the No-Action Alternative, concentrations are reported in units of nanograms per cubic meter (ng/m^3) which is 1/1,000 of the units for the ambient air standard. Alternative 1 shows a slight decrease in annual average PM2.5 concentrations in the eastern part of the United States with a maximum decrease of 2 ng/m^3 near Chicago. Alternatives 2 and 3 show substantial decreases in PM2.5 concentrations near all major urban areas, central California, and the eastern United States. The maximum difference in concentrations for Alternatives 2 and 3 occur near the Chicago region with reductions of 8 and 18 ng/m^3 , respectively.

Figure E-20. Difference in Simulated Annual Average PM_{2.5} Concentration (ng/m³) for 2050: Between the Action Alternatives minus the No-Action Alternative

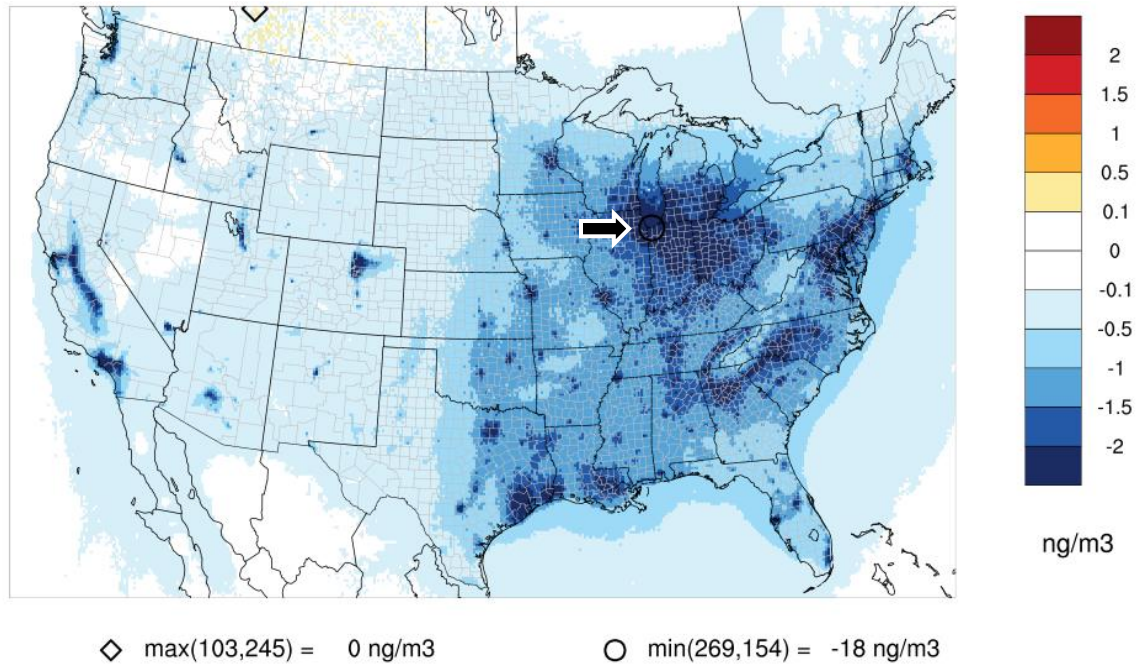
(a) Alternative 1



(b) Alternative 2



(c) Alternative 3



PM2.5 = particulate matter 2.5 microns or less in diameter; ng/m³ = nanograms per cubic meter

Total PM2.5 consists of primary PM2.5 released directly into the atmosphere and secondary PM2.5 formed in the atmosphere through a series of complex reactions involving precursor species. In many areas of the United States, secondary PM2.5 is a much larger component of total PM2.5 than primary PM2.5. The key precursor pollutants for secondary PM2.5 are SO₂, NO_x, and VOCs. Modeled emissions for these species (Figure E-7 to Figure E-9) under all action alternatives are reduced compared to the No-Action Alternative. As indicated in Section E.2, *Emissions Inventory Preparation*, total emissions of primary PM2.5 (Figure E-10) from all sectors are also reduced for all the action alternatives compared to the No-Action Alternative and this indicates that the changes in annual average PM2.5 concentrations presented in this section are due to impacts of both primary and secondary PM2.5 emissions reductions.

Impacts on total PM2.5 concentrations are governed by the magnitude and spatial distribution of primary PM2.5 emissions and the emissions of secondary PM2.5 precursors. The upstream sources and on-road mobile emissions reductions in secondary PM2.5 precursors at major urban areas resulted in a decrease in PM2.5 concentrations for all alternatives.

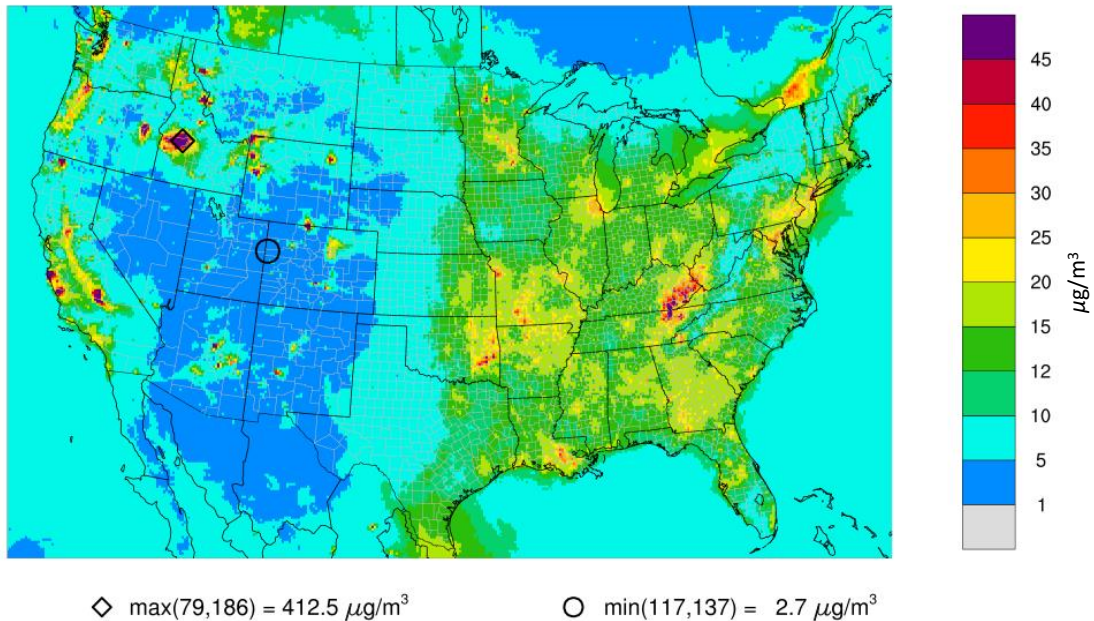
The differences in PM2.5 concentration between each action alternative and the No-Action Alternative are smallest under Alternative 1 and largest under Alternative 3. In general, magnitude and spatial extent of the differences in PM2.5 concentration between each action alternative and the No-Action Alternative tend to decrease from Alternative 3 to Alternative 1. The largest decrease in PM2.5 concentration for any grid cell in any of the action alternatives compared with the No-Action Alternative is 18 ng/m³ (0.018 µg/m³) under Alternative 3.

Overall, consistent reductions in PM2.5 concentrations occur in some areas with high concentrations in the No-Action Alternative (e.g., California, Texas, Chicago, and eastern states). The response of the model is influenced by the amount and spatial distribution of the emissions changes and the relative changes in emissions for the different pollutant species.

E.3.3.4 PM2.5 Maximum Impacts

Figure E-21 displays the future-year simulated 98th percentile (i.e., eighth highest) 24-hour average PM2.5 concentrations ($\mu\text{g}/\text{m}^3$) under the No-Action Alternative. While annual average PM2.5 concentrations indicate levels of PM2.5 relevant to assess chronic exposure, 98th percentile PM2.5 concentrations, calculated according to the current 24-hour average NAAQS, are important to assess acute exposure to fine PM. The spatial pattern of 98th percentile 24-hour average PM2.5 concentrations is similar to the annual average PM2.5 in Figure E-19, with areas of higher PM2.5 in the eastern half of the United States and a few isolated areas in the western states. Only a few isolated locations show 98th percentile PM2.5 concentrations above the current 24-hour average NAAQS of $35 \mu\text{g}/\text{m}^3$. The minimum and maximum concentrations in the domain are provided in each figure, along with their grid cell locations (x, y coordinates are provided relative to the modeling domain shown in Figure E-1).

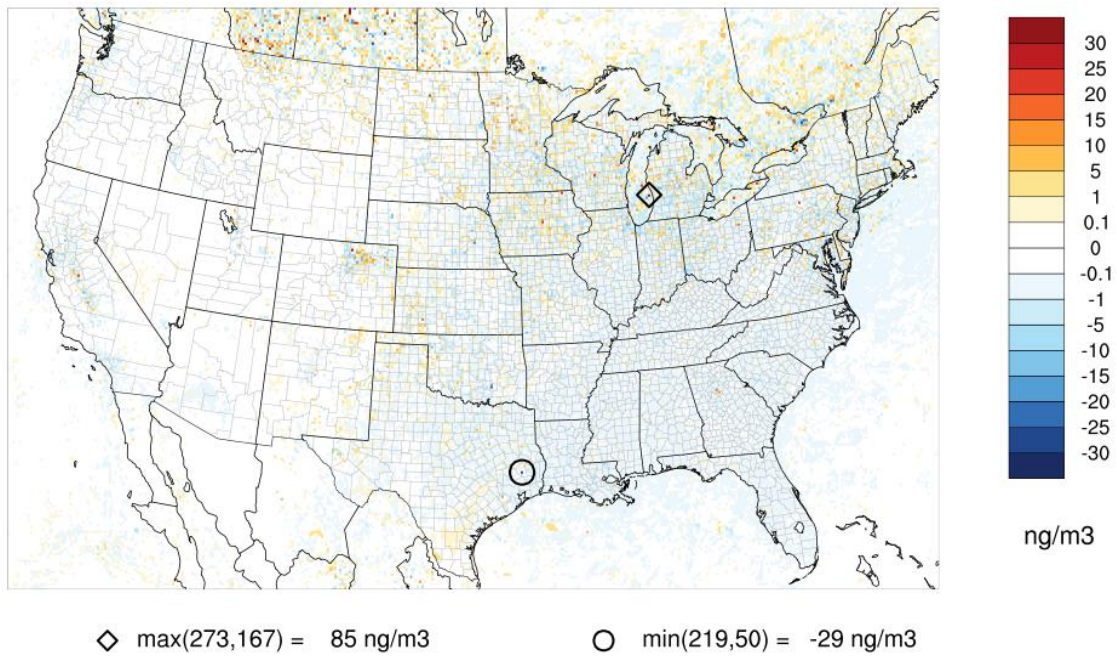
Figure E-21. Simulated 98th Percentile 24-hour average PM2.5 Concentration ($\mu\text{g}/\text{m}^3$) for 2050: No-Action Alternative



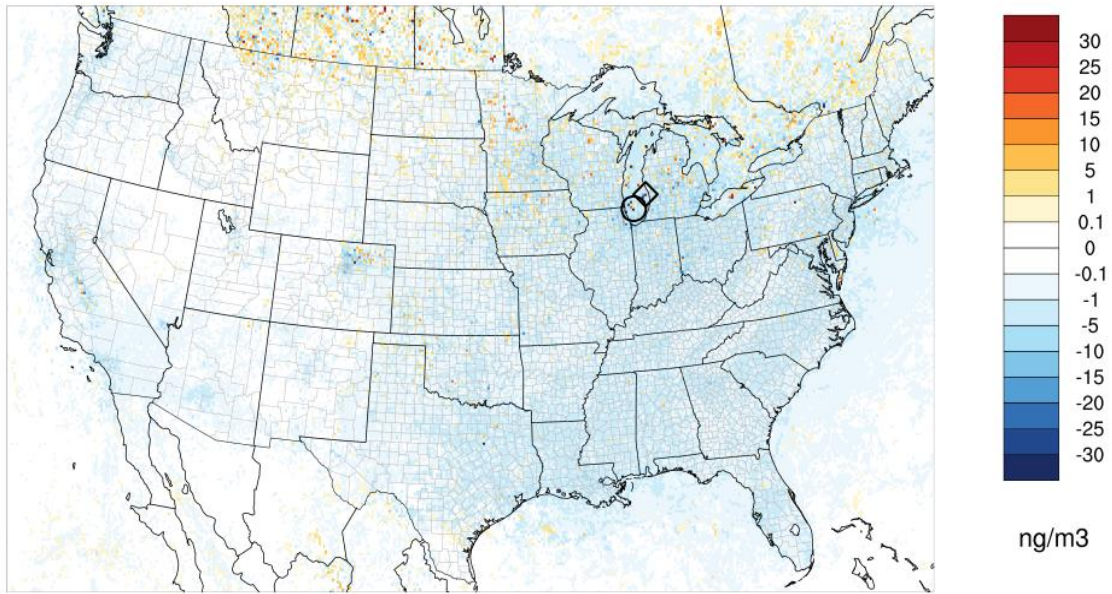
maximum increase is 85 ng/m³ (0.085 μg/m³). As observed previously for annual average PM_{2.5}, the magnitude and spatial extent of the maximum differences in 24-hour average PM_{2.5} concentrations between each action alternative and the No-Action Alternative tend to decrease from Alternative 3 to Alternative 1. The largest maximum decrease in PM_{2.5} concentrations occurs in the Chicago region under Alternative 3, while the largest maximum increase typically occurs in the same region under Alternative 1.

Figure E-22. Maximum Difference in Simulated 24-hour Average PM_{2.5} Concentration (ng/m³) for 2050: Between the Action Alternatives minus the No-Action Alternative

(a) Alternative 1

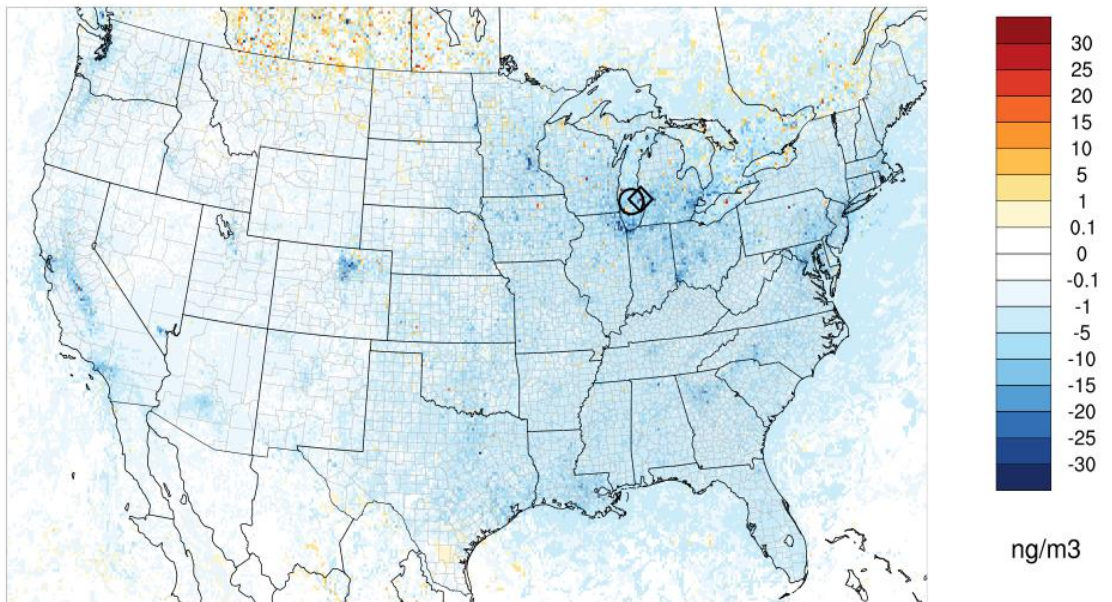


(b) Alternative 2



◇ max(273,167) = 83 ng/m³ ○ min(268,161) = -85 ng/m³

(c) Alternative 3



◇ max(273,167) = 80 ng/m³ ○ min(269,166) = -152 ng/m³

PM_{2.5} = particulate matter 2.5 microns or less in diameter; ng/m³ = nanograms per cubic meter

E.3.3.5 Attributes, Limitations, and Uncertainties

The CMAQ air quality modeling system provides a reliable platform for evaluating the expected responses to changes in precursor emissions at the national and regional scales. The detailed, quantitative modeling results provide an excellent basis for comparing the effects of the action alternatives and provide the requisite input for the health effects modeling.

CMAQ can account for differences in emissions and other factors that affect air quality and the resulting health impacts at any given location, such as meteorology, topography, land use, and atmospheric chemistry processes. Accordingly, CMAQ can simulate regional differences in the response of the model to the emissions changes. This simulation is important because different regions could experience either a net increase or a net decrease in emissions, depending on the relative magnitudes of the changes in emissions from increased fuel economy, increased vehicle use, and decreased fuel production and distribution. Regional differences in the response of the model to changes in emissions are also important in the calculation of health effects because the air quality changes are matched to gridded population estimates.

All air quality modeling exercises are affected by inherent uncertainties that derive from model formulation (including numerical approximations and the parameterization of physical and chemical processes) and inaccuracies in the input fields (including the meteorological inputs and emissions inventory estimates). The following paragraphs discuss a number of key limitations and uncertainties, both general and specific to this analysis.

- **Grid resolution.** CMAQ uses a 12-kilometer horizontal grid resolution. This grid resolution is commonly used for national modeling analyses and is coarser than some fine-scale modeling grids that are used for regional evaluations of ozone and PM_{2.5}. The 12-kilometer grid resolution might not be sufficiently detailed to resolve certain processes (e.g., emissions, meteorology, atmospheric chemistry) in portions of the modeling domain, and this could introduce biases or uncertainties into the simulated concentration fields. Use of the 12-kilometer grid resolution limits the response of the model to small changes in precursor emissions and spatial variability at a smaller scale cannot be characterized. This intermediate grid size is more refined than past analyses; however, uncertainty in health effect predictions remains.
- **Reaction pathways.** Pollutants such as ozone and PM_{2.5} are secondary pollutants formed through atmospheric chemical processes. There are many different reaction pathways and there are uncertainties associated with each pathway as represented in the CMAQ model.
- **Emissions rates.** The emissions estimates for on-road motor vehicles and the affected upstream emissions sources used in this analysis are total emissions for the contiguous United States. These were spatially allocated to each state and county using vehicle miles traveled and population density). These emissions assume that emissions rates for vehicles are the same across the contiguous United States. As a result, the modeling does not account for factors that affect emissions rates regionally, such as ambient temperature, localized differences in vehicle fleet age, and differences in fuels (especially regarding ethanol fraction).
- **Model biases.** Many of the national-scale databases used for this application, including the meteorological and other input databases (for 2016) and the projected baseline criteria pollutant emissions data (for 2050), were originally prepared by EPA for use in modeling exercises to support national rulemaking. However, as with any modeling database, it is expected that there are errors and uncertainties in the inputs that contribute to potential biases in the CMAQ results. This is especially true for the future-year modeling. For example, the meteorological conditions for 2016 might be representative of current conditions but would not reflect any effects of potential climate change in 2050. Similarly, the future-year emissions are based on future estimates of population and economic and industrial activity and growth, and contain uncertainties due to potential unknown social, political, and/or economic factors that could affect growth and activity and resulting future emissions. There are also 2016 baseline uncertainties that affect the emissions projections and associated spatial distributions. These include energy use, driving patterns,

industrial and fossil fuel power generation, and the extent of the hybrid and electric vehicle fleet. However, the 2016v3 emissions modeling platform developed by EPA was the most complete and best available national inventory at the time of photochemical modeling that included future year emissions for 2055.

E.4 Health Effects and Benefits Modeling

E.4.1 Overview of the BenMAP-CE Modeling System

BenMAP-CE¹¹ is a peer-reviewed EPA-developed computer program that uses interpolation functions, population projections, health impact functions, and valuation functions to translate simulated changes in air pollution concentration into changes in health-related incidences and can also be used to monetize health-related benefits. BenMAP-CE is primarily intended as a tool for estimating the human health effects associated with changes in ambient air pollution. EPA originally developed this tool to analyze national-scale air quality regulations. The health benefits derived using BenMAP-CE are intended to inform policymakers by enabling the comparison of the benefits of various regulatory measures.

BenMAP-CE relies on the input of air quality information that can be used to calculate the change in ambient air pollution associated with a change in emissions. Typically, the results from two air quality modeling simulations (with different emissions inputs) are used. In some cases, measured ambient air quality data can also be used.

BenMAP-CE calculates health effects based on expected relationships between the change in concentration and certain health effects (also known as health endpoints) using concentration-response functions from epidemiology studies. The response functions are used together with population concentration data to estimate health effects. For a model-based application, health effects are calculated grid cell by grid cell and then summed to obtain regional- and national-scale estimates. In its most basic form, the health effect for a given health endpoint is a function of the change in air concentration, concentration-response estimates, and population. Primary health endpoints include premature mortality, heart attacks, and chronic respiratory illnesses.

NHTSA used the most current version available at the time of analysis, BenMAP-CE. Configuration files specifying the health impact functions and population databases are available as part of the BenMAP-CE modeling system.

E.4.2 BenMAP-CE Application Procedures

NHTSA reformatted the CMAQ model output files for input to the BenMAP-CE tool and applied BenMAP-CE separately for ozone and PM_{2.5}. Both ozone and PM_{2.5} were run for a 1-year period. The area covered by the BenMAP-CE analysis is the contiguous United States. BenMAP-CE includes population data and projections at the census-tract level and algorithms for characterizing demographic changes (age distribution) over time. For this analysis, NHTSA used population estimates for 2050. This is consistent with the LD vehicle emissions data projections. Health impacts from changes in emissions of air toxics or other criteria pollutants (e.g., SO₂, NO₂, PM₁₀, CO) are not estimated by BenMAP-CE.

BenMAP-CE calculates the changes in health effects and monetized health-related benefits by comparing the results of two simulations. For this study, NHTSA used BenMAP-CE to calculate the

¹¹ www.epa.gov/benmap

change in health effects for each action alternative compared to the No-Action Alternative. This study resulted in three BenMAP-CE applications using the CMAQ results for each pair of action alternative and No-Action Alternative:

- Alternative 1 and the No-Action Alternative
- Alternative 2 and the No-Action Alternative
- Alternative 3 and the No-Action Alternative

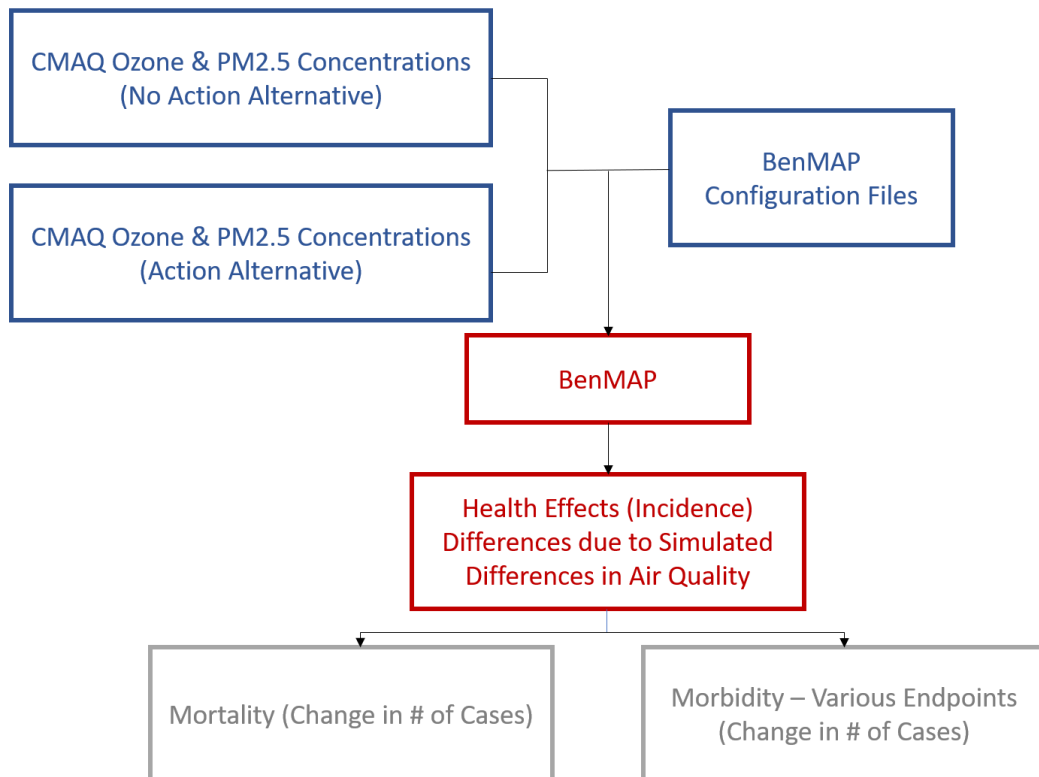
Figures E-16, E-18, E-20, and E-22 show difference plots of the CMAQ-derived ozone and PM2.5 concentrations for each of these pairs of simulations, and the corresponding BenMAP-CE results reflect those differences.

For each pollutant and simulation pair, the application of BenMAP-CE involved three steps:

1. Incorporate the CMAQ modeling results into the grid files required by BenMAP-CE (air quality grid creation). In this step, NHTSA used the CMAQ model results directly for the BenMAP configuration files.
2. Calculate the change in the health effects (incidences) differences in the CMAQ-derived ozone and PM2.5 concentrations between the two simulations.
3. Aggregate the incidence results to determine the total number of cases for mortality and for morbidity it is the sum of all cases for each health endpoint.

Figure E-23 presents a diagram of the BenMAP-CE application for the health effects analysis procedure using the CMAQ results.

Figure E-23. Diagram Illustrating Use of BenMAP-CE for Health Effects and Benefits Analysis



E.4.2.1 Health Impact Functions

NHTSA used BenMAP-CE to calculate reductions in both mortality and a range of nonfatal health effects (morbidity) based on epidemiological studies that spanned cities across the U.S. and Canadian populations.

BenMAP-CE can estimate changes in a wide range of health impact endpoints associated with changes in ozone and PM2.5 exposure. The endpoints are grouped broadly as mortality and morbidity. Mortality endpoints include changes in “all-cause” mortality, and mortality due to specific causes, such as cardiopulmonary disease. Morbidity endpoints include specific illnesses and symptoms (e.g., asthma exacerbations), events requiring medical care (i.e., emergency room visits and hospital admissions), and adverse effects that involve lost school days or restricted-activity days.

EPA has evaluated the literature related to the adverse effects of ozone and PM exposures and identified a set of endpoints for which the associations are considered by EPA (2023b) to be sensitivity analyses that characterize risk experienced by certain subpopulations and for which core exposure-response relationships have been developed. Tables E-11 and E-12 list the health endpoints used in this analysis for ozone and PM2.5, respectively. The endpoints include changes in mortality for both adults and infants, and a range of morbidity endpoints related to respiratory diseases and symptoms, hospital admissions, and lost school days or restricted-activity days. The tables provide the age range for each endpoint. The results options for this study include the mean value, incremental percentile values, and standard deviation.

Table E-11. Health Impact Functions Used to Estimate Ozone-Related Health Effects

Endpoint	Author/Study/Location (If Applicable)	Age Range	Notes
Mortality, all cause	Medina-Ramon and Schwartz (2008); Nationwide, 48 cities	0–99	b
Mortality, all cause	Zanobetti and Schwartz (2008); Nationwide, 48 cities	0–99	c
Emergency room visits, asthma	Mar and Koenig (2009); Seattle, WA	0–99	d
Emergency room visits, respiratory	Barry et al. (2018); Five US cities	0–99	a, h
Hospital admissions, all respiratory	Katsouyanni et. al. (2009); 14 U.S. cities	65–99	a,e,f
Respiratory, incident	Garcia et al. (2019); 12 Southern California communities	9–18	a
Asthma exacerbation, one or more symptoms	Lewis et al. (2013); Detroit, MI	5–12	a
School loss days, all	Gilliland et al. (2001); Southern CA	5–17	a,g

Notes:

- a. Metric is daily maximum 8-hour ozone.
- b. Metric is 8 hour daily mean ozone; warm season; May through September
- c. Metric is 8-hour daily mean ozone; 0–3 day lag; June through August, 1989 through 2000
- d. Child model; metric is daily maximum 8-hour ozone; 3-day lag; May through September
- e. Metric is daily maximum 8-hour ozone; Summer, 1985 through 1994 (penalized splines)
- f. Metric is daily maximum 8-hour ozone; Summer, 1985 through 1994 (natural splines)
- g. Metric is daily maximum 8-hour ozone; all year (8-hour max from 8-hour mean)
- h. Metric is daily maximum 8-hour ozone; all year, 3-day moving average

Table E-12. Health Impact Functions Used to Estimate PM2.5-Related Health Effects

Endpoint	Author/Study/Location (If Applicable)	Age Range	Notes
Mortality, all cause	Krewski et al. (2009); 116 U.S. cities	30–99	a
Mortality, all cause	Woodruff et al. (1997); 86 cities	0–0	a
Mortality, all cause	Pope et al. (2015); counties in all 50 states	30–99	a
Acute myocardial infarction, nonfatal	Zanobetti et al. (2009); 26 U.S. communities	18–99	b
Emergency room visits, respiratory	Zanobetti et al. (2009); 26 US Cities	65-99	b
Emergency room visits, cardiovascular	Ostro et al, (2016); 8 California Cities	0–99	b
Hospital admissions, neurological (Parkinson’s)	Kioumourtzoglou et al. (2016); 50 Northeastern US cities	65–99	a
Hospital admissions, neurological (Alzheimer’s)	Kioumourtzoglou et al. (2016); 50 Northeastern US cities	65–99	a
Respiratory incidence, lung cancer	Gharibvand et al. (2016); Nationwide	30–99	a
Hospital admissions, cardiovascular	Bell et al (2015); 213 US counties	65–99	b
Hospital admissions, respiratory allergies	Bell et al (2015); 213 US counties	0–99 65-99	b
Minor restricted-activity day symptoms	Ostro and Rothschild (1989); Nationwide	18–64	b
Work loss days	Ostro (1987); Nationwide	18–64	b

Notes:

a. 24-hour mean/quarterly mean

b. 24-hour mean

PM2.5 = particulate matter 2.5 microns or less in diameter

Pooled estimates for PM2.5 include acute myocardial infarction (i.e., heart attack). In the health incidence calculation step, no threshold value was specified, consistent with EPA guidance. The optional use of a threshold value can be used to examine the sensitivity of PM-related health impact estimates to different assumed thresholds. The results options for this study include the mean value, incremental percentile values, and standard deviation.

E.4.2.2 Post-Processing and Quality Assurance Procedures

NHTSA checked the results for each simulation pair for consistency with emissions and the CMAQ modeling results. NHTSA then prepared tabular and graphical summaries of the results, as presented in the following sections, and systematically checked the contents of the tables and charts by comparing the values with the raw BenMAP-CE report files.

E.4.3 BenMAP-CE Results

NHTSA used BenMAP-CE to estimate the reduction in the incidence of various health-related endpoints. The remainder of this section provides the BenMAP-derived mean values for health incidence results. All of the health incidence results are rounded to two significant figures.

E.4.3.1 Impacts

Tables E-3 and E-4 list the emissions associated with the action alternatives for the impact analysis. This section presents the health impacts for the emissions changes associated with the alternatives.

Ozone

Table E-13 lists BenMAP-CE results for the reduction in number of cases of ozone mortality for the three action alternatives for the impact analysis. The reductions in premature mortality incidence are for the contiguous United States. There are no results for the No-Action Alternative because this is the reference baseline to which the CMAQ results under the action alternatives were compared within the BenMAP-CE tool (see the list of simulation pairs in Section E.4.2, *BenMAP-CE Application Procedures*).

Table E-13. BenMAP-CE Aggregated Incidence Results for Reduction in Ozone-Related Mortality: Estimated Nationwide Reduction in Premature Mortality

Epidemiology Study	Alt. 1	Alt. 2	Alt. 3
Mortality, all cause (Medina-Ramon)	0.52	2.4	6.3
Mortality, all cause (Zanobetti and Schwartz)	0.15	0.68	1.8

BenMAP-CE = Environmental Benefits Mapping and Analysis Program—Community Edition

The results vary by epidemiology study and by alternative. Overall, these reductions are small. Nationwide, some locations experience increases in premature mortality, and some locations have reductions but with a slight net overall reduction nationwide. Alternative 3 is associated with the most reductions in mortality incidence for ozone, while Alternative 1 is associated with the fewest reductions.

Table E-14 lists the BenMAP-CE results for other reductions in the number of cases of ozone-related health effects and associated endpoints (morbidity) analysis. In some cases, the studies cover different age groups, as indicated. The reductions in incidence for all endpoints are for the contiguous United States, and overall show small changes. For all endpoints considered here, the greatest reductions are associated with Alternative 3, while the fewest reductions are associated with Alternative 1.

Table E-14. BenMAP-CE Aggregated Incidence Results for Reductions in Ozone-Related Morbidity: Estimated Nationwide Reduction in Various Morbidity Endpoints

Health Endpoint	Alt. 1	Alt. 2	Alt. 3
Emergency room visits, asthma	5.0	24	63
Emergency room visits, respiratory	5.8	27	72
Hospital admissions, all respiratory	0.32	1.5	4.0
Asthma incidence, respiratory	3.2	15	40
Asthma exacerbation, one or more symptoms	756	3,570	9,368
School loss days (age 5–17)	1,138	5,372	14,099

BenMAP-CE = Environmental Benefits Mapping and Analysis Program—Community Edition

PM2.5

Table E-15 lists the BenMAP-CE results for the reduction in number of cases of PM2.5 mortality under the action alternatives. The mortality reduction estimates are based on epidemiology literature findings that identify the increment in mortality associated with increments of PM2.5 exposures.

The results vary by study, due to the use of different study populations and exposure-response relationships, and by alternative. Overall, these reductions are small with a slight net overall reduction nationwide for all alternatives. Alternative 3 generally shows the greatest reductions in mortality while Alternative 1 generally shows the least reductions in mortality. The results for Alternative 2 lie between Alternative 1 and Alternative 3.

Table E-15. BenMAP-CE Aggregated/Pooled Incidence Results for Reductions in PM2.5-Related Mortality: Estimated Nationwide Reduction in Premature Mortality

Epidemiology Literature	Alt. 1	Alt. 2	Alt. 3
Mortality, all cause (Krewski et al.); 116 U.S. cities	3.4	17	45
Mortality, all cause (Woodruff et al.); 86 cities	0.01	0.03	0.1
Mortality, all cause (Pope et al.); counties in all 50 states	3.9	20	52

BenMAP-CE = Environmental Benefits Mapping and Analysis Program—Community Edition; PM2.5 = particulate matter 2.5 microns or less in diameter

Table E-16 lists BenMAP-CE results for other reductions in the number of cases of PM2.5-related health effects and associated endpoints (morbidity) under the action alternatives. The morbidity estimates are based on both epidemiology literature based on estimates of the increment in morbidity that would be associated with increments of PM2.5 exposures, based on their understanding of the epidemiological literature taken as a whole.

The results vary by study, due to the use of different study populations and exposure-response relationships, and by alternative. Overall, these reductions are small with a slight net overall reduction nationwide for all alternatives. Alternative 3 shows the greatest reductions in morbidity while Alternative 1 shows the least reductions in morbidity.

Table E-16. BenMAP-CE Aggregated/Pooled Incidence Results for Reductions in PM2.5-Related Morbidity: Estimated Nationwide Reduction in Various Morbidity Endpoints

Health Endpoints	Alt. 1	Alt. 2	Alt. 3
Acute myocardial infarction, nonfatal (18–99)	0.1	0.6	1.5
Emergency room visits, respiratory (65–99)	0.8	3.9	10
Emergency room visits, cardiovascular (0–99)	1.0	5.2	14
Hospital admissions, neurological (Parkinson’s) and (Alzheimer’s) (65–99)	1.0	5.2	13
Incidence, respiratory, incidence lung cancer (30–99)	0.2	1.2	3.2
Hospital admissions, cardiovascular (65–99)	0.5	2.5	6.6
Hospital admission, incidence respiratory (0–99)	0.3	1.6	4.1
Minor restricted activity days (18–64)	2,202	11,275	29,565
Work loss days (18–64)	373	1,909	5,008

BenMAP-CE = Environmental Benefits Mapping and Analysis Program—Community Edition; PM2.5 = particulate matter 2.5 microns or less in diameter

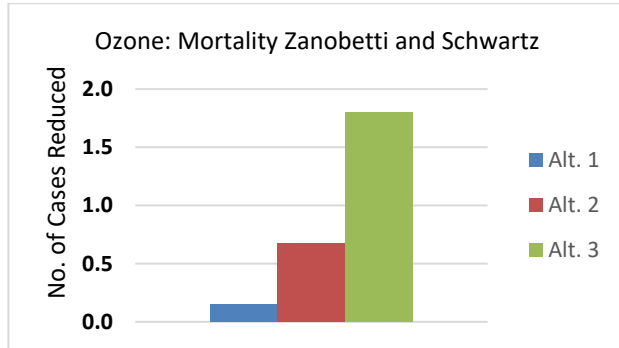
E.4.3.2 Summary of BenMAP-CE Results

The goal for this application was to compare the health effects across the range of alternatives. Figures E-24 and E-25 graphically display the nationwide reduction in the number of cases associated with selected health endpoints for ozone and PM2.5. For ozone (Figure E-24), the endpoints are

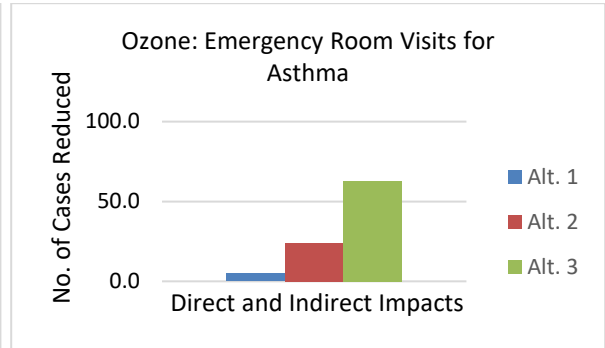
mortality (Zanobetti and Schwartz 2008), emergency room visits for asthma (Mar and Koenig (2009), hospital admissions for respiratory symptoms (Katsouyani et al. 2009), and school loss days. For PM2.5 (Figure E-25), the endpoints are mortality (Krewski et al. 2009), emergency room visits for respiratory symptoms (Zanobetti et al. 2009), hospital admissions for respiratory symptoms (Bell et al. 2015), and minor restricted-activity days (Ostro and Rothschild 1989). The scales are different for each plot.

Figure E-24. BenMAP-Derived Changes in Selected Health Effects: Ozone (Reduction in the Number of Cases)

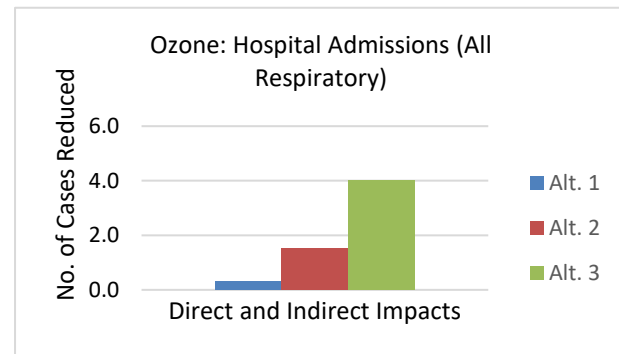
(a) Mortality



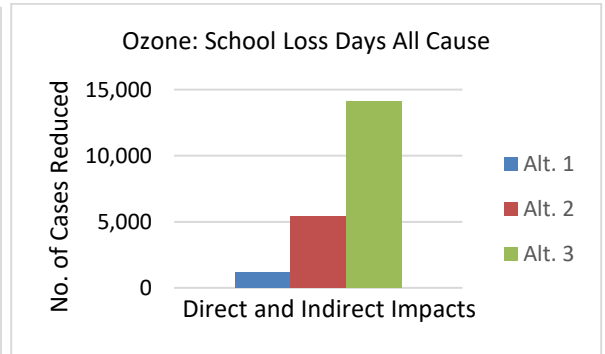
(b) Emergency Room Visits for Asthma



(c) Hospital Admissions for Respiratory Symptoms



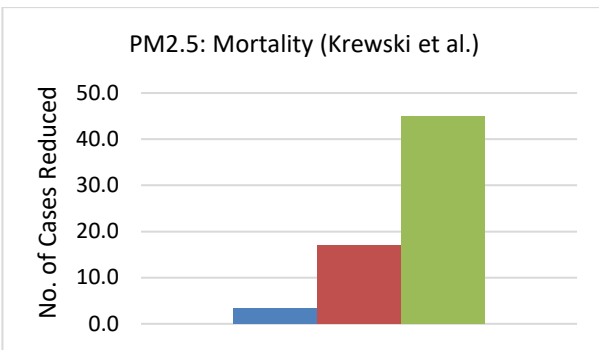
(d) School Loss Days



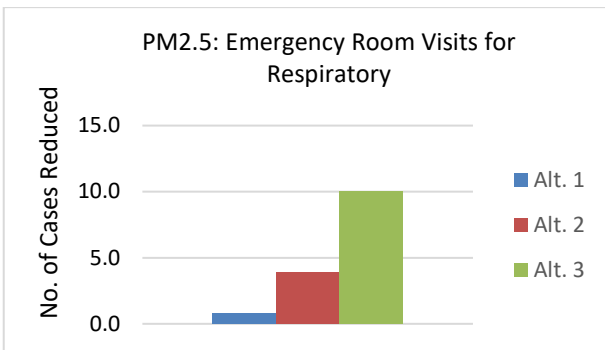
BenMAP = Environmental Benefits Mapping and Analysis Program

Figure E-25. BenMAP-Derived Changes in Selected Health Effects: PM2.5 (Reduction in the Number of Cases)

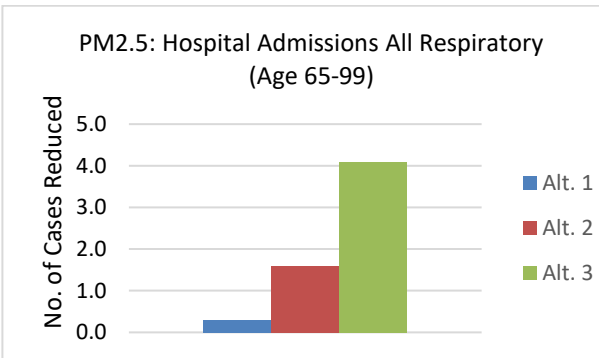
(a) Mortality



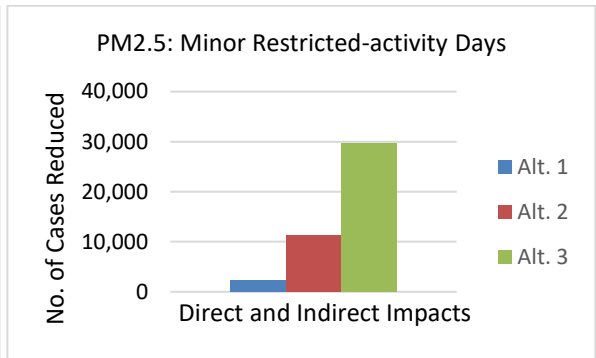
(b) Emergency Room Visits for Respiratory



(c) Hospital Admissions for Respiratory



(d) Minor Restricted-Activity Days



BenMAP = Environmental Benefits Mapping and Analysis Program; PM2.5 = particulate matter 2.5 microns or less in diameter

In summary:

- The relative changes in health effects cases are consistent with the changes in emissions for the action alternatives. Because they are driven by the CMAQ modeling results, the BenMAP-CE results are also affected by the emissions changes, their spatial distributions in relation to population, and the complex (and often nonlinear) chemical reactions in the atmosphere throughout each of the different regions during the course of the annual simulation period.
- **For ozone:** Alternative 3 showed the most reductions in the number of health effects cases for mortality and morbidity, while Alternative 1 generally showed the fewest reductions in the number of health effects cases.
- **PM2.5:** Alternative 3 is associated with the most reductions in the number of health effects cases. Alternative 1 is associated with the fewest reductions of health effects cases. The reduction in the number of health effects cases under Alternative 2 is between Alternatives 1 and 3.

E.4.3.3 Attributes, Limitations, and Uncertainties

The BenMAP-CE tool incorporates a wide variety of studies that can be used to quantify health effects resulting from reductions in air pollutant concentrations. The epidemiological studies address a variety of different health endpoints and, in some cases, multiple studies (involving different populations or concentration-response functions) allow some comparison. BenMAP-CE incorporates advanced

statistical methods for aggregating and weighting the results to obtain both mean values and information about the likelihood (probability) that the value will be within a given range. A primary advantage of BenMAP-CE is that it can incorporate the change in air quality directly from air quality model output files. Therefore, BenMAP-CE accounts for spatial and temporal differences in the changes in air quality and relates these to population. For this analysis, the selection of the health effects studies and valuation methods were based on the BenMAP-CE (configuration and aggregation, pooling and valuation) input files (which reference the studies and methods EPA considers the most relevant and applicable to the U.S. population as a whole).

Nevertheless, there are uncertainties associated with the estimation of changes in health effects associated with changes in ozone and PM_{2.5} air quality. For the health incidence calculations, BenMAP-CE includes an option to generate an average incidence estimate and range of results that assume variability in the inputs to the health impact functions. Variability is incorporated into most of the BenMAP-CE exposure-response algorithms by prescribing a dose-response parameter that assumes a Gaussian (bell-shaped) distribution about the mean value. In calculating the health effects, BenMAP-CE samples this distribution to develop a probability distribution of effect. The result is expressed as the mean value of the distribution.

Regarding the uncertainty with mortality risks, higher confidence is found for the magnitude of the risks for simulated PM_{2.5} concentrations that coincide with the bulk of the observed PM_{2.5} concentrations in epidemiological studies that are used to estimate the benefits. Less confidence is found in the risk for simulated PM_{2.5} concentrations that fall below the bulk of the observed PM_{2.5} concentration data used in these studies. There are uncertainties inherent in identifying any point at which the confidence in reported associations decreases appreciably, and the scientific evidence provides no clear dividing line.

One approach that has been used to illustrate the relative confidence is the concentration benchmark approach, also referred to as the lowest measured level [LML] analysis. This has been used in several EPA regulatory impact analyses (EPA 2018, 2019b) and EPA's Policy Assessment for Particulate Matter (EPA 2011) by reporting the estimated PM_{2.5}-related premature deaths according to alternative concentration cutpoints.

LML analysis allows a reader to determine the portion of population exposed to annual mean PM_{2.5} levels at or above different concentrations, which provides insight into the level of uncertainty in the estimated PM_{2.5} mortality benefits. These concentration benchmarks should not be viewed as concentration thresholds below which NHTSA and EPA would not quantify health benefits of air quality improvements.¹² Rather, the benefit estimates are appropriate estimates because they reflect the full range of air quality concentrations associated with the emissions changes being evaluated. The Integrated Science Assessment for Particulate Matter (EPA 2019c) and the 2022 Supplement (EPA 2022b) concluded that the scientific evidence is sufficient to determine that there is a causal relationship between long-term PM_{2.5} exposures and mortality, and that overall, the studies support the use of a no-threshold log-linear model to estimate mortality attributed to long-term PM_{2.5} exposure.

Modeling results from each scenario are stratified by estimated reduction in PM_{2.5} premature deaths according to the concentration at which they occurred: below the LML, between the LML and the

¹² For a summary of the scientific review statements regarding the lack of a threshold in the PM_{2.5}-mortality relationship, see the technical support document *Summary of Expert Opinions on the Existence of a Threshold in the Concentration-Response Function for PM_{2.5}-related Mortality* (EPA 2010).

NAAQS, and above the NAAQS for each of the three alternatives (Table E-17). The LML for Krewski et al. (2009) is 5.8 µg/m³. Table E-17 shows that a small reduction in the percentage of PM2.5-related premature deaths occurs above the NAAQS. These results are sensitive to the annual mean PM2.5 concentration predicted by the air quality model in each 12-by-12-kilometer grid cell. The results should be viewed in the context of the air quality modeling technique used to estimate PM2.5 concentrations. In general, higher confidence is placed in the ability of CMAQ to estimate changes in annual mean PM2.5 concentrations than in the ability to estimate absolute PM2.5 concentrations.

Table E-17. Estimated Percent of Changes in Reduction of PM2.5-Related Premature Deaths above and below PM2.5 Concentration Cutpoints

Alternative	Epidemiological Study	Reduction in PM2.5-Related Premature Deaths Compared to No-Action Alternative, Reported by Cutpoint			
		Total Reduced Mortality	Above NAAQS	Below NAAQS and Above LML ^a	Below LML ^a
Alt. 1	Krewski et al. 2009	3.4	0.11	2.2	1.1
			3%	64%	33%
Alt. 2	Krewski et al. 2009	17	0.57	11	5.5
			3%	64%	32%
Alt. 3	Krewski et al. 2009	45	1.5	29	14
			3%	65%	32%

Notes:

^a The LML of the Krewski study is 5.8 µg/m³.

Values less than 0.05 have been rounded to zero.

Sum of individual values may not equal total due to rounding.

LML = lowest measured level; NAAQS = National Ambient Air Quality Standards; PM2.5 = particulate matter 2.5 microns or less in diameter

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E.6 Preparers

Courtney Taylor	
	<p>M.S., Atmospheric Science, Colorado State University, Fort Collins B.A., Environment, Economics, and Politics, <i>Cum Laude</i>, Claremont McKenna College 19 years' air quality experience in atmospheric modeling, emission inventories and ambient air monitoring</p>
Marco Rodriguez	
	<p>Ph.D., Mechanical and Aerospace Engineering, University of California, Irvine M.S., Mechanical and Aerospace Engineering, University of California, Irvine B.A., Physics, Universidad Autónoma Metropolitana Iztapalapa, México 20 years' experience in air quality analysis including evaluating modeling data sets</p>
Pradeepa Vennam	
	<p>Ph.D., Environmental Sciences and Engineering (Air Quality), University of North Carolina, Chapel Hill M.S., Chemical Engineering (Major); Environmental Engineering (Minor), New Mexico State University B.S., Chemical Engineering, Jawaharlal Nehru Technological University, Hyderabad, Andhra Pradesh, India 10 years' experience in air quality modeling analysis, emission calculations and regulatory compliance analysis</p>
Tejas Shah	
	<p>M.S., Chemical Engineering, Lamar University B.S., Chemical Engineering, Mumbai University, India 17 years' experience in air quality modeling, emission inventories and air pollution control measure evaluation</p>
Chao-Jung Chien	
	<p>Ph.D., Atmospheric Chemistry and Organic Analytical Chemistry, University of North Carolina, Chapel Hill B.A., Chemistry, National Cheng Kung University, Taiwan 20 years' experience in processing/evaluating/validating input and output data for air quality models</p>
Edward L. Carr	
	<p>M.S., Atmospheric Science, University of Washington B.S., Meteorology, San Jose State University, San Jose, California 35 years' experience in meteorological and air quality modeling analysis and air quality monitoring</p>
Darrin Trageser	
	<p>M.S., Atmospheric Sciences, University of California, Davis B.S., Atmospheric Sciences, University of Washington, Seattle 7 years' experience in air quality modeling analysis, emission calculations and health risk assessment</p>

APPENDIX F

Greenhouse Gas Emissions and Climate Change

APPENDIX F GREENHOUSE GAS EMISSIONS AND CLIMATE CHANGE

F.1 Introduction

Section F.1, *Introduction*, discusses NHTSA’s reliance on major international or national scientific assessment reports such as those from the Intergovernmental Panel on Climate Change (IPCC) and the U.S. Global Change Research Program (GCRP) for the assessment of climate change impacts. Even where assessment reports include consensus conclusions of expert authors, uncertainty still exists, as with all assessments of environmental impacts. Section F.1.1, *Uncertainty in the IPCC Framework*, discusses how uncertainty is communicated in the IPCC reports. Section F.1.2, *Climate Change and its Causes*, presents a brief summary of climate change and drivers.

F.1.1 Uncertainty in the IPCC Framework

The IPCC reports communicate uncertainty and confidence bounds using commonly understood but carefully defined words in italics, such as *likely* and *very likely*, to represent likelihood of occurrence (Table F.1.1-1). The *IPCC Working Group I Sixth Assessment Report Summary for Policymakers* (IPCC WGI AR6) (IPCC 2021a) briefly explains this convention. The *IPCC Guidance Notes for Lead Authors of the IPCC AR5 on Addressing Uncertainties* (IPCC 2010) provides a more detailed discussion of the IPCC treatment of uncertainty. This EIS uses the IPCC uncertainty language (noted in italics) when discussing qualitative environmental impacts on specific resources. The referenced IPCC documents provide a full understanding of the meaning of those uncertainty terms in the context of the IPCC findings. The IPCC WGI AR6 (IPCC 2021b) notes that the two primary uncertainties with climate modeling are model uncertainties and scenario uncertainties.

- **Model uncertainties.** These uncertainties occur when a climate model might not accurately represent complex phenomena in the climate system. For some processes, the scientific understanding could be limited regarding how to use a climate model to “simulate” processes in the climate system. Model uncertainties can be differentiated into parametric and structural uncertainties.
- **Scenario uncertainties.** These uncertainties arise because of uncertainty in projecting future greenhouse gas (GHG) emissions, concentrations, and forcings (e.g., from solar activity).

As stated in the IPCC WGI AR6, these types of uncertainties are described by using two metrics for communicating the degree of certainty: confidence in the validity of findings, expressed qualitatively, and quantified measures of uncertainties, expressed probabilistically. The confidence levels synthesize the judgments about the validity of the findings, determined through evaluation of the evidence and the degree of scientific agreement. The qualitative expression of confidence ranges from *very low* to *very high*, with higher confidence levels assigned to findings that are supported by high scientific agreement. The quantitative expression of confidence ranges from *exceptionally unlikely* to *virtually certain*, with higher confidence representing findings supported by robust evidence (Table F.1.1-1).

Table F.1.1-1. Standard Terms to Define the Likelihood of a Climate-Related Event

Likelihood Terminology	Likelihood of the Occurrence/Outcome
Virtually certain	99–100% probability
Very likely	90–100% probability
Likely	66–100% probability
About as likely as not	33–66% probability
Unlikely	0–33% probability
Very unlikely	0–10% probability
Exceptionally unlikely	0–1% probability

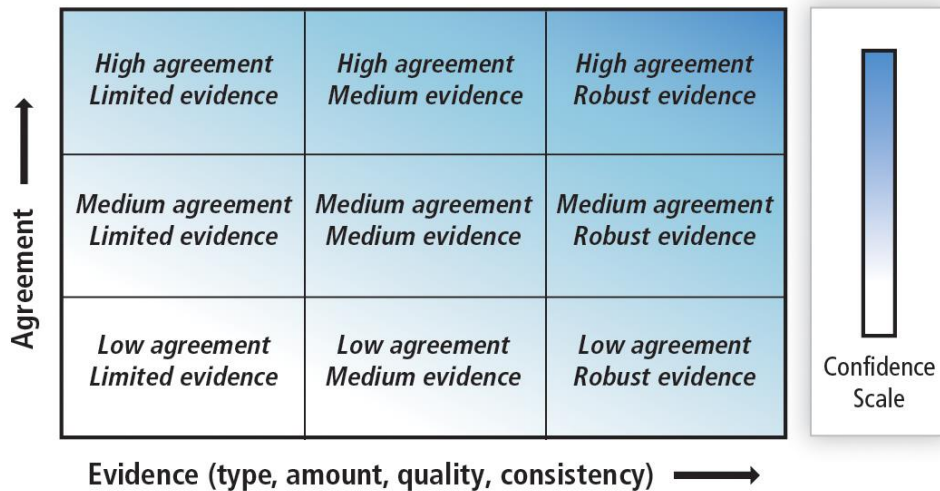
Notes:

Additional terms that were used in limited circumstances in the IPCC Fifth Assessment Report (AR5) (*extremely likely* = 95–100% probability, *more likely than not* ≥ 50–100% probability, and *extremely unlikely* = 0–5% probability) were also used in IPCC WGI AR6 when appropriate, and in the *Fifth National Climate Assessment* (GCRP 2023).

Source: IPCC 2021a

Figure F.1.1-1 demonstrates how the combination of evidence and agreement statements results in confidence level and shows that the degree of confidence increases as evidence becomes more robust and agreement is greater. Level of confidence is expressed with five qualifiers: *very low*, *low*, *medium*, *high*, or *very high*.¹

Figure F.1.1-1. Confidence Level as a Combination of Evidence and Agreement



Source: IPCC 2013a

¹ Figure F.1.1-1 shows the relationship between confidence level and summary statements for evidence and agreement. This relationship is flexible and different confidence levels can be assigned for a given evidence and agreement statement (IPCC 2010).

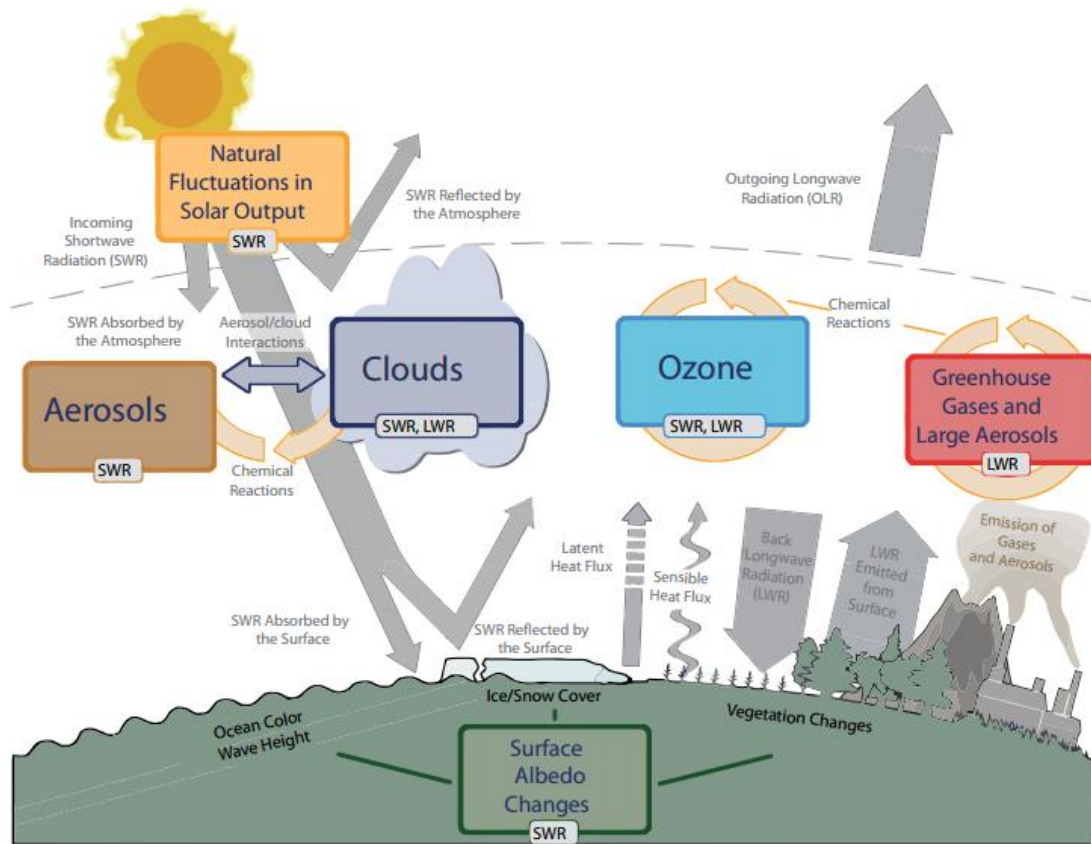
F.1.2 Climate Change and Its Causes

Although the climate system is complex, IPCC WGI AR6 identified the following drivers of climate change (Figure F.1.2-1). In 2021, IPCC WGI AR6 evaluated observed changes in these climate system drivers and the effective radiative forcing (ERF) they exert.

- **GHGs.** Primary GHGs in the atmosphere are water vapor, carbon dioxide (CO₂), nitrous oxide (N₂O), methane (CH₄), and ozone (IPCC 2021a). Though most GHGs occur naturally, human activities—particularly fossil fuel burning—have significantly increased atmospheric concentrations of these gases (see IPCC 2021a for more information on human impacts on the climate and effects of different GHGs).
- **Aerosols.** Aerosols are natural (e.g., from volcanoes) and human-made particles in the atmosphere that scatter incoming sunlight back to space, causing cooling. Some aerosols are hygroscopic (i.e., attract water) and can affect the formation and lifetime of clouds. Large aerosols (more than 2.5 micrometers in size) modify the amount of outgoing long-wave radiation (IPCC 2021a). Other particles, such as black carbon, can absorb outgoing terrestrial radiation, causing warming (IPCC 2021a). In the past 30 years, the relative importance of aerosol forcing compared to other climate drivers has decreased as the net forcing effect of aerosols has continued to decrease in the 21st century (IPCC 2021a).
- **Clouds.** Depending on cloud height, cloud interactions with terrestrial and solar radiation can vary. Any perturbations in cloud fields, such as through aerosol-cloud interactions or through cloud feedbacks, can have strong influences on the energy distribution of the climate system (IPCC 2021a). The rapid adjustments implied by clouds are included in the determination of ERF (IPCC 2021a).
- **Ozone.** Ozone is created through photochemical reactions from natural and human-made gases. In the troposphere, ozone absorbs and re-emits long-wave radiation, acting as a GHG. In the stratosphere, the ozone layer absorbs incoming short-wave radiation (IPCC 2021a). Ozone has the largest positive ERF of all gaseous short-lived climate forcers (IPCC 2021a).
- **Solar radiation.** Solar radiation, the amount of solar energy that reaches the top of Earth's atmosphere, varies over time (IPCC 2021a). Solar radiation has had a negligible impact on climate change since the start of the industrial era compared to other main drivers (IPCC 2021a).
- **Surface changes.** Changes in vegetation or land surface properties, ice or snow cover, and ocean color can affect surface albedo.² The changes are driven by natural seasonal and daily changes (e.g., snow cover) as well as human influences (e.g., changes in vegetation type) (IPCC 2021a). Changes to land use and land cover have introduced a negative ERF by increasing surface albedo since 1750 (IPCC 2021a).

² Surfaces on Earth (including land, oceans, and clouds) reflect solar radiation back to space. This reflective characteristic, known as *albedo*, indicates the proportion of incoming solar radiation the surface reflects. High albedo has a cooling effect because the surface reflects rather than absorbs most solar radiation.

Figure F.1.2-1. Main Drivers of Climate Change



Source: IPCC 2013a

SWR = shortwave radiation; LWR = longwave radiation; OLR = outgoing longwave radiation

F.2 Greenhouse Gas Emissions and Aerosols—Historical and Current Trends

F.2.1 Global Greenhouse Gas Emissions

GHGs are gaseous constituents in the atmosphere, both natural and anthropogenic, that absorb and re-emit terrestrial infrared radiation. Primary GHGs in the atmosphere are water vapor, CO₂, N₂O, CH₄, and ozone. These GHGs occur naturally and because of human activity.³ Other GHGs, such as the fluorinated gases,⁴ are almost entirely anthropogenic in origin and are used in commercial applications such as refrigeration and air conditioning and industrial processes such as aluminum production.

By far the GHG with the largest contribution to warming is CO₂. Global atmospheric CO₂ concentrations have increased 50 percent, from approximately 278 parts per million (ppm) in 1750 (IPCC 2021a) to

³ Although humans have always contributed some level of GHG emissions to the atmosphere through activities like farming and land clearing, substantial anthropogenic contributions did not begin until the mid-1700s with the onset of the Industrial Revolution. People began burning coal, oil, and natural gas to light their homes, power trains and cars, and run factories and industrial operations.

⁴ Fluorinated gases include perfluorocarbons, hydrofluorocarbons (HFCs), sulfur hexafluoride, and nitrogen trifluoride.

approximately 417 ppm in 2022 (National Oceanic and Atmospheric Administration [NOAA] 2024a). Isotopic- and inventory-based studies make clear that this rise in the CO₂ concentration is largely a result of the release of carbon that had been stored underground and then used to combust fossil fuels (coal, petroleum, and natural gas) to produce electricity, heat buildings, and power motor vehicles and airplanes, among other uses (IPCC 2021a). In 2020 CO₂ emissions accounted for 73 percent of global GHG emissions on a global warming potential (GWP)–weighted basis,⁵ followed by CH₄ (18 percent), N₂O (7 percent), and fluorinated gases (3 percent) (World Resources Institute [WRI] 2023).⁶ Atmospheric concentrations of N₂O and CH₄ increased approximately 19 and 158 percent, respectively, over roughly the same period (IPCC 2021a).

GHGs are emitted from a wide variety of sectors, including energy, industrial processes, waste, agriculture, and forestry. The energy sector is the largest contributor of global GHG emissions, accounting for 77 percent of global emissions in 2020; other major contributors of GHG emissions are agriculture (13 percent), industrial processes (7 percent), and waste (4 percent) (WRI 2023).⁷ Transportation CO₂ emissions from the combustion of petroleum-based fuels have increased by 55 percent from 1990 to 2020 and account for roughly 13 percent of total global GHG emissions (WRI 2023).⁸ The energy sector is largely composed of emissions from fuels consumed in the electric power, transportation, industrial, commercial, and residential sectors. The 13 percent value for transportation is therefore included in the 77 percent value for energy.

In general, global GHG emissions continue to increase, although annual increases vary according to factors such as weather, energy prices, and economics. Observed emissions between 2000 and 2010 approximately track the upper half of Representative Concentration Pathway (RCP)⁹ projections while more recently, the global fossil and industrial CO₂ emissions follow the middle of the projected Shared Socioeconomic Pathway (SSP)¹⁰ scenario ranges, though regional differences exist (IPCC 2021a).

⁵ Each GHG has a different radiative efficiency (i.e., the ability to absorb infrared radiation) and atmospheric lifetime. To compare their relative contributions, GHG emissions quantities are converted to carbon dioxide equivalent using the 100-year time horizon Global Warming Potential (GWPs) as reported in the IPCC *Assessment Reports*.

⁶ These global GHG estimates *do not* include contributions from land-use change and forestry or international bunker fuels. Additionally, these estimates do not add to 100 percent due to independent rounding.

⁷ These numbers do not add to 100 percent due to independent rounding.

⁸ The energy sector is largely composed of emissions from fuels consumed in the electric power, transportation, industrial, commercial, and residential sectors. The 13 percent value for transportation is therefore included in the 77 percent value for energy.

⁹ The Representative Concentration Pathways (RCPs) were developed for the IPCC AR5 report. They define specific pathways to emissions concentrations and ERF in 2100. The RCPs established four potential emissions concentration futures, a business-as-usual pathway representing continued GHG concentration increases (RCP8.5), two stabilization pathways (RCP6.0, RCP4.5), and an aggressive reduction pathway (RCP2.6).

¹⁰ The Shared Socioeconomic Pathways (SSPs) were developed for the IPCC AR6 report. Similar to RCPs, they utilize global socioeconomic projections to derive time-dependent global GHG concentrations and drive general circulation model simulations of climate change. The SSPs were designed to provide an expanded set of GHG concentration scenarios for the Coupled Model Intercomparison Project Phase 6 based on a range of socioeconomic scenarios, with SSP1 through 5 accounting for various global mitigation and adaptation measures. There is a set of five core SSPs used in IPCC reports: SSP1-1.9, SSP1-2.6, SSP2-4.5, SSP3-7.0, and SSP5-8.5.

F.2.2 U.S. Greenhouse Gas Emissions

In 2021, U.S. GHG emissions were estimated to be 6,340 million metric tons carbon dioxide equivalent (MMTCO₂e) (EPA 2023a).¹¹ The United States was the second largest emitter of GHG emissions in 2020 (the most recent year for which global emissions are available), contributing 12 percent of global emissions (excluding emissions and sinks from land-use change) (WRI 2023).¹² CO₂ is by far the primary GHG emitted in the United States, representing 79 percent of U.S. GHG emissions in 2021 (EPA 2023a) (on a GWP-weighted basis).

Most GHG emissions in the United States are from the energy sector, with the majority of those emissions being CO₂ emissions from the combustion of fossil fuels. In 2021, CO₂ emissions from fossil fuel combustion alone accounted for 73.2 percent of total U.S. GWP-weighted emissions (EPA 2023a), with the remaining emissions contributed by other energy-related activities (e.g., fugitive emissions from natural gas systems), industrial processes and product use, agriculture, forestry, waste, and other land use. CO₂ emissions due to combustion of fossil fuels are from fuels consumed in the following sectors: transportation (38 percent of fossil fuel combustion CO₂ emissions), electric power (33 percent), industrial (17 percent), residential (7 percent), commercial (5 percent), and U.S. territories (which include all of the aforementioned sectors) (1 percent) (EPA 2023a).

When U.S. CO₂ emissions are apportioned by end use, transportation is the single leading source of U.S. emissions from fossil fuels, causing over one-third of total CO₂ emissions from fossil fuels (EPA 2023a).¹³ CO₂ emissions from passenger cars and light trucks accounted for 58 percent of total U.S. CO₂ emissions from transportation in 2021 (EPA 2023a).

From 1990 to 2021, CO₂ emissions from passenger cars and light trucks increased by 12 percent (EPA 2023a). This increase in emissions is attributed to a 44.4 percent increase in vehicle miles traveled (VMT) by light-duty (LD) motor vehicles (passenger cars and light trucks), because of population growth and expansion, economic growth, and low fuel prices (EPA 2023a). Additionally, the rising popularity of sport utility vehicles and other light trucks with lower fuel economy than passenger cars has contributed to higher emissions (EPA 2023a; DOT 2017). However, fuel efficiency for new LD vehicles produced in 2022, including light trucks and sport utility vehicles, reached a record high of 26 miles per gallon (mpg), the largest single-year improvement in fuel economy in the last 9 years (EPA 2023n). The coronavirus disease of 2019 (COVID-19 pandemic) resulted in a 9 percent decrease in gross U.S. GHG emissions from 2019 to 2020, with contributions by sector remaining relatively consistent (EPA 2023a). Travel restrictions and behavior across the country resulted in decreased VMT by personal vehicles and lightweight trucks by 11 percent from 2019 to 2020 (EPA 2023a). However, due to the increased demand for e-commerce goods, truck travel in the United States was not nearly as affected by the pandemic as light-duty VMT, with truck VMT decreasing slightly from 2019 levels by 0.8 percent in 2020 and increasing by 9.1 percent in 2021 (DOT 2023a). Between 2019 and 2020, CO₂ emissions from passenger cars and light trucks decreased 14 percent; CO₂ emissions from transportation decreased 13 percent (EPA 2023a).

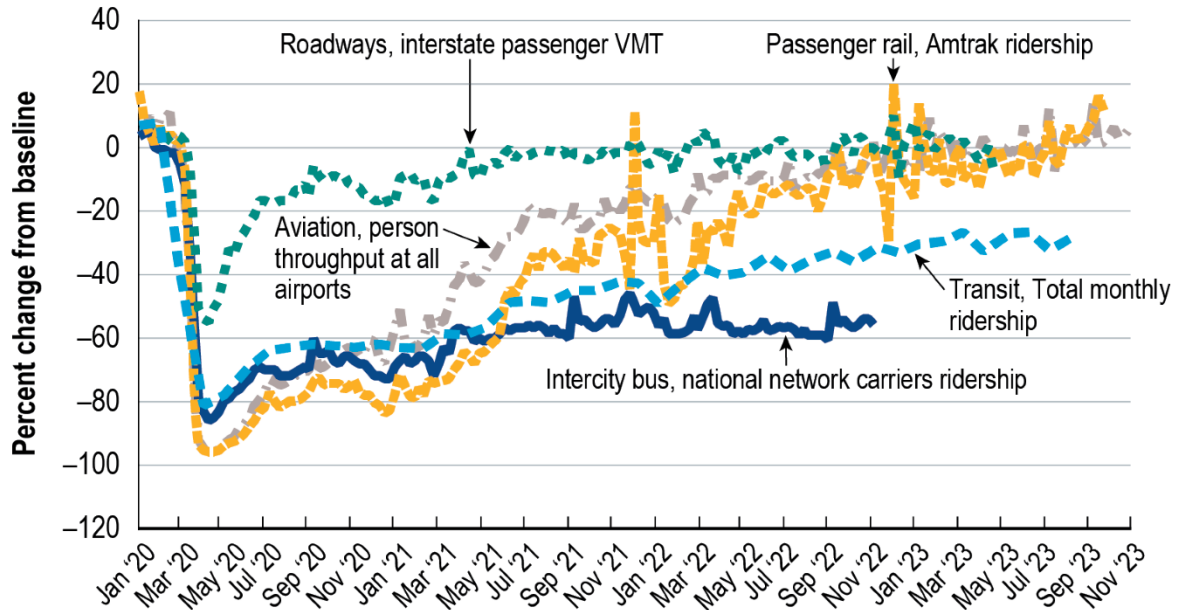
¹¹ The most recent year for which an official EPA estimate is available, excluding emissions and sinks from land-use change and forestry (EPA 2023a).

¹² Based on global and U.S. estimates for 2020, the most recent year for which a global estimate is available. Excluding emissions and sinks from land-use change and forestry.

¹³ Apportioning by end use allocates emissions associated with electricity generation to the sectors (residential, commercial, industrial, and transportation) where it is used.

More recent data shows that this decrease in emissions was temporary. In the transportation sector, indicators of emissions such as VMT have significantly increased since the end of 2020 as travel restrictions eased and economic activity increased (Liu et al. 2020). VMT increased by 11 percent from 2020 to 2021 (DOT 2021a), despite shifts in travel and behavior compared to before the pandemic (e.g., increases in Americans working from home or hybrid working). Furthermore, between 2020 and 2021, CO₂ emissions from passenger cars and light trucks increased 10 percent; CO₂ emissions from transportation increased 11 percent (EPA 2023a). In 2022, nationwide cumulative travel increased by 0.9 percent from 2021, amounting to an estimated 3,169 billion VMT (FHWA 2023a). Figure F.2.2-1 shows that travel on interstate roadways by personal vehicles has recovered to pre-pandemic levels.

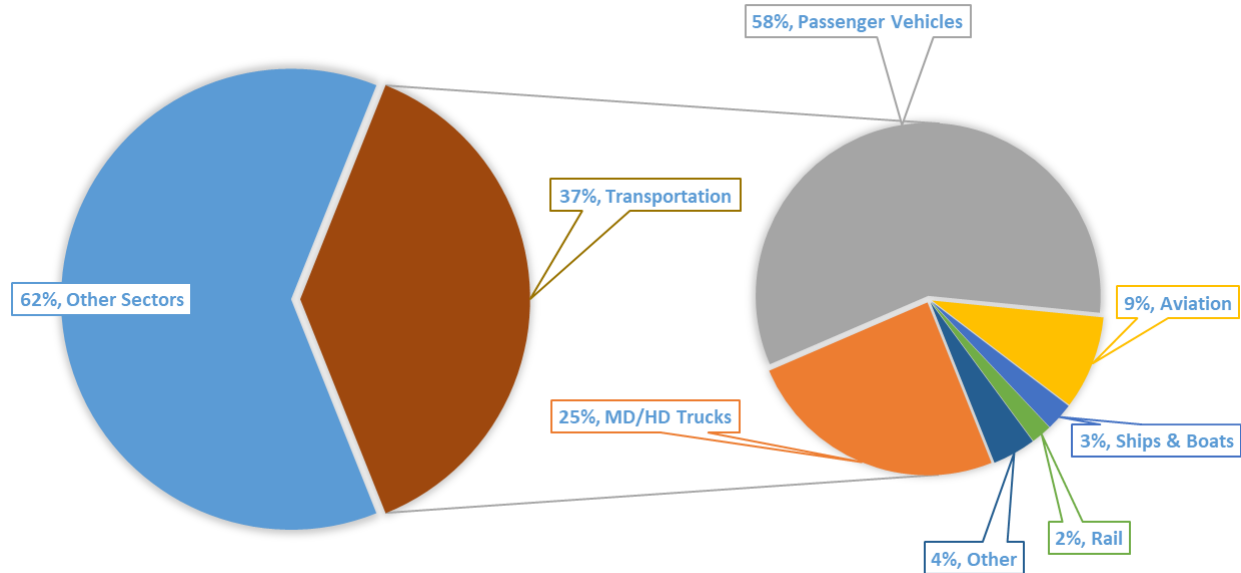
Figure F.2.2-1. Percentage Change in Passenger Travel from 2020 through 2023 by Mode



Source: DOT 2023b
VMT = vehicle miles traveled

Figure F.2.2-2 shows the proportion of U.S. CO₂ emissions in 2021 attributable to the transportation sector and the contribution of each mode of transportation to those emissions. The percentages shown in this chart are similar to those from 2020.

Figure F.2.2-2. Contribution of Transportation to U.S. Carbon Dioxide Emissions by Mode (2021)



Source: EPA 2023a
 MD/HD= Medium-Duty and Heavy-Duty

Although CO₂ emissions represent the vast majority of the U.S. contribution to warming (79.4 percent), CH₄ accounts for 11.5 percent of U.S. GHGs on a GWP-weighted basis, followed by N₂O (6.2 percent) and the fluorinated gases (3.0 percent) (EPA 2023a).

F.2.3 Black Carbon and Other Aerosols

Aerosols are solid or liquid particles suspended in the Earth’s atmosphere. The chemical composition of aerosols varies enormously and can include sulfates, nitrates, dust, black carbon, and other chemical species (IPCC 2021a; CCSP 2009). Aerosols are either emitted directly from a source (e.g., power plants, forest fires, volcanoes) into Earth’s atmosphere or chemically created in the atmosphere from gases (IPCC 2021a; CCSP 2009). Depending on meteorological conditions and other factors, aerosols typically remain in Earth’s atmosphere from days to weeks (IPCC 2021a). Their relatively short lifetimes can create regional areas of high aerosol concentrations nearby as well as some distance downwind from emissions source(s) (IPCC 2021a).

An aerosol’s impact on climate depends on its composition. Some aerosols, such as sulfates, reflect incoming sunlight back to space, causing a cooling effect; other aerosols, such as black carbon, absorb incoming sunlight, causing a warming effect (IPCC 2021a; CCSP 2009). In addition, some aerosols attract moisture or water vapor and can affect the lifetime and reflectivity of clouds. Overall, IPCC (2021a) states that there is *high confidence* that aerosols have offset a substantial portion of global mean forcing by cooling Earth’s atmosphere from the reflection of incoming sunlight and their interaction with clouds, though large uncertainties exist. Overall, aerosols can act to intensify precipitation in deep convective clouds or suppress precipitation in shallow cloud regimes through radiative and microphysical processes (IPCC 2021a).

Among the aerosols, black carbon has attracted much attention because of its strong impact on Earth’s energy balance. Black carbon is an aerosol that forms during incomplete combustion of certain fossil

fuels (primarily coal and diesel) and biomass (primarily fuel wood and crop waste). There is no single accepted method for summarizing the range of effects of black carbon emissions on the climate or representing these effects and impacts in terms of carbon dioxide equivalent (CO₂e); significant scientific uncertainties remain regarding black carbon's total climate effect. The IPCC (2021a) integrated the overall indirect cloud effects of black carbon (and other light-absorbing particles) into the estimated ERFs on the earth's energy budget, resulting in a small net positive (i.e., warming) (*low confidence*). Quantifiable estimate shows large uncertainties and although black carbon is likely to be a contributor to climate change, it is not feasible to quantify black carbon climate impacts in an analysis of the Proposed Action and alternatives.¹⁴

LD passenger cars and heavy-duty pickup trucks and vans (HDPUVs) (especially those that are diesel-powered) contribute to U.S. emissions of black carbon. For further information on black carbon and aerosol emissions, climatic interactions, and net radiative effect, see Section 5.1.6 of the *Phase 2 Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles Final EIS* (NHTSA 2016b).

F.3 Climate Change Trends

IPCC concludes that, at continental and global scales, numerous long-term changes in climate have been observed. Additionally, IPCC and the GCRP include the following trends observed over the 20th century as further supporting the evidence of climate-induced changes:

- Most land areas have *very likely* experienced warmer and/or fewer cold days and nights along with warmer and/or more frequent hot days and nights (IPCC 2021a; GCRP 2023).
- Cold-dependent habitats are shifting to higher altitudes and latitudes, and growing seasons are becoming longer (IPCC 2021a; GCRP 2023).
- Sea level is rising, caused by thermal expansion of the ocean water and melting of snowcaps and ice sheets (IPCC 2021a; GCRP 2023).
- More frequent weather extremes such as droughts, floods, severe storms, and heatwaves have been observed (IPCC 2021b; GCRP 2023).
- There is *high confidence* that oceans are becoming more acidic because of increasing absorption of CO₂ by seawater, which is driven by a higher atmospheric concentration of CO₂ (IPCC 2021a; United Nations [UN] 2021; GCRP 2023). Recent assessments found that the oceans have become about 30 percent more acidic over the last 150 years since the Industrial Revolution (IPCC 2021a).

Developed countries, including the United States, have been responsible for the majority of GHG emissions since the mid-19th century and still have some of the highest GHG emissions per capita (WRI 2023). While annual emissions from developed countries have been relatively flat over the last few decades, world population growth, industrialization, and increases in living standards in developing countries are expected to cause global fossil-fuel use and resulting GHG emissions to grow substantially. During the last decade (2010 through 2019), average annual anthropogenic CO₂ emissions reached the highest levels in human history (*high confidence*) (IPCC 2021a). Current emissions trajectory estimates from the IPCC project global atmospheric CO₂ concentrations between 400 ppm (SSP1-1.9) and 1,100 ppm (SSP5-8.5) by 2100, approximately two to four times preindustrial levels (IPCC 2021a). The effects of the CO₂ emissions that have accumulated in the atmosphere prior to 2100 will persist well beyond

¹⁴ NHTSA conducted a literature review on black carbon in early 2023, and did not locate new sources that met the criteria for inclusion in this document.

2100. If emissions from both developed and developing countries are not reduced dramatically in the coming decades, this elevation in atmospheric CO₂ concentrations is likely to persist for many centuries, with the potential for temperature anomalies continuing much longer (IPCC 2021a).

F.3.1 Climate Change Attributes

The climate change attributes of temperature, sea-level rise, precipitation, and ocean pH provide evidence of rapid climate change.

F.3.1.1 Temperature

Climate change is evidenced, in part, by increases in surface temperatures over time. The sections that follow discuss ERF, average temperatures, and extreme temperatures as they relate to climate change.

Effective Radiative Forcing

ERF describes the magnitude of change in energy fluxes caused by a specific driver—in this case, anthropogenic GHGs—that can alter the Earth’s energy budget. Positive ERF leads to warming while negative ERF leads to cooling (IPCC 2021a). GHGs have a positive ERF. Total anthropogenic ERF has increased by 2.72 watts per square meter (W/m²) (1.96 to 3.48 W/m²) since preindustrial times and is responsible for the observed warming (IPCC 2021b). This estimate is a 0.43 W/m² increase from the IPCC’s previous report (IPCC 2013a) due to an increase in the GHG ERF. The ERF from increased atmospheric CO₂ concentration alone (from 1750 to 2019) is estimated to be 2.16 W/m² (plus or minus 0.26 W/m²) (IPCC 2021a). Most recently, the net heat uptake rate has been shown to be increasing. From mid-2005 to mid-2019, ERF estimates from both in situ and satellite observations were shown to be 0.77 W/m² (plus or minus 0.06 W/m²) due to an increase in absorbed solar radiation associated with decreased reflection by clouds and sea ice and a decrease in outgoing longwave radiation due to increases in trace gases and water vapor (Loeb et al. 2021). Future projections of ERF are captured in the SSPs used to model future climate conditions. SSP1-1.9, SSP1-2.6, SSP2-4.5, SSP3-7.0, and SSP5-8.5 are named according to the amount of change in ERF in 2100 relative to preindustrial conditions (i.e., prior to 1750): +1.9, +2.6, +4.5, +7.0, and +8.5 W/m². This naming convention is a continuation from the IPCC AR5, where the RCPs were named RCP2.6, RCP4.5, RCP6.0, and RCP8.5 W/m² to denote ERF changes (GCRP 2023).

Average Temperatures

Global surface temperature increased by 0.99 degree Celsius (°C) (0.84 °C to 1.10°C) (1.78 degrees Fahrenheit [°F] [1.51°F to 1.98°F])¹⁵ from 1850–1900 to 2001–2020 and is projected to continue increasing until at least mid-century under all emissions scenarios considered (IPCC 2021a). Each of the last 4 decades has been successively warmer than any decade that preceded it, with the global surface temperature of the most recent decade (2011–2020) increasing by 1.09°C (0.95°C to 1.20°C) (1.96°F [1.71°F to 2.16°F]) from 1850–1900 (IPCC 2021a). The 10 warmest years on record have all occurred since 2010 (NOAA 2023a), and 2023 was the warmest year in NOAA’s recorded history, which dates back to 1850 (NOAA 2024b). IPCC (2021b) has also concluded that global surface temperatures have increased faster since 1970 than in any other 50-year period over at least the last 2,000 years (*high*

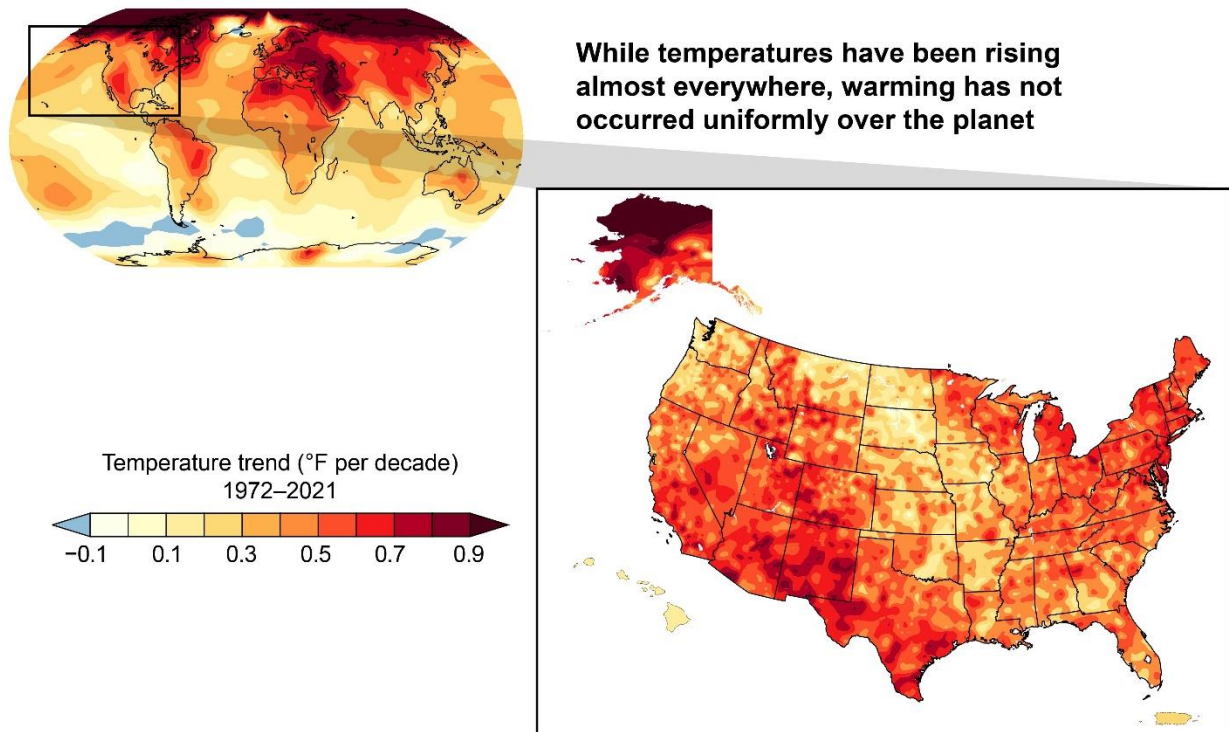
¹⁵ Values in parentheses represent the *very likely* range, or the 90 percent uncertainty interval, which is a range having 90 percent likelihood of covering the value that is being estimated. For more information on uncertainty in the IPCC framework, see Section F.1.1, *Uncertainty in the IPCC Framework*.

confidence). However, this warming has not occurred uniformly. Trends in annual average near-surface temperature show that warming has been more pronounced over land than over the ocean and the rate of temperature increase in the Arctic region has been more than twice the global average (GCRP 2023). Similarly, temperatures over the United States have increased faster in regions with significant seasonal snowpack, at high elevations, and in Alaska (Figure F.3.1-1) (GCRP 2023).

IPCC projects continued increases in global mean surface temperature over the course of this century with global average surface temperature in 2081 through 2100 *very likely* to be 1.0 to 1.8°C (1.8 to 3.2°F) warmer¹⁶ under a low GHG emissions scenario (SSP1-1.9), 2.1 to 3.5°C (3.8 to 6.3°F) warmer under an intermediate GHG emissions scenario (SSP2-4.5), and 3.3 to 5.7°C (5.9 to 10.3°F) warmer under a very high GHG emissions scenario (SSP5-8.5) (IPCC 2021b). For further information on observed and projected global average temperature trends, see IPCC 2021a and GCRP 2023.

Figure F.3.1-1. Observed Annual Average Global (left) and Overland U.S. (right) Near-Surface Temperature Trends (in °F per decade) over the period 1972–2021.

Regional Differences in Climate Response



Source: GCRP 2023
 °F = degrees Fahrenheit

In the United States, average temperature in Alaska has increased by 2.3°C (4.2°F), compared to a 1.3°C (2.5°F) increase in the contiguous United States, and a 0.9°C (1.7°F) increase globally since 1970 (GCRP 2023).

¹⁶ This temperature increase is compared to 1850 through 1900 global average temperature values.

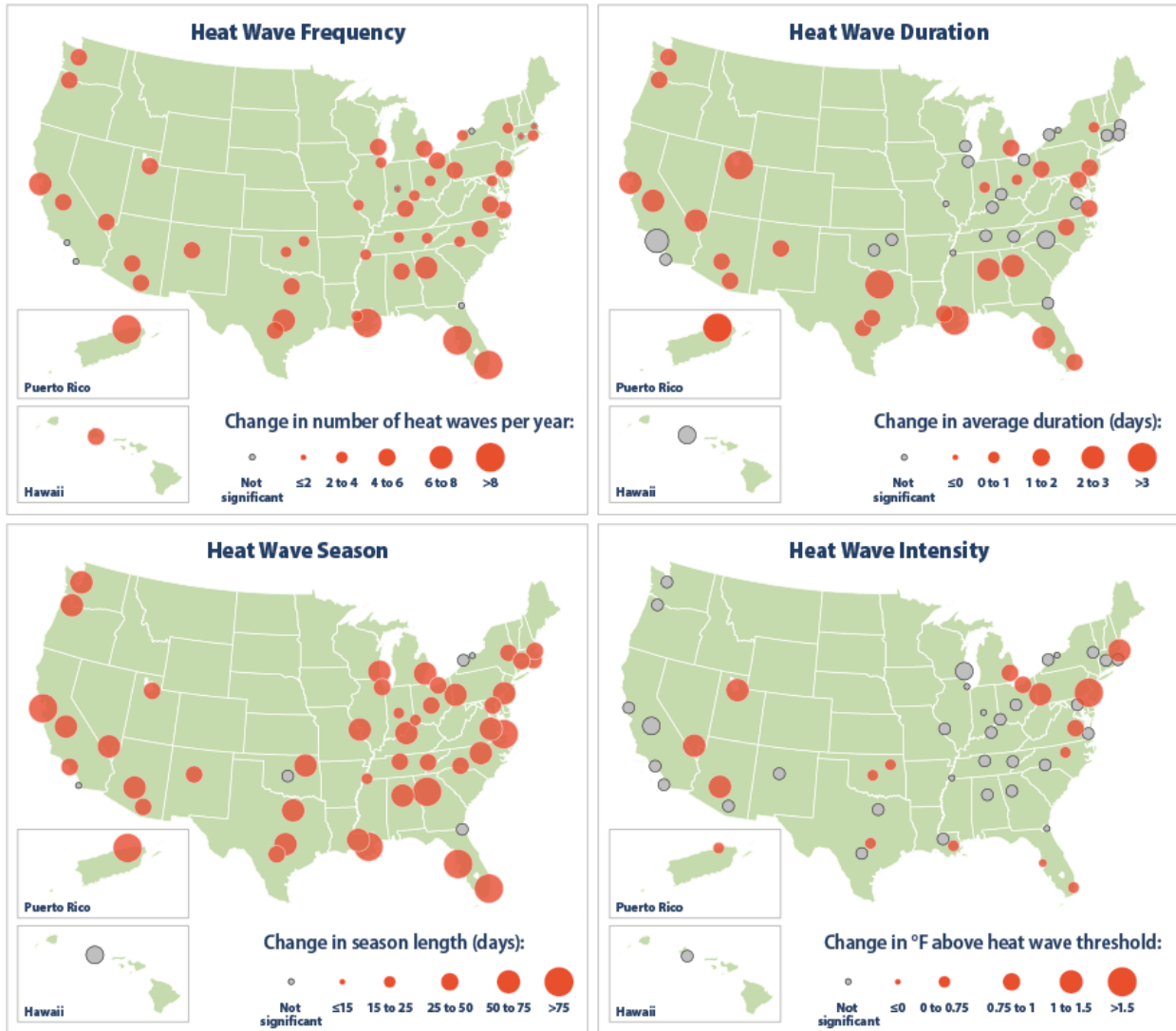
The oceans have a large heat capacity and have been absorbing more than 91 percent of warming caused by anthropogenic GHG emissions (GCRP 2023). Due to Earth’s thermal inertia—whereby oceans absorb and dissipate heat to the atmosphere over a long period of time—warming could continue for centuries, even after atmospheric CO₂ is stabilized or reduced.

Multiple lines of evidence have recorded increasing average temperatures, including measurements from satellites and weather stations (GCRP 2023). In addition, higher temperatures have been independently confirmed by other global observations. For example, scientists have documented shifts to higher latitudes and elevations of certain flora and fauna habitat (GCRP 2023). The average length of the growing season has increased across the contiguous United States since the early 20th century, particularly in the northern latitudes (GCRP 2023), and plant flowering and animal spring migrations and breeding patterns are occurring earlier on average, with exceptions in some regions (EPA 2009; GCRP 2023; IPCC 2022a). In the United States, the length of the growing season has increased by about 2 weeks in the contiguous U.S. regions (GCRP 2023).

Extreme Temperatures

In many regions, extreme temperatures have changed substantially both in frequency and intensity (GCRP 2023). The IPCC concluded it is *virtually certain* that there will be more hot and fewer cold temperature extremes with increases in the frequency, duration, and magnitude of hot extremes along with heat stress; however, occasional cold winter extremes will continue to occur (IPCC 2021a). Hot days, hot nights, and heatwaves have become more frequent; cold days, cold nights, and frost have become less frequent (EPA 2009; GCRP 2023; IPCC 2021a). Several major heatwaves have affected the United States since 2018, including the record-breaking 2021 heatwave in the Pacific Northwest (GCRP 2023). Recent studies show that the average number of heatwaves in the United States has doubled since the 1980s, and the western United States has been particularly affected (GCRP 2023). The length of the heatwave season has also increased from about 40 days to about 70 days (GCRP 2023). The frequency of heatwaves has increased steadily in major cities across the United States, from an average of two heatwaves per year during the 1960s to six per year during the 2010s and 2020s (Figure F.3.1-2).

Figure F.3.1-2. Heatwave Characteristics in 50 Large U.S. Cities, 1961–2021



Source: EPA 2022j

Additionally, fewer unusually cold days occurred in the past few decades. The number of cold days¹⁷ has decreased across the contiguous United States, and overall cold extremes are becoming less frequent and milder (GCRP 2023). Long-term warming driven by anthropogenic GHG emissions increases the likelihood of extreme temperatures and record warmth (Knutson et al. 2018; Meehl et al. 2016; Vogel et al. 2019a). According to IPCC, it is now considered *very likely* that humans have contributed to greater extreme heat events since the middle of the 20th century, with higher temperature changes increasing the probability of extreme heat events in some regions (IPCC 2021a). For example, the likelihood of consecutive years with record-breaking annual average temperatures from 2014 to 2016 was negligible (less than 0.03 percent) in the absence of human influence (Mann et al. 2017). Additionally, the 2017 heatwave in southern Europe was found to be at least three times more likely today than it was in 1950 due to anthropogenic climate change (Kew et al. 2018). Recent literature continues to support and

¹⁷ Days at or below freezing (0°C or 32°F).

strengthen such findings, projecting both geographic and temporal increases in extreme heat by the late century (Dahl et al. 2019). These projections result from the general warming trend, rather than a specific global emissions scenario or timeframe.

F.3.1.2 Sea-Level Rise

Global temperature increases contribute to sea-level rise. The sections that follow discuss contributions to sea-level rise, observed global sea-level rise, and observed regional sea-level rise, respectively.

Contributions to Sea-Level Rise

Higher temperatures cause global sea level to rise due to both thermal expansion of ocean water and an increased transfer of water from glaciers and ice sheets to the ocean. Since the early 1970s, the majority of observed sea-level rise has come from these sources. Other factors, such as changing ocean currents and vertical land adjustments (land subsidence or uplift), also affect local sea-level rise. IPCC concludes that it is *very likely* that human contributions to sea-level rise are substantial (IPCC 2021a).

At the ocean surface, temperature has, on average, increased by 0.88°C (1.58°F) (0.68 to 1.01°C [1.22 to 1.82°F])¹⁸ (over the reference period 1850 through 1900 compared to the 2011 through 2020 reference period) with approximately 68 percent of this warming (0.6°C [1.08°F]) having occurred since 1980 (IPCC 2021a). The ocean heat content has increased since at least 1970 (earliest reliable observations) and it is *virtually certain* that heat content will continue to rise over the 21st century, likely continuing until at least 2300, regardless of emissions scenario (IPCC 2021a). Rising ocean heat content leads to thermal heat expansion which contributes, in part, to sea-level rise.

IPCC concludes that mountain glaciers, ice caps, and snow cover have declined on average, further contributing to sea-level rise. Losses from the Greenland and Antarctic ice sheets from 1992 to 2020 have contributed to 13.5 millimeters (0.5 inch) and 7.4 millimeters (0.3 inch) of global mean sea-level rise, respectively (IPCC 2021a). Dynamic ice loss (i.e., the transfer of ice from land-based ice sheets to the ocean, which can accelerate following the collapse of supporting ice shelves) explains at least half of the Antarctic and Greenland net mass loss, with the other half coming from melting (IPCC 2021a). Although most of the last century's (1901 through 2018) global mean sea-level rise was caused by ocean thermal expansion (38 percent) and loss from glaciers (41 percent), the contribution of ice mass loss from the Greenland and Antarctic ice sheets increased and accounted for approximately 35 percent of observed global mean sea-level rise between 2006 and 2018 (IPCC 2021a).

These contributions to sea-level rise are expected to continue throughout this century. According to the IPCC, ocean warming is projected to continue throughout the 21st century (IPCC 2021b). Projections for sustained warming between 2 and 3°C (3.6 and 5.4°F) result in approximately 50 to 60 percent loss of glacier mass outside Antarctica, and approximately 60 to 75 percent loss for sustained warming between 3 and 5°C (5.4 and 9.0°F).

Under all SSP scenarios, both the Greenland ice sheet (*virtually certain*) and Antarctic ice sheet (*likely*) will continue to lose ice mass, further contributing to global mean sea-level rise. While the Greenland ice sheet is currently contributing more to global sea-level rise, Antarctica could become the larger

¹⁸ Values in parentheses represent the *very likely* range, or the 90 percent uncertainty interval, which is a range having 90 percent likelihood of covering the value that is being estimated. For more information on uncertainty in the IPCC framework, see Section F.1.1, *Uncertainty in the IPCC Framework*.

contributor by the end of the century due to rapid retreat of ice stream and glaciers draining the ice sheet (IPCC 2021a). Recent modeling indicates that the Antarctic ice sheet contribution to sea-level rise will continue at about the current rate if Paris Agreement targets are reached (i.e., limiting warming to 2°C [3.6°F] or less). However, warming of 3°C (5.4°F) consistent with current policies has the potential to increase the contribution of Antarctic ice loss to sea-level rise to about 0.5 centimeter (0.2 inch) per year from 2060 to 2100, roughly 10 times faster than current rates (DeConto et al. 2021). New projections also show that limiting global warming to 1.5°C (2.7°F) above preindustrial levels could halve land ice contribution to sea-level rise during the 21st century, resulting in median land ice contributions to sea-level rise ranging from 13 to 42 centimeters (5.1 to 16.5 inches) by 2100, with the higher projection due to rapid mass loss from the Antarctic ice sheet (Edwards et al. 2021).

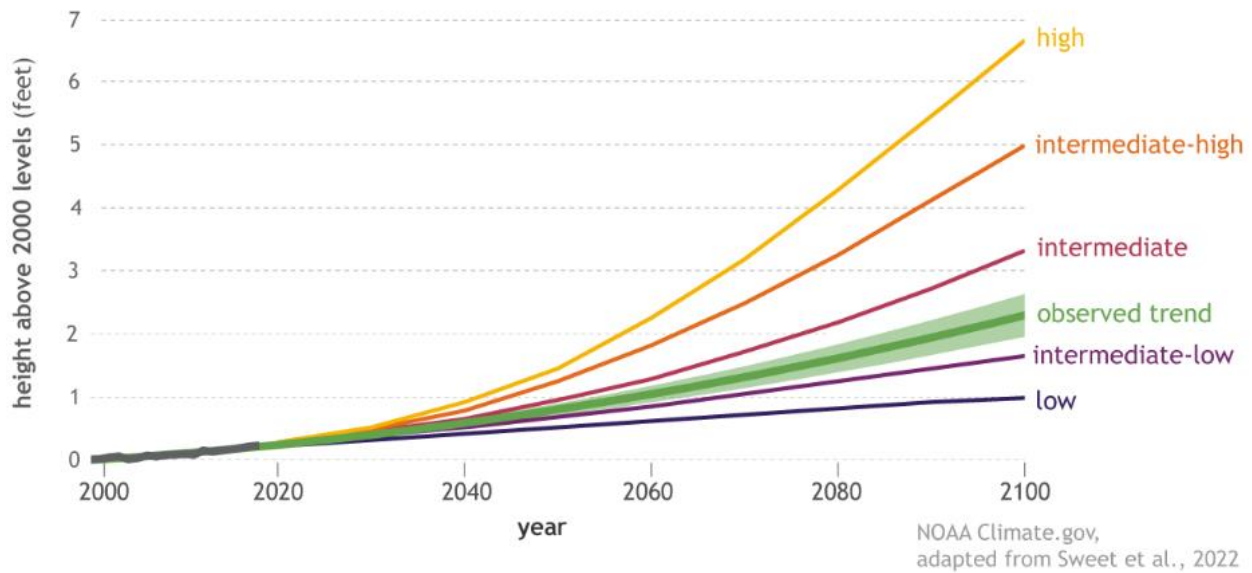
Warming ocean temperatures affect ice sheet stability through submarine melting and altering the dynamics of ice shelves, ice streams, and glaciers. The interconnectedness of the ocean and cryosphere (e.g., glaciers and ice streams that drain the Greenland and Antarctic ice sheets into the ocean) can lead to compounding impacts, whereby ocean warming triggers dramatic ice sheet instability through enhanced melting and calving at glacier and ice stream fronts. In turn, the nonlinear relationship between ocean warming and ice mass loss could be a large driver of future global sea-level rise (IPCC 2019a).

Global Sea-Level Rise

Global mean sea level rose faster in the 20th century than in any prior century over the last three millennia (IPCC 2021a). The rate of increase has been accelerating since the 1960s, with an average rate of 2.3 millimeters (0.09 inch) per year between 1971 and 2018, and an average rate of 3.7 millimeters (0.15 inch) per year between 2006 and 2018 (IPCC 2021a). Global mean sea level rose by about 1.2 ± 0.2 millimeters (0.05 ± 0.01 inch) per year from 1901 to 1990 (GCRP 2023). After 1993, global mean sea level rose at a faster rate of about 3.4 ± 0.4 millimeters (0.13 ± 0.02 inch) per year (GCRP 2023). Relative to 1995 through 2014, global mean sea level will likely rise by 0.38 meter (1.25 feet) (0.28 to 0.55 meter [0.92 to 1.8 feet]) under SSP1-1.9 and by 0.77 meter (2.3 feet) (0.63 to 1.02 meters [2.07 to 3.35 feet]) under SSP5-8.5 by 2100; these projections are made with *medium confidence* because the uncertainty in ice sheet stability during the 21st century may alter these projections (IPCC 2021a). There is *high confidence* that global mean sea level will continue to rise for centuries past 2100 and remain elevated for thousands of years due to continuing deep ocean heat uptake and committed mass loss from the Greenland and Antarctic ice sheets (IPCC 2021a).

In addition, other studies that consider dynamic mass loss from major ice sheets indicate that sea-level rise could be even greater (Figure F.3.1-3) (Robel et al. 2019; Bamber et al. 2019). Most of these studies project a higher sea-level rise than the IPCC studies. NOAA's *Global and Regional Sea Level Rise Scenarios for the United States* estimates that global mean sea level will rise 0.3 meter (1 foot) to 2.0 meters (6.6 feet) by 2100 and 0.4 meter (1.3 feet) to 3.7 meters (12 feet) by 2150 (Sweet et al. 2022). Increasing anthropogenic GHG emissions would increase the risks posed by greater warming and sea-level rise (IPCC 2022a). Records of paleo sea level indicate that, when global mean temperatures was 2.5 to 4°C (4.5 to 7.2°F) above 1850 through 1900 levels, global mean sea level was 5 to 25 meters (16.4 to 82.0 feet) higher than current levels (IPCC 2021a).

Figure F.3.1-3. Possible Pathways for Future Sea-Level Rise (2000–2100)



Source: Sweet et al. 2022

Regional Sea-Level Rise

Sea-level rise is not uniform across the globe, primarily because dynamic ocean heights are adjusted by ocean currents and because coastline elevations change through time because of regional tectonics, subsidence, and isostatic rebound. Throughout the period 1993 to 2018, sea levels rose fastest in the Western Pacific and slowest in the Eastern Pacific (IPCC 2021a). It is *very likely* that regional mean relative sea-level rise will continue throughout the 21st century, with variations, where a few regions that have substantial geologic land uplift rates are projected to show a deceleration in sea-level rise (IPCC 2021a).

Nationally, relative sea level has been rising at a rate of 1.1 to 2.0 inches per decade along most of the Atlantic and Gulf coasts and more than 3 inches per decade along portions of the Louisiana and Texas coasts (where land subsidence is relatively rapid) (EPA 2022k; Argus et al. 2018; Sweet et al. 2017a). Sea level is falling (due to tectonic uplift) at the rate of a few inches per decade in parts of Alaska (EPA 2009, 2022k; Argus et al. 2018; Sweet et al. 2017a; National Science and Technology Council 2008). This pattern of relative sea-level rise along the U.S. coast is projected to continue throughout this century (GCRP 2023 citing Sweet et al. 2022). Tools such as the NOAA Sea Level Rise viewer can be used to understand the impact of coastal inundation under different sea-level rise scenarios along the coastal United States.¹⁹

Sea-level rise extends the zone of impact of storm surges and waves from tropical and other storms farther inland, leading to increases in flood risks as well as shoreline erosion and change. For instance, roughly 20 square miles of dry land and wetland along the Atlantic coast were converted to open water between 1996 and 2011, with a higher rate of loss in the Southeast than mid-Atlantic (EPA 2014e). Throughout the United States, a net loss of tidal wetlands is expected with the rate and extent of loss varying significantly by geography and scenario of climate change (GCRP 2023). For example, a net loss

¹⁹ NOAA, Office for Coastal Management, DigitalCoast, Sea Level Rise Viewer, <https://coast.noaa.gov/digitalcoast/tools/slr.html>.

of tidal wetlands is expected in Florida, Chesapeake Bay, and New Jersey, while along the Gulf Coast, a shift in vegetation dynamics and habitat is likely (GCRP 2023).

F.3.1.3 Hydrologic Cycle

As the climate warms, evaporation from land and oceans increases and more moisture can be held in the atmosphere (GCRP 2023). Depending on atmospheric conditions, this evaporation causes some areas to experience increases in precipitation events, while other areas are left more susceptible to droughts (Fujita et al. 2019). Average atmospheric water vapor content has increased since at least the 1970s over land and the oceans, and in the upper troposphere, largely consistent with air temperature increases (IPCC 2021a). Because of changes in climate, including increased moisture content in the atmosphere, heavy precipitation events have increased in frequency over most land areas (IPCC 2021b; Min et al. 2011).

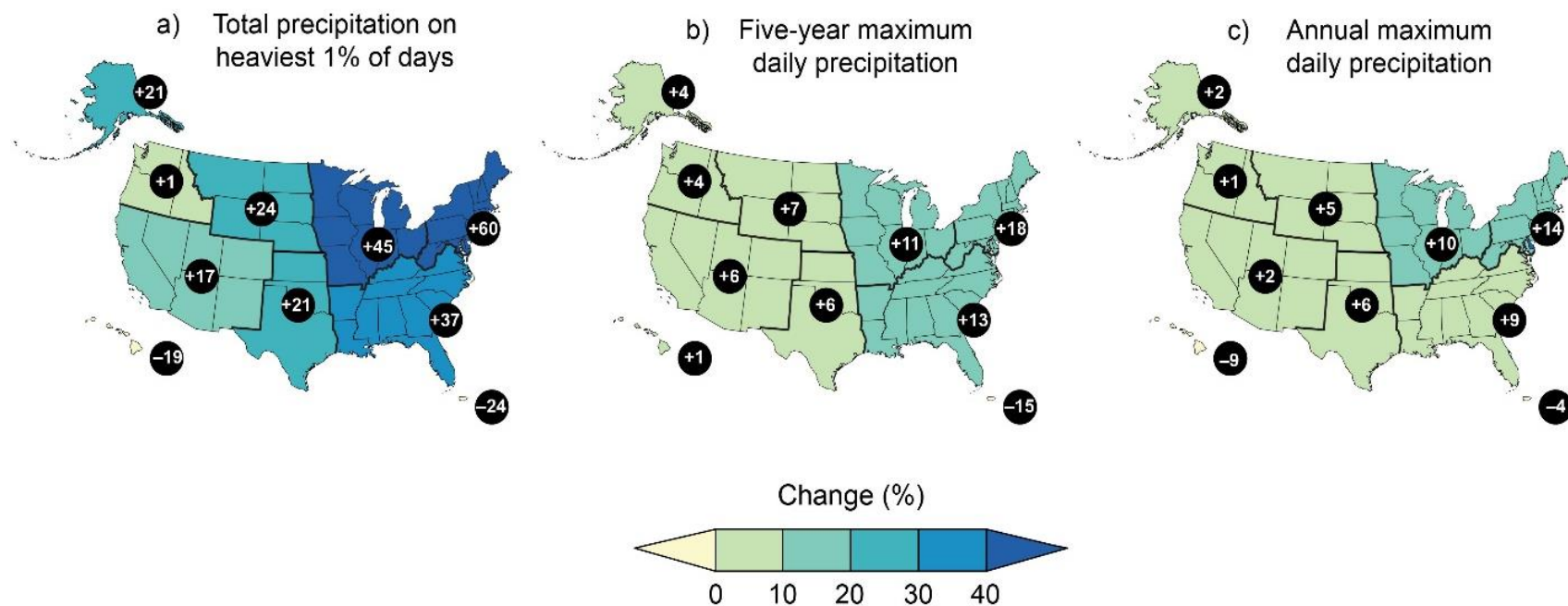
The sections that follow discuss global, regional, and national trends in precipitation, droughts, streamflow, and snow cover, respectively.

Precipitation

Long-term trends in global precipitation have been observed since 1901. Between 1901 and 2010, increases in precipitation have been observed in the middle and higher latitudes of both the Northern and Southern Hemispheres, specifically in northwestern and eastern parts of North America, parts of Europe and Russia, and southern South America. Drying has been observed in the Sahel region of Africa, the Mediterranean, southern Australia, and parts of Southeast Asia. Spatial and temporal variability for precipitation is high, and data are limited for some regions (IPCC 2021b).

Precipitation patterns have changed over much of the United States. Compared to the 1901–1960 average, average annual precipitation in the central and eastern United States from 2002–2021 was 5 to 15 percent higher. Meanwhile, Hawaii and parts of the Southwest have become drier, with average annual precipitation decreases between 10 and 15 percent over the same time period (GCRP 2023). There has also been an increase in heavy precipitation across the contiguous United States since the 1950s, with the largest increase in the number of extreme precipitation days having occurred over the Northeast (around 60 percent) and Midwest (around 45 percent), along with their annual and 5-year maximum amount showing an increase of about 10 percent (Figure F.3.1-4) (GCRP 2023).

Figure F.3.1-4. Observed Changes in Frequency and Severity of Heavy Precipitation Events in the United States (1958–2021)



Notes:

Maps show observed changes in three measures of extreme precipitation: (a) total precipitation falling on the heaviest 1 percent of days, (b) daily maximum precipitation in a 5-year period, and (c) the annual heaviest daily precipitation amount. Numbers in black circles depict percent changes at the regional level over 1958–2021.

Source: GCRP 2023

In general, climate change is expected to reinforce global precipitation patterns. Precipitation is projected to *very likely* increase over high latitudes, the equatorial Pacific, and parts of the monsoon regions, but decrease over parts of the sub-tropics and tropics under SSP5-8.5 (IPCC 2021a). It is *very likely* that mean precipitation will increase in far north regions (*high confidence*), and heavy precipitation events are projected to increase in most regions under future warming (IPCC 2022a).

Drought

Increased dryness has been observed in many regions since the 1950s, with intense droughts caused by higher temperatures and decreased precipitation; human-induced climate change is *likely* the main driver of these changes (IPCC 2021b). However, spatial variability for dryness is high and data availability is limited in some regions from which to draw global conclusions. IPCC (2021a) projects increased evapotranspiration (i.e., evaporation of water from the surface and transpiration from plants) and decreased soil moisture, increasing dryness over the Mediterranean, southwestern North America, south Africa, southwestern South America, and southwestern Australia (*high confidence*).

Climate change is expected to exacerbate drought in some regions of the United States, mainly through increases in evaporative demand, surface water losses, and declines in snowfall and water stored in winter snowpack (GCRP 2023). Observations indicate that climate change is already increasing hydrological drought severity in California, the Pacific Northwest, the Colorado River basin, and across the Southwest (GCRP 2023). In the Southwest, multidecadal soil moisture droughts comparable to the 2000–2021 drought are projected to increase in the future (GCRP 2023). However, in the eastern regions, hydrological droughts have become less frequent since the late 19th century due to increases in precipitation that compensate for increases in warming-driven evaporation (GCRP 2023).

By the end of the 21st century, a third of global land area, including regions like the Mediterranean, southern Africa, southwestern Australia, southwestern South America, tropical Central America, and western Africa, are projected to suffer from at least moderate drought under high emissions scenarios (IPCC 2021a). In western North America, there is *medium confidence* that human-induced climate change has contributed to the increases in agricultural and ecological droughts, with projected reductions in soil moisture and an increase in drought severity for mean global warming of 2°C and above (IPCC 2021a). Twenty-first-century drought risk in the Southwest and central plains will likely be higher than at any time since at least 1100 Current Era (CE) under both RCP4.5 and RCP8.5, increasing the possibility of megadroughts (i.e., droughts lasting 2 decades or more) in these regions (Cook et al. 2015). A more recent study expands upon this concept, showing that the 2000 to 2018 southwestern North America drought was the second driest 19-year period since 800 CE, exceeded only by a late-1500s megadrought, noting that anthropogenic warming increases the probability of otherwise moderate droughts becoming historic megadroughts (Williams et al. 2020b).

While current levels of climate change already manifest moderate risks of increased water scarcity, vegetation loss, and wildfire damage, these risks are projected to become more severe with future temperature increases (IPCC 2019b). In addition, increased warming is projected to shift climate zones poleward and increase the amount of land prone to drought (IPCC 2019b).

Streamflow

Melting snow and ice, increased evaporation, and changes in precipitation patterns all affect surface water. Previous assessments indicate variable changes in streamflow and river discharge. The northwest United States has experienced long-term declines in streamflow as a result of declining

winter precipitation and, more generally, the western United States has seen recent declines due to drought (GCRP 2023). In contrast, high streamflow is increasing across parts of the Midwest and Mississippi Valley as a result of increases in heavy precipitation (GCRP 2023). Other assessments show even greater global variability in trends, where decreases in streamflow were observed in mainly low- and mid-latitude river basins, while increasing flow at higher latitudes could have resulted from possible permafrost thawing and increased snowmelt (IPCC 2021a). Changes in precipitation have also been identified as a major driver for changing discharge trends across regions (IPCC 2021a).

These streamflow drivers are expected to continue to change throughout the 21st century, with more frequent and intense heavy precipitation events (*high confidence*) and more precipitation falling as rain rather than snow, thereby decreasing snowpack and snowmelt (*high confidence*) in the United States (GCRP 2023). Changes in streamflow are also dominated by snowpack and glacier-fed mountain basins, which are projected to decline and produce earlier spring peak flows (IPCC 2019a).

Snow Cover

Across the Northern Hemisphere, snow cover extent (in June) decreased by approximately 11 percent per decade over the 1967 to 2012 period (IPCC 2021b citing Vaughan et al. 2013) with future snow cover extent and duration projected to continue to decrease as global climate warms (IPCC 2021a). Changes in air temperature, decreased surface albedo, and increased atmospheric water vapor drove a downward trend in maximum snow cover per decade from 1961 to 2015 across North America (GCRP 2017). The amount of snow at the end of the winter season, which is important for water supply provided by snowmelt, has decreased because of springtime warming (GCRP 2023). In addition, North America, Europe, South Asia, and East Asia have experienced a decreasing number of snowfall events; according to IPCC, this is *likely* due to increasing winter temperatures (IPCC 2021a).

Recent studies support these findings, and project that spring snow cover could decrease by as much as 35 percent relative to 1986 to 2005 by the end of the century under RCP8.5 (IPCC 2019a). Furthermore, the most recent IPCC projections show that Northern Hemisphere spring snow cover extent could decrease by about 8 percent per 1°C (1.8°F) of global surface air temperature increase in the future (IPCC 2021a).

F.3.1.4 Ocean pH

With higher atmospheric CO₂ concentrations in recent decades, oceans have absorbed more CO₂, which lowers the potential of hydrogen (pH)—or increases the acidity—of the water. When CO₂ dissolves in seawater, the hydrogen ion concentration of the water increases; this is measured as a decrease in pH. Compared to the preindustrial period, the pH of the world’s oceans has decreased by 0.1 unit (IPCC 2021a). Because pH is measured on a logarithmic scale, this decrease represents about a 30 percent increase in the hydrogen ion concentration of seawater, a substantial acidification of the oceans. Although research on the ultimate impacts of declining ocean pH is limited, available observational, laboratory, and theoretical studies indicate that acidification could interfere with the calcification of coral reefs and inhibit the growth and survival of coral reef ecosystems (EPA 2009; GCRP 2023; IPCC 2021a). According to IPCC AR6 (IPCC 2022a), almost all coral reefs will degrade from their current state, even if global warming is contained below 2°C (3.6°F), and the remaining shallow coral reefs are likely to undergo a change in species composition and diversity. If global temperatures reach an average increase of 1.5°C (2.7°F), 70 to 90 percent of coral reefs are projected to decline, with even greater losses at 2°C (3.6°F) (IPCC 2021a). At 2°C (3.6°F) above preindustrial levels, mass mortalities of coral reefs are *virtually certain* (IPCC 2021a).

IPCC (2021a) projections indicate a decreasing ocean surface pH under all scenarios (except SSP1-1.9 and SSP1-2.6), with a 0.44-unit decrease under SSP5-8.5 (a 175 percent increase in the hydrogen ion concentration of seawater) by the end of the century (1870 to 1899 compared to 2080 to 2099 values). Additionally, high-latitude oceans, particularly the Arctic, are projected to show a steeper decline in pH and accelerated rate of acidification (IPCC 2021a).

F.3.2 Increased Incidence of Severe Weather Events

Tropical cyclones (commonly referred to as hurricanes in the United States) appear to be increasing in intensity since 1970, but no clear trend in the frequency of tropical cyclones each year has been observed. Identifying long-term trends of tropical cyclones has been difficult because observations were limited prior to the satellite era (IPCC 2021a). However, there is observational evidence of an increase in intense tropical cyclone activity correlated with increases of sea-surface temperatures in the North Atlantic, which includes the Gulf Stream, since about 1970 (GCRP 2023). The tracks of tropical cyclones have shifted in a warming climate, migrating toward the poles (GCRP 2023). According to IPCC, while recent assessments show no trend in the frequency of U.S. landfall events this past century, an increasing trend in intensity since the 1970s is *virtually certain* (IPCC 2021a). Additionally, recent projections indicate that it is *likely* that climate change could increase the frequency of Category 4 and 5 hurricanes, but it is still unclear how the overall frequency of events might change (GCRP 2023). This trend has been substantiated by the IPCC (2021a), which shows that globally, major tropical cyclone intensities (Category 3 and above) have increased over the past 4 decades. Thus overall, IPCC (2021a) projects tropical cyclones to increase in intensity despite a decrease in frequency in most tropical regions (*medium confidence*).

Climate change also causes hurricanes and tropical cyclones to produce heavier precipitation, in part because a warmer atmosphere holds more moisture and increases the energy available for convection, causing stronger storms and heavier precipitation (GCRP 2023; Gertler and O’Gorman 2019). Globally, the frequency and intensity of heavy precipitation events has increased (*high confidence*) in a majority of land regions, particularly in North America, Europe, and Asia (IPCC 2021a). IPCC (2021a) states that with increasing temperatures, it is *virtually certain* that heavy precipitation events (including those from tropical cyclones) will become more frequent and intense over all continents.

The influence of climate change on recent storms is well documented. For example, the rainfall produced in Texas and Louisiana by Hurricane Harvey in 2014 was increased by about 15 to 19 percent due to climate change (Risser and Wehner 2017; van Oldenborgh et al. 2017). Climate change also could increase the probability of a similar extreme event by 17 percent through 2100 relative to the period from 1981 to 2000 under RCP8.5 (Emanuel 2017). Looking forward, tropical cyclone rainfall amounts in the eastern United States could increase by 8 to 17 percent relative to the time period between 1980 and 2006 as a result of a warmer climate (Wright et al. 2015). The frequency of weather and climate disasters (including those causing more than \$1 billion in damages) has increased in the United States (GCRP 2023).

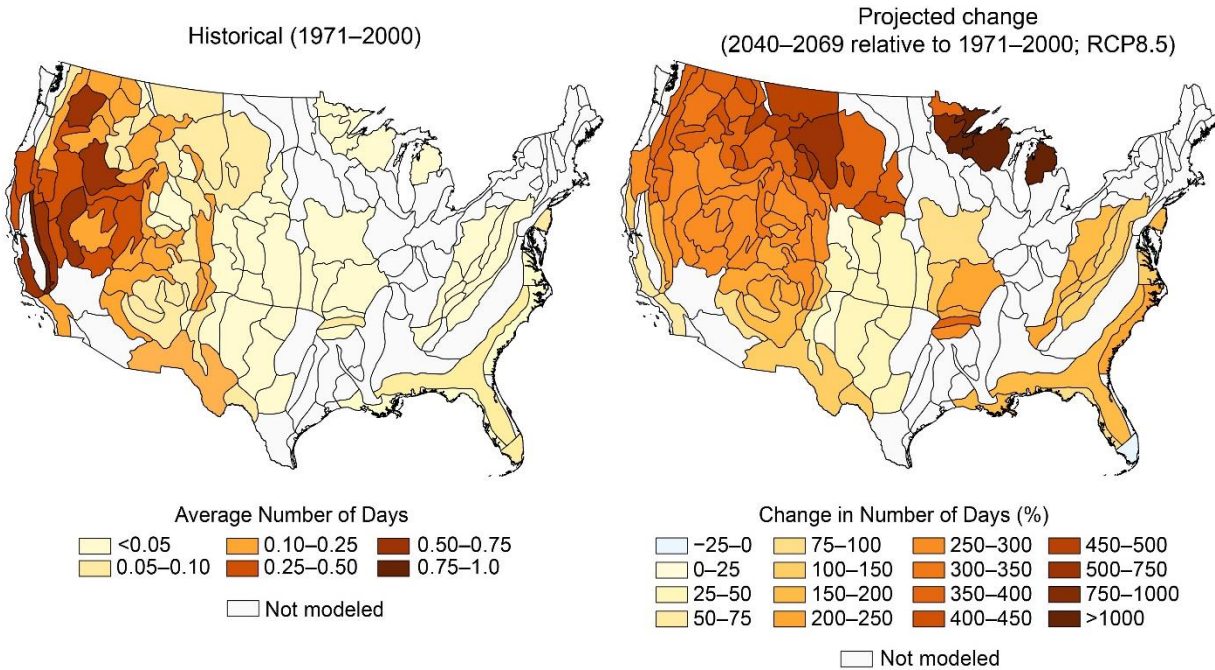
There is *low confidence* in historical trends of hail and severe thunderstorms (IPCC 2021a), which makes their relationship to climate change difficult to resolve. While IPCC states that climate models consistently project environmental changes that would support an increase in the frequency and intensity of severe thunderstorms that combine tornadoes, hail, and winds, there is *low confidence* in the details of the projected increases. Similarly, GCRP (2023) also indicates *low confidence* for future projections of severe thunderstorms including tornadoes, hail, and extreme winds.

Changes in ocean heat content and freshwater-driven buoyancy as a result of climate change could potentially weaken the Atlantic meridional overturning circulation (AMOC), a mechanism for heat transport in the North Atlantic Ocean that could drive dramatic changes to the regional climates of North America and Europe. However, there is currently *low confidence* in models that show AMOC weakening over the 21st century under a high emissions scenario (RCP8.5) (GCRP 2017, 2023). Models show low agreement in 20th-century AMOC trends (IPCC 2021a). Recent observations show a decline in AMOC since the 2000s; however, this cannot be distinguished from internal variability (IPCC 2021a).

Climate change is also driving increased wildfire activity. Wildfires in the western United States have become larger, hotter, and more damaging in recent decades, with the area burned by high-severity wildfires increasing eightfold since 1985 and the number of large fires on non-forested rangelands increasing more than fivefold from 1984 to 2017 (GCRP 2023). Recent wildfire events like the August 2023 fire in Lahaina, Hawaii; December 2021 Marshall Fire in Superior and Louisville, Colorado; and November 2018 Camp Fire ignitions in Paradise, California caused widespread damage to human life and property (Calkin et al. 2023). Changes in the frequency and severity of wildfires are driven, in part, by changes in climate including increasing temperatures, more intense droughts, reduced snowpack, and increased fuel (vegetation and other organic matter) availability and flammability (GCRP 2023). Increases in the occurrences of wildfires have resulted in increasing negative effects for human health and growing economic losses (GCRP 2023). Wildfires in U.S. forests are projected to further increase in frequency and severity under climate change (GCRP 2023). Projections indicate an increase in conditions conducive to very large wildfires (more than 12,000 acres) in the United States in the future (2040 to 2069), with the annual number of conducive days in May through October more than doubling in many ecoregions when compared to the baseline (1971 to 2000) under a high emissions scenario (RCP8.5) (GCRP 2023). Some regions, such as the Northwest, show a fourfold increase in annual number of conducive days in May through October, while other regions, such as the Upper Midwest, show an even higher sevenfold increase (Figure F.3.2-1) (GCRP 2023).

The southeast is also expected to see an increase in wildfires, though with substantial differences between ecoregions (Prestemon et al. 2016). Similarly, Alaska is expected to experience a longer fire season, with a higher risk of severe fires and greater total area burned (GCRP 2023). Wildfires are complex systems, but modeling focused on the climate variables that are closely linked to fire risk (e.g., surface temperature, snowmelt timing) is quite robust and shows that conditions conducive to wildfires are expected to continue under climate change (GCRP 2023).

Figure F.3.2-1. May through October Extreme Weather Conditions Associated with Very Large Fires (more than 12,000 acres) in the United States



Notes:

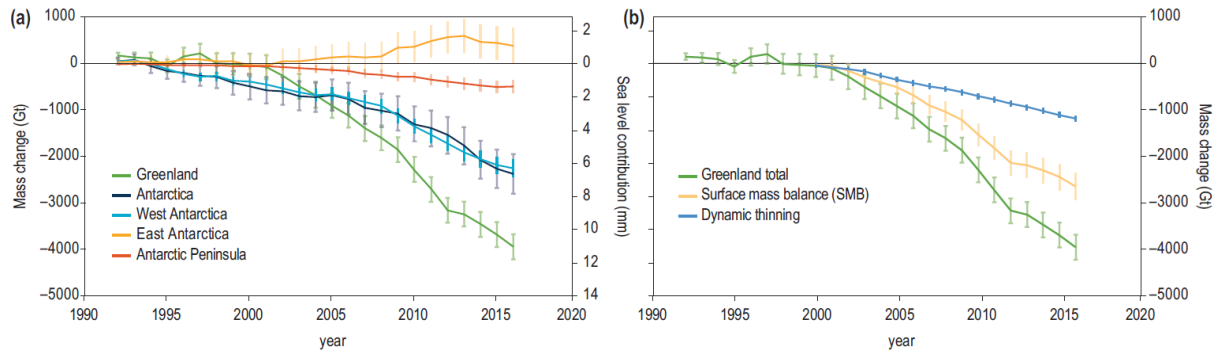
Left panel shows historical (1971–2000) values for the annual number of days in May through October with extreme weather conditions conducive to very large fires; right panel shows the percent change in the number of days for a projected future (2040–2069) climate under a very high scenario (RCP8.5).

Source: GCRP 2023

F.3.3 Changes in Ice Cover and Permafrost

Changes in air and ocean temperatures, precipitation onto the ice mass, and water salinity are affecting glaciers, sea-ice cover, and ice sheets. Numerous studies have confirmed that glaciers and ice sheets have shrunk substantially in the past half century. Satellite images have documented mass loss from the Greenland ice sheet and the West Antarctic ice sheet (IPCC 2021a; GCRP 2023). Figure F.3.3-1 shows polar ice sheet mass change from 1992 to 2016.

Figure F.3.3-1. Cumulative Ice Sheet Mass Change from 1992 to 2016



Notes:

Panel (a) shows cumulative mass change and corresponding sea-level rise contributions for different ice sheet regions. Panel (b) shows Greenland ice sheet mass change components from surface mass balance (orange) and dynamic thinning (blue) for 2000 to 2016. Uncertainties bars are 1 standard deviation.

Source: IPCC 2019a

Gt = gigaton

Average Arctic sea-ice area in August, September, and October has decreased approximately 25 percent in the past 40 years (1979–1988 to 2010–2019) and has decreased to some extent in every month of the year (IPCC 2021a). Warming in the Arctic has proceeded at about twice the rate as the global average, leading to decreases in summer sea-ice extent, glacier and ice sheet mass loss, coastal erosion, and permafrost thawing (IPCC 2021a).²⁰ Some Arctic ice that previously was thick enough to last through summer has now thinned enough to melt completely in summer. As of 2020, the 12 lowest Arctic sea-ice extents in the satellite era occurred in the last 12 years (Kumar et al. 2020). It is *very likely* that more than half of the observed Arctic sea-ice loss in summer is due to anthropogenic climate change (IPCC 2021a).

In March 2016, the Arctic experienced the lowest winter maximum ice extent in the satellite record (1979 to 2016), 7 percent below the 1981 to 2010 average (Perovich et al. 2016). Multiyear ice (more than 1 year old) and first-year ice were 22 percent and 78 percent of the ice cover, respectively, compared to 45 percent and 55 percent in 1985 (Perovich et al. 2016). In September 2016, the Arctic sea-ice minimum extent was 33 percent lower than the 1981 to 2010 average minimum ice extent, 22 percent larger than the record minimum set in 2012, and tied with 2007 for the second lowest value in the satellite record (1979 to 2016) (Perovich et al. 2016).

As of 2021, the Arctic experienced the 15 lowest summer minimum ice extents (occurring in September), all within the last 15 years (Meier et al. 2021). By end of summer in 2021, multiyear ice reached its second lowest level since 1985, based on available data (Meier et al. 2021).

There is *very high confidence* that Arctic sea ice volume and thickness have decreased in the period after 1979. However, there is *low confidence* in the quantitative volume and thickness estimates due to poor observations; current analyses show an approximately 72 percent reduction between 1979 and 2016 (IPCC 2021a). These area and thickness reductions allow winds to generate stronger waves, which have increased shoreline erosion along the Alaskan coast. Alaska has also experienced increased thawing of

²⁰ Permafrost thawing releases CO₂ and CH₄ into the atmosphere.

the permafrost base of up to 1.6 inches per year since 1992 (EPA 2009; National Science and Technology Council 2008).

There is *high confidence* that permafrost temperatures have been increasing over the past 3 to 4 decades in the permafrost regions (IPCC 2021a). Globally, permafrost has warmed approximately 0.29°C (0.52°F) between 2007 and 2016. The active layer thickness of the permafrost (a layer subject to annual temperature changes) has increased across the entire Arctic region (IPCC 2021a). At lower depths, IPCC (2019a) stated with *very high confidence* that record high permafrost temperatures at the depth of the zero annual amplitude (the depth about 10 to 20 meters [32.8 to 65.6 feet] below the surface where the seasonal soil temperature cycle vanishes) were observed in recent decades in the northern circumpolar permafrost region. They also conclude (*high confidence*) that global warming over the last decades has led to widespread permafrost warming. Complete permafrost thaw in recent decades is a common phenomenon across the permafrost regions (IPCC 2021a). Continued thawing of permafrost over the next century is *virtually certain*, with projections showing the volume of perennially frozen soil within the upper 3 meters (9.8 feet) of the ground decreasing by about 25 percent per 1°C (1.8°F) of global surface air temperature increase (IPCC 2021a).

Increasing temperatures are driving a shortened snow cover season, thawing permafrost, and less predictable sea ice extent (GCRP 2023). IPCC (2021a) shows that the Arctic Ocean will *likely* become practically sea-ice free during the seasonal sea-ice minimum for the first time before 2050, regardless of SSP scenario. At the same time, permafrost is projected to continue to decrease (GCRP 2023). Projections indicate that by the end of the century, near-surface (i.e., within 3 to 4 meters) permafrost could decrease by approximately 24 to 69 percent relative to the 1986 to 2005 baseline time period, based on RCP2.6 and RCP8.5, respectively (IPCC 2019a) and it is *virtually certain* that permafrost extent and volume will shrink as the climate warms (IPCC 2021a). According to the Fifth National Climate Assessment (NCA5), previously reported projections of permafrost degradation may underestimate permafrost thaw rates (GCRP 2023 citing Farquharson et al. 2022).

F.4 Analysis Methods

NHTSA provides an overview of the methods used to characterize the effects of the alternatives on climate in Chapter 5, Section 5.3, *Analysis Methods*. Additional detail is provided below.

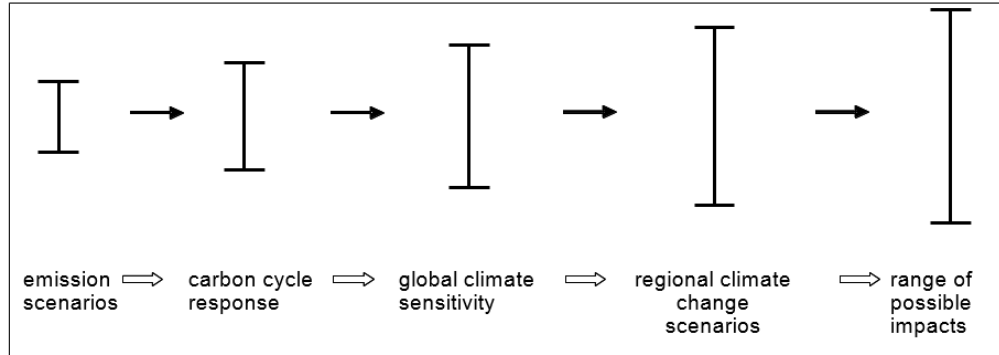
F.4.1 Uncertainty in Climate Modeling

The methods used to characterize emissions and climate impacts consider multiple sources of uncertainty. Sources of uncertainty include the following, in addition to many other factors.

- The pace and effects of technology changes in the transportation sector and other sectors that emit GHGs.
- Changes in the future fuel supply and fuel characteristics that could affect emissions.
- Sensitivity of climate to increased GHG concentrations.
- The rate of change in the climate system in response to changing GHG concentrations.
- Potential existence of thresholds in the climate system (which cannot be predicted or simulated).
- Regional differences in the magnitude and rate of climate change.
- Sensitivity to natural variability, such as El Niño conditions.

Moss and Schneider (2000) characterize the “cascade of uncertainty” in climate change simulations (Figure F.4.1-1). As indicated in Figure F.4.1-1, the emissions estimates used in this EIS have narrower bands of uncertainty than global climate sensitivity, which is less uncertain than regional climate change impacts. The impacts on climate are, in turn, less uncertain than the impacts of climate change on affected resources (such as terrestrial and coastal ecosystems, human health, and other resources discussed in Section F.5, *Health, Societal, and Environmental Impacts of Climate Change*). Although the uncertainty bands broaden with each successive step in the analytic chain, not all values within the bands are equally likely; the mid-range values have the highest likelihood.

Figure F.4.1-1. Cascade of Uncertainty in Climate Change Simulations



Source: Moss and Schneider 2000

Scientific understanding of the climate system is incomplete; like any analysis of complex, long-term changes to support decision-making, evaluating reasonably foreseeable impacts on the human environment involves many assumptions and uncertainties. This EIS uses methods and data to analyze climate impacts that represent the best and most current information available on this topic and that have been subjected to extensive peer review and scrutiny. The information cited throughout this section, extracted from the most recent EPA, IPCC, and GCRP reports on climate change, has endured a more thorough and systematic review process than information on virtually any other topic in environmental science and policy. The tools used to perform the climate change impacts analysis such as the Model for the Assessment of Greenhouse Gas-Induced Climate Change (MAGICC) are widely available and are commonly used in the scientific community.

The CCSP Synthesis and Assessment Product 3.1 report on the strengths and limitations of climate models (CCSP 2008) provides a thorough discussion of the methodological limitations regarding modeling. Additionally, Chapter 1 of IPCC WGI AR6 provides an evaluation of the performance of global climate models. Readers interested in a detailed treatment of this topic will find the Technical Summary and Chapter 1 of IPCC WGI AR6 useful in understanding the issues that underpin the modeling of environmental impacts of the Proposed Action and alternatives on climate change.

F.4.2 Methods for Modeling Greenhouse Gas Emissions

This EIS compares GHG emissions under each action alternative to those under the No-Action Alternative for both LD passenger vehicles, HDPUVs, and the combined CAFE and HDPUV FE alternatives. GHG emissions under each alternative were estimated using the methods described in Chapter 2, Section 2.3, *Standard-Setting and EIS Methods and Assumptions*. For years 2022 through 2050, the emissions estimates in this EIS include tailpipe emissions from fuel combustion and upstream emissions from the production and distribution of fuel for LD passenger vehicles and HDPUVs. GHG emissions

were estimated by the DOT Volpe National Transportation Systems Center (Volpe Center) using the CAFE Compliance and Effects Model (referred to as the CAFE Model), described in Chapter 2, Section 2.3.1, *CAFE Model*. To calculate tailpipe CO₂ emissions, the CAFE Model applies estimates of the density and carbon content of gasoline and other fuels. To calculate tailpipe CH₄ and N₂O emissions, the CAFE Model applies gram-per-mile emissions factors Volpe Center staff referenced from EPA's Motor Vehicle Emissions Simulator (MOVES).²¹ To calculate GHG emissions from upstream processes such as refining and electricity generation, the CAFE Model applies process-specific emissions factors specified on a gram-per-British thermal unit (Btu) basis; Volpe Center staff developed these emissions factors using the Greenhouse Gases and Regulated Emissions in Transportation (GREET) model, developed by the DOE Argonne National Laboratory.

For the climate analysis, GHG emissions trajectories are projected through the year 2100. In order to estimate GHG emissions for the LD and HD fleets for 2051 to 2100, NHTSA extrapolated from the aforementioned CAFE Model results by applying the projected rate of change in U.S. transportation fuel consumption over this period from the global climate scenario (SSP2-4.5) used in the analysis.^{22,23} For 2051 through 2100, the SSP2-4.5 and SSP3-7.0 scenarios project that U.S. road transportation fuel consumption will decline slightly because of assumed improvements in efficiency of internal combustion engine (ICE)-powered vehicles and increased deployment of non-ICE vehicles with higher drivetrain efficiencies. However, the projection of road transport fuel consumption beyond 2050 does not change substantially. Therefore, emissions remain relatively constant from 2050 through 2100.²⁴ The assumptions and methods used to extrapolate GHG emissions estimates beyond 2050 for this EIS are broadly consistent with those used in the *MY 2011–2015 CAFE Final EIS* (NHTSA 2008), the *MY 2012–2016 CAFE Final EIS* (NHTSA 2010), *Phase 1 Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles Final EIS* (NHTSA 2011), *MY 2017–2025 CAFE Final EIS* (NHTSA 2012), *Phase 2 Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles Final EIS* (NHTSA 2016b), the *MY 2021–2026 Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule Final EIS* (NHTSA 2020), and the *MY 2024–2026 CAFE Final EIS and SEIS* (NHTSA 2021, 2022).

The emissions estimates include global CO₂, CH₄, and N₂O emissions resulting from direct fuel combustion and the production and distribution of fuel and electricity (upstream emissions).²⁵ The MOVES model also estimated non-GHG emissions—both criteria pollutants and air toxics—which are

²¹ All downstream emissions estimates in the CAFE Model use emissions factors from EPA's MOVES4 model version (EPA 2023b).

²² More information regarding global emissions scenarios can be found in Section F.4.3.4, *Global Emissions Scenarios*.

²³ 2050 is the last year for which the CAFE Model provides estimates of fleet CO₂ emissions for this analysis.

²⁴ NHTSA anticipates a larger post-2050 decline in passenger car and light truck energy consumption than what is projected in the SSP3-7.0 scenario due to updated projections around technology availability and adoption, as well as other factors that affect fuel consumption. However, the EIS approach for projecting emissions from 2051 to 2100 is consistent with methods used in recent NHTSA EISs, conservative in terms of estimating environmental impacts, and reasonable given the uncertainty associated with post-2050 projections.

²⁵ Upstream emissions considered in this EIS include those that occur during the recovery, extraction, and transportation of crude petroleum, as well as during the refining, storage, and distribution of transportation fuels. The CAFE Model considers crude petroleum from domestic and international sources. A portion of finished motor fuels is refined within the United States using imported crude petroleum as a feedstock and GREET's emissions factors are used to estimate emissions associated with transporting imported petroleum from coastal port facilities to U.S. refineries, refining it to produce transportation fuels, and storing and distributing those fuels. In addition, GREET's emissions factors are used to estimate the GHG emissions produced in foreign countries during the extraction, refining, transportation, storage and distribution of refined fuels imported to the United States from abroad.

used as inputs in MAGICC7. Criteria pollutants included are sulfur dioxide (SO₂), nitrogen oxides (NO_x), carbon monoxide (CO), fine particulate matter 2.5 microns or less in diameter (PM_{2.5}), and volatile organic compounds (VOCs). Air toxics included are acetaldehyde, acrolein, benzene, 1,3-butadiene, formaldehyde, and diesel particulate matter 10 microns or less in diameter.

Fuel savings from more stringent CAFE and HDPUV FE standards would result in lower overall emissions of CO₂ (the main GHG emitted) because of reduced refining, distribution, and use of transportation fuels.²⁶ Fuel efficiency, fuel consumption, and CO₂ emissions are closely connected. Fuel efficiency describes how much fuel a vehicle requires to perform a certain amount of work (for example, how many miles it can travel or how many tons it can carry per mile traveled). A vehicle is more fuel efficient if it can perform more work while consuming less fuel. Lower fuel consumption reduces CO₂ emissions directly because the primary source of vehicle-related CO₂ emissions is the combustion of carbon-based fuel in ICEs. Combustion of a hydrocarbon essentially produces energy (used to power the vehicle), CO₂, and water. Therefore, lowering fuel consumption lowers CO₂ emissions, and greater fuel efficiency means less CO₂ emissions.

NHTSA estimated reductions in tailpipe CO₂ emissions resulting from fuel savings by assuming that the carbon content of gasoline, diesel, and other fuels is converted entirely to CO₂ during the combustion process.²⁷ Specifically, NHTSA estimated CO₂ emissions from fuel combustion as the product of the volume of each type of fuel consumed (in gallons), its mass density (in grams per gallon), the fraction of its total mass represented by carbon (measured as a proportion), and CO₂ emissions per gram of fuel carbon (the ratio of the molecular weights of CO₂ and elemental carbon). NHTSA estimated changes in tailpipe CH₄ and N₂O emissions by applying MOVES-based emissions factors for these GHGs to estimated annual mileage accumulation (i.e., VMT) of vehicles of different types and vintages.

Reduced fuel consumption also lowers CO₂ emissions that result from the use of carbon-based energy sources during fuel production and distribution. At the same time, new CAFE and HDPUV FE standards may also lead to increased CO₂ emissions from processes involved in producing and delivering any alternative energy sources (i.e., other than petroleum) for which consumption increases. In particular, the CAFE Model shows electricity consumption by LD vehicles increasing more rapidly under the action alternatives than under the No-Action Alternative. NHTSA estimated the CO₂ emissions during each phase of fuel and electricity production and distribution (upstream emissions) using CO₂ emissions rates obtained from the GREET model and using previous assumptions about how fuel savings are reflected in reductions in activity during each phase of fuel production and distribution. For this EIS, the Argonne National Laboratory GREET model was updated from the 2021 version to the 2022 version. The total reduction in CO₂ emissions from improving fuel economy under each alternative is the sum of the reductions in motor vehicle emissions from reduced fuel combustion compared to the relevant No-

²⁶ For this rulemaking, NHTSA estimated emissions of vehicular CO₂, CH₄, and N₂O emissions, but did not estimate vehicular emissions of HFCs. HFCs are released to the atmosphere only through air-conditioning system leakage and are not directly related to fuel efficiency. NHTSA's authority under the Energy Policy and Conservation Act, as amended by the Energy Independence and Security Act, extends only to the regulation of vehicle fuel efficiency. For reference, CH₄ and N₂O account for 4 percent of the tailpipe GHG emissions from LD passenger vehicles and light trucks, HDPUVs, and combined tailpipe GHG emissions from all vehicle classes, respectively. CO₂ emissions account for the remaining 96 percent in each category. Of the total (including non-tailpipe) GHG emissions from passenger cars and light trucks, tailpipe CO₂ represents approximately 97.4 percent, tailpipe CH₄ and N₂O represent approximately 0.7 percent, and HFCs represent approximately 1.9 percent (values are calculated from EPA 2023a).

²⁷ This assumption results in a slight overestimate of CO₂ emissions because a small fraction of the carbon content of gasoline is emitted as CO and unburned hydrocarbons. However, the magnitude of this overestimation is likely to be extremely small. This approach is consistent with the recommendation of IPCC for Tier 1 national GHG emissions inventories (IPCC 2006).

Action Alternative plus the reduction in upstream emissions from a lower volume of fuel production and distribution than is projected under the relevant No-Action Alternative (minus the increase in upstream emissions resulting from increased electricity generation).

F.4.3 Methods for Estimating Climate Effects

This EIS estimates and reports the projected reductions in GHG emissions, particularly CO₂, that would result from the action alternatives for CAFE standards, HDPUV FE standards, and the combined set of alternatives. The reduction in GHG emissions is a direct effect of the increased stringency in fuel economy associated with the action alternatives. The reductions in CO₂ emissions, in turn, cause indirect effects on five attributes of climate change: CO₂ concentrations, temperature, sea level, precipitation, and ocean pH.

The subsections that follow describe methods and models used to characterize the reductions in GHG emissions and the indirect effects on the attributes of climate change. Importantly, this EIS uses the SSPs that were developed for the IPCC AR6 report to represent a range of future climate change scenarios and development pathways. Similar to RCPs, which were developed for the previous IPCC AR5 report, the SSPs utilize global socioeconomic projections to derive time-dependent global GHG concentrations and drive general circulation model simulations of climate change. The SSPs were designed to provide an expanded set of GHG concentration scenarios for the Coupled Model Intercomparison Project Phase 6 (CMIP6) based on a range of socioeconomic scenarios, with SSP1 through 5 accounting for various global mitigation and adaptation measures, described in further detail in the following subsections.

F.4.3.1 MAGICC Modeling

NHTSA used a reduced-complexity climate model (MAGICC) to estimate the changes in CO₂ concentrations and global mean surface temperature and used increases in global mean surface temperature combined with an approach and coefficients from IPCC WGI AR6 (IPCC 2021a) to estimate changes in global precipitation and sea-level rise. NHTSA used the publicly available modeling software²⁸ MAGICC7 (Meinshausen et al. 2020) to estimate changes in key direct and indirect effects. NHTSA used MAGICC7 to incorporate the estimated reductions in emissions of CO₂, CH₄, N₂O, CO, NO_x, SO₂, and VOCs and the associated estimated changes in upstream emissions using factors obtained from the GREET model and CAFE Model analysis. NHTSA also performed a sensitivity analysis to examine variations in the direct and indirect climate impacts of the CAFE standard and HDPUV FE standard action alternatives under different assumptions about the sensitivity of climate to GHG concentrations in Earth's atmosphere. The results of the sensitivity analysis can be used to infer how the variation in GHG emissions associated with the action alternatives affects the anticipated magnitudes of direct and indirect climate impacts.

The selection of MAGICC for this analysis was driven by several factors:

- MAGICC has been used in the peer-reviewed literature to evaluate changes in global mean surface temperature and sea-level rise. Applications include the IPCC WGI AR6 (IPCC 2021a) and IPCC WGI AR5 (IPCC 2013a), where it was used to estimate global mean surface temperature and sea-level rise

²⁸ MAGICC7, accessible for general use, is distributed under the Creative Commons Attribution-NonCommercial 4.0 International (CC BY-NC 4.0) license, which forbids commercial application. NHTSA has entered into a direct agreement with ClimateResource, the creators of MAGICC, to incorporate MAGICC7 modeling in this analysis.

for simulations of global emissions scenarios that were not run with the more complex atmospheric-ocean general circulation models (AOGCMs) (Meinshausen et al. 2011).²⁹

- MAGICC is designed for the type of analysis performed in this EIS.
- More complex AOGCMs are not designed for the type of sensitivity analysis performed in this EIS and are best used to provide results for groups of scenarios with much greater differences in emissions.
- MAGICC7 uses updated carbon cycle models that can emulate temperature-feedback impacts on the heterotrophic respiration carbon fluxes.
- MAGICC7 incorporates the latest science from IPCC AR6 and AR5; MAGICC7 was used in the IPCC WGI AR6 (IPCC 2021a).

F.4.3.2 Sea-Level Rise

NHTSA estimated the projected changes in global mean sea level based on data from the IPCC WGI AR6 (IPCC 2021a).^{30, 31} The sea-level rise analysis uses global mean surface temperature data and projections from 1950 to 2100, and global mean sea-level rise data from 1950 to 2019 and projections from 2020 to 2100 under various SSP scenarios. These projections are based on the climate ensemble data of the SSP³² scenarios for sea level and temperature. Simple equations relating projected changes in sea level to projected changes in temperature are developed for each scenario using a regression model.

The regression models for all the SSP scenarios were developed directly from their respective data. For example, the regression models for SSP2-4.5 were used to estimate sea-level rise for the SSP2-4.5 scenario. The temperature outputs of the MAGICC simulations are used as input to these regression models to project sea-level rise for each SSP scenario.³³

F.4.3.3 Ocean pH

NHTSA projected changes in ocean pH using the CO₂ System Calculations (CO2SYS) model, which calculates parameters of the CO₂ system in seawater and freshwater. This model translates levels of atmospheric CO₂ into changes in ocean pH. A lower ocean pH indicates higher ocean acidity, while a higher pH indicates lower acidity.³⁴ The model was developed by Brookhaven National Laboratory and Oak Ridge National Laboratory and is used by both the DOE and EPA. Orr et al. (2015) compared

²⁹ As a reduced-complexity model, MAGICC relies on a more limited number of potential climate and carbon cycle responses and a higher level of parameterization to proxy carbon cycle force than more complex models. Results from MAGICC (e.g., projected atmospheric CO₂ concentration in 2100) will, therefore, vary somewhat from those of more complex models (Meinshausen et al. 2011).

³⁰ Sea-level rise outputs from MAGICC7 were not used because this component of the model is still under development.

³¹ In this EIS, the relationship between sea-level rise and global mean surface temperature developed using IPCC AR6 is used to estimate sea-level rise using global mean surface temperatures from AR6 for the SSP scenarios.

³² SSP1-1.9, SSP1-2.6, SSP2-4.5, SSP3-7.0, and SSP5-8.5.

³³ The MAGICC model runs simulations from a preindustrial starting point through the year 2100. Results of this analysis are shown for the years 2040, 2060, and 2100.

³⁴ Preindustrial average ocean pH was 8.2. The average pH of the world's oceans has decreased by 0.1 unit compared to the preindustrial period, bringing ocean pH to 8.1 (IPCC 2021a).

multiple ocean carbon system models and found that the CO2SYS model was more efficient at analyzing observed ocean chemistry data than other models.

This model uses two of four measurable parameters of the CO₂ system (total alkalinity, total inorganic CO₂, pH, and either fugacity or partial pressure of CO₂) to calculate the remaining two input parameters. NHTSA used the CO2SYS model to estimate the pH of ocean water in the year 2040, 2060, and 2100 under the relevant No-Action Alternative and each of the action alternatives. For each action alternative, total alkalinity and partial pressure of CO₂ were selected as inputs. The total alkalinity input was held constant at 2,345 micromoles per kilogram of seawater and the projected atmospheric CO₂ concentration (ppm) data was obtained from MAGICC model runs using each action alternative. NHTSA then compared the pH values calculated from each action alternative to the relevant No-Action Alternative to determine the impact of the Proposed Action and alternatives on ocean pH.

F.4.3.4 Global Emissions Scenarios

In 2003, CCSP released the *Strategic Plan for the U.S. Climate Change Science Program* (CCSP 2003), which called for the preparation of 21 synthesis and assessment products addressing a variety of topics on climate change science, GHG mitigation, and adapting to the impacts of climate change. These scenarios used updated economic and technology data along with improved scenario development tools that incorporated knowledge gained over the years since the *IPCC Special Report on Emissions Scenarios* (IPCC 2000) was released. The strategy recognized that it would be important to have a consistent set of emissions scenarios so the whole series of synthesis and assessment products would have the same foundation. Three climate-modeling groups independently produced a unique emissions reference scenario with no implemented climate policies beyond the current set of policies in place and four additional stabilization scenarios with varying long-term radiative impacts for GHGs (CO₂, N₂O, CH₄, hydrofluorocarbons [HFCs], perfluorocarbons, and sulfur hexafluoride). The no climate policy scenario uses a set of assumptions about drivers such as population changes, economic growth, land and labor productivity growth, technological options, and resource endowments. The four additional stabilization scenarios represent various levels of implementation of global GHG emissions reduction policies and have been continuously updated with subsequent IPCC reports.

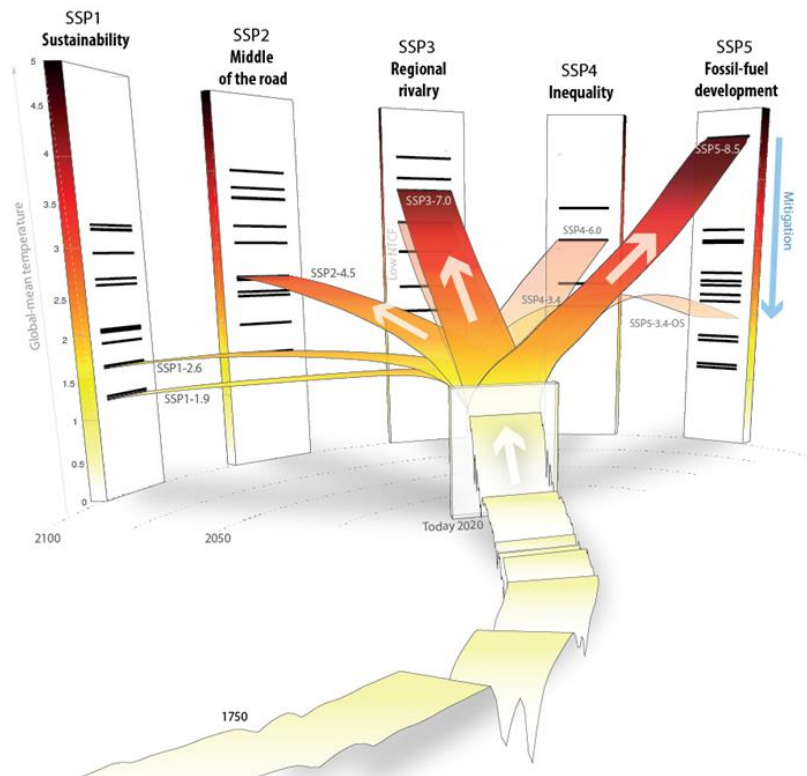
AR6 uses updated Global Climate Models and GHG concentration scenarios developed for the CMIP6. The newest GHG concentration scenarios are called SSPs and are designed to provide an expanded set of GHG concentrations based on a range of future socioeconomic conditions (Riahi et al. 2017). The SSPs are a series of projections representing a range of future climate change scenarios and development pathways that encompass various trajectories of global GHG emissions. Developed using complex Integrated Assessment Models, these pathways make assumptions about how population, education, energy use, technology, and more, could change over the next century and are coupled with assumptions about the level of ambition for and success with mitigating climate change. These socioeconomic factors and mitigation ambitions are translated into projections of future GHG emissions and resulting changes to climate indicators (Harrison 2021).

NHTSA adjusted the reference datasets to use these SSP scenarios in place of the previous RCP scenarios, which explore the effects of different emissions trajectories, resulting in various radiative

forcing values.³⁵ However, unlike in SSPs, the socioeconomic characteristics that define RCPs are not standardized, making it difficult to map societal changes.

First, SSPs lay out possible socioeconomic conditions, land-use changes, and other human-caused climate drivers that influence GHG emissions, affecting ERF. Second, they describe socioeconomic characteristics that influence GHG emissions in a standardized manner, indicating the societal pathways associated with different levels of warming. Potential mitigation actions, such as limiting global temperature rise to below 2°C above preindustrial levels, can be “applied” within these baseline socioeconomic scenarios to evaluate their effectiveness in achieving various targets. Illustrated in Figure F.4.3-1 are temperature levels relative to preindustrial levels with historical temperatures (front light-yellow band), 2020 temperatures (white block in the middle) and branching of the respective scenarios over the 21st century along the five different SSP scenarios.

Figure F.4.3-1. The SSP Scenarios and Their Five Socioeconomic SSP Families



Source: Meinshausen et al. 2020
 SSP = Shared Socioeconomic Pathway

A set of SSPs provide continuity with RCPs by modeling similar ERFs through the end of this century (e.g., SSP5-8.5 is a companion to RCP8.5). SSPs also consider a greater range of future aerosol concentrations, which drives a greater range of temperature projections (Riahi et al. 2017). The core set of five SSP scenarios in AR6 (SSP1-1.9, SSP1-2.6, SSP2-4.5, SSP3-7.0, SSP5-8.5) were chosen to ensure overlap with

³⁵ “Radiative forcing (RF) describes the change in the net downward radiative flux from the top of the atmosphere after allowing for atmospheric temperatures, water vapor and clouds to adjust, but with surface temperature or a portion of surface conditions unchanged. All surface and tropospheric conditions are kept fixed for RF, whereas effective radiative forcing (ERF) allows all physical variables to respond to perturbations, except for those concerning the ocean and sea ice” (IPCC 2021a). The SSP scenarios model ERF, while previous RCP scenarios modeled RF.

the existing RCP levels of ERF in the year 2100, while simultaneously presenting a broader array of potential mitigation and adaptation possibilities.

CMIP6 model ensembles using SSPs yield greater warming and a larger range of projected temperature and precipitation outcomes than the Coupled Model Intercomparison Project Phase 5 (CMIP5). Specifically, CMIP6 models project greater warming at the upper end of the 5 percent to 95 percent ensemble envelope for the high SSP5-8.5 scenario, and individual global climate models using SSP5-8.5 simulate warming greater than previously predicted (Tebaldi et al. 2021). For instance, the upper end (95th percentile) of warming through the end of the century under SSP5-8.5 is 5.7°C (10.3°F) (IPCC 2021b), while warming under RCP8.5 is 4.8°C (8.6°F) (IPCC 2013b). CMIP6 models also have larger climate sensitivities than CMIP5 (Zelinka et al. 2020; Hermans et al. 2021), meaning that, on average, CMIP6 models simulate larger global temperature change in response to increases in CO₂ concentrations. For example, effective climate sensitivity corresponding to CO₂ quadrupling increased from 3.7 to 8.4°F in CMIP5 to 3.2 to 10.1°F in CMIP6 (Zelinka et al. 2020).

MAGICC uses the SSP long-term emissions scenarios that represent different assumptions about key drivers of GHG emissions. As explained in more detail below, the direct and indirect impacts analysis uses the SSP3-7.0 scenario, and the cumulative impacts analysis uses the SSP2-4.5 scenario to represent reference case global emissions scenarios. NHTSA chose the SSP3-7.0 scenario as a reference case for the direct and indirect impacts analysis for its incorporation of a comprehensive suite of GHG and pollutant gas emissions, including carbonaceous aerosols and a global context of emissions with a full suite of GHGs and ozone precursors. The SSP3-7.0 scenario yields an ERF of approximately 7.0 W/m² in the year 2100 and it is noted in the IPCC WGI AR6 as being a high emissions scenario, “in between RCP6.0 and RCP8.5.” That assumes no successful, comprehensive global actions to mitigate GHG emissions (IPCC 2021a). SSP2-4.5 was chosen as a reference case for the cumulative impacts analysis because the scenario assumes an intermediate level of emissions with significant global cooperation to address climate change. Sections F.4.3.4.1, *Global Emissions Scenario Used for the Direct and Indirect Impacts Analysis*, through F.4.3.4.3, *Other Past, Present, and Reasonably Foreseeable Future Actions*, describe the differences among these scenarios and provide the rationale for use in each analysis.

F.4.3.4.1 Global Emissions Scenario Used for the Direct and Indirect Impacts Analysis

The results of the direct and indirect impacts analysis rely on the SSP3-7.0 scenario to represent a high reference case emissions scenario resulting from limited global cooperation on emissions mitigation efforts under the SSP3 socioeconomic development narrative. This scenario replaces the GCAMReference scenario used in the previous analysis. This scenario assumes there are no successful, comprehensive global actions to mitigate GHG emissions and yields atmospheric CO₂ levels of 800 ppm and an ERF of 7.0 W/m² in 2100. SSP3-7.0 has particularly high non-CO₂ emissions, including high aerosols emissions, which continue to increase over the 21st century. The IPCC refers to SSP3-7.0 as a high emissions scenario, where CO₂ emissions roughly double current levels by 2100, but increase less rapidly than the very high SSP5-8.5 scenario.

SSP3, the regional rivalry scenario, centers around high challenges to mitigation and adaptation. Policies are focused on security with significant barriers to international trade, high inequality, slow economic growth, low population growth in rich countries, and high population growth in the developing world. The pathway represents concerns about competitiveness and security, and policies become increasingly oriented toward national and regional security issues with countries focusing on energy and food security within their own regions, at the expense of broader development. Educational and

technological investments decline, and economic development is slow. Consumption is material-intensive and there is a low international priority for addressing environmental concerns, leading to inequalities and strong environmental degradation in some regions (Riahi et al. 2017). SSP3 has higher climate mitigation costs and shows high challenges to adaptation in terms of income and trade features. Unlike SSP5, which faces high challenges to mitigation and low challenges to adaptation, fossil fuel use does not intensify in SSP3 and therefore there is less intense warming. Furthermore, SSP3 does not see inequality deepen as much as the SSP4 pathway, which faces low challenges to mitigation and high challenges to adaptation. SSP4 and SSP5 include distinctly bleaker views of a world with limited technology improvements and continued business-as-usual emissions projections (Fujimori et al. 2017).

The impact of each action alternative was simulated by calculating the difference between annual GHG emissions under the relevant No-Action Alternative and emissions under the action alternative and subtracting this change from the selected scenarios to generate modified global-scale emissions scenarios, which show the effects of the various regulatory alternatives on the global emissions path. The same methodology was used to analyze the impact of action alternatives under the CAFE standards, the HDPUV FE standards, and the combined set of alternatives.

For example, CO₂ emissions from passenger cars and LD trucks in the United States in 2040 under the No-Action Alternative are estimated to be 833 million metric tons carbon dioxide (MMTCO₂); the emissions in 2040 under Alternative PC2LT002 (Preferred Alternative for CAFE standards) (Chapter 2, Section 2.2, *Proposed Action and Alternatives*) are estimated to be 822 MMTCO₂. For HDPUVs in the United States, CO₂ emissions in 2040 are estimated to be 139 MMTCO₂ under the No-Action Alternative and 136 MMTCO₂ under Alternative HDPUV108 (Preferred Alternative for HDPUV FE standards). Combining all vehicle classes, CO₂ emissions are estimated to be 972 MMTCO₂ in 2040 under the No-Action Alternative and 958 MMTCO₂ under the Preferred CAFE and Preferred HDPUV FE Alternatives. Therefore, projected emissions are expected to be 11 MMTCO₂ lower for passenger cars and LD trucks, 3 MMTCO₂ lower for HDPUVs, and 14 MMTCO₂ lower for both combined as a result of adopting the Preferred Alternative.

Global emissions in 2040 are estimated to be 58,498 MMTCO₂ under the SSP3-7.0 scenario. These global emissions are assumed to incorporate emissions from passenger cars, LD trucks, and HDPUVs in the United States under the No-Action Alternatives for the CAFE standards and HDPUV FE standards. Therefore, global emissions under the Preferred Alternative for all vehicle classes are estimated to be 14 MMTCO₂ less than the reference levels, or approximately 58,484 MMTCO₂ for SSP3-7.0 in 2040.

There are some inconsistencies between the overall assumptions used to develop SSP3-7.0 used by AR6 and the assumptions used in the CAFE Model in terms of economic growth, energy prices, energy supply, and energy demand. However, these inconsistencies affect the characterization of each action alternative in equal proportion, so the relative estimates provide a reasonable approximation of the differences in environmental impacts among the action alternatives.

F.4.3.4.2 Global Emissions Scenario Used for the Cumulative Impacts Analysis

The cumulative impacts analysis relies primarily on the SSP2-4.5 scenario to represent a reference case global emissions scenario that assumes a moderate level of global actions to address climate change and predicts CO₂ emissions would remain around current levels before starting to fall mid-century. The IPCC refers to SSP2-4.5 as an intermediate emissions scenario. NHTSA chose this scenario as a plausible global emissions baseline for the cumulative analysis because of the potential impacts of these reasonably foreseeable actions, yielding a moderate level of global GHG reductions from the SSP3-7.0

baseline scenario used in the direct and indirect analysis. The SSP2-4.5 scenario serves as a reference scenario against which the climate impacts of the Proposed Action and alternatives can be measured. This scenario yields atmospheric CO₂ levels of 568 ppm and an ERF of approximately 4.5 W/m² in the year 2100.

The timeframe for this analysis extends from 2040 through 2100 and the geographic area of interest is domestic and global because cumulative impacts of changes in GHG emissions occur on a domestic and global scale. This temporal and geographic focus is consistent with the analysis of direct and indirect GHG and climate change impacts as discussed in Chapter 5, *Greenhouse Gas Emissions and Climate Change*. Specific actions that support the use of the scenarios used in this analysis were included as examples in Section F.4.3.4.3, *Other Past, Present, and Reasonably Foreseeable Future Actions*. The methods NHTSA used to characterize the impacts of the Proposed Action and alternatives on climate are described above. The methods and assumptions for the cumulative analysis are largely the same as those used in the direct and indirect impacts analysis, except (1) the global emissions scenario used for the main cumulative analysis is SSP2-4.5, and (2) multiple global emissions scenarios are modeled in the sensitivity analysis.

SSP2, the middle of the road scenario, considers medium challenges to mitigation and adaptation that continue with current development patterns (Fricko et al. 2017). The pathway represents a world in which social, economic, and technological trends do not shift markedly from historical patterns. Development and income growth proceed unevenly; institutions make slow progress in achieving sustainable development goals; environmental systems experience degradation, although there are some improvements; and overall, resource and energy use declines. Global population growth levels off in the second half of the century and income inequality persists or slowly improves, with challenges to reducing vulnerability to societal and environmental changes remaining (Riahi et al. 2017). Thus, NHTSA believes that SSP2-4.5 represents reasonable proxies for the past, present, and reasonably foreseeable GHG emissions through 2100, and is used for that purpose in this cumulative impact analysis on GHG emissions and climate change.

For the cumulative impact analysis, NHTSA calculated the difference in annual GHG emissions under the Proposed Action and alternatives compared to the relevant No-Action Alternative. NHTSA applied this change to the SSP2-4.5 scenario to generate modified global-scale emissions scenarios, which show the impact of the Proposed Action and alternatives on the global emissions paths.

For example, CO₂ emissions from passenger cars and LD trucks in the United States in 2040 under the No-Action Alternative are estimated to be 833 MMTCO₂; the emissions in 2040 under Alternative PC2LT002 (Preferred Alternative for CAFE standards) (Chapter 2, Section 2.2, *Proposed Action and Alternatives*) are estimated to be 822 MMTCO₂. For HDPUVs in the United States, CO₂ emissions in 2040 are estimated to be 139 MMTCO₂ under the No-Action Alternative and 136 MMTCO₂ under Alternative HDPUV108 (Preferred Alternative for HDPUV FE standards). Combining all vehicle classes, CO₂ emissions are estimated to be 972 MMTCO₂ in 2040 under the No-Action Alternative and 958 MMTCO₂ under the Preferred CAFE and Preferred HDPUV FE Alternatives. Therefore, projected emissions are expected to be 11 MMTCO₂ lower for passenger cars and LD trucks, 3 MMTCO₂ lower for HDPUVs, and 14 MMTCO₂ lower for both combined as a result of adopting the Preferred Alternative.

Global emissions in 2040 are estimated to be 44,253 MMTCO₂ under the SSP2-4.5 scenario. These global emissions are assumed to incorporate emissions from passenger cars, LD trucks, and HDPUVs in the United States under the No-Action Alternatives for the CAFE standards and HDPUV FE standards.

Therefore, global emissions under the Preferred Alternative for all vehicle classes are estimated to be 14 MMTCO₂ less than the reference levels, or approximately 44,239 MMTCO₂ for SSP2-4.5 in 2040.

To evaluate the sensitivity of the results to a reasonable range of alternative emissions scenarios, NHTSA also used the SSP1-2.6 and SSP3-7.0 scenarios. The SSP1-2.6 scenario is considered a more aggressive stabilization scenario that illustrates a “green growth strategy” that stabilizes the anthropogenic components of ERF at 2.6 W/m² and has atmospheric CO₂ levels at 437.66 ppm in 2100. In this scenario, there are low challenges to adaptation and mitigation. The scenario is used in place of the optimistic RCP2.6 scenario and was designed with the aim of simulating a development that is compatible with a 2°C target.

SSP1, the sustainability scenario, is based on minimal challenges to mitigation and adaptation, policy focused on sustainable development, effective international cooperation, reduced inequality, low consumption, and low population growth. The pathway represents a world that shifts gradually toward a more sustainable path, emphasizing development that respects environmental boundaries. Resource management slowly improves, investments in education and health accelerate the demographic transition, and the emphasis on economic growth shifts toward human well-being. Driven by an increasing commitment to achieving development goals, inequality is reduced both across and within countries, and consumption is oriented toward lower material growth and resource and energy intensity (Riahi et al. 2017).

This green growth paradigm shows how GHG and air pollutant emissions and global land use could develop in very different directions based on societal trends in the energy and agriculture sectors. SSP1 shows how a combination of resource efficiency, preferences for sustainable production methods, and investment in human development could lead to lower anthropogenic GHG emissions and land use in 2100 than in 2010. This scenario could be a basis for further discussion on how climate policy can be combined with achieving other societal goals (van Vuuren et al. 2017).

F.4.3.4.3 Other Past, Present, and Reasonably Foreseeable Future Actions

NHTSA chose the SSP2-4.5 scenario as the primary global emissions scenarios for evaluating climate impacts for the cumulative impacts analysis because regional, national, and international initiatives and programs now in the planning stages or already underway indicate that a moderate reduction in the growth rate of global GHG emissions is reasonably foreseeable in the future.

The following initiatives and programs are evidence of the past, present, or reasonably foreseeable future actions that would affect GHG emissions. Global and domestic actions to reduce GHG emissions indicate that a moderate reduction in the growth rate of global GHG emissions is reasonably foreseeable in the future. NHTSA used these scenarios to assess the impacts of the Proposed Action and alternatives when reasonably foreseeable increases in global GHG emissions are taken into account. Although it is not possible to quantify the precise GHG effects associated with these actions, policies, or programs when taken together (and NHTSA does not attempt to do so), collectively they illustrate an existing and continuing trend of U.S. and global awareness, emphasis, and efforts toward substantial GHG reductions. Therefore, a scenario that accounts for an intermediate emissions pathway with moderate reductions in the rate of global GHG emissions, such as the SSP2-4.5 scenario, can be considered reasonable under NEPA.

United States: Regional and State Actions

The following actions in the United States are already underway or reasonably foreseeable.

- **Regional Greenhouse Gas Initiative (RGGI).** Launched on January 1, 2009, RGGI was the first mandatory, market-based effort in the United States to reduce GHG emissions (RGGI 2009). The initiative now includes the following 11 Northeast and Mid-Atlantic states: Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont.³⁶ Initially, RGGI states agreed to cap annual emissions from power plants in the region at 188 MMTCO₂ for 2009 through 2011, and 165 MMTCO₂ for 2012 through 2013 (RGGI 2014; Block 2014). In 2013, RGGI states lowered the regional emissions cap to 91 MMTCO₂ for 2014. The RGGI CO₂ cap then declined 2.5 percent per year from 2015 through 2020 (RGGI 2021). RGGI states plan to reduce the overall cap by 30 percent between 2020 and 2030 (RGGI 2021). The proposed changes include an 11-state cap of 119.8 MMTCO₂ in 2021, which will decline to 86.9 MMTCO₂ in 2030 (RGGI 2021). In 2024, the RGGI cap for the 10 actively participating states—excluding Pennsylvania, which is currently under a court injunction that prevents it from releasing allowances—is established at 157.2 MMTCO₂ (RGGI 2024).
- **California 2016 Greenhouse Gas Reduction Legislation (Senate Bill 32).** In 2016, California passed Senate Bill 32, which codifies into law a GHG emissions reduction target of 40 percent below 1990 levels by 2030, equivalent to an absolute level of 260 MMTCO₂e (California Air Resources Board [CARB] 2017). Initiatives to support this goal seek to reduce GHGs from cars, trucks, electricity production, fuels, and other sources. GHG-reduction measures under CARB’s 2017 proposed scoping plan update include a continuation of the state’s cap-and-trade program, a renewables portfolio standard, reduction of electric sector GHG emissions through the integrated resources plan process, low carbon fuel standards, zero-emission and plug-in hybrid LD electric vehicle (EV) deployment, medium- and heavy-duty vehicle GHG regulations, VMT reduction programs, the Short-Lived Climate Plan to reduce non-CO₂ GHGs, and refinery sector GHG regulations (CARB 2017).³⁷ CARB released a proposed scoping plan update in 2022 that supported a goal of 100 percent zero-emission sales of LD vehicles by 2030 and medium- and heavy-duty vehicles by 2040, a 20 percent zero-emission target for the aviation transportation sector, and reduced per capita VMT by 25 percent of 2019 levels by 2030 (CARB 2022a). Each of these measures is either a known commitment, already underway, or required. The cap-and-trade program took effect in 2013 for electric generation units and large industrial facilities and expanded in 2015 to include ground

³⁶ New Jersey was a part of RGGI at its founding but dropped out of the program in May 2011. On January 29, 2018, New Jersey Governor Phil Murphy signed an executive order directing the state to rejoin RGGI, and the state officially rejoined in 2019. Virginia joined RGGI in July 2020. On October 3, 2019, Pennsylvania Governor Tom Wolf issued an executive order instructing the state’s Department of Environmental Protection to join RGGI. In April 2022 the state officially joined; however, as of July 2022, the Commonwealth Court of Pennsylvania reinstated an injunction on implementation and enforcement of RGGI regulation (PA DEP 2022). Additionally, Virginia withdrew from RGGI on June 7, 2023, after the State Air Pollution Control Board voted to withdraw following an executive order from Virginia Governor Glenn Youngkin (Paullin 2023). However, in February 2024, a court ruled that a lawsuit appealing the decision to withdraw will be allowed to proceed (Hafner 2024).

³⁷ In September 2019, NHTSA issued a final rule that established regulatory text explicitly preempting state and local laws relating to fuel economy standards established under the Energy Policy and Conservation Act. As part of that action, EPA also withdrew the waiver it had previously provided to California for that State’s GHG and ZEV programs under Section 209 of the Clean Air Act. The Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule Part One: One National Program; Final Rule, 84 FR 51310 (Sept. 27, 2019). NHTSA has since reconsidered its position and EPA has reconsidered its withdrawal, as discussed further below.

transportation and heating fuels (C2ES 2014). The known commitments are projected to reduce GHG emissions by 48 percent of 1990 levels by 2030 (CARB 2022b).

- **U.S. Climate Alliance.** Twenty-four U.S. governors have committed to reduce GHG emissions in their respective jurisdictions consistent with the goals of the Paris Agreement. Alliance members have committed to implement policies that will reduce emissions at least 50 to 52 percent below 2005 levels by 2030 and achieve overall net-zero emissions as soon as practicable and before 2050 (U.S. Climate Alliance 2021). In 2005, emissions from Alliance members totaled approximately 2.8 gigatons (Gt) of CO₂ (U.S. Energy Information Administration 2018a, 2018b). From 2005 to 2021, Alliance members reduced emissions by 18 percent (U.S. Climate Alliance 2024). Based on policies in place in 2024, Alliance members aim to achieve the reduction targets of 26 to 28 percent below 2005 levels by 2025, 50 to 52 percent below 2005 levels by 2030, and net-zero GHG emissions no later than 2050 (U.S. Climate Alliance 2024).
- **Zero-Emission Vehicle (ZEV) Programs.** In March 2012, California Governor Jerry Brown issued an Executive Order (E.O.) establishing several milestones on a path toward 1.5 million ZEVs in California by the year 2025 (California Office of the Governor 2013). Since 2013, California has created three ZEV action plans for obtaining this goal and introducing new goals; most recently with the goal of 5 million ZEVs by 2030 (California Governor’s Office of Business and Economic Development 2021). In addition to these goals, California has issued several updates with more details on California’s ZEV plans of action. In 2015, the state updated the California Code of Regulations (CCR) at 13 CCR § 1962.2, which regulated the minimum ZEV credit percentage requirements for passenger cars, LD trucks, and medium-duty vehicles for MY 2018 and later. In 2018, this ZEV minimum percentage requirement was 4.5 percent, increasing to 22.5 percent for MY 2025 and beyond. In September 2020, California Governor Gavin Newsom established through E.O. N-79-20 new targets for ZEVs including 100 percent of in-state sales of new passenger vehicles and drayage trucks to be zero-emission by 2035, with medium- and heavy-duty vehicles to follow in 2045 (California Governor’s Office of Business and Economic Development 2021). As of 2024, 17 states (the “Section 177” states³⁸), making up more than one-third of total new car sales in the United States, have adopted either ZEV programs identical to California’s or ones with variations (CARB 2024).
- **California Actions on Emissions.** In August 2020, California formalized bilateral agreements with six automakers to continue its emissions reduction framework developed in 2019 (CARB 2019). These six automakers are BMW (of America), Ford, Honda, Volkswagen (of America), Audi, and Volvo. The framework agreement continues annual reductions of LD vehicle GHG emissions through MY 2026 under approximately the same rates as the standards set by EPA in 2012 (CARB 2020). The states that have previously adopted these California standards (13 states that also adopted the ZEV programs) have also supported California’s GHG vehicle framework agreements. In March 2022, EPA confirmed the Clean Air Act (CAA) waiver of preemption for California’s Advanced Clean Cars I program and GHG emissions standards.³⁹

United States: Federal Actions

The following Federal actions are already underway or reasonably foreseeable.

³⁸ *Section 177 states* refers to the U.S. states that have adopted California’s criteria pollutant and GHG emissions regulations under Section 177 of the Clean Air Act (42 U.S.C. 7507).

³⁹ California State Motor Vehicle Pollution Control Standards; Advanced Clean Car Program; Reconsideration of a Previous Withdrawal of a Waiver of Preemption; Notice of Decision, 87 FR 14332 (Mar. 14, 2022).

- **EPA Clean Trucks Plan.** In August 2021, in response to the requirements in the Energy Independence and Security Act of 2007 (EISA), EPA announced the Clean Trucks Plan, which aims to reduce GHG emissions and other air pollutants from HD trucks through a series of rulemakings over 3 years. The regulatory actions include setting stronger NO_x standards for HD trucks and tightening “Phase 2” GHG emissions beginning in MY 2027, setting stronger emissions standards for medium-duty commercial vehicles beginning in MY 2027, and setting “Phase 3” GHG standards for HD vehicles beginning in MY 2030 that are significantly stronger than the MY 2027 GHG standards (EPA 2021g). On March 29, 2024, EPA announced the Phase 3 FE standards final rule (EPA 2024h). In December 2022, EPA finalized the strongest-ever national clean air standards to cut smog- and soot-forming emissions from HD trucks beginning with MY 2027, as part of this plan (EPA 2022i).
- **Bureau of Land Management (BLM) Methane Waste Prevention Rule.** On March 27, 2024, BLM announced a final rule that will curb the waste of natural gas from venting, flaring, and leaks during the production of oil and gas on Federal and Tribal lands (BLM 2024). The Waste Prevention, Production Subject to Royalties, and Resource Conservation rule (also known as the Waste Prevention Rule) modernized existing regulations that did not properly address the increasingly fast development in the oil and gas industry and will hold oil and gas companies accountable by requiring measures to avoid wasteful practices and find and fix leaks. BLM estimates the rule would have \$17.9 million annual societal benefits from reduced GHG emissions (using a 3 percent discount rate).
- **U.S. National Blueprint for Transportation Decarbonization.** In September 2022, DOE, DOT, EPA, and U.S. Department of Housing and Urban Development signed a joint memorandum of understanding to work towards decarbonizing the national transportation sector. The agencies jointly released the Blueprint for Transportation Decarbonization, which acts as the first framework of strategies to decarbonize the transportation sector by mid-century across multiple U.S. government agencies (DOE et al. 2023). The blueprint focuses on equitable, convenient, and accessible transportation, and it emphasizes the need to collaborate across public and private sectors and across different government levels.
- **NHTSA Fuel Efficiency (FE) and GHG Standards for Medium- and Heavy-Duty Engines and Vehicles.** NHTSA, in coordination with EPA and in response to the requirements in EISA, intends to propose new FE standards for MYs 2030 and beyond for medium- and heavy-duty vehicles.⁴⁰ Through this, NHTSA will propose the next phase (Phase 3) of the Medium and Heavy Vehicle Fuel Efficiency Standards program. In Phase 2, NHTSA tailored the standards to different regulatory categories of HD vehicles based on fuel type, duty cycle, vehicle application, etc., and sought comments on how to tailor Phase 3 FE standards to these regulatory categories.
- **Inflation Reduction Act (IRA).** In August 2022, the IRA was signed into law, representing the most significant action Congress has yet to take on clean energy and climate change. The IRA is a 10-year plan that includes \$369 billion in clean energy programs and incentives (e.g., tax credits) across the U.S. economy, including in the power, industry, buildings, transportation, and agriculture and forestry sectors. The IRA provides clean vehicle credits for new and used EVs; removes the cap for the DOE program that provides loans to facilities manufacturing advanced vehicles that emit a low amount of GHGs or no GHGs; provides incentives to replace eligible medium-duty and HD vehicles with ZEVs; increases funding for the EPA program that gives grants, rebates, and loans under the

⁴⁰ NHTSA Fuel Efficiency and Greenhouse Gas Standards for Medium and Heavy-Duty Engines and Vehicles <https://www.regulations.gov/document/NHTSA-2022-0076-0001>. Notice of Intent to Prepare an Environmental Impact Statement for Model Years 2030 and Beyond New Medium and Heavy-Duty Fuel Efficiency Improvement Program Standards; Request for Scoping Comments, 87 FR 57248 (Sept. 19, 2022).

Energy Policy Act of 2005 to identify and reduce diesel emissions resulting from goods movement facilities and vehicles servicing those facilities in low-income and disadvantaged communities; and provides funding to the U.S. Postal Service for purchasing zero-emission delivery vehicles and installing related infrastructure.⁴¹ Additionally, it builds on the Infrastructure Investment and Jobs Act and advances the Justice40 Initiative, which sets as a goal that 40 percent of the overall benefits of certain Federal climate, clean energy, and other Federal investments flow to disadvantaged communities that are marginalized by underinvestment and overburdened by pollution (U.S. White House 2023b). Combined with the Infrastructure Investment and Jobs Act, actions from these two pieces of legislation are estimated to reduce emissions by 1,150 MMTCO₂e in 2030 (DOE 2022l).

- **Final Rule to Redefine Terms under DOE Lighting Efficiency Standards.** In 2007, EISA directed DOE to conduct a rulemaking on efficiency standards for general service lamps (GSLs) and other incandescent lamps. In January 2017, DOE issued a final rule that revised and expanded the definition for GSL to include a broader range of incandescent lightbulbs, including those used for decorative and less-common purposes than general lighting (EPA 2017c). In February 2019, DOE issued a notice of proposed rulemaking to rescind the 2017 amendments, arguing that the definition revisions were not lawful according to the 2007 rulemaking directive (EPA 2019c). The rule to rescind the amendments was finalized in September 2019. The energy savings potential of the 2017 standards was estimated to be 27 quadrillion BTUs for lamps shipped between 2020 and 2049 (Kantner et al. 2017). The proposal had the potential to reduce GHG emissions by 540 MMTCO₂e by 2030 (Kantner et al. 2017). In May 2021, DOE announced that it is re-evaluating its determination from 2019—that the Secretary of Energy was not required to implement the statutory backstop requirement for GSLs—possibly reinstating the 2017 revision (DOE 2021). On May 9, 2022, the proposed rulemaking was finalized by DOE to reinstate the 2017 revision for GSLs and other supplemental definitions. This final rule entered into effect in July 2022 (DOE 2022m).
- **NHTSA Fuel Economy Standards for MYs 2024–2026.** On March 31, 2022, NHTSA issued this final rule to establish standards that would require an industry-wide fleet average of approximately 49 mpg for passenger cars and light trucks in MY 2026, by increasing fuel efficiency by 8 percent annually for MYs 2024 and 2025, and 10 percent annually for MY 2026. The agency projects the final standards will avoid consumption of about 234 billion gallons of gas between MYs 2030 and 2050, and will reduce CO₂ emissions by 2.5 billion metric tons. EPA issued a separate final rule setting GHG standards for passenger cars and light trucks for MYs 2023 through 2026.⁴²
- **The Long-Term Strategy of the United States: Pathways to Net-Zero GHG Emissions by 2050.** In November 2021, the United States submitted its long-term strategy to the UNFCCC, communicating a goal of net-zero emissions by 2050. This document lays out how the United States plans to achieve both the near-term 2030 GHG target and the longer-term 2050 target. To achieve these goals, the long-term strategy lays out multiple pathways the United States could take, all of which include “five key transformations” including decarbonizing electricity, electrifying end uses and switching to clean fuels, cutting energy waste, reducing non-CO₂ emissions, and scaling up CO₂ removal (U.S. State Department and U.S. Executive Office of the President 2021).

⁴¹ H.R.5376 - inflation reduction act of 2022 - congress. (n.d.). Retrieved January 20, 2023, from <https://www.congress.gov/bill/117th-congress/house-bill/5376>.

⁴² Revised 2023 and Later Model Year Light-Duty Vehicle Greenhouse Gas Emissions Standards; Final Rule, 86 FR 74434 (Dec. 30, 2021).

- **Infrastructure Investment and Jobs Act.**⁴³ On November 15, 2021, the Infrastructure Investment and Jobs Act was signed into law. This bipartisan infrastructure bill authorizes funds for Federal-aid highways, highway safety programs, and public transit programs. Among other provisions, this legislation will invest \$7.5 billion to build a network of EV chargers in the United States and \$39 billion to improve public transit infrastructure, in addition to the reauthorization of existing transit programs. This investment will include replacing existing public vehicles with ZEVs, as well as expanding and improving public transit options across the country, including the largest investment in passenger rail since Amtrak was authorized in 1970. The transportation sector is the largest single source of GHG emissions in the United States. Improving access to and quality of public transit systems will reduce GHG emissions via reduced dependency on single-occupancy vehicles. The bill also aims to build more climate-resilient transmission lines to facilitate the expansion of renewables at lower costs. Combined with the IRA, actions from these two pieces of legislation are estimated to reduce emissions by 1,150 MMTCO₂e in 2030 (DOE 2022I).
- **E.O. 14037, Strengthening American Leadership in Clean Cars and Trucks.** In E.O. 14037,⁴⁴ President Biden directed NHTSA and EPA to consider multiple actions to regulate the fuel efficiency of and CO₂ emissions from post-MY 2026 light-, medium-, and heavy-duty vehicles.
- **United States and the Paris Agreement.** On April 22, 2021, President Biden submitted a Nationally Determined Contribution to the United Nations Framework Convention on Climate Change (UNFCCC) secretariat, with a target for the United States to achieve a 50 to 52 percent reduction in economy-wide net GHG pollution from 2005 levels by 2030. This target was submitted under the Paris Agreement, which entered into force on November 4, 2016. The United States formally withdrew from the Paris Agreement in November 2020, but then officially rejoined in February 2021. The Paris Agreement's goal is to limit global average temperature increase to well below 2°C (3.6°F) above preindustrial levels and pursue efforts to limit the increase to 1.5°C (2.7°F).
- **E.O. 14008, Tackling the Climate Crisis at Home and Abroad.** President Biden signed E.O. 14008 on January 27, 2021, to prioritize tackling climate change in both domestic and international policy.⁴⁵ The E.O. takes a whole-of-government approach to addressing climate change, establishing the White House Office of Domestic Climate Policy, the National Climate Task Force, and other interagency working groups to facilitate a cohesive government-wide approach to climate change that prioritizes job creation, economic opportunity, and environmental justice.
- **Regulations on HFCs.** On December 27, 2020, the American Innovation and Manufacturing (AIM) Act was enacted by Congress. The AIM Act directs EPA to address the environmental impact of HFCs by phasing down production and consumption, maximizing reclamation and minimizing releases from equipment, and facilitating the transition to next-generation technologies through sector-based restrictions. Specifically, the AIM Act directs EPA to phase down production and consumption of HFCs to 15 percent of their baseline levels in a stepwise manner by 2036 through an allowance allocation and trading program. On October 11, 2022, EPA published its list of annual HFC allowances for the production and consumption of HFCs in 2023. This action is expected to reduce GHG emissions by 4,700 MMTCO₂ from 2022 to 2050 (EPA 2021h). On October 14, 2021, EPA issued a decision to grant or partially grant petitions requesting EPA restrict the use of HFCs in the refrigeration and air conditioning, aerosols, and foams sectors. EPA will complete a rulemaking

⁴³ Infrastructure Investment and Jobs Act, Notice of Implementation, 86 FR 64335 (Nov. 15, 2021).

⁴⁴ E.O. 14037, Strengthening American Leadership in Clean Cars and Trucks, 86 FR 43583 (Aug. 10, 2021).

⁴⁵ E.O. 14008, Tackling the Climate Crisis at Home and Abroad, 86 FR 7619 (January 27, 2021).

within 2 years of the date the petitions were granted. EPA continues to receive, evaluate, and grant or deny petitions within 180 days of receipt.

- **Revisions to the Methane New Source Performance Standards (NSPS) Rule.** In 2016, the NSPS rule that targets controlling CH₄ and VOC leaks from oil and gas operations was finalized. In 2020, EPA issued two final rules that amended the 2016 NSPS. The first, published on September 14, 2020, finalized changes to the prior standards that remove oil and gas transmission and storage operations and associated CH₄ emissions limits (policy amendments final rule).⁴⁶ The second, published on September 15, 2020, finalized technical changes to the prior standards that lowered leak mitigation requirements for compressor stations in the oil and gas industry and eliminated leak mitigation requirements for the industry's low-production wells, among other changes (technical amendments final rule).⁴⁷ In June 2021, President Biden signed a Congressional Review Act resolution to disapprove (repeal) the policy amendments final rule.⁴⁸ EPA has announced its intention to reconsider the technical amendments final rule.⁴⁹ If the technical amendments final rule remains in place, CH₄ emissions can be expected to increase by 10 MMTCO₂e by 2030.⁵⁰ In November 2021, EPA proposed a new rule that would significantly reduce emissions from the crude oil and natural gas industries.⁵¹ The rule would revise NSPS for new sources and propose guidelines under the CAA for states to follow in developing new performance standards for existing sources. In total, this action could reduce CH₄ emissions by 41 million tons through 2035 (EPA 2021i). In December 2022, EPA issued a supplement to this proposed rulemaking to expand the rule to additional sources, strengthen the standards, make amendments in response to public comments, and propose a timeline and other implementation requirements for states (EPA 2022m). In December 2023, EPA announced a final rule to set new requirements for CH₄ flaring, monitoring, and reporting that is expected to avoid 58 million tons of CH₄ emissions from 2024 to 2038 (EPA 2023o).
- **NHTSA and EPA Joint Phase 2 Rule on GHG Emissions and FE Standards for Medium- and Heavy-Duty Vehicles, MYs 2018–2027.** In August 2016, NHTSA and EPA published the Phase 2 joint final rule to reduce fuel consumption and GHG emissions from HD vehicles. As with the Phase 1 standards, the Phase 2 fuel consumption and CO₂ standards apply to highway vehicles and engines that are not regulated by the LD vehicle CAFE and CO₂ standards. NHTSA and EPA Phase 2 standards apply to MYs 2021–2027 for HD vehicle engines, Classes 7 and 8 tractors (combination heavy-haul tractors), Classes 2 through 8 vocational vehicles (buses and work trucks), and Classes 2b and 3 HDPUVs (large pickup trucks and vans). The combined standards were projected to reduce GHG emissions by approximately 1,100 MMTCO₂e over the lifetime of vehicles sold during MYs 2018–2027 (NHTSA 2016b).
- **NHTSA and EPA Joint Rule on Fuel Economy and GHG Emissions Standards for LD Vehicles.** In August 2012, NHTSA and EPA issued joint final rules to further improve the fuel economy of and

⁴⁶ Oil and Natural Gas Sector: Emission Standards for New, Reconstructed, and Modified Sources Review; Final Rule, 85 FR 57018 (Sept. 14, 2020).

⁴⁷ Oil and Natural Gas Sector: Emission Standards for New, Reconstructed, and Modified Sources Reconsideration; Final Rule, 85 FR 57398 (Sept. 15, 2020).

⁴⁸ Pub. L. No. 117-23, S.J.Res.14 (June 30, 2021).

⁴⁹ Spring 2021 Unified Agenda of Regulatory and Deregulatory Actions, RIN 2060-AV16. Available at: <https://www.reginfo.gov/public/do/eAgendaMain> (last accessed June 22, 2021).

⁵⁰ Oil and Natural Gas Sector: Emission Standards for New, Reconstructed, and Modified Source Reconsideration; Final Rule, 85 FR 57398, 57434 (Sept. 15, 2020).

⁵¹ Standards of Performance for New, Reconstructed, and Modified Sources and Emissions Guidelines for Existing Sources: Oil and Natural Gas Sector Climate Review; Proposed Rule, 86 FR 63110 (Nov. 15, 2021).

reduce CO₂ emissions for passenger cars and light trucks, as described in Chapter 1, *Purpose and Need for the Action*. The standards were projected to reduce average CO₂ emissions from new U.S. LD vehicles by 3.5 percent per year for MYs 2017–2021 (NHTSA and EPA 2011). Since the implementation of this joint rule, 10 of the 14 largest vehicle manufacturers selling cars in the U.S. market have made improvements to both fuel economy and CO₂ emissions. Between 2012 and 2019, the industry decreased CO₂ emissions by 21 gallons per mile and increased fuel economy by 1.3 mpg (EPA 2020f).

- **NHTSA and EPA Joint Phase 1 Rule on GHG Emissions and FE Standards for Medium- and Heavy-Duty Vehicles, MYs 2014–2018.** On September 15, 2011, NHTSA and EPA published the Phase 1 joint final rules to establish FE and CO₂ standards for commercial medium- and heavy-duty on-highway vehicles and work trucks. The agencies' standards apply to highway vehicles and engines that are not regulated by the LD vehicle CAFE and CO₂ standards. NHTSA's Phase 1 mandatory standards for HD vehicles and engines began for MY 2016 vehicles, with voluntary standards for MYs 2014–2015. EPA's mandatory standards for HD vehicles began for MY 2014 vehicles. The combined standards were projected to reduce CO₂ emissions by approximately 270 MMTCO₂e over the lifetime of vehicles built during MYs 2014–2018 (NHTSA 2011).
- **Renewable Fuel Standard 2 (RFS2).** Section 211(o) of the CAA requires that a renewable fuel standard be determined annually that is applicable to refiners, importers, and certain blenders of gasoline and diesel fuel. Based on this standard, each obligated party determines the volume of renewable fuel that it must ensure is consumed as motor vehicle fuel. RFS2, which went into effect July 1, 2010, increases the volume of renewable fuel required to be consumed in the transportation sector from the baseline of 9 billion gallons in 2008 to 36 billion gallons by 2022, as written in 2010. Since 2014, the volumetric requirements have been modified to account for lower-than-expected growth in advanced and cellulosic biofuels (EPA 2015c).⁵² The increased use of renewable fuels over 30 years, given a zero percent discount rate, is projected to reduce GHG emissions by 4,500 MMTCO₂e.
- **U.S. Appliance and Equipment Standards Program.** The National Appliance Energy Conservation Act of 1987 established minimum efficiency standards for many household appliances and has been authorized by Congress through several statutes. Since its inception, the program has implemented additional standards for more than 60 products, which represent about 90 percent of home energy use, 60 percent of commercial building use, and 30 percent of industrial energy use (DOE 2017). The program has avoided more than 3,000 MMTCO₂ and is expected to reduce GHG emissions by 7,900 MMTCO₂e annually by 2030 (DOE 2016).

International Actions

The following international actions are already underway or reasonably foreseeable:

- **UNFCCC and the Annual Conference of the Parties.** This international treaty was signed by many countries around the world (including the United States). It entered into force on March 21, 1994, and sets an overall framework for intergovernmental efforts to tackle the challenge posed by climate change (UNFCCC 2002).
- **Kyoto Protocol.** The Kyoto Protocol is an international agreement linked to the UNFCCC. The major feature of the Kyoto Protocol is its binding targets for 37 industrialized countries and the European Community for reducing GHG emissions, which covers more than half of the world's GHG emissions.

⁵² <https://www.epa.gov/renewable-fuel-standard-program/final-renewable-fuel-standards-2014-2015-and-2016-and-biomass-based>.

These reductions amount to approximately 5 percent of 1990 emissions over the 5-year period 2008 through 2012 (UNFCCC 2014). The December 2011 COP-17 held in Durban, South Africa, resulted in an agreement to extend the imminently expiring Kyoto Protocol. The Doha Amendment, adopted at COP-18 in Doha, Qatar, included new commitments and revised gases for tracking in the Second Commitment Period, whose parties differed from the first (UNFCCC 2014). The Second Commitment Period took effect on January 1, 2013, ran through December 2020, and required parties to reduce emissions by at least 18 percent below 1990 levels by 2020, a metric that was on pace to be exceeded (UNFCCC 2020). The Paris Agreement, ratified in 2015, supersedes the Kyoto Protocol (UN 2022).

- **Paris Agreement.** At COP-21, the Paris Agreement was adopted, which emphasizes the need to limit global average temperature increase to well below 2°C (3.6°F) above preindustrial levels and pursue efforts to limit the increase to 1.5°C (2.7°F). The agreement urged countries to commit to a GHG reduction target by 2020 and to submit a new reduction target that demonstrates progress every 5 years thereafter. The UN analyzed progress on global commitments in 2023 and will analyze progress every 5 years thereafter. Results of this analysis indicated that existing national climate commitments are insufficient to keep global temperatures below 1.5°C (2.7°F) and more action will be needed (UNFCCC 2023). As of January 2023, 194 parties (193 countries plus the European Union [EU]), including the United States, comprising over 97 percent of global GHG emissions had ratified, accepted, or approved the Paris Agreement (WRI 2023; UN 2023a). Initial GHG emissions reduction targets announced by country signatories to the Paris Agreement are expected to result in global emissions that are 3.6 Gt lower in 2030 than projected from pre-Paris national pledges (UNFCCC 2015). Based on country pledges from the Paris Agreement, global GHG emissions in 2030 are expected to be lower than those under the highest emissions scenario (RCP8.5) but higher than those under RCP4.5 and RCP6.0 (UNFCCC 2015). While the commitments to reduce GHG emissions cannot be extrapolated into a trend (i.e., there is significant uncertainty surrounding emissions before and after 2030), they demonstrate global action to reduce the historical rate of GHG emissions growth. A recent report by the UN finds that current commitments by the parties, if attained, will limit projected warming to about 2.5°C by 2100, but indicates an urgent need for more ambitious Nationally Determined Contributions (NDCs), or significant overachievement of the most recent NDCs to limit warming to below 2°C (UNFCCC 2022a).
- **Additional UNFCCC and COP Decisions and Actions.** COP-26 emphasized the need to attain net-zero emissions by 2050 by phasing out coal, accelerating the shift to EVs, and by ending and reversing deforestation. Over 130 countries have pledged to reach net-zero emissions by mid-century. COP-27 reaffirmed commitments to limit global temperature rise to 1.5°C (2.7°F) and the launch of the Forest and Climate Leaders' Partnership to end forest loss by 2030. An additional outcome was an agreement to create a loss and damage fund to provide financial assistance to developing countries that are vulnerable to climate change (UNFCCC 2022b). At COP-28, 19 countries pledged to provide up to \$660 million to this fund (UNFCCC 2024a). COP-28 re-emphasized global commitments with the UAE Consensus to keep average global temperature rise below 1.5°C (2.7°F), and recognized that pathways to meet that goal include phasing out fossil fuels. The parties called for tripling of renewable energy capacity by 2030 from 2019 levels and doubling energy efficiency improvements within the same timeline. Additionally, over 66 countries, including the United States, endorsed the Global Cooling Pledge, which aims for net zero emissions from cooling by 2050 (UNFCCC 2024b).
- **Global Commercial Drive to Zero Program.** The *Global Memorandum of Understanding on Zero-Emission Medium- and Heavy-Duty Vehicles* (Global MOU) calls for 100 percent new medium- and heavy-duty vehicle sales to be ZEVs by 2040. Thirty-three countries, including the United States, are

signatories to the Global MOU, and more than 110 subnational governments and private companies have formally endorsed the Global MOU (Drive to Zero 2024).

- **Montreal Protocol.** The Montreal Protocol is an international agreement, adopted in September 1987, to limit the production and use of ozone-depleting substances (ODS), such as hydrochlorofluorocarbons (HCFCs) and chlorofluorocarbons (CFCs) that are used in refrigeration and air-cooling systems. The treaty received universal ratification and it is estimated that the Parties of the Protocol have reduced the use of ODS by 98 percent compared to 1990 levels. The Kigali Amendment added HFCs to the list of identified substances to phase down starting in 2016. HFCs were initially used to replace ODS, but their high GWP led the parties to add HFCs to the list of controlled substances, with the goal of reducing their use by over 80 percent by the late 2040s (UN 2023b). The amendment is expected to avoid more than 80 billion metric tons of CO₂e by 2050—equivalent to 0.5°C of warming by 2100 (EPA 2022n).
- **Global Methane Pledge.** On November 2, 2021, more than 100 countries representing 70 percent of the global economy and nearly half of anthropogenic CH₄ emissions signed a pledge to reduce global CH₄ emissions to help limit warming to 1.5°C (2.7°F) (EU 2021). The Global Methane Pledge spans both developing and developed nations and commits to a reduction in global CH₄ levels reaching at least 30 percent reduction from 2020 levels by 2030. If the plans of the Pledge are met, warming could be reduced by at least 0.2°C (0.36°F) by 2050, providing a significant basis for global emissions reduction and climate mitigation efforts (U.S. White House 2021). The Global Methane Pledge also provides co-benefits for improved air quality, mitigation of health issues, and reduction of agricultural losses. As of November 2022, 150 countries have endorsed the Global Methane Pledge, and the United States, EU, and 11 additional countries finalized the Global Methane Pledge Energy Pathway with detailed steps on how to accelerate CH₄ emissions reductions, specifically in the fossil fuel sector (U.S. State Department 2022).
- **The EU GHG Emissions Trading System.** In January 2005, the EU Emissions Trading System commenced operation as the largest multicountry, multisector GHG emissions trading system worldwide (EU 2018). The aim of the system is to help EU member states achieve compliance with their commitments under first the Kyoto Protocol and now the Paris Agreement (EU 2015). This trading system does not entail new environmental targets; instead, it allows for less expensive compliance with existing targets. The scheme is based on Directive 2003/87/EC, which entered into force on October 25, 2003 (EU 2015) and covers about 10,000 energy-intensive installations across the EU. This represents 40 percent of Europe’s emissions of CO₂ (EU 2018). These installations include commercial aviation, combustion plants, oil refineries, iron and steel plants, and factories making cement, glass, lime, brick, ceramics, pulp, and paper (EU 2018). To achieve climate neutrality in the EU by 2050, the EU Emissions Trading System is under review with the aim to expand the scope of coverage, but also update its target by reducing GHGs to at least 55 percent below 1990 levels by 2030 (EU 2020). Installations covered by the Emissions Trading System reduced emissions by about 35 percent between 2005 and 2019 (EU no date). The Emissions Trading System was updated under the Phase 4 Revision in 2021 to enact new measures in order to meet the 2030 goal of reducing net emissions by at least 55 percent, including setting up new funds to support low-carbon power and more targeted rules on carbon leakage (European Commission 2023).
- **Fuel Economy Standards in Asia.** Both Japan and China have taken actions to reduce fuel use, CO₂ emissions, and criteria pollutant emissions from vehicles. Japan has invested heavily in research and development programs to advance fuel-saving technologies, has implemented fiscal incentives such as high fuel taxes and differential vehicle fees, and has mandated fuel economy standards based on vehicle weight class (using country-specific testing procedures [Japan 1015/JC08]). In 2015, Japan’s

Ministry of Land, Infrastructure, Transport, and Tourism finalized new fuel economy standards for light and medium commercial vehicles sold in 2022 that are a 23 percent increase from the 2015 prevailing standard (International Council on Clean Transportation [ICCT] 2015). Similarly, China has implemented fuel economy standards, based on the Worldwide Harmonized Light-duty Test Cycle instead of the previously used New European Driving Cycle. In December 2019, China set new standards for passenger vehicles produced or imported to an average target of 59 mpg. In June 2019, Japan issued new standards that require the average fleet fuel economy in 2030 to be above 60 mpg (Yang and Rutherford 2019).

- **China EV Targets.** China has established a program that effectively sets quotas for plug-in electric vehicles (PEVs) and fuel cell electric vehicles, under which PEVs and fuel cell electric vehicles were expected to make up at least 10 percent of each automaker’s sales in China in 2019, and 12 percent in 2020 (ICCT 2021). Subsequent targets under Phase 2 of this policy will require these vehicles to make up 18 percent of total sales by 2023. China has not yet set a timetable to reach 100 percent EV sales but is expected to join other nations in phasing out sales of ICE vehicles by 2040.
- **Other International GHG Mitigation Efforts.** There are many nations adopting other national actions, such as cap-and-trade programs, to reduce GHG vehicle emissions. Some efforts from large emitters include:
 - In January 2021, China launched its new national emissions trading scheme, which allows market emitters to buy, sell, and trade emissions credits (International Carbon Action Partnership [ICAP] 2021). These new plans build upon existing cap-and-trade efforts launched in December 2017. The updates include goals of a reduction in carbon emissions per unit of gross domestic product by 18 percent compared to the 2020 levels within the next 5 years, a peak of emissions before 2030, and carbon neutrality by 2060 (ICAP 2021).
 - Officially launched in 2017, India currently has a similar cap-and-trade program, which has been cited as the first program to include PM aerosols within its emissions trading scheme program (University of Chicago 2019). As of 2019, India has also pledged to reduce emissions intensity by 33 to 35 percent compared to 2005 levels (Timperley 2019).

To date, many other countries have adopted a national cap-and-trade program including, but not limited to, Mexico, Australia, New Zealand, South Korea, China, Kazakhstan, the United Kingdom, and nearly all the nations in the EU (ICAP 2023).

F.4.3.5 Reference Case Modeling Runs

The modeling runs and sensitivity analysis simulate relative changes in atmospheric CO₂ concentrations, global mean surface temperature, precipitation, sea-level rise, and ocean pH that could result under each alternative. The modeling runs are based on the reductions in emissions estimated to result from each of the action alternatives compared to projected emissions under the relevant No-Action Alternative. They assume a climate sensitivity of 3°C (5.4°F) for a doubling of CO₂ concentrations in the atmosphere.⁵³ The approach uses the following five steps to estimate these changes.

1. NHTSA assumed that global emissions under the relevant No-Action Alternative would follow the trajectory provided by the global emissions scenario.

⁵³ NHTSA used a climate sensitivity of 3°C (5.4°F), as this is IPCC’s best estimate, with a *likely* range of 1.5 to 4.0°C (2.7 to 7.2°F) (IPCC 2021a).

2. NHTSA assumed that global emissions for each action alternative would be equal to the global emissions under the relevant No-Action Alternative minus the reductions in emissions of CO₂, CH₄, N₂O, SO₂, NO_x, CO, and VOCs estimated to result from each action alternative. For example, the global emissions scenario under Alternative PC2LT002 and Alternative HDPUV108⁵⁴ equals the global emissions scenario minus the emissions reductions from those alternatives.
3. NHTSA used MAGICC7 to estimate the changes in global CO₂ concentrations and global mean surface temperature through 2100 using the global emissions scenario under each alternative developed in Steps 1 and 2.
4. NHTSA utilized the CO2SYS model to estimate changes in ocean pH. Changes in global CO₂ concentrations calculated within the MAGICC7 model are parsed to the CO2SYS ocean pH model to calculate change. This model uses two of four measurable parameters of the ocean CO₂ system—total alkalinity, total inorganic CO₂, pH, and either fugacity or partial pressure of CO₂—to calculate the remaining two input parameters. NHTSA used the CO2SYS model to estimate the pH of ocean water in the years 2040, 2060, and 2100 under the relevant No-Action Alternative and each of the action alternatives.
5. NHTSA used the increase in global mean surface temperature to estimate the increase in both global average precipitation and sea-level rise for each alternative using the global emissions scenario.

F.4.3.6 Sensitivity Analysis

NHTSA performed a sensitivity analysis to examine the effect of various equilibrium climate sensitivities on the results, using MAGICC7 to run the same probabilistic distribution as in IPCC WGI AR6 for the categorization and climate assessment of the SSP scenarios. Equilibrium climate sensitivity is the projected responsiveness of Earth's global climate system to increased ERF from higher GHG concentrations and is expressed in terms of changes to global surface temperature resulting from a doubling of CO₂ compared to preindustrial atmospheric concentrations (278 ppm CO₂) (IPCC 2021a). Sensitivity analyses examine the relationship among the alternatives, likely climate sensitivities, and scenarios of global emissions paths and the associated direct and indirect impacts for each combination.

The best estimate from IPCC WGI AR6 probabilistic output expresses stronger confidence in some fundamental processes in models that determine climate sensitivity than the AR5 (IPCC 2021a). According to IPCC, the very likely range of equilibrium climate sensitivity is between 2°C (3.6°F) (*high confidence*) and 5°C (9°F) (*medium confidence*). The assessed best estimate is 3°C (5.4°F) with a *likely* range of 2.5°C (4.5°F) to 4°C (7.2°F) (*high confidence*), compared to 1.5°C (2.7°F) to 4.5°C (8.1°F) in AR5.

NHTSA assessed climate sensitivities of 1.9, 3.0, and 4.8°C (3.4, 5.4, and 8.6°F) for a doubling of CO₂ concentrations in the atmosphere. NHTSA performed the sensitivity analysis around three of the alternatives—the No-Action Alternative, Alternative PC2LT002, and Alternative PC6LT8—because this was deemed sufficient to assess the effect of various climate sensitivities on the results under the range

⁵⁴ Alternatives PC2LT002 and HDPUV108 are NHTSA's Preferred Alternative under the CAFE standards and HDPUV FE standards, respectively. Alternative PC2LT002 represents a 2 percent increase per year, year over year for MY 2027–2031 passenger cars, 0 percent increase per year, year over year for MY 2027–2028 light trucks, and 2 percent increase per year, year over year for MY 2029–2031 light trucks. Alternative HDPUV108 represents a 10 percent increase per year, year over year for MY 2030–2032 HDPUVs, and an 8 percent increase per year, year over year, for MY 2033–2035 HDPUVs. For more information on the action alternatives and methodology, see Chapter 2, Sections 2.2.2.1, *CAFE Standard Action Alternatives*, and 2.2.2.2, *HDPUV FE Standard Action Alternatives*.

of alternatives considered in this EIS. The best estimate derived from the median output from MAGICC is in line with this climate sensitivity.

The approach uses the following four steps to estimate the sensitivity of the results to alternative estimates of the climate sensitivity.

1. NHTSA used the SSP3-7.0 scenario to represent emissions from the No-Action Alternative.
2. Starting with the respective scenarios, NHTSA assumed reductions in global emissions of CO₂, CH₄, N₂O, SO₂, NO_x, CO, and VOCs for both the CAFE alternatives and the HDPUV FE alternatives. For the CAFE alternatives, NHTSA assessed emissions resulting from the least stringent alternative (Alternative PC2LT002) would be equal to the global emissions of each pollutant under the No-Action Alternative minus emissions of each pollutant under Alternative PC2LT002. Separately, NHTSA used the same approach for Alternative PC6LT8 (the lowest GHG emissions alternative) compared to the No-Action Alternative.⁵⁵ The same assessment was done for HDPUVs using Alternative HDPUV4 (least stringent) and Alternative HDPUV14 (most stringent). All SO₂ reductions were applied to Aerosol Region 1 of MAGICC, which includes North America.
3. NHTSA assumed a range of climate sensitivity values consistent with the 5th, 50th, to 95th percentile of the probability distribution from the IPCC WGI AR6 (IPCC 2021a), in line with a climate sensitivity of 1.9°C (compared to the IPCC estimate of 2.0°C), 3.0°C, and 4.8°C (compared to the IPCC estimate of 5.0°C), respectively.
4. For each climate sensitivity value in Step 3, NHTSA used MAGICC7 to estimate the resulting changes in CO₂ concentrations and global mean surface temperature, as well as the regression-based analysis to estimate sea-level rise through 2100 for the global emissions scenarios in Steps 1 and 2.

Chapter 5, Section 5.4, *Environmental Consequences*, presents the results of the model runs for the alternatives. For the direct and indirect impacts analysis, the sensitivity analysis was performed against the SSP3-7.0 scenario (800 ppm in 2100).

For the cumulative impacts analysis, the sensitivity analysis also assesses the sensitivity around different global emissions scenarios. NHTSA assumed multiple global emissions scenarios, including SSP2-4.5 (568 ppm in 2100), SSP1-2.6 (438 ppm in 2100), and SSP3-7.0 (800 ppm in 2100).

F.5 Health, Societal, and Environmental Impacts of Climate Change

F.5.1 Introduction

This section discusses how climate change resulting from global GHG emissions (including U.S. LD vehicles and HDPUVs under the Proposed Action and alternatives) could affect certain key natural and human resources: freshwater resources; terrestrial and freshwater ecosystems; ocean systems, coasts, and low-lying areas; food, fiber, and forest products; urban areas; rural areas; human health; human security; and stratospheric ozone. In addition, this section discusses compound events, tipping points,

⁵⁵ Some SO₂ emissions are associated with charging EVs. However, total power plant emissions are limited by caps under the EPA Acid Rain Program and the Cross-State Air Pollution Rule and will be reduced through emissions standards such as the Mercury and Air Toxics Standards rule. Because of these rules and advances in technology, emissions from the power-generation sector are expected to decline over time (i.e., the grid is expected to become cleaner). Any economic activity or trend that leads to an increase in electrical demand—including increases in EV sales and use—would be accommodated by the power industry in planning for compliance with applicable emissions limitations.

and abrupt climate change. Regional impacts of climate change are discussed in Chapter 5, Section 5.4.3.3, *Regional Impacts of Climate Change*.

F.5.2 Sectoral Impacts of Climate Change

NHTSA's analysis of sectoral impacts of climate change draws largely from recent studies and reports, including the IPCC AR6 (IPCC 2021a, 2021b, 2022a), the IPCC *Special Study: Global Warming of 1.5° C* (IPCC 2018), the IPCC *Special Report on the Ocean and Cryosphere in a Changing Climate* (IPCC 2019a), the IPCC *Special Report on Climate Change, Desertification, Land Degradation, Sustainable Land Management, Food Security, and Greenhouse Gas Fluxes in Terrestrial Ecosystems* (IPCC 2019b), and the GCRP NCA5 (GCRP 2023). The IPCC and GCRP reports, in particular, provide a comprehensive overview of the state of scientific, technical, and socioeconomic knowledge on climate change, its causes, and its potential impacts. To reflect the likelihood of climate change impacts accurately for each sector, NHTSA references and uses the IPCC uncertainty guidelines (Section F.1.1, *Uncertainty in the IPCC Framework*). This approach provides a consistent method to define confidence levels and percent probability of a projected outcome or impact. This is primarily applied for key IPCC and GCRP findings where IPCC or GCRP has defined the associated uncertainty with the finding (other sources generally do not provide enough information or expert consensus to elicit uncertainty rankings).

Recent reports from GCRP and such agencies as the NRC are also referenced in this chapter. NHTSA relies on major international or national scientific assessment reports because these reports have assessed numerous individual studies to draw general conclusions about the potential impacts of climate change. This material has been well vetted, both by the climate change research community and by the U.S. government. In addition, NHTSA has supplemented the findings from these reports with recent peer-reviewed information, as appropriate.

F.5.2.1 Freshwater Resources

This section provides an overview of the recent findings regarding observed and projected impacts of climate change on freshwater resources in the United States and globally. More than 70 percent of the surface of the Earth is covered by water, but only 2.5 percent is fresh water. Respectively, freshwater contributions include permanent snow cover in the Antarctic, the Arctic, and mountainous regions (68.7 percent); groundwater (29.9 percent); and fresh water in lakes, reservoirs, and river systems (0.26 percent) (UNESCO 2006).

Potential risks to freshwater resources are expected to increase with increasing GHG emissions; for example, higher emissions are projected to result in less renewable water at the same time as continued population growth (IPCC 2021a). Although some positive impacts are anticipated, including reductions in water stress in some areas because of increased runoff and increased primary productivity in some systems, such as boreal waters, the negative impacts are expected to outweigh positive impacts (IPCC 2022a; GCRP 2023).

Observed and Projected Climate Impacts

In recent decades, annual average precipitation increases have been observed across the Midwest, Great Plains, Northeast, and Alaska, while decreases have been observed in Hawaii, the Northwest, and the Southwest (GCRP 2023; Walsh et al. 2014; Huang et al. 2017). Nationally, there has been an increase of 4 percent in annual precipitation from 1901 to 2016 (GCRP 2017) with the central and

eastern regions recording a 5 to 15 percent increase in average annual precipitation from 2002 to 2021 compared to the average from 1901 to 1960 (GCRP 2023).

According to GCRP, globally, for mid-latitude land areas of the Northern Hemisphere, annual average precipitation has *likely* increased since 1901 (GCRP 2017), with evidence of a faster increase since the 1980s (*medium confidence*) (IPCC 2022a). For most other latitudinal zones, long-term trends in average precipitation are uncertain due to data quality, data completeness, or disagreement among available estimates (IPCC 2022a). Globally, average precipitation over land areas has likely increased since the 1950s (*medium confidence*), but with large interannual variability and regional heterogeneity (IPCC 2021a).

Anthropogenic climate change has altered annual mean streamflow trends around the world, with some regions like eastern Asia and western North America showing decreasing trends, and other regions like northern Asia and eastern North America showing increasing trends, between 1950s and 2010s (IPCC 2022a). Globally, in regions with seasonal snow storage, warming has led to earlier occurrence of the maximum streamflows from snowmelt during the spring and increased winter streamflows because more winter precipitation falls as rain instead of snow (IPCC 2022a citing Dudley et al. 2017, Bonsal et al. 2020, and Fox-Kemper et al. 2021). These reduced snow-to-rain ratios are leading to significant differences between the timing of water supply and demand (*medium confidence*). In particular, warming temperatures and reduced snowpack are decreasing surface water and groundwater availability in much of the western United States (U.S. Bureau of Reclamation 2021). Changes in the timing of flows and temperatures of freshwater bodies *likely* affect local wildlife populations through phenological and distribution/range shifts (*high confidence*) (GCRP 2023). Average global precipitation is projected to increase over the next century; generally, wet places are expected to get wetter and dry places are expected to get drier (IPCC 2021a).

The frequency and intensity of heavy precipitation events have been increasing across most of the United States (U.S. Bureau of Reclamation 2011; GCRP 2023). According to GCRP NCA5 (2023), floods have become more common in parts of the central United States, but overall, it is difficult to detect changes in observed flooding magnitude, duration, or frequency in the United States. Globally, anthropogenic climate change has increased the likelihood of extreme precipitation and associated increase in the frequency and magnitude of river floods (*high confidence*) (IPCC 2022a). Projections reveal high regional variations, with intensification of heavy precipitation and flooding for Africa and Asia (*high confidence*), North America (*medium to high confidence*), and Europe (*medium confidence*) for 1.5°C (2.7°F) of warming (IPCC 2021b).

The quality of freshwater resources may be adversely affected by the projected changes in frequency and magnitude of extreme precipitation events and associated floods. Locally variable changes in precipitation and increases in high flow events can affect the transport of pollutants, sediments, nutrients, and microbial pathogens to freshwater bodies, which can have cascading impacts on water supplies, water quality, treatment costs, public health, and ecosystems (GCRP 2023). Coastal floods related to sea-level rise and the resulting increase in storm surge height could also result in increased inland impacts such as saltwater intrusion into coastal rivers and aquifers, which could threaten drinking water supplies, infrastructure, and the health of coastal and estuarine ecosystems (GCRP 2023).

The risk faced from heavy precipitation and flooding events is compounded by aging water infrastructure such as dams and levees across the United States (GCRP 2023). The scope of the nation's exposure to this risk has not yet been fully identified; however, the estimated reconstruction and

maintenance costs for the totality of American water infrastructure is estimated in the trillions of dollars (GCRP 2018a).

In the United States, there is mixed information on the historical connection between climate change and drought. GCRP found that there is little evidence of a human influence on past precipitation shortages (i.e., meteorological); however, there is *medium to high confidence* of a human influence on surface soil moisture deficits due to higher temperatures and the resultant increase in evapotranspiration (i.e., agricultural droughts) (GCRP 2023). This increased evapotranspiration has also increased the need for human use of water in many areas. Reducing snowpack and increasing evaporative losses from increasing temperatures may also increase hydrological and biophysical drought (GCRP 2023). Over the past 3 decades, efficiency gains in irrigation methods have generally kept pace with this increased usage; however, without further improvements in this area, future human demand could outpace supply in many regions (GCRP 2018a, 2023). Additionally, groundwater usage data have demonstrated unsustainable trends in the past, and future trends in groundwater pumping will continue to depend on water management practices and policy (GCRP 2023). Globally, increasing trends in agricultural droughts are more evident than increasing trends in meteorological droughts in several regions of the world (IPCC 2022a citing Douville et al. 2021 and Seneviratne et al. 2021), with varying degrees of confidence on attribution to anthropogenic climate change. For example, there is *high confidence* in anthropogenic influence on increased meteorological droughts in southwestern Australia but *low confidence* in central Africa (IPCC 2022a). Drought hazards are projected to be less severe at 1.5°C (2.7°F) of warming compared to 2°C (3.6°F) (IPCC 2018 citing Smirnov et al. 2016, Sun et al. 2017, Arnell et al. 2018, and Liu et al. 2018; IPCC 2019b).

Dry spells are also projected to increase in length in most regions, especially in the southern and northwestern portions of the contiguous United States (EPA 2015d). Projected changes in total average annual precipitation are generally small in many areas, but both wet and dry extremes (heavy precipitation events and length of dry spells) are projected to increase substantially almost everywhere. Long-term (multi-seasonal) intensifying drought conditions are also projected to increase in the Southwest (GCRP 2023). Furthermore, trends of earlier spring melt and reduced snow water equivalent are expected to continue, and analyses using higher emissions scenarios project that the western United States will see chronic, long-duration hydrological droughts (GCRP 2017, 2023).

Rising temperatures across the United States have reduced total snowfall, lake ice, seasonal snow cover, sea ice, glaciers, and permafrost over the last few decades (GCRP 2023; EPA 2016d citing Mote and Sharp 2016). The impact of climate change on groundwater recharge varies globally (IPCC 2022a citing Thomas et al. 2016, Asoka et al. 2018, Vincent et al. 2019, and Nygren et al. 2020). There is *medium confidence* that increased precipitation intensities have enhanced groundwater recharge, particularly in the tropics, while there is *high confidence* that groundwater depletion has occurred over at least the 21st century due to water extraction for irrigation within many agricultural areas (IPCC 2021a). Both globally and in the United States, sea-level rise, storms and storm surges, and changes in surface water and groundwater use patterns are expected to compromise the sustainability of coastal freshwater aquifers and wetlands (U.S. Bureau of Reclamation 2016; GCRP 2023). These effects are of particular concern in Hawaii and U.S. territories in the Caribbean and Pacific, threatening previously dependable and safe water supplies. The freshwater supplies in these same areas also face increased potential for contamination from increasingly frequent extreme weather events that damage freshwater infrastructure (GCRP 2023).

Globally, most observed changes of water quality attributed to climate change are known from isolated, short-term studies, mostly of rivers or lakes in high-income countries. The most frequently reported

change is more intense eutrophication (i.e., an increase in phosphorus and nitrogen in freshwater resources) and algal blooms (i.e., excessive growth of algae) at higher temperatures, or shorter hydraulic retention times and higher nutrient loads resulting from increased storm runoff. Higher temperatures may also lead to increases in fecal coliform bacteria and aggravate challenges for treatment plants from increased sediments and debris after wildfire events (GCRP 2023). While extreme floods cause massive physical disturbance, moderate floods may have some positive effects, such as providing woody debris that contributes to habitat complexity and diversity, flushing fine sediments and nutrients from lakes and estuaries which may reduce the risk of eutrophication (IPCC 2022a citing Peters et al. 2016 and Talbot et al. 2018). For rivers, all reported impacts on water quality are negative, and surface water quality as a whole declines as water temperature increases (GCRP 2018a, 2023). Water shortages and droughts have been associated with diarrheal disease peaks (IPCC 2022a citing Epstein et al. 2020, Subiros et al. 2019, and Boithias et al. 2016). Additionally, droughts can reduce groundwater levels, increasing the risk of groundwater contamination and creating challenges for management and drinking water treatment (IPCC 2022a citing Kløve et al. 2014 and Khan et al. 2015).

Changes in sediment transport are expected to vary regionally and by land-use type, with potentially large increases in some areas, resulting in alterations to reservoir storage and river channels, affecting flooding, navigation, water supply, and dredging (GCRP 2023; IPCC 2022a).

Adaptation

Given the uncertainty associated with climate change, adaptation planning often involves anticipatory scenario-based planning and the identification of flexible, low-regrets strategies (e.g., water conservation and demand-side management) to maximize resilience. In the United States and globally, current and projected impacts of climate change on water resources have sparked several responses by water resource managers. In 2011, Federal agencies, which manage most of the freshwater resources in the United States, worked with stakeholders to develop a National Action Plan for managing freshwater resources in a changing climate to help ensure adequate freshwater supplies, while also protecting water quality, human health, property, and aquatic ecosystems (ICCATF 2011). Water utilities are determining ways to adjust planning, operational, and capital infrastructure strategies (EPA 2015e; Abt Associates 2016). Water conservation and demand management are also being promoted as important nonstructural, low-regrets⁵⁶ approaches for managing water supply. Investing in ecosystem protection and restoration and other nature-based solutions have also been identified as adaptation priorities to build resilience in the water sector (EPA 2022o).

However, NCA5 states that water management standards and policies have been slow to adapt to the changing climate because of competing interests that hinder progress (GCRP 2023). Climate change adaptation policies, if not designed with careful attention to water resources, could increase the magnitude, spatial coverage, and frequency of water deficits given potential increased demand for irrigation water (GCRP 2023).

F.5.2.2 Terrestrial and Freshwater Ecosystems

This section provides an overview of the recent findings regarding observed and projected impacts of climate change on the terrestrial and freshwater ecosystems in the United States and globally. Ecosystems include all living organisms and their environs that interact as part of a system (GCRP 2023).

⁵⁶ A low-regrets approach is commonly used to signify a method of action with relatively low cost and relatively large benefits under predicted future climates.

These systems are often delicately balanced and sensitive to internal and external pressures due to both human and nonhuman influences. Ecosystems are of concern to society because they provide beneficial ecosystem services such as jobs (e.g., from fisheries and forestry), fertile soils, clean air and water, recreation, and aesthetic value (GCRP 2023). Terrestrial and freshwater ecosystems in the United States and around the world are experiencing rapid and observable changes. The ecosystems addressed in this section include terrestrial ecosystems, such as forests, grasslands, shrublands, savanna, and tundra; aquatic ecosystems, such as rivers, lakes, and ponds; and freshwater wetlands, such as marshes, swamps, and bogs.

Observed and Projected Climate Impacts

The impacts of climate change on terrestrial and freshwater ecosystems have been observed at a variety of scales, including individuals (e.g., changes in genetics and physical characteristics), populations (e.g., changes in timing of life-cycle events), and species (e.g., changes in geographic range) (GCRP 2023). Several reviews of climate change impacts on ecosystem services indicate that 59 to 82 percent of ecosystem services have experienced impacts from climate change (Runting et al. 2016; Scheffers et al. 2016).

Recent global satellite and ground-based data have identified phenology⁵⁷ shifts, including earlier spring events such as breeding, budding, flowering, and migration, which have been observed in hundreds of plant and animal species (EPA 2021j; IPCC 2022a citing Cook et al. 2012, Cohen et al. 2018, Piao et al. 2019, and Menzel et al. 2020). Phenological mismatches result when key activities in interacting species change at different rates, such as shifts in food availability that no longer match a dependent organism's needs (GCRP 2023 citing Kharouba et al. 2018 and Visser and Gienapp 2019). These mismatches can affect seasonal carbon cycling, increase vulnerability to spring frost damage, and lead to socioeconomic damages, including tourism impacts and loss of culturally significant species (GCRP 2023).

In the United States, modeled trends in timing of first leaf and bloom events, using 1981 to 2010 as a baseline, show that these are happening earlier in the year throughout the northern and western regions, but later in much of the southern regions (EPA 2016e citing Schwartz et al. 2013). Phenological mismatches that result in unfavorable breeding conditions could cause significant negative impacts on species' breeding processes (IPCC 2022a; GCRP 2018a citing Miller-Rushing et al. 2010 and Mayor et al. 2017; Little et al. 2017 citing McNab 2010 and Potti 2008; Pecl et al. 2017 citing CAFF 2013 and Mustonen 2015). In some ecosystems, higher trophic levels may be more sensitive to climate change than lower trophic levels, which can affect energy demands and mortality rates of prey, affect overall ecosystem functioning, and alter energy and nutrient flow (IPCC 2022a; GCRP 2018a citing Laws and Joern 2013, McCluney and Sabo 2016, Verdeny-Vilalta and Moya-Laraño 2014, Miller et al. 2014, and Zander et al. 2017).

Species respond to stressors such as climate change by phenotypic⁵⁸ or genotypic⁵⁹ modifications, migrations, or extinction (IPCC 2022a citing Menzel et al. 2020, Román-Palacios and Wiens 2020, and Weeks et al. 2020). Changes in morphology⁶⁰ and reproductive rates have been attributed to climate change. For example, the egg sizes of some bird species are changing with increasing regional

⁵⁷ Phenology refers to the relative timing of species' life-cycle events.

⁵⁸ Referring to an organism's observable traits, such as color or size.

⁵⁹ Referring to an organism's genetic makeup.

⁶⁰ Referring to an organism's structural or anatomical features (e.g., egg size, wing shape, or even of the organism as a whole).

temperatures (Potti 2008). At least one study indicates that birds in North America are experiencing decreased body size due to changes in climate (Van Buskirk et al. 2010).

Over the past several decades, a pole-ward (in latitude) and upward (in elevation) extension of various species' ranges has been observed that may be attributable to increases in temperature (GCRP 2023; IPCC 2022a). Studies show that range shifts in terms of elevation and latitude have already occurred for multiple species, with marine species showing more responsive range shifts, which are also greater in magnitude than terrestrial ones (GCRP 2023). It is estimated that terrestrial animal communities have shifted ranges at an average of 3.8 miles per decade, with marine communities recording even larger range shifts of up to 17.4 miles per decade over the last century (GCRP 2018a citing Parmesan and Yohe 2003, Burrows et al. 2011, and Walsh et al. 2015). Climate-driven range shifts, along with disturbances such as introduction of invasive species, may result in significant changes in ecosystem composition and new species interactions, creating entirely new ecological communities with no historical analogs (GCRP 2018a citing Williams and Jackson 2007 and Blois et al. 2013; GCRP 2023). A recent study suggests that species redistribution is linked to reduced terrestrial productivity, impacts on marine community assembly, and threats to the health of freshwater systems from toxic algal blooms (Pecl et al. 2017). Milder winters and warmer growing seasons may expand ranges for some species (GCRP 2023).

IPCC indicates that 20 to 30 percent of species assessed so far are likely to be at an increased risk of extinction, if global average warming exceeds 1.5 to 2.5°C (2.7 to 4.5°F) (*medium confidence*). Even the lowest estimates of species extinction are 1,000 times the natural background rates (IPCC 2022a). A recent study suggests that local extinctions related to climate change are already widespread, with 47 percent of 976 species reviewed having experienced climate-related local extinctions (Wiens 2016). Regional warming puts some bird populations at risk when increased predatory populations or declines in available habitat (resulting in fewer appropriate nesting and egg-laying spots) leads to increased vulnerability of their eggs to predators (Wormworth and Mallon 2010).

Additionally, an increase in phosphorus and nitrogen in freshwater resources (eutrophication) from increased agricultural runoff is probable, especially in areas that experience heavier or more frequent precipitation events (GCRP 2023). The effects of eutrophication include excessive growth of algae (algal blooms), which reduce dissolved oxygen in the water, causing some plants, fish, and invertebrates to die.

Climate change may result in increased competition between species (GCRP 2023). For example, increased temperatures can benefit some invasive species by decreasing native communities' resistance and by occasionally putting native species at a competitive disadvantage (GCRP 2023 citing Ellison et al. 2018, Alsip et al. 2020, Patrick et al. 2012, and Yamada et al. 2021).

Observations also show that a combination of CO₂ fertilization of global vegetation and secondary forest regrowth has increased global vegetation productivity. However, terrestrial net primary productivity has also decreased during some time periods and in some regions where drought stress has exerted more influence than increased atmospheric CO₂, and water stress has resulted in decreased tree growth and increased tree mortality (IPCC 2022a). As a result, global terrestrial net primary productivity increased by 6 percent from 1982 to 1999 from increased temperature and increased solar radiation in the Amazon, but decreased by 1 percent from 2000 to 2009, due to extensive droughts in the Southern Hemisphere (IPCC 2022a). In addition, nitrogen and phosphorus limitations can also constrain the CO₂ fertilization effect (IPCC 2022a).

Elevated CO₂ concentrations have physiological impacts on plants, which can result in changes in both plant water utilization and local climate. A process referred to as CO₂-physiological forcing (Cao et al. 2010) occurs when increased CO₂ levels cause plant stomata (pores in plant leaves, which allow gas exchange of CO₂ and water vapor) to open less widely, resulting in decreased plant transpiration (Cao et al. 2010). Reduced stomata opening increases water use efficiency in some plants, which can increase soil moisture content, mitigating drought conditions (McGrath and Lobell 2013 citing Ainsworth and Rogers 2007, Leakey 2009, Hunsaker et al. 2000, Conley et al. 2001, Leakey et al. 2004 and 2006, and Bernacchi et al. 2007; IPCC 2022a). Reduced plant transpiration can also cause a decrease in evapotranspiration, which may trigger adjustments in water vapor, clouds, and surface radiative fluxes. These adjustments could ultimately drive macroclimatic changes in temperature and the water cycle (Cao et al. 2010). However, the estimation of large-scale transpiration response to increased CO₂, based on leaf-level responses of water-use efficiency is understood to be complex, owing to competing forces (Tor-ngern et al. 2014; IPCC 2022a citing Bernacchi and VanLoocke 2015 and Tor-ngern et al. 2015). Elevated CO₂ concentrations may also affect soil microbial growth rates and their impact on terrestrial carbon pools; however, these effects are complex and not well understood (Wieder et al. 2014; Bradford et al. 2016).

Ecological tipping points⁶¹ begin with initial changes in a biological system (e.g., introduction of a new predatory animal species to the system due to changes in climate that are favorable to the newly introduced species), which are then amplified by positive feedback loops and can lead to cascading effects throughout the system. The point at which the system can no longer retain stability is a threshold known as a tipping point. Changes in such situations are often long-lasting and hard to roll back; managing these conditions is often very difficult (IPCC 2022a citing Prober et al. 2019, Berdugo et al. 2020, and Bergstorm et al. 2021; GCRP 2023). Leadley et al. (2010) evaluated the potential tipping point mechanisms and their impacts on biodiversity and ecosystem services for several ecosystems. Examples include warming tundra that will reduce albedo, providing a warming feedback that will result in further thawing of tundra; and the large-scale changes of Amazonian rainforests to agricultural lands, resulting in decreased local and regional rains, promoting further decline of trees.

Forest ecosystems and services are at risk of greater fire disturbance when they are exposed to increased warming and drying, as well as declines in productivity and increases in insect disturbances (e.g., pine beetles). Boreal fire regimes have become more intense in terms of areas burned, length of fire season, and hotter, more energetic fires (IPCC 2022a citing Hanes et al. 2019, Veraverbeke et al. 2021, and Scholten et al. 2021). Cascading effects in forests are possible when fire-related changes in forest composition result in reduced capacity as a carbon sink and reduced albedo, or when post-fire increases in soil erosion contribute to indirect carbon emissions, all of which factor into further warming, putting forests at even greater risk of fire and dieback (IPCC 2022a citing Rogers et al. 2015, Chen et al. 2017, and van der Werf et al. 2017).

Limiting warming to 1.5°C (2.7°F) compared to 2°C (3.6°F) may benefit terrestrial and wetland ecosystems through avoidance or reduction of changes, such as biome transformation, species range losses, and increased extinction risks (all *high confidence*) (IPCC 2018 citing Hoegh-Guldberg et al. 2018).

⁶¹ An ecological tipping point is described by IPCC (2014), in reference to the potential for Amazonian ecosystem shifts, as “a large-scale, climate-driven, self-reinforcing transition” of one ecosystem into another type.

Adaptation

In the context of natural resource management, climate-driven changes in ecosystems are most effectively managed through highly adaptive and proactive approaches that address emerging and anticipated impacts of climate change (GCRP 2023). The ability or inability of ecosystems to adapt to change is referred to as adaptive capacity. There could be notable regional differences in the adaptive capacity of ecosystems, and adaptive capacity is moderated by anthropogenic influences and capabilities. The ultimate impact of climate change on ecosystems depends on the speed and extent to which these systems can adapt to a changing climate. Rapid rather than gradual climate change may put populations at risk of extinction before beneficial genes are able to enhance the fitness of the population and its ability to adapt (Staudinger et al. 2013 citing Hoffmann and Sgro 2011).

Some adaptation strategies include landscape-scale and ecosystem-based conservation and management approaches, increasing habitat connectivity, manipulating habitat, conserving populations with more genetic diversity or behaviors, sourcing seeds, and assisting relocation or migration (GCRP 2023). EPA (2016f) stresses the enhancement of natural buffers to protect and help ecosystems increase adaptive capacity. Anthropogenic stressors can compound climate change impacts, so reducing these effects, such as nutrient pollution or invasive species introduction, can bolster resilience (NPS 2016, 2021). The NCA5 report indicates the effectiveness of existing adaptation strategies and approaches may be significantly reduced in the face of a changing climate (GCRP 2023).

F.5.2.3 Ocean Systems, Coasts, and Low-Lying Areas

This section provides an overview of recent findings regarding observed and projected impacts of climate change on ocean systems, coasts, and low-lying areas in the United States and globally. Ocean systems cover approximately 71 percent of the Earth's surface and include many habitats that are vital for coastal economies. Coastal systems and low-lying areas include all areas near the mean sea level. Coastal systems consist of both natural systems (i.e., rocky coasts, beaches, barriers, sand dunes, estuaries, lagoons, deltas, river mouths, wetlands, and coral reefs) and human systems (i.e., the built environment, institutions, and human activities) (IPCC 2014, 2022a).

In general, global ocean surface temperatures have risen at an average rate of $0.7^{\circ}\text{C} \pm 0.08^{\circ}\text{C}$ ($1.3^{\circ}\text{F} \pm 0.1^{\circ}\text{F}$) per century and have risen at a higher rate from 2000 to 2016 than from 1950 to 2016 (GCRP 2018a citing Jewett and Romanou 2017; Blunden and Arndt 2017). IPCC concludes that ocean temperatures are *very likely* to increase in the future (*high confidence*), with impacts on climate, ocean circulation, chemistry, and ecosystems (IPCC 2021b). Northern oceans are projected to warm faster than the tropics (GCRP 2023). From 1971 to 2010, global oceans have absorbed more than 90 percent of all extra heat stored in earth's systems (UN 2021; Cheng et al. 2019). Ocean systems absorb approximately 2.8 ± 0.4 petagrams of anthropogenic CO_2 emissions, leading to changes in ocean pH, which affects the formation of some marine species that are crucial to ocean health (GCRP 2023; UN 2021). The combination of warming and acidification across water bodies has adverse impacts on key habitats such as coral reefs and results in changes in distribution, abundance, and productivity of many marine species.

Observed and Projected Climate Impacts

Approximately 896 million people, or nearly 11 percent of the global population, were estimated to be living in the Low Elevation Coastal Zone by 2020, a figure projected to rise above 1 billion by 2050 (IPCC 2022a citing Oppenheimer et al. 2019). Globally, there will be an increasing number of people exposed

to sea-level rise in the coming decades, due to high population growth from both migration and natural population increases in coastal cities, some of which are in flood- and cyclone-prone regions, increasing the number of individuals at risk (IPCC 2022a citing Neumann et al. 2015 and Hooijer and Vernimmen 2021). Without adaptation, hundreds of millions of people may be displaced due to episodic localized flooding associated with storm surge and coastal flooding and land loss from sea-level rise by 2100, with the majority from eastern, southeastern, and southern Asia (Jongman et al. 2012; GCRP 2023; IPCC 2022a).

In the United States, populations in shore-adjacent counties grew by 5.3 percent from 2010 to 2019. The number of people in coastal areas at risk of sea-level rise inundation (permanent inundation by daily high tides) or surge- or wave-driven flooding (temporary flooding driven by storm events) has also been changing with changing patterns of growth and development (GCRP 2023). For example, modeling studies estimate that the number of people living on land that is less than 1 meter above sea level has increased by about 14 to 18 percent between 1990 and 2020 (GCRP 2023). Projected changes in future sea level will likely lead to an increased frequency of coastal flooding events in the continental United States over the next 30 years (GCRP 2023). Studies indicate that 4.2 million Americans could be at risk under a scenario of 3 feet of sea-level rise, and 13.1 million people under 6 feet of sea-level rise, which could drive mass migration and societal disruption (Hauer 2017; Hauer et al. 2016).⁶² New high-resolution digital elevation models improve estimates of potential future population exposure to sea-level rise. For example, assuming sea-level rise projections under RCP8.5, these new models reveal that up to 630 million people live on land that could be exposed to annual coastal flood levels in 2100 (Kulp and Strauss 2019). Such increases in sea-level rise and annual flooding present dramatic risks to coastal communities. Those at risk include a substantial number of individuals in a high social vulnerability category, with less economic or social mobility and who are less likely to be insured (GCRP 2023).

Coastal inundation and flooding are the product of both long-term sea-level rise and dynamic short-term processes such as storm surge, erosion, and ocean tides (GCRP 2023; Barnard et al. 2019). Climate change is expected to exacerbate all of these coastal processes, potentially altering coastal life and disrupting coast-dependent economic drivers and activities and services, some of which—such as transportation and energy infrastructure, and water resources—are particularly sensitive to these changes (GCRP 2023; IPCC 2022a). Increased sea surface temperature and ocean heat content are projected to facilitate additional tropical storm activity and increase the probability of high rainfall tropical cyclones (Trenberth et al. 2018; Emanuel 2017). In turn, extreme storms can erode or remove sand dunes and other land elevations, exposing them to inundation and further change (GCRP 2023). Rising water temperatures and other climate-driven changes (e.g., salinity, acidification, altered river flows) will affect the survival, reproduction, and health of coastal plants and animals (GCRP 2023; UN 2021). Shifts in the distribution of species and ranges, changes in species interactions, and reduced biodiversity cause fundamental changes in ecosystems and can adversely affect economic activities such as fishing (GCRP 2023). For instance, major marine heatwaves—prolonged periods of discrete (from days to several months) anomalously high sea surface temperatures—have now been documented in every U.S. marine system and are projected to increase with increased warming. Several events have affected the Northwest Atlantic over the last decade and a massive marine heatwave, which originated in the Gulf of Alaska in the winter of 2013/14, subsequently encompassed the entire U.S. West Coast from 2014 to 2016 (GCRP 2023). These events caused changes in the coastal ecosystems, including the

⁶² The NOAA Sea Level Rise visualization tool shows inundation footprints associated with different sea-level rise simulations along the continental U.S. coast (NOAA, Office for Coastal Management, DigitalCoast, Sea Level Rise Viewer, <https://coast.noaa.gov/digitalcoast/tools/slr.html>). This and other tools can be used to understand and assess risks from sea-level rise.

appearance of warm-water species, increased mortality of marine mammals, and an unprecedented harmful algal bloom, all of which contributed to economic stress for the fisheries in these regions (GCRP 2023). While temperature is seen as the major driver of fisheries change globally, other climate-induced drivers like acidification, deoxygenation, and sea ice loss will also play significant roles in future changes to global and local fisheries (*high confidence*) (IPCC 2022a citing Cheung et al. 2019, Olsen et al. 2018, and Sampaio et al. 2021).

Species with narrow physiological tolerance to change, low genetic diversity, specific resource requirements, or weak competitive abilities will be particularly vulnerable to climate change (GCRP 2018a, 2023). For example, during the end-Permian mass extinction, a change in ocean pH of approximately 0.3, which is consistent with current projections for pH changes over the next 100 years, resulted in a loss of approximately 90 percent of known species (NRC 2013a). Under the RCP8.5 scenario, the Atlantic, Pacific, and Indian Oceans are projected to see a 15 to 30 percent decrease in total marine animal biomass by 2100. Meanwhile, polar oceans are projected to see a 20 to 80 percent decrease (Bryndum-Buchholz et al. 2018). Overall, projected shifts in fish and species distribution and decreases in their population due to climate change pose risks to income, food security, and livelihoods of marine-based communities (IPCC 2019a, 2022a).

Warming is leading to an increase in coral bleaching around the globe, with mass bleaching events and outbreaks of coral diseases affecting vulnerable reef ecosystems (GCRP 2023). There are already 25 coral species listed under the Endangered Species Act (NOAA 2023b). Coral reefs are projected to face very high risks at 1.5°C (2.7°F) warming of global sea surface (*very high confidence*), with all coral reefs projected to degrade from their current state, even if global warming remains below 2°C (3.6°F) (IPCC 2022a citing IPCC 2019a). Updated numerical predictions show that 70 to 90 percent of coral reefs are projected to decline at a warming level of 1.5°C (2.7°F), with larger losses (more than 99 percent) at 2°C (3.6°F) (IPCC 2021a, 2022a). The potential for coastal ecosystems to pass a tipping point threshold is of particular concern because these changes can be irreversible (GCRP 2023).

Several studies have analyzed the impact of climate change on historical and future coral bleaching. Mass coral bleaching events and disease outbreaks have increased due to more frequent and severe heat stress associated with ocean warming (*very high confidence, virtually certain*) (IPCC 2022a). For example, the Great Barrier Reef experienced mass bleaching three times between 2016 and 2020 (IPCC 2022a citing Pratchett et al. 2021). According to an analysis of bleaching records at 100 globally distributed reef locations from 1980 to 2016, the time between recurrent severe coral bleaching events has decreased steadily to 6 years during this period, and coral bleaching is occurring more frequently in all El-Niño-Southern Oscillation (ENSO) phases. These trends prevent the full recovery of mature coral assemblages between bleaching events (Hughes et al. 2018). Based on the high emissions scenario (RCP8.5), by 2055, 90 percent of reef locations are projected to experience annual severe bleaching events, and by 2034, all reef locations are projected to experience 5 percent declines in calcification. In general, the projected year of onset for annual severe bleaching events varies based on latitude, with reefs at lower latitudes expected to experience these events earlier than those at higher latitudes (van Hooidonk et al. 2014; Sully et al. 2019).

NOAA concluded that there is *very high confidence* that global average sea level has risen by 0.16 to 0.21 meters since 1900, with a 0.07-meter rise occurring since 1993 (Sweet et al. 2017b). NOAA also estimates that global mean sea level will rise by 0.12 to 0.15 meter (0.39 to 0.49 foot) by 2030, 0.15 to 0.43 meter (0.49 to 1.4 feet) by 2050, 0.3 to 2.0 meters (0.98 to 6.56 feet) by 2100, and 0.4 to 3.7 meters (1.31 to 12.14 feet) by 2150, relative to 2000 (Sweet et al. 2022). The change in sea level is attributed to thermal expansion of ocean water, thawing of permafrost, and mass loss from mountain

glaciers, ice caps, and ice sheets (GCRP 2023). Sea-level rise was found to be non-uniform around the world, which might result from variations in thermal expansion; exchanges of water, ocean, and atmospheric circulation; and geologic processes (IPCC 2022a; UN 2021). Higher sea levels cause greater coastal erosion; changes in sediment transport and tidal flows; landward migration of barrier shorelines; fragmentation of islands; and saltwater intrusion into aquifers, croplands, and estuaries (GCRP 2023). Higher sea levels also result in the loss of coastal wetland environments; it is estimated that 43 to 48 percent of wetlands along the Atlantic and Gulf Coasts are currently vulnerable to sea-level rise (GCRP 2023). It was estimated that the United States lost an average of about 80,160 acres of U.S. coastal wetland environments per year between 2004 and 2009 (GCRP 2018a citing Dahl and Stedman 2013). At this rate, the United States would lose an additional 16 percent of coastal wetlands by 2100. Sea-level rise will expand floodplain areas and place more individuals in high-hazard zones; coastal communities could face increased flooding and erosion. Coastal systems and low-lying areas are expected to experience more submergence, flooding, and erosion of beaches, sand dunes, and cliffs (IPCC 2022a).

Oceans have absorbed approximately one quarter of all human-caused CO₂ since the preindustrial era, decreasing ocean surface pH by about 0.11 unit⁶³ (approximately 0.017 to 0.027 pH unit per decade since the 1980s), resulting in the lowest surface pH levels (i.e., highest ocean acidity) in the last 26,000 years (IPCC 2021a). The most recent projections show surface pH may decline by approximately -0.16 ± 0.002 under SSP1-2.6 and -0.44 ± 0.005 under SSP5-8.5 by 2080 to 2099 relative to 1870 to 1899; these new estimates of ocean acidity are slightly more acidic than previous estimates because the SSPs generally have higher atmospheric CO₂ concentrations (IPCC 2021a). IPCC concluded there is *very high confidence* that coastal areas experience considerable temporal and spatial variability in seawater pH compared to the open ocean due to additional natural and human influences including monsoons, agricultural river runoff, and internal variability (IPCC 2021a). IPCC concluded there is *high confidence* that coastal acidification will continue into the 21st century but with large spatiotemporal variability as drivers of local acidity changes are influenced by biological processes, natural and anthropogenic eutrophication, sea ice melt, coastal upwelling, and seasonal dynamics (IPCC 2021a). There is high agreement that coastal acidification, regardless of cause, negatively affects marine organisms such as reef-building corals, crabs, pteropods, and sessile fauna (IPCC 2021a). Increased CO₂ uptake in the oceans makes it more difficult for organisms to form and maintain calcium carbonate shells and skeletal structures; increases erosion and bleaching of coral reefs and their biodiversity; and reduces growth and survival of shellfish stocks globally (GCRP 2023). At more than 2°C (3.6°F) above preindustrial levels, very high risks that will be difficult to reverse are anticipated for sensitive ecosystems such as coral reefs (GCRP 2023).

Hypoxia in ocean environments is a condition under which the dissolved oxygen level in the water is low enough to be detrimental to resident aquatic species. Oxygen solubility decreases as temperatures increase, with greater sensitivity at lower temperatures. As a result, warming sea surface temperatures will decrease oxygen concentrations in the ocean, especially at high latitudes where predicted rates of warming are higher. In addition, warmer sea surface temperatures enhance stratification, which prevents oxygen-rich surface water from mixing with deeper water where hypoxia typically occurs. Stratification can also be a result of sea-level rise, which increases the overall volume of shallow coastal water that is susceptible to hypoxia (Altieri and Gedan 2015). There has *very likely* been a net loss of oxygen, in the range of 0.3 to 2.0 percent over all ocean depths since the 1960s, with oxygen levels in the upper 1,000 meters (3,280 feet) of the ocean decreasing by 0.5 to 3.3 percent during 1970–2010

⁶³ The pH scale is logarithmic; therefore, each whole unit decrease in pH is equivalent to a 10-fold increase in acidity.

(*medium confidence*), with large multidecadal variations throughout the water column and across ocean basins (*high confidence*) (IPCC 2021a). Due to warming waters, stratification, and changes in precipitation, oxygen-minimum zones are expanding in the North Atlantic, the North Pacific California Current, and tropical oceans (IPCC 2022a). Models project that oxygen levels in the oceans will continue to decline through 2100 by 2.4 to 3.5 percent under the RCP4.5 and RCP8.5 emissions scenarios, respectively, with greater losses regionally and in deep sea areas (Jewett and Romanou 2017 citing Bopp et al. 2013). Decreased oxygen concentrations and hypoxia affect the physiology, behavior, and ecology of marine organisms. For instance, hypoxia has the potential to affect the visual behavior of organisms as visual tissues have high oxygen demands (McCormick and Levin 2017). Hypoxia may also cause deterioration in the reproductive systems of both male and female fish, leading to a significant decrease in hatching success (Lai et al. 2019). The ability of marine organisms to survive in hypoxic conditions is further strained by warming ocean temperatures. Marine benthic organisms (i.e., organisms that live on or near the ocean floor) have been shown to have significantly shortened survival times when subjected to warmer hypoxic conditions (Vaquer-Sunyer and Duarte 2011).

Ocean salinity levels can be affected by freshwater additions, ocean evaporation, and the freezing or thawing of ice caps and glaciers. Marine organisms are adapted to specific levels of ocean salinity and often become stressed by changing salinity levels. Additionally, changing ocean salinity levels affect the density of water, which in turn affects factors such as the availability of local drinking water and, potentially, global ocean circulation patterns. Although the globally averaged salinity change is small, changes in regional basins have been significant. On a regional scale, projected trends over the 21st century indicate that fresh ocean regions will continue to get fresher and salty ocean regions will continue to get saltier (*medium confidence*) (IPCC 2021a). Evaporation-dominated subtropical regions are exhibiting definite salinity increases, while regions dominated by precipitation are undergoing increasing freshening in response to intensification of the hydrological cycle (IPCC 2021a; UN 2021). These effects are amplified in regions that are experiencing increasing precipitation or evaporation. Findings through surface water analyses of the Atlantic Ocean show increased salinity, while the Pacific Ocean demonstrates decreased salinity, and the Indian Ocean has observed minimal changes (Durack and Wijffels 2010).

Net primary production refers to the net flux of carbon from the atmosphere into organic matter over a given period.⁶⁴ Ocean systems provide approximately half of global net primary production. Net primary production is influenced by physical and chemical gradients at the water surface, light, and nutrient availability. A changing climate alters the mixed layer depth, cloudiness, and sea-ice extent, thus altering net primary production. Global mean net primary productivity of oceans is projected to decline by 2080 to 2099 relative to 2006 to 2015 under all scenarios with considerable regional variations, ranging from large declines in the North Atlantic and western equatorial Pacific to consistent productivity increases in the high latitudes (IPCC 2022a citing Kwiatkowski et al. 2020). Impacts on primary productivity vary significantly across regions. While primary productivity in the tropics and temperate zones is projected to decrease, primary productivity in high-latitude regions, particularly the Arctic, showed positive trends from 2003 to 2021 in all nine regions, with statistically significant trends occurring in two regions—the Eurasian Arctic and the Barents Sea (NOAA 2022).

⁶⁴ Net primary production is estimated as the amount of carbon synthesized via photosynthesis minus the amount of carbon lost via cellular respiration.

Adaptation

The primary adaptation options for sea-level rise include *protection*, *accommodation*, *advance*, and *retreat*—all of which are widely used around the world (IPCC 2022a citing Cooley et al. 2022, Glavovic et al. 2022, and Oppenheimer et al. 2019). *Protection* is the creation of barriers against sea intrusion, through a variety of hard engineering (e.g., sea walls and dikes), soft engineering (e.g., beach nourishment) and nature-based measures (e.g., mangrove protection). *Accommodation* is achieved by increasing the flexibility of infrastructure and adjusting the use of at-risk coastal zones, for example, through flood proofing and spatial planning (IPCC 2022a). An *advance* strategy creates new land by building seaward, which can reduce risk for the hinterland or the newly elevated land, for example, through land filling. *Retreat* allows the impacts of sea-level rise to occur unobstructed as inhabitants pull back from inundated coastlines, such as through adaptive migration, planned relocation, or involuntary displacement.

Ecosystem-based protection strategies, which include the protection and restoration of coastal ecosystems like oyster reefs, mangroves, and salt marshes are increasingly attracting attention (IPCC 2022a citing Beck et al. 2018 and Narayan et al. 2016). In addition, reducing non-climate stresses (e.g., coastal pollution, overfishing, development) may increase the climate resilience of framework organisms (i.e., tropical corals, mangroves, and seagrass) (GCRP 2023; World Bank 2013; Ellison 2014; Anthony et al. 2015; Sierra-Correa and Cantera Kintz 2015; Kroon et al. 2016; O’Leary et al. 2017; Donner 2009).

While many coastal adaptation plans call for risk identification, monitoring, research, and planning, required financial resources for implementation and capacities of communities to adapt equitably need to be increased (GCRP 2018a, 2023). Some examples of coastal adaptation include integrating natural landscape features with built infrastructure (green and gray infrastructure⁶⁵) to reduce stormwater runoff and wave attack, constructing seawalls around wastewater treatment plants and pump stations, pumping effluent to higher elevations as sea levels rise, pumping fresh water into coastal aquifers to mitigate saltwater infiltration, developing flood-proof infrastructure, relocation of coastal infrastructure away from the coast, and relocation of communities away from high-hazard areas (GCRP 2018a, 2023). Some examples of ocean adaptation include reducing overfishing; establishing marine protected areas; conserving habitat to increase resilience; restoring and conserving coastal ecosystems like oyster reefs, mangroves, and coral reefs (GCRP 2018a, 2023).

F.5.2.4 Food, Fiber, and Forest Products

Increases in atmospheric CO₂, combined with rising temperatures and altered precipitation patterns, have begun to affect both agricultural and forest systems (Walthall et al. 2013; GCRP 2015, 2023; IPCC 2022a; U.S. Department of Agriculture [USDA] 2015, 2020; U.S. Forest Service [USFS] 2016; Food and Agriculture Organization of the United Nations [FAO] 2015, 2022). These impacts are expected to become more severe and to affect food security (FAO 2015; GCRP 2015).

Observed and Projected Climate Impacts

Climate change has slowed the growth of agricultural production over the past 50 years and will put pressure on food production and access, particularly undermining food security in vulnerable regions. It

⁶⁵ Green infrastructure refers to sustainable pollution-reducing practices that also provide other ecosystem services (e.g., permeable pavements, green roofs). Gray infrastructure refers to traditional practices for stormwater management and wastewater treatment, such as pipes and sewers.

is projected that current global crop and livestock areas will increasingly become climatically unsuitable—an estimated 8 percent under SSP1-2.6 and 30 percent under SSP5-8.5 by 2100. Though a few regions may experience some beneficial effects in the near future, overall impacts on terrestrial and aquatic food systems will become increasingly negative (IPCC 2022a). Currently, yields for some crops are increasing; however, climate change could be diminishing the rate of these increases. It is estimated that global crop yield reduction due to climate change is about 1 percent per decade, with median yield declines for major crops ranging from 0.7 percent for rice to 1.3 percent and 2.3 percent for wheat and maize, per decade, respectively (IPCC 2022a citing Porter et al. 2014). Generally, yields and food security are at greater risk in less-developed, low-latitude countries (FAO 2015; GCRP 2015), concentrated in Sub-Saharan Africa, South Asia and Central America (IPCC 2022a).

Increased frequency and intensity of extreme weather events is expected to negatively influence crop, livestock, and forest productivity and increase the vulnerability of agriculture and forests to climate risks (Walthall et al. 2013; GCRP 2023; IPCC 2022a; USDA 2015, 2020; EPA 2016f; USFS 2016; Vogel et al. 2019b). Increases in frequency and intensity of droughts, floods, heatwaves, and continued sea-level rise will increase risk to food security (*high confidence*) from moderate to high between 1.5°C (2.7°F) and 2°C (3.6°F) global warming levels, assuming no to low levels of adaptation (IPCC 2022a). Specific climate impacts on agriculture will vary based on the species, location, timing, and current productivity of agricultural systems (including crops, livestock, and fish) at local, national, and global scales (IPCC 2022a; USDA 2015).

Bench- and field-scale experiments have found that over a certain range of concentrations, greater CO₂ levels have a fertilizing impact on plant growth (e.g., Long et al. 2006; Schimel et al. 2000) with considerable variability among regions and species (McGrath and Lobell 2013). However, climate change is projected to cause multiple abiotic (nonliving) stressors (e.g., temperature, moisture, extreme weather events), and biotic (living) stressors (e.g., disease, pathogens, weeds, insects) on crop production (Thornton et al. 2014; IPCC 2022a; GCRP 2023). Climate change impacts on agriculture may also affect socioeconomic conditions, such as the amount of crop insurance paid to cover losses from extreme climate conditions (Walsh et al. 2020).

Additionally, climate change is projected to affect a wide range of ecosystem processes, including maintenance of soil quality and regulation of water quality and quantity (GCRP 2023; USDA 2015). Changes in these and other ecosystem services will exacerbate stresses on crops, livestock, and forests (Walthall et al. 2013; GCRP 2023). Major staple crops (wheat, rice, maize, and soybean) could suffer reduced yields between 3 and 7.4 percent for each degree-Celsius increase in global mean temperature (Zhao et al. 2017).

Livestock are vulnerable because climate change affects the nutritional quality of pastures and grazing lands; affects the production, availability, and price of feed-grains; stresses animals; hurts overall animal well-being (i.e., animal health, growth, and reproduction and distribution of animal diseases and pests); and decreases livestock productivity (e.g., meat, milk, and egg production) (IPCC 2022a citing Rojas-Downing et al. 2017, Godde et al. 2021, Stanimirova et al. 2019, Sloat et al. 2018, Bett et al. 2017, and Naqvi et al. 2015; GCRP 2015; GCRP 2023 citing Derner and Augustine 2016, Shrum et al. 2018, Derner et al. 2018, Reeves et al. 2018, Brice et al. 2020, and Godde et al. 2021).

Studies have concluded that climate change is affecting aquatic ecosystems, including marine and freshwater fisheries (IPCC 2022a; Groffman et al. 2014). Climate change impacts on marine fisheries have primarily been linked to increasing temperatures (including both mean and extreme temperatures) but are also affected by increasing CO₂ concentrations and ocean acidification (IPCC 2022a; GCRP 2023).

Fisheries are affected by increases in ocean temperatures, resulting in many marine fish species migrating to deeper or colder water, additional stress to already strained coral reefs, and an expansion in warm freshwater habitats and a shrinkage of cool and cold freshwater habitats (IPCC 2022a; NOAA 2015a). FAO estimates that by 2050, the average total marine maximum catch potential in the world's Exclusive Economic Zones could decline by 7 to 12 percent (relative to 2000) under a higher emissions scenario (RCP8.5); by 2100, this decrease could be as much as 16 to 25 percent (Bell and Bahri 2018 citing FAO 2018). Climate change is projected to reduce catch in all U.S. regions, resulting in billions of dollars in economic losses by 2100, with higher losses under a very high scenario (RCP8.5) than an intermediate scenario (RCP4.5) (GCRP 2023). Climate change threatens forests by increasing tree mortality and forest ecosystem vulnerability due to fire, insect infestations, drought, disease outbreaks, increasing temperatures, and extreme weather events (Joyce et al. 2014; IPCC 2022a; USFS 2016; GCRP 2023; Aleixo et al. 2019; Williams et al. 2019). Currently, tree mortality is increasing in many parts of the globe due to warmer and drier than average conditions (IPCC 2022a). It is projected that tree mortality will increase with climate change as forests become more exposed to extreme events like heatwaves, droughts, and storm, and due to increased incidences of wildfires (IPCC 2022a).

Other climate-change-induced direct and indirect effects, such as 1) changes in the distribution and abundance of insects and pathogens, 2) fire, 3) changes in precipitation patterns, 4) invasive species, and 5) extreme weather events (e.g., high winds, ice storms, hurricanes, landslides), are also affecting forests (GCRP 2023; Thornton et al. 2014; IPCC 2022a). A dramatic increase in the area burned by wildfire and risk of wildfire is projected in the contiguous United States through 2100, especially in the West (EPA 2015d; Halofsky et al. 2017; Tett et al. 2018). In the past 4 decades, burned area from wildfires has roughly quadrupled in the United States due to a variety of factors, one of which is a recent increase in fuel aridity, which is expected to continue to increase as the climate changes (Burke et al. 2021 citing National Interagency Fire Center 2020). Moreover, in recent years, there has been record-breaking wildfire activity in areas not typically prone to wildfires, such as the Arctic and the Amazon (United Nations Environment Programme [UNEP] and GRID-Arendal 2022). Tree species are predicted to shift their geographic distributions to track future climate change (Zhu et al. 2014; USFS 2016).

Forests serve as a net carbon sink globally but are projected to become less effective at capturing accumulated CO₂ as GHG emissions increase (IPCC 2021b). Carbon storage is expected to generally decrease in the future due to increased temperatures, more frequent droughts, increased disturbances such as pest outbreaks and wildfires, and current trends in land use and forest management, making it difficult to predict whether forests will continue to serve as a net carbon sink in the future (Joyce et al. 2014; GCRP 2023; IPCC 2022a). For example, impacts of climate change coupled with deforestation and agricultural expansion have caused the Amazon rainforest to become an overall net carbon emitter between 2010 to 2019 (IPCC 2022a citing Qin et al. 2021 and Hubau et al. 2020). In addition, historic land uses have a legacy effect on patterns of carbon uptake in forests, further complicating the calculation of future CO₂ sequestration patterns (Thom et al. 2018).

Climate change impacts on food security and food systems are predicted to be widespread, complex, geographically and temporally variable, and greatly influenced by socioeconomic conditions (IPCC 2022a). For example, smallholder farmers—a group that suffers from chronic food insecurity—are especially vulnerable to the risks of pests, diseases, and extreme weather events that are made worse by climate change (Mbow et al. 2019). An additional challenge for food security will be future population growth, with global population projected to reach 9.7 billion by 2050 (UN Department of Economic and Social Affairs 2022). Climate change, through direct and indirect pathways, adversely affects all four pillars of food security—availability, access, utilization, and stability—all of which are closely tied to underlying socioeconomic factors like poverty and inequality (IPCC 2022a). Projected

rising temperatures, changing weather patterns, and increases in the frequency of extreme weather events will affect food security by potentially altering agricultural yields, post-harvest processing, food and crop storage, transportation, retailing, and food prices (GCRP 2023; IPCC 2022a). Many of these impacts are expected to be negative, including decreasing production yields; harming pollinators; increasing costs and spoiling during processing, packaging, and storage; inhibiting water, rail, and road transportation; and increasing food safety risks (GCRP 2015; Giannini et al. 2017). The negative consequences of climate change—decreased crop yields, nutrition, and food security—are projected to be more severe under 2°C (3.6°F) of warming than under 1.5°C (2.7°F) of warming (*high confidence*) (IPCC 2018).

Currently, the vast majority of undernourished people live in developing countries (IPCC 2022a). Both due to the nature of the direct impacts and the means to implement adaptation strategies, climate change poses the greatest food security risks to poor and tropical region populations, and the least risk to wealthy, temperate, and high-latitude region populations (GCRP 2015; FAO 2015). As most countries import at least some of their domestic food consumed, climate change has the potential to affect not just food production but also the amount of food that countries import and export. Import demand is expected to increase for developing nations lacking advanced technologies and practices and producing low agricultural yields (GCRP 2015).

Adaptation

Over the past 150 years, the agricultural and forestry sectors have demonstrated an impressive capacity to adapt to a diversity of growing conditions amid dynamic social and economic changes (Walthall et al. 2013; Joyce et al. 2014; FAO 2015; GCRP 2015). Recent changes in climate, however, threaten to outpace the current adaptation rate and create challenges for the agricultural sector and associated socioeconomic systems (GCRP 2023; IPCC 2022a). Economic literature indicates that in the short term, producers will continue current adaptation practices for weather changes and shocks (e.g., by changing timing of field operations, shifting crops grown, changing tillage/irrigation practices) (GCRP 2023). In the long term, however, current adaptation technologies are not expected to buffer the impacts of climate change sufficiently (GCRP 2023). In fact, significant shifts in crop choice and land-use patterns will be required in order to sustain production growth and match global demand (Mbow et al. 2019).

To minimize these impacts, a variety of resilience actions can be implemented, including management and policy, engineering, and insurance responses. Management practices associated with sustainable agriculture, such as diversifying crop rotations and crop varieties, integrating livestock with crop production systems, improving soil quality, and minimizing off-farm flows of nutrients and pesticides can increase resiliency to climate change (GCRP 2023 citing Martin and Isaac 2018, National Academy of Sciences, Engineering, and Medicine 2019, Tittonell et al. 2020, and Wezel et al. 2020). Furthermore, the use of heat- and stress-tolerant and other adaptively advantageous varieties of crops can increase yield in the face of climate change (Zhang and Zhao 2017; GCRP 2018a). Enhancing genetic resources via genetic modification and improved breeding systems also has potential to enhance crop resilience (GCRP 2015 citing Jacobsen et al. 2013 and Lin 2011).

For livestock, adaptive capacity is limited by high costs and competition. Possible adaptation measures include breeding livestock to genetically adapt to local conditions, improving the design of livestock housing, and implementing management strategies that cool livestock and reduce stress (GCRP 2018a, 2023). However, cooling strategies are not always economically feasible due to high infrastructure and energy demands (GCRP 2015). Furthermore, increased shade and moisture can heighten pathogen risk (Fox et al. 2015). Irrigation strategies to improve feed quality and quantity could also be limited by

competition with other water users, especially in arid climates (GCRP 2015 citing Elliott et al. 2014). To enhance resilience against increased pathogen risk, adaptation strategies include no-regrets strategies, disease surveillance and response, disease forecast capacity, animal health service delivery, eradication of priority diseases, increased diversification and integration of livestock with agriculture, breeding resilient animals, and monitoring impacts of land-use change on disease (Grace et al. 2015). Fisheries have developed a number of adaptation practices as well. For example, NOAA's Climate Science Strategy (2015b) has the objective of designing adaptive decision processes to enable fisheries to enhance fishery resilience.

Forest management responses to climate change will be influenced by the changing nature of private forestland ownership, globalization of forestry markets, emerging markets for bioenergy, and climate change policy (Walthall et al. 2013; Joyce et al. 2014). The emerging market for bioenergy—the use of plant-based material to produce energy—has the potential to aid in forest restoration (Joyce et al. 2014). Flexible policies that are not encumbered with legally binding regulatory requirements can facilitate adaptive management where plants, animals, ecosystems, and people are responding to climate change (Joyce et al. 2014 citing Millar and Swanston 2012). Ultimately, maintaining a diversity of tree species could become increasingly important to maintain the adaptive capacity of forests (Duvencek et al. 2014). Carbon sequestration losses can be mitigated using sustainable land-management practices (GCRP 2015 citing Branca et al. 2013).

In terms of food security, global undernourishment dropped from 19 percent in 1990 to 11 percent in 2014 (GCRP 2015). However, global undernourishment has been increasing in recent years, from 8 percent in 2019 to 9.3 percent in 2020 and 9.8 percent in 2021 (FAO et al. 2022). This recent increase is due largely to the COVID-19 pandemic, but it is unclear what future trends will look like, particularly with other global stressors such as the war in Ukraine as well as the challenges posed by climate change (FAO et al. 2022; GCRP 2015). Developing and implementing new agricultural methods in low-yield regions, reducing waste in the food system, making food distribution systems more resilient to climate risks, protecting food quality and safety at higher temperatures, and creating policies to ensure food access for disadvantaged populations during extreme events are all adaptation strategies to mitigate the effects of climate change (GCRP 2015, 2023; IPCC 2022a). Although the impacts of climate change on crop and livestock production are known and there are a variety of adaptation strategies that can be applied, the effectiveness of adaptation strategies at the farm, regional, and national scales are uncertain, given the highly spatially and temporally variable landscapes, such as changing soils, weather, and water availability, within which the strategies will be implemented and interact (GCRP 2023).

F.5.2.5 Urban Areas

Urban centers are now home to more than half of the global population, and this percentage continues to increase every year (IPCC 2022a). Global urban populations grew by more than 397 million people between 2015 and 2020, with more than 90 percent of this increase concentrated in less developed countries (IPCC 2022a). More recent estimates project approximately 60 percent of the global population will reside in urban areas by 2030, with more people living in unplanned and informal settlements (IPCC 2021a; IPCC 2022a citing UN Department of Economic and Social Affairs 2018). In the United States, approximately 86 percent of the population lives in urban areas⁶⁶ and is projected to increase to 91.7 percent by 2100 (GCRP 2023). In addition to large numbers of people, urban centers

⁶⁶ While the NCA5 does not define urban area, the 2020 U.S. Census generally explains that “[u]rban areas represent densely developed territory, and encompass residential, commercial, and other nonresidential urban land uses. Each urban area must encompass at least 2,000 housing units or at least 5,000 people.” (U.S. Census Bureau 2022)

also contain a great concentration of the world's economic activity, infrastructure, and assets (IPCC 2022a; GCRP 2023).

Wealthy nations are predominantly urbanized, and low- and middle-income nations are rapidly urbanizing. Urbanization processes generate vulnerability and exposure that interact with climate hazards, resulting in urban risk and impacts (*high confidence*) (IPCC 2022a). The rate of urbanization is outstripping the rate of investment in basic infrastructure and services, which is creating urban communities with high vulnerability to climate change, especially in unplanned and informal settlements (IPCC 2022a citing Angel et al. 2016, Banks et al. 2020, and Myers 2021). Across urban communities, there are very large differences in the extent to which economies are dependent on climate-sensitive resources, but in general, a high proportion of people most at risk of extreme weather events are located in urban areas (IPCC 2022a). The most economically and socially marginalized people in urban areas are the most affected by climate impacts (*high confidence*) (IPCC 2022a).

Observed and Projected Climate Impacts

The risks of climate change to urban communities and their populations' health, livelihood, and belongings are increasing. Risks include rising sea levels, storm surges, extreme temperatures, extreme precipitation events leading to inland and coastal flooding and landslides, drought leading to increased aridity and water scarcity, and various combinations of stressors exacerbating air pollution (IPCC 2022a; GCRP 2023). It cannot be assumed that climate change impacts will be the same or even similar in different cities (Silver et al. 2013). In addition, certain population groups may be more directly affected by climate change than other groups. For example, the very young and elderly are both more sensitive to heat stress, some communities of color and tribal and Indigenous communities are disproportionately exposed to health risks related to climate hazards, those with preexisting health issues could be more sensitive to a range of stressors, and low-income groups and women could be more sensitive due to a lack of resources and discrimination in access to support services (Ebi et al. 2018; IPCC 2022a; Cutter et al. 2014; GCRP 2023). In turn, some populations most vulnerable to climate-related health hazards also experience greater challenges in accessing information, resources, and tools for building resilience to climate change (Ebi et al. 2018).

Cities that are projected to experience rising temperatures are apt to experience temperatures even higher than projected due to the urban heat island effect (whereby the volume of paved land in urban areas absorbs and holds heat along with other causes) (GCRP 2023; IPCC 2022a citing Oke et al. 2017, Susca and Pomponi 2020, and Doblaz-Reyes et al. 2021). Heatwaves are also projected to worsen, and half of the future urban population will be affected by extreme heat events (IPCC 2022a). This could lead to increased health impacts, air pollution, and energy demand, disproportionately affecting low-income, young, historically underserved, and elderly populations (IPCC 2022a citing Chambers 2020, Sabrin et al. 2020, and Quintana-Talvac et al. 2021). Urbanization, through increased impermeable surfaces and microclimatic changes, can also increase flooding. Climatic trends, such as increased frequency of extreme precipitation and sea-level rise, will stress existing flood infrastructure (GCRP 2023; National Academies of Sciences, Engineering, and Medicine 2019).

Drought and reduced snowpack will have many effects in urban areas, including water shortages, electricity shortages (from decreased hydropower operation), water-related diseases (which could be transmitted through contaminated water), and food insecurity. Changes in precipitation due to climate change could exacerbate existing water demand conflicts, both within cities and across regions (IPCC 2022a citing Garrick et al. 2019, Moser and Hart 2015, and Liu et al. 2018). Sea-level rise and increases in tropical cyclone storm surge can also increase the probability of coastal city flooding (*high confidence*)

(IPCC 2022a). Sea-level rise will also result in increased salinization of groundwater, estuaries, wetlands, and soils, which will further constrain water availability and quality (IPCC 2022a). Increased eutrophication from warming water temperatures will incur costs related to upgrading municipal drinking water treatment facilities and purchase of bottled water. Additionally, sea-level rise poses a risk to water treatment facilities (Baron et al. 2013).

In developed and developing countries, stormwater systems will be increasingly overwhelmed by extreme short-duration precipitation events if they are not upgraded (IPCC 2022a citing Flood and Cahoon 2011, Trtanj et al. 2016, Hummel et al. 2018, Kirshen et al. 2018, Nazarnia et al. 2020, Reznik et al. 2020, and McKenzie et al. 2021). Flooding of roadways and bridges could cause travel lanes and bus routes to be blocked or rerouted, leading to delays (GCRP 2023).

Climate change will have direct impacts on both the production and the demand side of the energy system. For example, individual or combinations of hazards may increase risk of direct physical damage to generation as well as transmission and distribution systems, reduce the efficiency of water cooling for large thermoelectric electricity generating facilities, reduce water availability for hydroelectric and wind power potential, and change demands for heating and cooling in developed countries (GCRP 2023; IPCC 2022a; National Academies of Sciences, Engineering, and Medicine 2017a). Many power supply facilities such as power plants, refineries, pipelines, transmission lines, substations, and distribution networks are located in coastal environments and are thus subject to direct physical damage and permanent and temporary flooding from sea-level rise, higher storm surge and tidal action, increased coastal erosion, and increasingly frequent and intense storms and hurricanes (GCRP 2023). The facilities may also be negatively affected by the vulnerability of transportation systems that provide feedstocks such as coal (DOE 2015 citing DOE 2013; Ingram et al. 2013).

Climate change impacts that decrease the reliability of, or cause disruptions to, the energy supply network could have far-reaching consequences on businesses, infrastructure, health care, emergency services, residents, water treatment systems, traffic management, and rail shipping (GCRP 2023; IPCC 2022a citing Groundstroem and Juhola 2019 and Cronin et al. 2018). Oil and gas availability for transportation in the United States would also be affected by increased energy demand in global markets as well as by climate change events. For example, DOE (2015) concluded that 9 percent of U.S. refining capacity could be exposed to sea-level rise and storm surge in 2050 (assuming 23 inches of sea-level rise and a Category 3 storm), and strategic petroleum reserves may be exposed to flooding during lower-intensity storms.

The daily and seasonal operation of most transportation systems is already sensitive to fluctuations in precipitation, temperature, winds, visibility, and for coastal cities, rising sea levels (GCRP 2018a citing Niemeier et al. 2013, Schwartz et al. 2014, and Chinowsky et al. 2017; IPCC 2022a). With climate change, the reliability and capacity of the transportation network could be diminished from projected changes in temperature and precipitation, sea-level rise, and storm surge, which can significantly affect railroads, roads, ports, airports, and other transportation-related riverine and coastal properties in the United States (GCRP 2023; DOT 2019b). Information and communication technology (ICT) infrastructure is already vulnerable to climate risks. Impacts on ICT components include flooding of electrical support systems, wind, ice and snow damage to overhead cables, corrosion due to flooding and sea-level rise, heatwave-induced ground shrinkage and damage to underground ICT assets, and unstable foundations due to warming-induced permafrost melt (IPCC 2022a citing Fu et al. 2016 and Shiklomanov et al. 2017).

Housing in urban areas is heavily affected by extreme weather events such as cyclones, floods, and fires, causing both physical damage and loss of property value (IPCC 2018a). Housing that is constructed out

of informal building materials (usually occupied by low-income residents) and without strict building codes is particularly vulnerable to extreme events (IPCC 2022a). Loss of housing due to extreme events and shifts in climate patterns is linked to displacement, loss of home-based businesses, and health and security issues (IPCC 2022a). Some of the climate impacts described here (e.g., property damage associated with greater flood risk) are sometimes described as costs of carbon in analyses of the social cost of carbon (National Academies of Sciences, Engineering, and Medicine 2017b).

Climate change will also affect urban public services such as health care and social care services, education, police, and emergency services (IPCC 2022a citing Corvalan et al. 2020 and Hierink et al. 2020). The links between city sectors can mean that climate stressors have cascading impacts across sectors; these impacts increase risk to urban dwellers' health and well-being and make urban areas more vulnerable to disruptions (GCRP 2018a citing Torres and Maletjane 2015). Water shortages can lead to reliance on poorer quality water sources and can increase the likelihood of contracting waterborne illnesses. Changes in temperature extremes will also affect health through heat stress and changes in air quality (IPCC 2022a); however, impacts of climate change on air quality in particular locations are highly uncertain (IPCC 2022a citing Weaver et al. 2009 and Baklanov et al. 2016).

Adaptation

Adapting urban centers will require substantial coordination between the private sector, multiple levels of government, utilities, Tribal communities, and local residents (GCRP 2023), but early action by urban governments is key to successful adaptation because adaptation measures need to be integrated into local investments, policies, and regulatory frameworks (IPCC 2022a). Existing risk reduction plans, such as public health and natural hazard mitigation plans, provide strong foundations for the development of more comprehensive and forward-thinking documents that address increasing exposure and vulnerability (IPCC 2022a). Forward-looking designs and governance solutions can help to better anticipate and respond to future climate change by encouraging building technologies, land use and infrastructure plans, transportation choices, and urban planning processes to account for future climate risk (GCRP 2023). Although many more cities have adopted adaptation plans since IPCC AR5, there remains a large gap between planning and implementation, mainly due to lack of governance and management capacity, limited financial mechanisms, and competing priorities (IPCC 2022a). Financing adaptation strategies could be one of the largest hurdles to overcome; however, urban adaptation can enhance the economic competitiveness of an area by reducing risks to businesses, households, and communities (IPCC 2022a). Additionally, there are emerging synergistic options for urban adaptation measures that also deliver GHG emissions reduction co-benefits (IPCC 2022a).

F.5.2.6 Rural Areas

This section discusses existing vulnerabilities in rural areas, associated climate change impacts, and potential adaptation strategies. It is difficult to consistently define rural areas because human settlements exist along a continuum from urban to rural with many varied land-use forms in between; moreover, there are varying development patterns between developed and developing countries (IPCC 2022a). IPCC describes rural settlements as those with low population density and a high proportion of people engaged in the agricultural sector for their livelihoods (IPCC 2022a).

The Organization for Economic Co-operation and Development (OECD) estimates that 24 percent of the global population lives in rural areas (IPCC 2022a citing OECD and European Commission 2020). The U.S. Census Bureau classifies more than 97 percent of the land area in the United States as rural but only 20 percent of the population calls these areas home (U.S. Census Bureau 2020). Rural areas tend to have a

higher percentage of people living in poverty than urban areas, in addition to having lower education and lower wages for the same level of education than people in urban areas (GCRP 2018a).

Observed and Projected Climate Impacts

Rural livelihoods and incomes are mostly based on farming, livestock rearing, and natural resources that are inherently sensitive to climate variability and change (IPCC 2022a citing Viswanathan and Kumar 2015 and Bohra-Mishra et al. 2017; GCRP 2023). Due to their dependence on natural resources and reliance on weather-dependent activities, rural communities are subject to unique vulnerabilities to climate change (GCRP 2023). In addition, rural communities often lack economic diversity and have limited access to the internet and limited critical infrastructure, making it more difficult for communities to adjust to climate disturbances (GCRP 2023; IPCC 2022a). Due to demographic and socioeconomic trends, such as population loss and high poverty rates, many rural areas struggle to maintain effective government services, economic sustainability, and often lack infrastructural, technological, human, financial, and institutional resources needed for recovery and resilience in the face of natural hazard events. Rural vulnerabilities also have the potential to affect urban areas significantly; for example, drought experienced in rural areas can decrease food production and contribute to food insecurity in urban areas (IPCC 2022a).

An increase in extreme climate-induced events will have a negative impact on rural areas and their agricultural production. Tropical storms, extreme flooding, and droughts have led to a rise in food rates and created severe food crises (IPCC 2022a). Extreme heat has also posed challenges to human and livestock health from increased frequency of extreme temperatures (IPCC 2022a; GCRP 2023). Heat stress has caused livestock production to decrease in productivity, caused livestock to experience increased mortality rates, and resulted in large economic losses for producers (IPCC 2022a; GCRP 2023).

Rural areas frequently depend on groundwater extraction and irrigation for local agriculture (IPCC 2022a). In the United States, groundwater is responsible for more than 40 percent of water used in agriculture (GCRP 2018a). Higher temperatures in the future will increase irrigation demand, which may increase rates of groundwater pumping in areas where groundwater is the primary source or where surface water supplies are limited. Mismanagement, overpumping, and decreased recharge have already led to groundwater levels declining in many major aquifers (GCRP 2023). In the long term, it is projected that irrigated acreage will decrease due to the decline of water availability and the decreasing profitability of irrigated crops (GCRP 2018a).

Soil erosion is also a threat to rural communities and agricultural productivity (GCRP 2023). Extreme precipitation events are expected to increase in frequency due to climate change within many regions of the United States (GCRP 2023). This will consequently increase the potential for soil to be eroded and reduce agricultural productivity (GCRP 2018a). In addition, major flooding events can lead to soil and water degradation in rural communities and decrease economic activity (GCRP 2023). For more information on climate impacts on agriculture, see Section F.5.2.4, *Food, Fiber, and Forest Products*. Nonfood crops and high-value food crops such as cotton, rice, corn, wheat, wine grapes, beverage crops (coffee, tea, and cocoa), and other cash crops contribute to an important source of income to rural locations. Negative impacts of climate change on a variety of crop types, including cash crops, have already been documented (GCRP 2018a, 2023; IPCC 2022a).

Impacts of climate change on rural infrastructure are similar to those in urban areas (see Section F.5.2.5, *Urban Areas*), but frequently there is less redundancy in rural systems, so assets are more vulnerable to hydroclimatic events (GCRP 2018a). Rural communities are becoming more connected to urban ones,

but human migration from rural to urban areas is not necessarily any greater due to climate change than under regular conditions (IPCC 2022a). Migration will increase following extreme events that lead to the desertion of local communities (e.g., extreme storms), but migration from slow environmental degradation (e.g., sea-level rise) is anticipated to be minimal. Generally, more migration is linked to additional stressors such as political instability and socioeconomic factors (IPCC 2022a). It is possible that factors such as increased temperatures and natural disasters will spur migration, but the underlying force may be the adverse consequences of climate change on agriculture (Bohra-Mishra et al. 2017).

Rural communities that are economically reliant or centered around rural landscapes for tourism are also vulnerable to the impacts of climate change (IPCC 2022a). Declining snow cover, increase in wildfire smoke, and animal migration shifts are just some climate-related impacts that are expected to decrease tourism in rural areas (IPCC 2022a). Coastal tourism infrastructure is vulnerable to sea-level rise, storm surge, and coastal erosion (IPCC 2022a). Additionally, an increase in algal blooms and changes in wind and precipitation patterns can threaten coastal tourism in North America (IPCC 2022a). Nature-based tourism in tropical forests may be affected by the declining rate of biodiversity and consequently experience a decline in nature trekking (IPCC 2022a). Glacier melting may also reduce nature trekking and other nature-based tourism activities (IPCC 2022a). Winter sport tourism and recreation are also negatively affected by changes in seasonality and shifts in precipitation as more precipitation is falling as rain rather than snow (IPCC 2022a).

Adaptation

Some feasible and effective adaptation options for people living in rural areas include the provision of basic services, livelihood diversification, and strengthening of food systems (*high confidence*) (IPCC 2022a). Providing critical infrastructure, for example, through renewable energy projects, can provide many co-benefits (IPCC 2022a). Biodiversity management strategies can also provide multiple social co-benefits to rural communities, including improved community health and opportunities for recreational activities and ecotourism. Climate-smart agricultural initiatives, such as cover crops, specialized irrigation, and nutrient management, can also help rural communities prepare for climate variability and change (GCRP 2023), while strengthening local and regional food systems and building resilience and self-reliance (IPCC 2022a).

While rural lands and rural communities have the potential to make significant contributions to climate change mitigation and adaptation, these opportunities are limited by socioeconomic and demographic factors (GCRP 2023). Adaptations in rural communities face challenges posed by the lack of economic diversity, relatively limited infrastructure and resources, and limited political influence (GCRP 2023). Adaptation efforts should focus on serving vulnerable populations and ensuring that an inclusive, equitable, and evidence-based decision process is followed (IPCC 2022a).

F.5.2.7 Human Health

This section provides an overview of the recent findings regarding observed and projected impacts of climate change on the human health sector in the United States and globally. This section describes the climate impacts related to extreme events, heat and cold events, air quality, aeroallergens, water- and food-borne diseases, vector-borne diseases, cancer, and indirect impacts on health. Effects of climate change on human health range from direct impacts from extreme temperatures and extreme weather events to changes in prevalence of diseases, and indirect impacts from changes to agricultural productivity, nutrition, conflict, and mental health (IPCC 2022a). However, vulnerability to health risks

varies across subpopulations and geographic areas. Both globally and within the United States,⁶⁷ populations that are particularly vulnerable include those in vulnerable life stages such as pregnant and nursing women, the elderly, and children in all age groups; those with comorbidities and disabilities; those living alone; those experiencing homelessness, mental illness, or substance abuse; those living in inadequate housing; Indigenous and minority populations; outdoor workers; low-income residents lacking social support networks; those with less access to health care, including the uninsured and underinsured; and those with limited financial resources to rebound from disasters (Watts et al. 2019; IPCC 2022a; GCRP 2023). Climate change is expected to exacerbate some existing health threats and create new challenges, and more people could be exposed (GCRP 2023). At the same time, climate change could decrease the capacity of health systems to manage changes in health outcomes due to climate shifts.

Observed and Projected Climate Impacts

Health impacts associated with climate-related changes in exposure to extreme events (e.g., floods, droughts, heatwaves, severe storms) include death, injury, illness, or exacerbation of underlying medical conditions. Climate change will increase exposure risk in some regions of the United States due to projected increases in frequency and intensity of drought, wildfires, and flooding related to extreme precipitation, rising temperatures, and hurricanes (EPA 2021d).

Many types of extreme events related to climate change cause disruption to infrastructure—including power; heating, ventilation, and air conditioning systems; water; transportation; and communication systems—that are essential to maintaining access to health care and emergency response services that safeguard human health (EPA 2021d; GCRP 2016; IPCC 2022a). The damage caused by extreme events can disrupt transportation and access to health services, which exacerbates health conditions of those chronically sick (GCRP 2016).

Across climate risks, those experiencing discrimination, low-income populations, some communities of color, and older adults and children often experience disproportionate health impacts (Ebi et al. 2018; IPCC 2022a; GCRP 2023). Populations with greater health and social vulnerability often have less access to resources, information, institutions, or other factors that could help avoid or prepare for the health risks of climate change (Ebi et al. 2018; IPCC 2022a; GCRP 2023).

Extreme Temperature

One direct way climate change is projected to affect human health is through increasing exposure to extreme heat, which is the leading source of weather-related deaths in the United States (Nahlik et al. 2017; Sailor et al. 2019). Hospital admissions and emergency room visits tend to increase during hot days with heat-related illnesses, including cardiovascular and respiratory complications, renal failure, electrolyte imbalance, and diabetes (GCRP 2023). Children; elderly people; those who are pregnant; those with disabilities, mental health, or substance-use disorders; and those lacking access to cooling or engaging in outdoor labor and activities are most affected by heat-related health impacts. Black, Latinx, Asian, historically redlined, and urban communities are disproportionately exposed to heat-related health risks (GCRP 2023). Higher than usual temperatures can cause heat exhaustion and heat stroke,

⁶⁷ Multi-Pollutant Emissions Standards for Model Years 2027 and Later Light-Duty and Medium-Duty Vehicles; Proposed Rule, 88 FR 29184 (May 5, 2023).

and exacerbate other cardiovascular and pulmonary conditions (Mora et al. 2017; Tianqi et al. 2017 citing Borden and Cutter 2008, Bouchama et al. 2007, and Wilker et al. 2012; IPCC 2022a).

Certain populations are more vulnerable to extreme heat events than others. In general, those with preexisting conditions are more vulnerable to heat-related illness (Kuehn and McCormick 2017). In all parts of the world, the youngest, oldest, and poorest members of society are most vulnerable to health impacts from heat and cold events (EPA 2021d; GCRP 2016). Pregnant women and their fetuses are particularly vulnerable to the impacts of heat exposure because their thermoregulatory abilities are limited. Increased heat events could increase preterm birth, decrease birth weights, and increase the rate of stillbirths (Kuehn and McCormick 2017).

Higher temperatures and humidity can create negative health outcomes for people engaging in physical activity, or for those who work outside (IPCC 2018, 2022a). Worker safety and productivity during the hottest days and months will be a greater challenge under a changing climate (IPCC 2018). Longer-duration heatwaves are expected to heavily affect workers already exposed to extreme temperatures; for example, outdoor workers (in both urban and rural areas) and miners. Occupational heat strain in outdoor workers may manifest as dehydration, mild reduction in kidney function, fatigue, dizziness, confusion, reduced brain function, loss of concentration, and discomfort (IPCC 2022a).

Certain geographic areas are more likely to experience damaging heat events. For example, the risk of heatwaves will be higher in cities as a result of the urban heat island effect (IPCC 2018, 2022a; GCRP 2023). Additionally, increased mortality from extreme heat exposure will be more marked in regions that are currently warmer and poorer, particularly around the equator (Gasparrini et al. 2017; Mora et al. 2017).

With 1.5°C (2.7°F) of warming, twice as many megacities will be exposed to heat stress, which would expose approximately 350 million additional people to dangerous heatwave conditions by 2050 (IPCC 2018). It is projected that at a global scale, future exposure to heatwaves increases from approximately 15 million person-days in the current period to 170 billion person-days under business-as-usual emissions scenario (SSP2-4.5) and substantially higher to 535 billion person-days under a high emissions scenario (SSP5-8.5) (IPCC 2022a).

The reduction in cold-related deaths has not been studied as thoroughly as heat-related deaths, although such events have become less frequent and intense, and they are expected to continue to decrease (GCRP 2016). Warming associated with climate change could contribute to a decline in cold-related deaths, but evidence suggests that the impacts from extreme heat events greatly outweigh any benefits from decreases in cold-related deaths (GCRP 2018a; EPA 2015d, 2021d; IPCC 2022a citing Aboubakri et al. 2020, Achebak et al. 2020, Burkart et al. 2021, Rodrigues et al. 2020, and Weitensfelder and Moshhammer 2020; Medina-Ramón and Schwartz 2007; GCRP 2018a citing Sarofim et al. 2016; Hajat et al. 2014; GCRP 2016 citing Mills et al. 2012, Deschênes and Greenstone 2011, Barreca 2012, and Honda et al. 2014). Positive and negative health impacts arising from changes in frequency and severity of ice storms, blizzards, and cold spells are areas for future research (GCRP 2023).

Although extreme cold events are projected to become less frequent and severe under future warming, cold spells and cold waves may continue to threaten certain areas, especially in milder regions with larger temperature differences and less adaptive capacity to extreme cold (IPCC 2022a). Cold waves can cause adverse health impacts and premature deaths, in addition to threatening essential infrastructure and services (IPCC 2022a). For instance, the extreme cold temperatures experienced in Texas in February 2021 led to a significant increase in energy demand while adverse impacts on natural gas and

electric power supply systems led to extensive power outages that left more than 4.5 million residents without power, resulted in 70 deaths, and economic losses estimated at \$196 billion (Zhiyuan et al. 2022).

Air Quality

Although CO₂ emissions do not directly affect air quality, increased temperatures and related climate changes due to emissions of CO₂ and other GHGs could increase the formation of ozone and PM_{2.5} and affect their dispersion and transport, affecting ozone and PM_{2.5} concentrations. Climate change could increase ground-level concentrations of ozone or PM in some locations, degrading air quality and negatively affecting human health (Chapter 4, Section 4.1.1.1, *Health Effects of Criteria Pollutants*), as well as being associated with developmental problems such as childhood attention deficit hyperactivity disorder (Perera 2017 citing Newman et al. 2013; Perera et al. 2014). Under future warming, more people are projected to die from PM_{2.5}- and ozone-attributable causes by end of century compared to 2000 (Fann et al. 2021). An additional 21,000 deaths are projected to occur due to PM_{2.5} and an additional 4,100 deaths are projected to occur due to ozone (Fann et al. 2021).

Ozone formation is temperature-dependent and increases in ozone levels could result in more ozone-related mortality (IPCC 2018).⁶⁸ Climate change may result in meteorological conditions more favorable for the formation of ozone, including higher temperatures, less relative humidity, and altered wind patterns (Jacob and Winner 2009; GCRP 2016). Ozone production could increase with rising temperatures, especially in urban areas (IPCC 2022a citing Archibald et al. 2020, Fu and Tian 2019, and Doherty et al. 2017). These climate-driven increases in ozone could cause premature deaths, hospital visits, lost school days, and acute respiratory symptoms (GCRP 2016; Silva et al. 2017).

As with ozone, climate change is expected to alter several meteorological factors that affect PM_{2.5}, including precipitation patterns, wind patterns and atmospheric mixing, and humidity, although there is less consensus regarding the effects of meteorological changes on PM_{2.5} than on ozone (Jacob and Winner 2009; GCRP 2016 citing Dawson et al. 2014). Because of the strong influence of changes in precipitation and atmospheric mixing on PM_{2.5} levels and because of the high variability in projected changes to those variables, it is not yet clear whether climate change will lead to a net increase or decrease in PM_{2.5} levels in the United States (GCRP 2016 citing Dawson et al. 2014, Fiore et al. 2012, Penrod et al. 2014, Tai et al. 2012, Val Martin et al. 2015, Dawson et al. 2009, and Trail et al. 2014). Overall, however, eastern, midwestern, and southern states are projected to experience degraded air quality associated with climate change (EPA 2015d; GCRP 2016).

Climate change can also affect air quality through an increasing number of wildfires and changing precipitation patterns. Wildfires produce PM pollutants and ozone precursors that diminish both air quality and human health (EPA 2021d; GCRP 2016; Reid et al. 2016, 2019). Exposure to PM pollutants and extreme heat are individually associated with negative health impacts but can also have synergistic impacts on human health, as evidenced by the record-setting wildfire season experienced by California in 2020, where an estimated 42 percent of the state's population simultaneously experienced hazardous smoke PM_{2.5} and extreme temperatures at least once in that year (Rosenthal et al. 2022). Exposure to wildfire smoke has been linked to various adverse health impacts, including inflammation, reduced lung

⁶⁸ Consistent with EPA's 2013 Ozone Integrated Science Assessment (ISA) (EPA 2013e), the latest Ozone ISA (EPA 2020g) concludes that there is a causal relationship between short-term ozone exposure and respiratory effects. However, the causality determination for short-term ozone exposure and total mortality has been updated from "likely to be causal relationship" to "suggestive of, but not sufficient to infer, a causal relationship," based on new data and studies (EPA 2020g).

function, lung cancer, and mortality (UNEP and GRID-Arendal 2022; Burke et al. 2021 citing Casio 2018 and Reid et al. 2016). Wildfires can also cause adverse mental health impacts, such as post-traumatic stress disorder (UNEP and GRID-Arendal 2022).

Climate change could also affect air quality through changes in vegetative growth, increased stagnation events, and increased absolute humidity (GCRP 2023 citing Ziska and Ebi 2021, Damialis et al. 2019, Cai 2019, Cai et al. 2019, and Tai et al. 2010). Further, climate change is projected to increase flooding in some locations both in the United States (GCRP 2023) and around the world (IPCC 2022a). Combined with higher air temperatures, this could foster the growth of fungi and molds, diminishing indoor air quality, particularly in impoverished communities (GCRP 2018a citing Fisk 2015, Fann et al. 2016, and Institute of Medicine 2011).

Increased temperatures and CO₂ concentrations can shift or extend plant growing seasons, including those of plants that produce allergens and pollen (EPA 2021d; GCRP 2023 citing Manangan et al. 2021, Ziska and Ebi 2021, and Damialis et al. 2019). These effects already occur worldwide and are projected to continue with climate change (D'Amato et al. 2013; GCRP 2018a citing LaDeau and Clark 2006, Anenberg et al. 2017, Albertine et al. 2014, Singer et al. 2005, and EPA 2016; IPCC 2022a). Increases in pollen and other aeroallergens can exacerbate asthma and other health problems such as conjunctivitis and dermatitis (EPA 2021d; IPCC 2022a citing Beggs 2021, Ziska et al. 2019, Ziska 2020, and de Souza Hacon et al. 2019). Exposure to air pollutants such as increased ozone or PM levels could also exacerbate the effects of aeroallergens (GCRP 2016 citing Cakmak et al. 2012; GCRP 2023 citing Berger et al. 2021, Gleason et al. 2014, and Ochkur et al. 2022). Increases in aeroallergens has also been known to reduce school and work productivity (GCRP 2016, 2018a).

Water- and Food-Borne Pathogens

Climate—both temperature and precipitation—can influence the growth, survival, and persistence of water- and food-borne pathogens (EPA 2021d; IPCC 2022a). Also, changing weather patterns may shift the geographic range, seasonality, and intensity of climate-sensitive infectious disease transmission (IPCC 2018). For example, heavy rainfall and increased runoff promote the transmission of water-borne pathogens and diseases in recreational waters, shellfish-harvesting waters, and sources of drinking water with increased pathogens and toxic algal blooms (GCRP 2016, 2023; EPA 2021d). Diarrheal disease rates are also linked to temperatures (IPCC 2022a). More frequent and intense rainfall and storm surge events could lead to combined sewer overflows that can contaminate water resources (GCRP 2023; EPA 2021d; IPCC 2022a citing Howard et al. 2016, Khan et al. 2015, and Sherpa et al. 2014) and changes in streamflow rates can precede diarrheal disease outbreaks like salmonellosis and campylobacteriosis (GCRP 2018a citing Soneja et al. 2016 and Jiang et al. 2015; GCRP 2016). In general, heavy rainfall, flooding, and high temperatures are associated with higher rates of diarrheal disease (GCRP 2018a). Rising water temperatures could also increase the growth and abundance of pathogens in coastal environments that cause illnesses and deaths from both water contact and ingestion of raw or undercooked seafood. Changes in ocean pH may also increase virulent strains of pathogens prevalent in seafood, particularly because acidification can increase the proliferation of microbes that affect shellfish, whose immune responses and shells are weakened, making them more susceptible to infection (National Institutes of Health [NIH] 2010). Higher temperatures and flooding are expected to increase *Vibrio*, a temperature-sensitive and dangerous marine pathogen (GCRP 2023; Muhling et al. 2017). Climate-change-induced drought may increase the spread of pests and mold that can produce toxins dangerous to consumers (IPCC 2022a; NIH 2010 citing Gregory et al. 2009). Similar to other climate change health impacts, health challenges due to adverse impacts on food and water quality

disproportionately affect Black, Indigenous, and People of Color (BIPOC) communities, households with low wealth, single-parent households, and children (GCRP 2023; IPCC 2022a).

Vector-Borne Diseases

Climate change, particularly changes in temperatures, could change the range, abundance, and disease-carrying ability of disease vectors such as mosquitoes or ticks (GCRP 2016, 2023; EPA 2021d; IPCC 2022a; Bouchard et al. 2019). This, in turn, could affect the prevalence and geographic distribution of diseases such as Rocky Mountain spotted fever, dengue fever, chikungunya virus, Lyme disease, West Nile virus, and Zika virus in human populations (Watts et al. 2017; GCRP 2023). Some of these changes are already occurring, although the interactions between climate changes and actual disease incidence are complex and multifaceted (Altizer et al. 2013; Deichstetter 2017).

Mental Health

Climate change can influence mental health. People can experience adverse mental health outcomes and social impacts from the threat of climate change, the perceived direct experience of climate change, and changes to the local environment (EPA 2021d). Climate change is associated with mental health consequences ranging from stress to clinical disorders such as anxiety, depression, post-traumatic stress disorder, and thoughts and acts of suicide (GCRP 2023; Burke et al. 2018; Khafaie et al. 2019). Extreme weather conditions can increase stress population-wide, which can exacerbate preexisting mental health problems and even cause such conditions (EPA 2021d; IPCC 2022a citing Berry et al. 2010, Cianconi et al. 2020, Clayton et al. 2017, Ruskiewicz et al. 2019, and Bromet et al. 2017). For example, individuals experiencing loss due to flood, wildfires, extreme storms report high levels of depression, anxiety, and post-traumatic stress disorder, which could persist for years after the event (GCRP 2023; Belova et al. 2022). Children, the elderly, women, people with preexisting mental illness, the economically disadvantaged, rural communities, Indigenous communities, people experiencing homelessness, and first responders are at higher risk for distress and adverse mental health consequences from exposure to climate-related disasters (GCRP 2023; EPA 2021d; GCRP 2016 citing Osofsky et al. 2011 and Schulte et al. 2016). Recent research estimates that an increase of 1 to 6°C (1.8 to 10.8°F) of warming of mean U.S. average temperatures could increase the annual U.S. suicide rate by 0.7 to 4.1 percent (Belova et al. 2022).

Environmentally motivated migration and displacement may lead to disruption of social ties and community bonds, which may negatively affect mental health, for both those displaced and those who stay behind (Torres and Casey 2017; IPCC 2022a). Stress, induced by climate change or other factors, can also result in pregnancy-related problems such as preterm birth, low birth weight, and maternal complications (Harville et al. 2009; GCRP 2023 citing Bekkar et al. 2020, He et al. 2018, and Clayton et al. 2017; GCRP 2016 citing Sheffield and Landrigan 2011; Rylander et al. 2013). Heat can also affect mental health and has been known to increase aggressive behaviors, in addition to increasing suicide rates, dementia, and problems for patients with schizophrenia and depression (GCRP 2023; EPA 2021d; GCRP 2016 citing Ruuhela et al. 2009, Dixon et al. 2007, Qi et al. 2009, and Preti et al. 2007).

Transportation-Safety Impacts

Climate change can also indirectly affect health by damaging or disrupting essential infrastructure and services, such as transportation. Increasing temperatures and extreme events are already adversely affecting transportation assets across all modes and will continue to do so under future climate change (GCRP 2023). For instance, high temperatures and heatwaves can threaten the health of roadworkers

and consequently reduce construction hours and productivity (GCRP 2023). Extreme heat can increase the risk of roads cracking, buckling, and rutting from heat, resulting in unsafe conditions and increased need for roadway maintenance (GCRP 2023). Extreme precipitation and flooding in both coastal and inland regions are progressively reducing the functionality of roads, bridges, and railways, causing congestion, damaging infrastructure, and increasing accident risk (GCRP 2023). Extreme events can disrupt access to essential services and health care by causing longer response times for first responders and emergency workers (GCRP 2023). Transportation safety impacts will disproportionately affect vulnerable populations, especially those in more remote areas who rely heavily on public transportation. Insufficient access to reliable and safe transportation can adversely affect both mobility and economic vitality, which can cause stress and mental health impacts (GCRP 2018a).

Other Human Health Impacts

Climate change alters temperature, precipitation, and cloud cover, which can affect sun exposure behavior and may change the risk of ultraviolet (UV) ray-related health outcomes such as melanoma cases in outdoor workers (IPCC 2022a citing Modenese et al. 2018).

Contamination of drinking water caused by incidences of wildfires, droughts, and heavy rain can contribute to elevated levels of heavy metals (lead, mercury, cadmium, and chromium), pesticides, and pharmaceuticals, which can increase human exposure to toxic compounds (IPCC 2022a). Increase in heavy rainfall and flooding can enhance runoff and increase the leaching of heavy metals into water systems, especially when sewage treatment plants are overwhelmed by runoff (IPCC 2022a). Ocean warming can facilitate the formation of methylmercury, the subsequent uptake of which by fish and marine food sources can affect the health of populations consuming them (IPCC 2022a). Studies have also shown that the combined impacts of climate change and arsenic in paddy fields can increase arsenic content in rice (IPCC 2022a citing Muehe et al. 2019).

Research is emerging on the role of climate change in increasing risks of pandemics like COVID-19. Shifts in wildlife range, human exploitation of wildlife, and loss of wildlife habitat quality have increased the opportunity for pathogens to spread from wildlife to human populations; climate change has contributed to this increased risk by driving animal and human migrations (IPCC 2022a).

Adaptation

Many observed and projected risks for human health can be reduced or potentially avoided through timely, proactive and effective adaptation (*high confidence*) (IPCC 2022a). Current adaptation measures in the health sector have mostly been incremental;⁶⁹ for example, focusing on improvements to basic public health and health care services, such as vaccination programs and post-disaster initiatives (IPCC 2022a). However, incremental changes to policies and strategies have proven largely insufficient to reduce health risks from climate change. As risks to human health continue to increase under future warming, transformational adaptation aimed at building climate-resilient and environmentally sustainable health systems will become increasingly necessary (IPCC 2022a).

⁶⁹ IPCC defines *incremental adaptation* as measures that maintain the essence and integrity of a system or process at a given scale. Incremental adaptations are understood as extensions of actions and behaviors that already reduce the losses or enhance the benefits of natural variations in extreme weather or climate events. On the other hand, transformational adaptation is understood to change the fundamental attributes of a socio-ecological system in anticipation of climate change and its impacts (IPCC 2022a).

The public health community has identified several potential adaptation strategies to reduce the risks to human health from climate change. In the United States, the CDC has established the Building Resilience against Climate Effects Framework, which can help health officials assess how climate impacts could affect disease burdens and develop a Climate and Health Adaptation Plan (CDC 2022). The framework aligns with the Climate-Ready States and Cities Initiative, which provides grants and technical assistance to state and local health departments to prepare for and respond to health risks from climate change. The program provides resources for states, cities, and municipalities to develop their own climate and health adaptation plans, including concept documents, toolkits, webinars, and data resources (CDC 2022).

At the state level, governments can conduct vulnerability and adaptation assessments, develop emergency response plans for climate events, develop climate-proof health care infrastructure, and integrate surveillance systems for infectious disease (IPCC 2018).

In terms of specific adaptation measures, early warning programs can reduce human health impacts from extreme weather events (GCRP 2023). Heatwave early-warning systems can also be used to reduce injuries, morbidity, and mortality due to heatwaves (IPCC 2018, 2022a). A local adaptation strategy may include opening a community cooling center during heatwaves to accommodate vulnerable and at-risk populations (Nayak et al. 2017). In the long term, strategies to reduce the urban heat island effect such as cool roofs and increased green space can reduce health risks from extreme heat (GCRP 2023 citing Zheng et al. 2021, Zhang and Ayyub 2020, and Lwasa et al. 2022; Boumans et al. 2014; McDonald et al. 2016). GHG reduction policies can also create co-benefits for air pollution by reducing pollutants, such as PM, SO₂, nitrogen dioxide, and other harmful pollutants (IPCC 2018). Thus, mitigation strategies can have health benefits by improving air quality and promoting active transportation, which can reduce rates of obesity, diabetes, and heart disease (GCRP 2023).

F.5.2.8 Human Security

This section provides an overview of the recent findings regarding observed and projected impacts of climate change on human security in the United States and globally. IPCC defines human security in the context of climate change as “a condition that exists when the vital core of human lives is protected, and when people have the freedom and capacity to live with dignity” (IPCC 2022a). As there are multiple drivers of human security, it can be difficult to establish direct causation between climate change and impacts on human security. Rather than directly causing conflict, climate stress could aggravate food and water insecurity, which are drivers of conflict (GCRP 2023). Overall, the research literature finds that climate change has negative impacts on various dimensions of human security, including livelihoods, food, water, cultures, migration, and conflict. However, some dimensions of human security are driven more by economic and social forces rather than by climate change (IPCC 2022a). According to the U.S. Department of Defense (DOD), climate change may have far-reaching impacts on existing problems, such as poverty, social tensions, environmental degradation, ineffectual leadership, and weak political institutions, both nationally and internationally (DOD 2015, 2021).⁷⁰

Observed and Projected Climate Impacts

Human security includes access to food, clean water, shelter, and employment, as well as avoidance of direct risks to health. Climate change poses significant risks to all of these aspects and can thereby

⁷⁰ Sources cited throughout this section may use other terms that fall within the concept of *human security* (e.g., economic and livelihood security, national security, food security). For simplicity, *human security* is used in throughout this section.

threaten the human security of individuals or communities (IPCC 2022a). Even with an increase of approximately 1.5°C (2.7°F) by 2030, climate change will be a *poverty multiplier* that increases levels of poverty and the number of people living in poverty (IPCC 2018 citing Hallegatte et al. 2016 and Hallegatte and Rozenberg 2017). In particular, climate change will affect those whose livelihoods depend on natural resources (Brzoska and Fröhlich 2015; Reyer et al. 2017). There are well-documented impacts of climate variability and change on agricultural productivity and food insecurity, water stress and scarcity, and destruction of property and residence (IPCC 2022a). Populations that are most at risk of food insecurity include the urban poor and the rural and Indigenous communities whose livelihoods are highly dependent upon natural resources (IPCC 2022a citing Martin-Shields and Stojetz 2019 and FAO et al. 2018; GCRP 2023).

Around the world, it is increasingly challenging for Indigenous communities to maintain cultures, livelihoods, and traditional food sources in the face of climate change (IPCC 2022a citing Jaakkola et al. 2018, Nilsson et al. 2011, Furberg et al. 2011, Amstislavski et al. 2013, Zavaleta et al. 2018, Akande et al. 2021, Bogdanova et al. 2021, and Bryson et al. 2021). The impacts of climate change are expected to be more significant both in places where Indigenous people live and on traditional ecological knowledge (IPCC 2018 citing Olsson et al. 2014). Many studies indicate that further significant changes in the natural resource base would negatively affect Indigenous cultures, particularly if people are confined to particular territories created by treaties; if natural resources are lost within that territory, that is a permanent loss to the tribe and its culture (IPCC 2022a; GCRP 2023). For example, climate change is causing changes in the range and abundance of culturally important plant and animal species, reducing the availability of and access to traditional foods, and increasing damage to tribal homes and cultural sites (GCRP 2023). Ultimately, this could make life on ancestral lands untenable (IPCC 2018). Climate change can also cause loss of land and displacement, such as in small island nations or coastal communities, which have well-documented negative cultural and well-being impacts (IPCC 2022a).

Studies show that when planned resettlement and relocation initiatives are implemented without adequate participation of those affected, relocated communities can experience significant financial and emotional distress due to disruptions to cultural and spiritual bonds to place and livelihoods (IPCC 2022a citing Neef et al. 2018, Bertana 2020, McMichael and Katonivualiku 2020, and McMichael et al. 2021). Lack of involvement in formal government decision-making over resources also decreases the resilience of Indigenous peoples and their cultures to climate change impacts (GCRP 2023; IPCC 2022a citing Frye and Parker 2016, Anderson and Leonard 2016, Frye 2012, Singletary et al. 2016, Shoemaker 2015, and Miller 2016).

Climate change is expected to increase internal migration and displacement, in part due to extreme events or long-term environmental changes (IPCC 2022a citing Thomas et al. 2020 and van der Geest et al. 2020). However, the causation and extent of this risk is hard to determine due to the complexity of migration decisions (IPCC 2022a). An increase in the incidence or severity of extreme events due to climate change will directly increase the risks of displacement and amplify its impacts on human security (IPCC 2022a). Projections indicate that 4.2 million Americans could be at risk with 3 feet of sea-level rise, and 13.1 million people with 6 feet of sea-level rise, which could drive mass migration and societal disruption (Hauer 2017; Hauer et al. 2016). In the past, major extreme weather events have led to significant population displacement (IPCC 2022a). For example, after Hurricane Katrina, refugees from coastal areas spread to all 50 states, which resulted in economic and social costs around the country (GCRP 2018a). However, past experiences have shown that the relationship between environmental change and migration patterns is complex, and efforts to predict migration would depend on assumptions about how climate hazards will affect future habitability of places, as well as the

adaptability of systems that govern land and property, such as housing markets, homeowners' insurance, and federal disaster recovery housing assistance, which can promote *in situ* housing recovery for many homeowners (GCRP 2023). Following rapid-onset events such as floods or storms, displacement is usually short-term (Brzoska and Frohlich 2015). Voluntary migration often emerges as an alternative when other forms of adaptation are insufficient, and while temporary (or seasonal) migration is frequently used as a risk reduction strategy by rural households to cope with climate variability, permanent migration is less common, especially when the whole household relocates (IPCC 2022a citing Afifi et al. 2016, Call et al. 2017, Pigué et al. 2018, Borderon et al. 2019, Cattaneo et al. 2019, Hoffmann et al. 2020, Lopez-i-Gelats et al. 2015, Lu et al. 2016, and Kaczan and Orgill-Meyer 2020).

Climate-driven migration outside of the United States could have implications for human security, either due to immigrants to the United States or instability abroad. For example, there could be significant population displacement in the tropics due to warming. Tropical populations may have to move more than 1,000 kilometers by the end of the century, which could lead to a concentration of displaced persons on the margins, contributing to higher population densities in destination areas (IPCC 2018 citing Hsiang and Sobel 2016). Some of these refugees could come to the United States. For example, the United States granted Temporary Protected Status to 57,000 Honduran and 2,550 Nicaraguan nationals after Hurricane Mitch (GCRP 2018a).

Long-term changes in climate conditions, such as droughts or land degradation, have greater potential to result in permanent migration (Brzoska and Frohlich 2015). For example, higher temperatures have contributed to outmigration in 163 countries, specifically for those dependent on agriculture (IPCC 2018 citing Cai et al. 2016). According to the International Migration Database of the OECD, a 1°C (1.8°F) increase in temperature contributed to a 1.9 percent increase in migration flows from 142 countries moving to 19 receiving countries, and an additional increase in precipitation of 1 millimeter could increase migration by 0.5 percent (IPCC 2018 citing Backhaus et al. 2015).

Climate-change-induced mass migration threatens to adversely affect the humanitarian assistance requirements of the U.S. military, as well as strain its ability to respond to conflict (DOD 2015; NRC 2011b). Displacement affects human security by affecting housing, health, and economic outcomes (IPCC 2022a). A large influx of migrants can result in conflict and violence, especially if the refugees differ from the native population in ethnicity, nationality, and/or religion; have had previous conflicts with the receiving area; or want to settle long term (Brzoska and Frohlich 2015). In other cases, migration to more prosperous and resource-rich areas can dissolve conflicts (Brzoska and Frohlich 2015).

Conversely, extreme events can sometimes be associated with immobility, which—if involuntary—reflects inability, lack of agency and resource limitations, but can also be a deliberate choice by people to maintain livelihoods or due to social and cultural attachments to native places. Involuntary mobility can exacerbate inequality and increase future vulnerability of households to climate change impacts (IPCC 2022a). Involuntary displacement and migration that occurs among migrants who have low agency is often associated with poor outcomes for health, well-being, and socioeconomic security of migrants and fewer benefits to sending and receiving communities (*high confidence*) (IPCC 2022a).

The association between short-term warming and deviations in rainfall (including floods and droughts) with armed conflict is contested, with some studies finding a relationship while others find no relationship (IPCC 2022a citing Mach et al. 2019; Schleussner et al. 2016; Buhaug et al. 2015). Most studies find that climate change impacts on armed conflict are negligible in situations where other risk factors are extremely low, such as where per capita incomes are high or governance is effective and

stable (IPCC 2022a). Many studies, however, argue that reduced availability and changes in the distribution of water, food, and arable land from a changing climate are factors prone to triggering violent conflicts (Brzoska and Frohlich 2015 citing Hsiang et al. 2013). Overall, compared to other socioeconomic factors, the influence of climate on conflicts is understood to be relatively weak (*high confidence*), and there is insufficient evidence at present to attribute armed conflict to anthropogenic climate change (IPCC 2022a). Some studies suggest a greater role for climate in influencing the dynamics of conflict than on being an initial trigger for conflict outbreak (IPCC 2022a).

The potential impacts of climate change on accelerating instability in volatile regions of the world have profound implications for national security of the United States. The DOD 2014 Quadrennial Defense Review indicates that the projected effects of climate change “... are threat multipliers that will aggravate stressors abroad such as poverty, environmental degradation, political instability, and social tensions—conditions that can enable terrorist activity and other forms of violence” (DOD 2015). For example, drought may increase the likelihood of sustained conflict, particularly for groups dependent on agricultural livelihoods, which are more vulnerable to climate change (IPCC 2018). With a 1°C (1.8°F) increase in temperature or a greater intensity of extreme rainfall events, intergroup conflicts could increase in frequency by 14 percent (IPCC 2018 citing Hsiang et al. 2013).

Climate change can compromise state integrity by affecting critical infrastructure, threatening territorial integrity, and increasing geopolitical rivalry (IPCC 2022a). Climate change impacts on critical infrastructure will reduce the ability of countries to provide the economic and social services that are important to human security (IPCC 2022a citing Neumann and Hermans 2015, McLeman 2017, Barnett and McMichael 2018, Cattaneo et al. 2019, and Hoffmann et al. 2020). For example, extreme heat, storms and floods, and sea-level rise could directly affect military assets, such as roads, airport runways, and coastal infrastructure; disrupt supply chains; endanger personnel; inhibit training; and increase operating costs (GCRP 2023). In addition, climate change can also affect military logistics, energy, water, and transportation systems, compromising the ability of the U.S. military to conduct its missions (NRC 2011b, 2013b; CNA Corporation 2014). Power outages and fuel shortages could affect the energy system, which could have cascading impacts on critical sectors that support the economy and national security (GCRP 2023). Furthermore, the U.S. military could become overextended as it responds to extreme weather events and natural disasters at home and abroad, along with current or future national security threats (NRC 2011b; CNA Corporation 2014).

Sea-level rise, storm surge, and coastal erosion can threaten the territorial integrity of small island nations or countries with significant areas of soft low-lying coasts (IPCC 2022a). These changes can also have negative implications for navigation safety, port facilities, and coastal military bases (DOD 2015). Open access to resources and new shipping routes due to significant reductions in Arctic sea ice coverage could increase security concerns because of territorial and maritime disputes, if equitable arrangements between countries cannot be agreed to (IPCC 2022a; DOD 2015). A variety of maritime boundary disputes in the Arctic could be exacerbated by the increased accessibility of the region due to warmer temperatures (IPCC 2022a citing Drewniak et al. 2018; Smith and Stephenson 2013 citing Brigham 2011 and Elliot-Meisel 2009; GCRP 2023). Furthermore, nations bordering the Arctic maintain unresolved sea and economic zone disputes (Smith and Stephenson 2013 citing Liu and Kronbak 2010 and Gerhardt et al. 2010; NRC 2011b). Other transboundary impacts of climate change such as changing shared water resources and adverse impacts on food security can increase geopolitical rivalry between countries (IPCC 2022a). Additionally, climate change could increase tension and instability over energy supplies (GCRP 2023).

Adaptation

Adaptation strategies can reduce vulnerability and thereby increase human security. Examples of adaptation measures to improve livelihoods and well-being include diversification of income-generating activities in agricultural and fishing systems, development of insurance systems, and provision of education for women. Integration of local and traditional knowledge is found to increase the effectiveness of adaptation strategies. Improvements in Indigenous peoples' entitlements and rights, as well as engagement of Indigenous peoples in decision-making, increase their social and cultural resilience to climate change (IPCC 2022a citing Nurse-Bray et al. 2020). There is not enough evidence on the effectiveness of migration and resettlement as adaptation. Poorly designed adaptation strategies can increase the risk of conflict and amplify vulnerabilities in certain populations if they exacerbate existing inequalities or grievances over resources (IPCC 2022a).

Local and traditional knowledge is a valuable source of information for adapting to climate change (IPCC 2022a; GCRP 2023). There is high agreement in the literature that the integration of local and traditional and scientific knowledge increases adaptive capacity (IPCC 2022a). Moreover, traditional knowledge helps create resilient food systems, and bolster health and well-being more generally (IPCC 2022a citing High Level Panel of Experts 2020, Bezner Kerr et al. 2021, International Panel of Experts on Sustainable Food Systems 2020, and Bourke et al. 2018). While being an important resource for adaptation, traditional knowledge alone may be insufficient to respond to rapidly changing ecological conditions or unexpected or infrequent risks as the ability of Indigenous peoples to anticipate and respond to climate change is significantly affected by a host of economic, social, political, and legal factors that may constrain their abilities to cope and respond (GCRP 2018a). Limited access to traditional territory and resources, and limitations of current policies and funding mechanisms in considering unique circumstances of Indigenous communities pose barriers to effective adaptation (GCRP 2023). For example, case studies from Africa indicate that opportunities for Indigenous people to apply traditional drought mitigation strategies through migration have been limited by factors such as competing land use, policies around environmental protection, and limited mobility posed by national borders (IPCC 2022a citing Mamo 2020). While adaptation is possible to avoid some losses of cultural assets and expressions, cultural integrity will still be compromised if climate change erodes livelihoods, sense of place, and traditional practices, undermining some of the benefits of the adaptation strategy (GCRP 2023; IPCC 2022a).

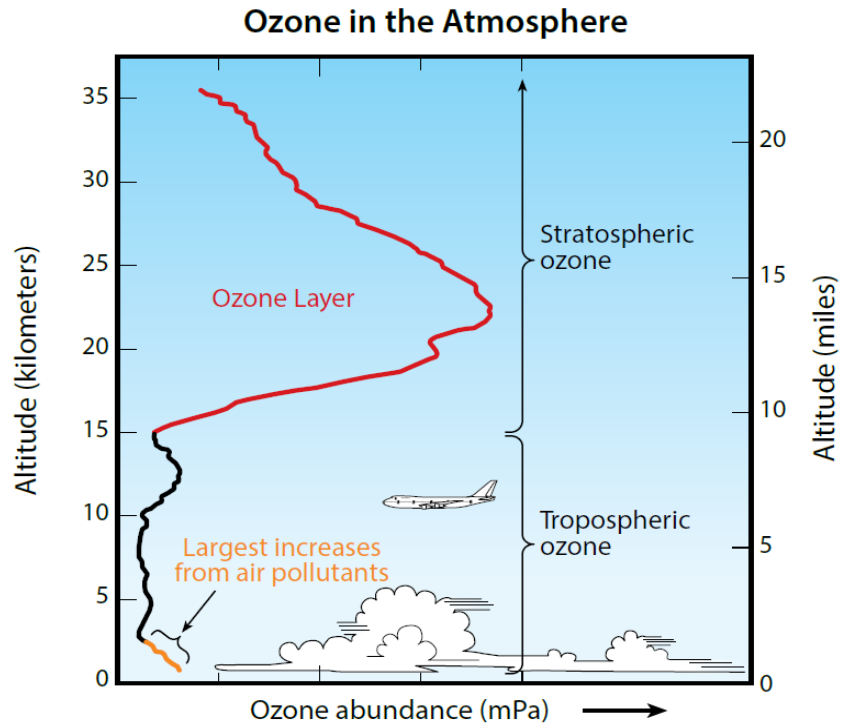
F.5.2.9 Stratospheric Ozone

This section presents a review of stratospheric ozone and describes how CO₂ and climate change are projected to affect stratospheric ozone concentrations. Ozone is a molecule consisting of three oxygen atoms. Ozone near Earth's surface is considered an air pollutant that causes respiratory problems in humans and adversely affects crop production and forest growth (Salawitch et al. 2019). Conversely, ozone in Earth's stratosphere acts as a shield to block UV rays from reaching Earth's surface (Salawitch et al. 2019; Ravishankara et al. 2008).⁷¹ This part of the atmosphere is referred to as the *ozone layer*, and it provides some protection to humans and other organisms from exposure to biologically damaging UV rays that can cause skin cancer and other adverse impacts for humans and other organisms (Salawitch et al. 2019; Fahey et al. 2008; Figure F.5.2-1). The ozone layer occupies the lower part of the

⁷¹ These height measurements defining the bottom and top of the stratosphere vary depending on location and time of year. Different studies might provide similar but not identical heights. The heights indicated for the stratosphere and the layers within the stratosphere are provided in this section as defined by each study.

stratosphere, which begins approximately 6 to 10 miles above Earth’s surface and extends up to about 30 miles above the Earth’s surface, although this changes with latitude and time of year (NOAA 2008).

Figure F.5.2-1. The Three Lowest Layers in Earth’s Atmosphere and the Location of the Ozone Layer



Source: Hegglin et al. 2015
 mPa: microPascal

Ozone in the stratosphere is created when a diatomic oxygen molecule absorbs UV rays at wavelengths less than 240 nanometers, causing the molecule to dissociate into two very reactive free radicals that then each combine with an available diatomic oxygen molecule to create ozone (Salawitch et al. 2019). Through this process, heat is released, warming the surrounding environment. Once ozone is formed, it absorbs incoming UV rays with wavelengths from 220 to 330 nanometers (Salawitch et al. 2019). The concentration of ozone in the stratosphere is affected by many factors, including concentrations of ozone-depleting substances and other trace gases, atmospheric temperatures, transport of gases between the troposphere and the stratosphere, and transport within the stratosphere. Specifically, ozone is depleted in reactions that involve halogens, such as chlorine and bromine, which result from the decomposition of some halocarbons (Salawitch et al. 2019; GCRP 2017 citing World Meteorological Organization [WMO] 2014). Alterations to the carbon cycle, including climate-driven ecosystem changes, influence atmospheric concentrations of CO₂ and CH₄. In turn, atmospheric aerosols affect clouds and precipitation rates, which change the removal rates, lifetimes, and abundance of the aerosols themselves (GCRP 2017 citing Nowack et al. 2015). Also, stratospheric ozone abundance can be affected by climate-driven circulation changes and longwave radiation feedbacks (GCRP 2017 citing Nowack et al. 2015).

IPCC reports it is *very likely* and *extremely likely* that anthropogenic contributions, particularly to GHGs and stratospheric ozone depletion, have led to the detectable tropospheric warming and related cooling

in the lower stratosphere since 1979, respectively (IPCC 2021b). Satellite and ground observations demonstrated clearly that stratospheric ozone was decreasing in the 1980s. Global annual mean total ozone declined by about 3.5 percent during the 1980s and early 1990s, compared to the pre-ozone depletion 1964 to 1980 average (IPCC 2021a). There is an international consensus that human-made ozone-depleting substances (e.g., gases emitted by air conditioners and aerosol sprays) are responsible (IPCC 2021a), which has prompted the establishment of international agreements to reduce the consumption and emissions of these substances (Salawitch et al. 2019; Langematz 2019). In response to these efforts, the rate of stratospheric ozone reduction has slowed. Although there are elements of uncertainty, total column stratospheric ozone concentrations outside of polar regions are projected to recover to pre-1980 levels around 2040 (Salawitch et al. 2019; WMO 2022).

Stratospheric ozone levels influence the surface climate in both the Northern and Southern Hemispheres. In the Northern Hemisphere, stratospheric ozone extremes over the Arctic contribute to spring surface temperatures, particularly linking low Arctic ozone in March with colder polar vortex and circulation anomalies (Ivy et al. 2017). March stratospheric ozone can be used as an indicator of spring climate in certain regions (Ivy et al. 2017). In the Southern Hemisphere, comparison of the 1979 to 2010 climate trends shows that stratospheric ozone depletion drives climate change (Li et al. 2016). Interactive chemistry causes cooling in the Antarctic lower stratosphere and acceleration of the circumpolar westerly winds (Li et al. 2016; IPCC 2021a). In turn, this affects overturning circulation in the Southern Ocean, leading to stronger ocean warming near the surface and increased ice melt around the Antarctic (Li et al. 2016).

Changes in stratospheric ozone influence the climate by affecting the atmosphere's temperature structure and circulation patterns (Salawitch et al. 2019; Ravishankara et al. 2008; IPCC 2021a). Conversely, climate change could aid in the recovery of stratospheric ozone. Although GHGs, including CO₂, warm the troposphere (the lower layer of the atmosphere), this process cools the stratosphere (IPCC 2021a). Consequently, it slows the chemical reactions between stratospheric ozone and ozone-depleting substances, assisting in ozone recovery. Climate change could enhance atmospheric circulation patterns that affect stratospheric ozone concentrations, assisting in ozone recovery in the extra-tropics. However, for polar regions, cooling temperatures can increase winter polar stratospheric clouds, which are responsible for accelerated ozone depletion. Large ozone depletions continue to appear in spring, such as over Antarctica (also known as the ozone hole), and in the Arctic in particularly cold years (IPCC 2021a). In summary, reduced stratospheric ozone may contribute to climate change, while climate change has been projected to have a direct impact on stratospheric ozone recovery, although there are large elements of uncertainty in these projections.

Human-Made Ozone-Depleting Substances and Other Trace Gases

Until the mid-1990s, stratospheric ozone concentrations had been declining in response to increasing concentrations of human-made ozone-depleting substances (IPCC 2022a; WMO 2022). Since the year 2000, ozone has been slowly increasing in the upper stratosphere (Steinbrecht et al. 2017). Examples of ozone-depleting substances include CFCs and compounds containing chlorine and bromine (WMO 2022; IPCC 2022a; Ravishankara et al. 2008; Fahey and Hegglin 2011). These ozone-depleting substances are chemically inert near Earth's surface but decompose into very reactive species when exposed to UV radiation in the stratosphere.

In 1987, an international agreement, the Montreal Protocol on Substances that Deplete the Ozone Layer, was established to reduce the consumption and production of human-made ozone-depleting

substances to protect and heal the ozone layer and rebuild the ozone hole.⁷² Subsequent agreements have followed that incorporate more stringent reductions of ozone-depleting substances and expand the scope to include additional chemical species that attack ozone. Some ozone-depleting substances such as CFCs are potent GHGs; therefore, reducing the emissions of these gases also reduces radiative forcing and hence reduces the heating of the atmosphere. However, HFCs were not included in the Montreal Protocol. While atmospheric abundance of CFCs has been decreasing in response to the mandates of the Montreal Protocol, HCFCs, which are replacements for CFCs and HFCs (which are replacements for HCFCs) have been found to be increasing (IPCC 2021a). HFCs contribute to anthropogenic climate change, and global mean abundance of major HFCs has increased since 2016 (WMO 2022). In 2016, the Kigali Amendment to the Montreal Protocol introduced a treaty on managing and phasing out HFCs (Hurwitz et al. 2016).

Increases in the emissions of other trace gases (e.g., CH₄, N₂O) and CO₂ also affect stratospheric ozone concentrations (WMO 2018, 2022). When CH₄ is oxidized by hydroxyl radicals in the stratosphere, it produces water and the methyl radical. Increases in stratospheric water lead to an increase in reactive molecules that assist in the reduction of ozone and an increase in polar stratospheric clouds that accelerate ozone depletion. Increases in N₂O emissions cause a reduction of ozone in the upper stratosphere as N₂O breaks down into reactive ozone-depleting species (WMO 2022).

Changes in Atmospheric Temperature

Since the observational record began in the 1960s, global stratospheric temperatures have been decreasing in response to ozone depletion, increased tropospheric CO₂, and changes in water vapor (WMO 2022; IPCC 2021a; Fahey et al. 2008). Natural concentrations of GHGs increase the warming in the troposphere by absorbing outgoing infrared radiation; increasing GHG concentrations in the troposphere traps more heat in the troposphere, which translates to less incoming heat into the stratosphere. In essence, as GHGs increase, the stratosphere is projected to cool. However, model simulations suggest reductions in ozone in the lower to middle stratosphere (13 to 24 miles) create a larger decrease in temperatures compared to the influence of GHGs (WMO 2022; IPCC 2021a; Fahey et al. 2008 citing Ramaswamy and Schwarzkopf 2002). In the upper stratosphere, both the reductions of ozone and the impact of GHGs can contribute significantly to stratospheric temperature decreases (IPCC 2021a). It is estimated that anthropogenic forcings has caused a cooling of approximately 2 to 3°C (3.6 to 5.4°F) in the upper stratosphere between 1979 and 2015 (IPCC 2021a).

The cooling temperatures in the stratosphere could slow the loss of ozone (WMO 2018; Reader et al. 2013) because the dominant reactions responsible for ozone loss slow as temperatures cool. For example, ozone in the upper stratosphere is projected to increase by 15 to 20 percent under a doubled CO₂ environment, and by 30 to 40 percent under a quadrupled CO₂ environment (Fahey et al. 2008 citing Jonsson et al. 2004; Chiodo et al. 2019). In the lower stratosphere, where day-night energy transport plays an important role both within the stratosphere and between the troposphere and stratosphere, cooling temperatures have less influence on ozone concentrations (except in the polar regions). Since 1993, ozone in the lower stratosphere above the Arctic has been greatly affected by cooling temperatures, as cooling has led to an increase in polar stratospheric clouds (WMO 2022; Fahey et al. 2008). Polar stratospheric clouds play a significant role in reducing ozone concentrations. Ozone

⁷² Significant thinning in the ozone layer has been observed above the Antarctic since the spring of 1985, to such a degree it is termed the *ozone hole* (WMO 2018; Ravishankara et al. 2008). This location is particularly susceptible to ozone loss due to a combination of atmospheric circulation patterns and the buildup of ozone-depletion precursors during the dark winter months from June to September.

in the lower stratosphere above the Antarctic does not demonstrate such a significant response to cooling temperatures because this region already experiences temperatures cold enough to produce these clouds.

Circulation and Transport Patterns

The large-scale Brewer-Dobson circulation represents the transport between the troposphere and stratosphere: an upward flux of air from the troposphere to the stratosphere occurs in the tropics balanced by a downward flux of air in the extratropics (i.e., the middle latitudes that extend beyond the tropics). This circulation carries stratospheric ozone from the tropics poleward (IPCC 2021a). It is suggested that the ozone in the lower stratosphere has experienced an acceleration in this transport over the past century, particularly in the Northern Hemisphere—potentially explaining the larger increase in total atmospheric ozone per area (i.e., column ozone) observed in the Northern Hemisphere compared to the Southern Hemisphere (Reader et al. 2013). According to many chemistry-climate models and observational evidence, climate change is thought to accelerate the Brewer-Dobson circulation (IPCC 2021a), extending the decline of ozone levels in the tropical lower stratosphere through the 21st century (WMO 2022).

Models suggest that the reduction of ozone above Antarctica is responsible for strengthening the circulation of stratospheric circumpolar winds of the wintertime vortex (i.e., the establishment of the vortex leads to significant ozone loss in late winter/early spring) (Fahey et al. 2008 citing Gillet and Thompson 2003 and Thompson and Solomon 2002).⁷³ Observations have shown that these winds can extend through the troposphere to the surface, leading to cooling over most of Antarctica. These studies suggest changes in stratospheric ozone can affect surface climate parameters.

Trends and Projections

Observations of global ozone concentrations in the upper stratosphere have shown a strong and statistically significant decline of approximately 6 to 8 percent per decade from 1979 to the mid-1990s (WMO 2018; Pawson and Steinbrecht 2014). Observations of global ozone within the lower stratosphere demonstrate a slightly smaller but statistically significant decline of approximately 4 to 5 percent per decade from 1979 to the mid-1990s (WMO 2018). An updated study from 2000 to 2020 found that ozone outside of the polar regions increased in the upper stratosphere by about 1.1 to 1.6 percent per decade in the tropics and by 1.5 to 2.2 percent per decade in the mid latitudes (35 to 60 degrees) (WMO 2022). Models attribute about half of the observed upper stratospheric ozone increase after the year 2000 to the decline in ozone-depleting substances, and the other half to cooling of upper stratosphere that slows down ozone destruction cycles (IPCC 2022a). From 2000 to 2020 in the lower stratosphere, there is model- and observation-based evidence indicating a small decrease of about 1 to 2 percent per decade (WMO 2022); this deviates from previous studies that indicated no statistically significant change in the lower stratosphere for these years (Steinbrecht et al. 2017). Radiative forcing from stratospheric ozone changes over 1850 to 2011 is estimated to cause a slight radiative cooling of -0.02 W/m^2 , with an uncertainty of $\pm 0.13 \text{ W/m}^2$ (WMO 2022).

⁷³ During the polar winter, a giant vortex with wind speeds exceeding 300 kilometers (186 miles) per hour can establish above the South Pole, acting like a barrier that accumulates ozone-depleting substances. In Antarctic springtime, temperatures begin to warm and the vortex dissipates. The ozone-depleting substances, now exposed to sunlight, release large amounts of reactive molecules that significantly reduce ozone concentrations (Fahey and Hegglin 2011).

Modeled projections for total column ozone (i.e., the total ozone within a column of air from Earth's surface to the top of the atmosphere) show that total column ozone returns to its 1980 value sooner for scenarios that assume larger emissions of GHGs than scenarios with smaller GHG emissions (WMO 2022). For middle-of-the-road scenario SSP2-4.5 the model ensemble suggests the northern mid-latitudes (35 to 60 degrees north) total column ozone will recover to 1980 levels around 2035, and the southern mid-latitudes (60 to 35 degrees south) total column ozone will recover around 2045 (WMO 2022). Overall, the recovery of near global mean ozone column to 1980 levels in the mid-latitudes (60 degrees south to 60 degrees north) is projected to occur around 2040 (WMO 2022). The Arctic recovery time to 1980 conditions is estimated to be slightly before mid-century (around 2045), while the Antarctic will regain 1980 concentrations shortly after mid-century (around 2065) (WMO 2022). The recovery is linked to impacts of climate that affect total column ozone, including increased formation of ozone in the mid- to upper stratosphere in response to cooling temperatures, accelerated ground-level ozone formation in the troposphere as it warms, and an accelerated Brewer-Dobson circulation increase in ozone transport in the lower stratosphere from the tropics to the mid-latitudes (WMO 2022).

In another study, doubled CO₂ concentrations simulated by 14 climate-change models project a 2 percent increase per decade in the annual mean troposphere-to-stratosphere exchange rate. This acceleration could affect long-lived gases such as CFCs, CH₄, and N₂O by reducing their lifetime and increasing their removal from the atmosphere. In addition, this could increase the vertical transport of ozone concentrations from the stratosphere to the troposphere over mid-latitude and polar regions (Fahey et al. 2008 citing Butchart and Scaife 2001).

F.5.2.10 Compound Events

According to the IPCC, compound events consist of combinations of multiple drivers and hazards that contribute to societal or environmental risk (IPCC 2022a). While some compound events may involve individual components that occur simultaneously or successively, others may include combinations of extreme events with underlying conditions that amplify the impact of the events, or combinations of events that are not themselves extremes but lead to an extreme event or impact when combined (GCRP 2023). Compound events can also have societal impacts even if they occur across separate regions; for example, droughts in multiple agricultural areas could have amplifying effects on food shortages (GCRP 2023).

The underlying probability of compound events occurring is increasing because of climate change, as underlying climate variables shift (GCRP 2023). Examples of shifting underlying conditions that could contribute to compound event frequency or severity include higher temperatures (of both surface and sea), increased drought risk, increased overall precipitation, and changes to oceanic circulation patterns (Cook et al. 2015; GCRP 2023; Swain et al. 2016). For instance, increasing swings from dry-to-wet extremes may increase the chances of intense rains on parched or recently burned landscapes in western states and Pacific Islands, increasing risks of postfire impacts such as flash flooding, debris flow, and reduced drinking water quality (GCRP 2023). Climate change may also alter the physical drivers of compound events. For example, increasing frequency of extreme La Niñas could simultaneously elevate the risk of droughts in Western United States and back-to-back severe Atlantic hurricanes (GCRP 2023).

Climate change could also facilitate the emergence of new types of compound events by combining previously unseen physical effects (GCRP 2017). An example of this is Hurricane Sandy, which was affected by sea-level rise, anomalously high temperatures, and a so-called “blocking ridge” around Greenland that steered the storm toward the mainland and may have been caused by reduced summer sea ice in the region (GCRP 2017).

The interconnectedness of the ocean and cryosphere can also lead to a type of compounding event called a cascade, where changes in one event trigger and increase the likelihood of secondary changes in different but connected elements of the system (IPCC 2022a citing IPCC 2019b). For example, enhanced melting and mass loss from ice sheets creates a huge flux of fresh water and iron to the ocean, which can, in turn, have dramatic effects on ocean productivity. Similarly, increasing ocean temperatures and sea level can affect ice shelf, ice sheet, and glacier stability because of the nonlinear response of ice melt, and calving, to ocean temperatures (IPCC 2022a). In this case, small increases in ocean temperature have the potential to destabilize large sections of ice sheets and contribute to large sea-level rise changes (IPCC 2022a).

Compound events may also lead to limited recovery time that can have far reaching detrimental impacts for socio-ecological systems. For example, between 1998 and 2016, the Maldives Islands were affected by three major climate events, including the 1997–1998 ENSO event, the 2007 flood event, and the 2016 ENSO event (IPCC 2022a citing Morri et al. 2015). These successive events had cumulative devastating effects on the reef ecosystem and cascading effects on health and well-being, livelihoods, and the overall Maldives economy (IPCC 2022a).

The impact of climate change on the frequency and severity of compound events remains uncertain because many climate models only address certain aspects of the climate system and cannot forecast compound events that involve combined and complex events from different subsystems (GCRP 2017; AghaKouchak et al. 2014). This makes the risks posed by compound events undervalued in modeled estimates of future climate conditions (GCRP 2017; AghaKouchak et al. 2014 citing Gräler et al. 2013).

To the extent the Proposed Actions and alternatives would decrease the rate of CO₂ emissions relative to the No-Action Alternative, they would contribute to the general decreased risk of extreme compound events. While this rulemaking alone would not necessarily cause decreases in compound event frequency and severity from climate change, it would be one of many global actions that, together, could reduce these effects.

F.5.2.11 Tipping Points and Abrupt Climate Change

Tipping points refer to thresholds in Earth systems that could be triggered by continued increases in the atmospheric concentration of GHGs, incremental increases in temperature, or other relatively small or gradual changes related to climate change. Earth systems that contain a tipping point exhibit large or accelerating changes or transitions to a new physical state, which are significantly different from the rates of change or states that have been exhibited in the past, when the tipping point is crossed. A recent study suggests that passing some tipping points may increase the likelihood of occurrence of other tipping points (McKay et al. 2022; Cai et al. 2016). The following discussion provides examples of tipping points in Earth systems.

Climate feedbacks can also drive tipping points in the climate system. Positive climate feedbacks amplify the impacts of anthropogenic emissions. For example, CO₂ emissions increase atmospheric temperatures, which increase the likelihood of wildfires that, in turn, release more CO₂ into the atmosphere (Mansoor et al. 2022; Liu et al. 2014). Climate feedbacks are complex and not always incorporated into future climate models and could lead to tipping points being crossed earlier than anticipated.

Atlantic Meridional Overturning Circulation

AMOC is the northward flow of warm, salty water in the upper layers of the Atlantic Ocean coupled to the southward flow of colder water in the deep layers, which transports oceanic heat from low to high latitudes. If enough fresh water enters the North Atlantic (such as from melting sea ice or the Greenland ice sheet), the density-driven sinking of North Atlantic waters might be reduced or even stopped, as apparently occurred during the last glacial cycle (approximately 22,000 years ago) (IPCC 2021a; Katsman et al. 2018; Lenton et al. 2008 citing Stocker and Wright 1991). This is expected to reduce the northward flow of thermal energy in the Gulf Stream and result in less heat transport to the North Atlantic. At the same time, reduced formation of very cold water may slow global ocean circulation, leading to impacts on global climate and ocean currents. Some proxy evidence suggests that the AMOC has declined since the industrial revolution (GCRP 2023 citing Caesar et al. 2018). However, it remains uncertain whether observations support predictions by climate models of the anthropogenically forced weakening of the AMOC during the past 4 decades (GCRP 2023 citing Jackson and Wood 2020). IPCC reports it is *very likely* that the AMOC will weaken over the 21st century; further, it reports it is *likely* that there will be some decline in the AMOC by about 2050 regardless of the future GHG emissions trajectory, but the AMOC could also undergo fluctuations because of large natural internal variability (IPCC 2021a). IPCC also reports that it is *very unlikely* that the AMOC will experience an abrupt collapse before 2100 (*medium confidence*) (IPCC 2021a). Should an AMOC collapse occur, it is *very likely* to drive abrupt shifts in weather patterns and the water cycle, including a weakening of the African and Asian monsoons and strengthening of Southern Hemisphere monsoons (IPCC 2021a). There is *low confidence* in changes to the AMOC beyond the 21st century, but a large-scale collapse from large, sustained warming cannot be excluded (IPCC 2021a).

Greenland and West Antarctic Ice Sheets

For both the Greenland and Antarctic ice sheets, there is clear evidence of loss of ice sheet mass from 1993 to 2020, and the rate of loss has increased (GCRP 2023). The sustained mass loss by ice sheets would cause a significant increase in sea level, and some part of the mass loss might be irreversible (IPCC 2021a). For example, under 2°C (3.6°F), about one-third of the Antarctic ice sheet and three-fifths of the Greenland ice sheet would be lost (GCRP 2018a citing Clark et al. 2016). There is *medium confidence* that a warming in the range of 3 to 5°C (5.4 to 9°F) would result in the near complete and irreversible loss of the Greenland ice sheet and the West Antarctic ice sheet over the next millennium or more (IPCC 2021a). The temperature range of 1.5 to 2°C (2.7 to 3.6°F) presents a moderate risk of triggering marine ice sheet instability in Antarctica (IPCC 2021a).

Of particular concern is the potential for abrupt increases in sea-level rise from rapid destabilization and ice loss from marine-based glaciers grounded on bedrock below sea level. Marine-based glaciers are prone to unground, destabilize, and rapidly contribute to sea-level rise due to a combination of mechanisms including basal melting, retreat, and acceleration. Climate change may drive abrupt and irreversible ice loss through an instability of marine-based sectors of the West Antarctic ice sheet in the absence of ice shelf buttressing. Several studies suggest that recent observations of sustained mass loss from large glaciers in Antarctica are consistent with the onset of this instability (Wild et al. 2022; Joughin et al. 2014; Rignot et al. 2014; IPCC 2021a). Some studies demonstrate the potential irreversibility of marine-based ice sheet loss and the presence of thresholds beyond which ice loss becomes self-sustaining, whereas other studies note glacier stability can be regained if ice shelves provide buttressing (IPCC 2021a; Mengel and Levermann 2014). Overall, there remains medium agreement for anthropogenic forcing of observed Antarctic mass balance changes and deep uncertainty regarding processes that may contribute

to large increases in Antarctic mass loss under high GHG emissions (IPCC 2021a). The likelihood of rapid destabilization of the Greenland ice sheet this century is low, because the ice sheet periphery is not predominantly marine-based and most areas of deep water contact between ice sheets and the ocean are limited to narrow troughs and fjord systems that constrict ice discharge into ocean basins (NRC 2013a).

Arctic Sea Ice

Since satellite observations of Arctic sea ice began in 1979, a steep decline in the average Arctic sea-ice extent in September (when the ice shrinks to its smallest area each year) has been observed, along with an increase in the overall length of the melt season over time (Figure F.5.2-2) (GCRP 2023 citing National Snow and Ice Data Center [NSIDC] 2023 and EPA 2023). In the satellite record period, 17 of the lowest sea ice minimums have all occurred in the last 17 years (NOAA 2023c), with an overall declining trend of 12.6 percent per decade from 1979 to 2022, compared to the average for 1981-2010 (NSIDC 2022). IPCC (2021a) suggests that anthropogenic influences have *very likely* contributed to these Arctic sea-ice losses since 1979, and that it is *very likely* that the Arctic sea-ice cover will continue to shrink and thin.

Rising temperatures are reducing ice volume and surface extent on land, lakes, and sea, with this loss of ice expected to continue. The Arctic Ocean is expected to become essentially ice free (i.e., where the ice extent is less than 1 million square kilometers) in September by the end of the 21st century under SSP2-4.5, SSP3-7.0, and SSP5-8.5 (IPCC 2021a). In the near term, it is *very likely* that September sea ice area minimums would continue to decrease (IPCC 2021a). The same projections also reveal decreasing March sea ice area maximums but to a lesser extent.

Figure F.5.2-2. (a) Comparison of Annual Minimum Arctic Sea Ice Extent in 1979 and 2022, and (b) Changes in Annual Length of Arctic Sea Ice Melt Season (1979–2021)

a) September Arctic sea ice extent

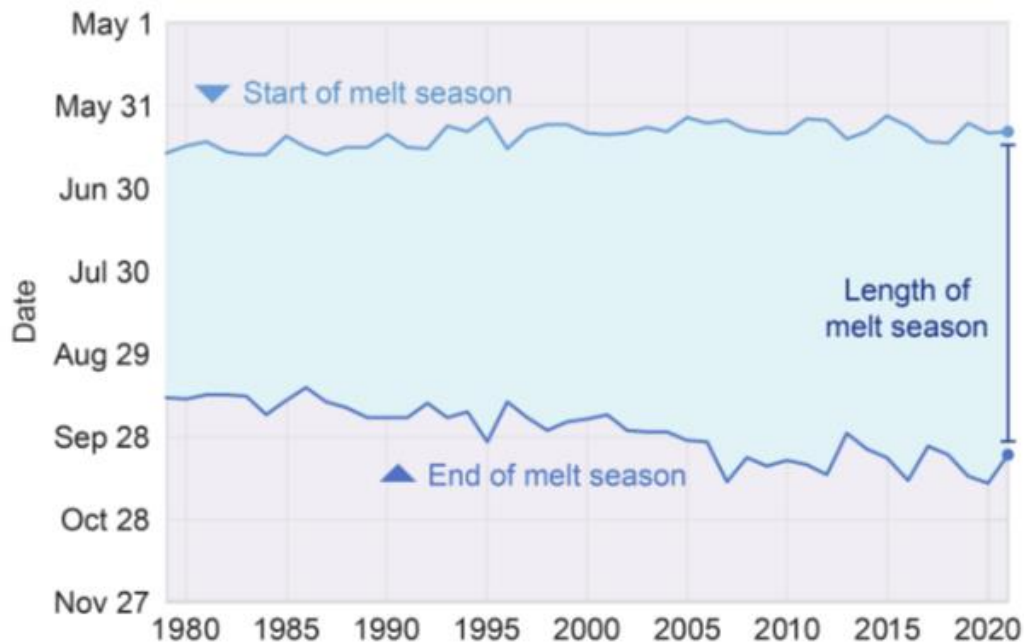
1979: 2.7 million square miles



2022: 1.9 million square miles



b) Arctic sea ice melt season



Notes: (a) This indicator compares the annual minimum sea ice extent—the smallest area of sea ice—measured in the Arctic in 1979 (the beginning of the record) and 2022 (the most recent year of observation when NCA5 was published). The pink line on each map represents the median ice edge for 1981 to 2010. (b) This indicator shows the annual length of the Arctic sea ice melt season from 1979 to 2021. The blue shaded area represents the amount of time between the date when ice begins to melt consistently (light blue line) and the date when it begins to refreeze (dark blue line).

Sources: Adapted from GCRP 2023 (a) adapted from NSIDC 2023 imagery from the Special Sensor Microwave Imager/Sounder (SSMIS) instrument, courtesy of NASA and NSIDC; (b) adapted from EPA 2023.

Sea ice loss contributes to positive feedback by changing the albedo of the Arctic's surface, affecting formation of ice the next winter (Riihela et al. 2021; GCRP 2018a citing Abe et al. 2016, Pedersen et al. 2016, and Post et al. 2013). Larger areas of open water in the Arctic during the summer will affect the Arctic climate, ecosystems, and human activities in the Northern Hemisphere; these impacts on the Arctic could potentially be large and irreversible. Less summer ice could disrupt the marine food cycle, alter the habitat of certain marine mammals, and exacerbate coastline erosion. For instance, sea ice is the primary habitat for polar bears. Polar bear movements are closely tied to the seasonal dynamics of sea-ice extent, and the loss of sea-ice habitat due to climate change is a primary threat to polar bears (IPCC 2022a; Pagano and Williams 2021; U.S. Fish and Wildlife Service 2016). Reductions in summer sea ice will also increase the navigability of Arctic waters, opening opportunities for shipping and economic activities, but also creating new political and legal challenges among circumpolar nations (IPCC 2022a; NRC 2013a).

Irreversibility of Anthropogenic Climate Change Resulting from Carbon Dioxide Emissions

A large fraction of anthropogenic climate change resulting from CO₂ emissions (e.g., global mean temperature increase, decrease in ocean pH) is irreversible on a multi-century to millennial time scale, except in the case of a large net removal of CO₂ from the atmosphere over a sustained period (IPCC 2021a). Surface temperatures will remain approximately constant at elevated levels for many centuries after a complete cessation of net anthropogenic CO₂ emissions. Because of the long timescales of heat transfer from the ocean surface to depth, ocean warming will continue for centuries (IPCC 2021a). A recent study indicates that the Earth may be approaching an approximate 2°C (3.6°F) threshold after which the system as a whole would be locked into a rapid pathway toward much hotter conditions that would be accelerated by self-reinforcing feedbacks (Differbaugh and Barnes 2023; Steffen et al. 2018).

Delaying Mitigation

Several studies have shown that delaying mitigation of GHG emissions results in a greater accumulation of CO₂ in the atmosphere, thereby increasing the risk of crossing tipping points and triggering abrupt changes (IPCC 2021a; Anderson and Bows 2011; Friedlingstein et al. 2011; van Vuuren et al. 2011a, 2011b; Ranger et al. 2012). The studies speak to the delayed timing of reductions, which increases the overall cumulative amount of GHGs in the atmosphere. Consequently, regardless of future emissions rates, the greater amount of GHGs present in the atmosphere increases the likelihood of climatic changes and thus crossing certain tipping points.

Increases in the Risk of Extinction for Marine and Terrestrial Species

The rate of climate change is increasing the risk of extinction for a number of marine and terrestrial species (IPCC 2022a; NRC 2013a). Climate change can cause abrupt and irreversible extinctions through four known mechanisms (IPCC 2022a; NRC 2013a).

- Direct impacts from an abrupt event, such as flooding of an ecosystem through a combination of storm surge and sea-level rise.
- Incremental climatic changes that exceed a threshold beyond which a species enters decline; for example, pikas and ocean coral populations are close to physiological thermal limits.
- Adding stress to species in addition to nonclimatic pressures such as habitat fragmentation, overharvesting, and eutrophication.

- Biotic interactions, such as increases in disease or pests, loss of partner species that support a different species, or disruptions in food webs after the decline of a keystone species.

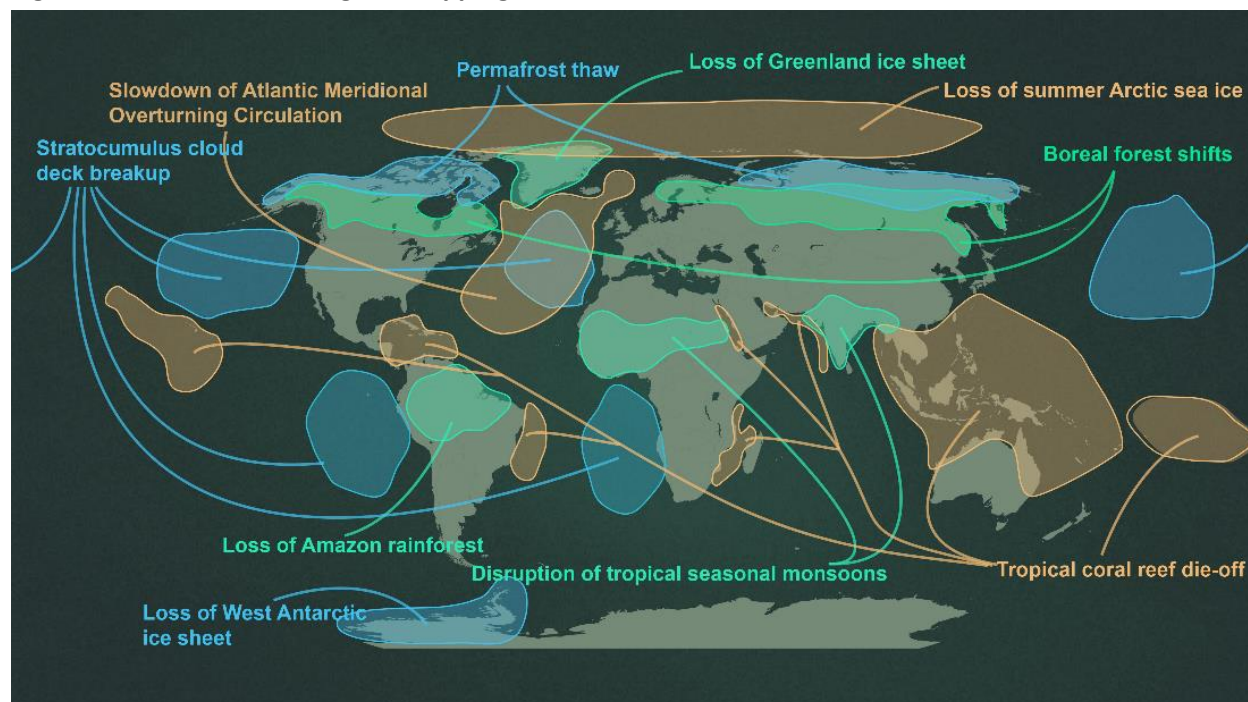
It is expected that some species will become extinct or fall below viable numbers in the next few decades (IPCC 2022a; NRC 2013a). IPCC states that there is *high confidence* that a large fraction of species faces increased extinction risk due to climate change during the 21st century and beyond (IPCC 2022a citing IPCC 2014).

Additional Tipping Points

GCRP (GCRP 2023) and IPCC (IPCC 2021a, 2022a) indicate a number of other potential tipping points (Figure F.5.2-3) that are described in this section.

- **El-Niño-Southern Oscillation (ENSO).** It is *very likely* that regional rainfall variability due to ENSO will increase over this century, particularly in late 21st century (IPCC 2021a). In the United States, the rainfall variability associated with ENSO events will *likely* move eastward in the future, though some model disagreement exists (IPCC 2021a). Research indicates that the frequency of extreme El Niño events increases linearly with global mean temperature; under 1.5°C (2.7°F) of temperature warming, the number of extreme El Niño events could double (IPCC 2018 citing Wang et al. 2017). Ultimately, it is *likely* that extreme El Niño events, including rainfall exceeding the 5-millimeters-per-day threshold in the eastern equatorial Pacific, will increase in intensity (IPCC 2021a).
- **Amazon rainforest.** Deforestation, reductions in precipitation, a longer dry season, and increased summer temperature could contribute to accelerated forest dieback. Important additional stressors also include forest fires and human activity (e.g., land clearing) (IPCC 2022a; Lenton et al. 2008). In general, studies agree that future climate change increases the risk of the tropical Amazon forest being replaced by seasonal forest or savannah (IPCC 2022a). Overall, this region is projected to experience enhanced aridity (*high confidence*), and although the occurrence of a tipping point driving this ecosystem to an arid state in the 21st century is *unlikely*, continued deforestation and warming increase the probability of the tipping point (IPCC 2021a).
- **Boreal forest.** The dieback of boreal forest could result from a combination of increased heat stress and water stress, leading to decreased reproduction rates, increased disease vulnerability, and subsequent fire, as well as increased beetle infestations (IPCC 2022a). Although highly uncertain, studies suggest a global warming of 3°C (5.4°F) could be the threshold for loss of the boreal forest (Lenton et al. 2008). Models indicate that under a high emissions scenario (RCP8.5), even without water stress, additional heat could transition the boreal forests into a net CO₂ source (Helbig et al. 2017).

Figure F.5.2-3. Potential Regional Tipping Elements



Source: GCRP 2023 adapted from Wang et al. 2023

- Release of methane hydrates and permafrost and tundra loss.** A catastrophic release of CO₂ and CH₄ to the atmosphere from clathrate hydrates⁷⁴ in the seabed and permafrost thaw, and from northern high-latitude and tropical wetlands, has been identified as a potential cause of abrupt climate change (GCRP 2017, 2023). There is an estimated 4,800 to 5,900 billion tons of carbon frozen in Arctic permafrost, which is roughly double the amount currently in the atmosphere and more than three times what has been emitted to the atmosphere from fossil fuel use since preindustrial times (GCRP 2023 citing Hugelius et al. 2014). With rising temperatures, more than 100 billion tons of CO₂ are likely to be released by thawing permafrost over the next century, with higher-end estimates of around 400 billion tons (GCRP 2023 citing Schuur et al. 2021). In the Arctic, the timing of the permafrost thaw may be further accelerated by increasing disturbances such as wildfires at high latitudes (GCRP 2023 citing Chen et al. 2021). Models predict a near total loss of near-surface permafrost by 2100 for intermediate (RCP4.5) and very high (RCP8.5) emissions scenarios, with permafrost carbon emissions projected to exceed carbon uptake from higher vegetation productivity (GCRP 2023 citing Miner et al. 2022). A smaller fraction of permafrost carbon will be emitted as CH₄. The size of the CH₄ hydrate reservoir in the Arctic is estimated to be between 500 to 3,000 billion tons of carbon (GCRP 2017). However, as CH₄ is a much more powerful GHG than CO₂, CH₄ emissions are projected to cause 40 to 70 percent of total permafrost-affected radiative forcing in this century (GCRP 2023 citing Schuur et al. 2022). Past research warns that these tundra sources could cause an abrupt release of carbon, causing dramatic warming in the atmosphere (IPCC 2019a; Hansen et al. 2013; NRC 2013a), but more recent literature suggests that the most probable process is a gradual and prolonged release of carbon (Schuur et al. 2015;

⁷⁴ Clathrate hydrates are *inclusion compounds* in which a hydrogen-bonded water framework—the host lattice—traps guest molecules (typically gases) within ice cages. Naturally occurring gas hydrate on Earth is primarily methane hydrate and forms under high pressure–low temperature conditions in the presence of sufficient CH₄ (GCRP 2014 citing Brook et al. 2008).

Mestdagh et al. 2017). According to NCA5, previously reported projections of permafrost degradation may underestimate permafrost thaw rates (GCRP 2023 citing Farquharson et al. 2022).

To the extent that the Proposed Action and alternatives would decrease the rate of CO₂ emissions relative to the relevant No-Action Alternative, they could contribute to the marginal decrease or deceleration of reaching these tipping-point thresholds. Moreover, while this rulemaking alone would not cause sufficient CO₂ emissions reductions to avoid reaching the tipping-point thresholds, it would make substantial contributions in averting levels of abrupt and severe climate change when paired with many other global actions.

APPENDIX G

List of Preparers and Reviewers

APPENDIX G LIST OF PREPARERS AND REVIEWERS

G.1 U.S. Department of Transportation

Table G.1-1 identifies the preparers, contributors, and reviewers in the U.S. Department of Transportation.

Table G.1-1. U.S. Department of Transportation Preparers, Contributors, and Reviewers

Preparers	
Hannah Fish, Attorney Advisor, NHTSA	
	J.D., William & Mary Law School B.S., Environmental Studies, SUNY College of Environmental Science and Forestry 8 years of legal experience, including environmental law
Stephanie Walters, Attorney Advisor, NHTSA	
	J.D., University of Florida, Levin College of Law B.S.B.A., Marketing and Entrepreneurship, University of Florida Warrington College of Business 5 years of legal experience, including environmental law
Claire McManus, General Engineer, NHTSA	
	B.S., Geology, George Washington University 1 year of experience in environmental cleanup; 4 years of experience in the oil and gas industry; 5 years of experience in environmental regulations and vehicle and fuel economy and compliance
Travis Mast, Environmental Protection Specialist, Volpe Center	
	B.S., Natural Resources and Environmental Science, Purdue University, West Lafayette 5 years of experience in natural resource management and wetland permitting; 15 years of experience in NEPA compliance and analysis for transportation improvements
Rebecca Blatnica, (former) Environmental Protection Specialist, Volpe Center	
	M.S., Community and Regional Planning, University of Texas, Austin B.A., Geography and History, University of Texas, Austin 23 years of experience in NEPA compliance and analysis for transportation improvements
Vinay Nagabhushana, (former) Contracting Officer's Representative, NHTSA	
	M.S., Mechanical Engineering, University of Texas at El Paso B.S., Mechanical Engineering, Bangalore University 26 years of experience in vehicle engineering and development of regulation in vehicle safety and fuel economy
Contributors and Reviewers	
Joseph Bayer, Chief, Fuel Economy Division, NHTSA	
	M.S., Mechanical Engineering, University of Wisconsin, College of Engineering B.S., Mechanical Engineering, University of Wisconsin, College of Engineering 23 years of experience in automotive engineering, vehicle testing, performance and fuel economy development; 5 years of experience in vehicle fuel economy rulemaking

Appendix G List of Preparers and Reviewers

Aerin Kim, Attorney Advisor, NHTSA	
	J.D., George Mason University, Antonin Scalia Law School B.A., Psychology, Case Western Reserve University 5 years of legal experience, including environmental law
Andrew Eilbert, Physical Scientist (former), Volpe Center	
	M.S., Natural Resources and Environment, University of Michigan, Ann Arbor B.S., Physics, Brandeis University 15 years of experience in emissions and energy modeling, data science, and policy analysis; 10 years of experience in fuel economy and greenhouse gas rulemaking
Bentley Clinton, Economist, Volpe Center	
	Ph.D., Economics, University of Colorado, Boulder B.A., Economics and Mathematics, Bates College 15 years of experience in transportation, energy, and environmental economics and policy analysis
Eikar Lai, General Engineer, Volpe Center	
	B.E., Mechanical Engineering, City College of New York, City University of New York 7 years of experience in municipal vehicle fleet engineering development and acquisition; 6 years of experience in vehicle engine testing, design, manufacturing, and tooling; 2 years of experience in fuel economy rulemaking
Gonzalo Saenz, General Engineer, Volpe Center	
	M.B.A., Warrington College of Business, University of Florida B.S., Mechanical and Aerospace Engineering, University of Missouri, Columbia 9 years of experience in automotive and aerospace industry; 3 years of experience in fuel economy rulemaking
Mark Shaulov, IT Specialist, Volpe Center	
	M.S., Computer Science, Boston University B.S., Computer Science, Northeastern University 20 years of experience in fuel economy rulemaking
Alexis Zubrow, (former) Physical Scientist, Volpe Center	
	M.S., Geography, University of Wisconsin, Madison A.B., Physics, Harvard University 21 years of experience in emissions, air quality, and environmental modeling and data analysis; 11 years of experience in environmental rulemaking
Don Pickrell, Chief Economist, Volpe Center	
	M.A. and Ph.D., Urban Planning, University of California, Los Angeles B.A., Economics and Mathematics, University of California, San Diego 46 years of experience in transportation economics, transportation policy, energy and environmental analysis, and benefit-cost evaluation
Katya Garcia-Israel, Economist, Volpe Center	
	B.A., Economics, Smith College 4 years of experience in fuel economy rulemaking

G.2 Consultant Team

The ICF Team supported NHTSA in preparing its environmental analyses and this EIS. Table G.2-1 identifies the consultant team and their contributions.

Table G.2-1. Consultant Team

Project Management	
Elizabeth Diller, Project Director	
	B.S., Environmental Science, University of Ulster at Coleraine, Northern Ireland 23 years of experience in the environmental field and 21 years of experience in the management, preparation, and review of NEPA documents
Sarah Powers, Project Manager	
	J.D., Boston University School of Law B.A., Astronomy and Physics, Boston University 16 years of legal and regulatory experience; 3 years of experience in macroeconomic analysis
Debra Rogers, Project Manager	
	M.B.A., University of North Carolina at Chapel Hill (Kenan Flagler Business School) B.S., Business Administration, Villanova University 26 years of experience managing NEPA processes
Rob Greene, Deputy Project Manager	
	M.B.A., Wilmington University B.A., Land Use Planning, Virginia Polytechnic Institute and State University 11 years of experience in management, preparation, and review of NEPA documents
Sarah Baer, Project Coordinator	
	B.S., Applied Geography, University of Louisville 8 years of experience in environmental science and NEPA processes
Emma Cwalinski, Project Coordinator	
	B.S., Environmental Science and Policy, University of Maryland, College Park 2 years of experience supporting NEPA projects and permitting processes
Libby Fortin, (former) Project Coordinator	
	B.A., Environmental Biology, Columbia University Over 7 years of experience supporting environmental efforts, including climate research; 4 years of experience supporting NEPA projects and permitting processes
Technical and Other Expertise	
Bikash Acharya, Climate Change Team	
	M.S., Mechanical Engineering, University of Maryland B.S., Physics, Mathematical Economics, Applied Mathematics, Hampden-Sydney College 12 years of experience in climate change and sustainability analysis
Hugh Arceneaux, Public Comments Team	
	J.D., Tulane University Law School B.A., History, McGill University 6 years of experience in regulatory technical support

Appendix G List of Preparers and Reviewers

Sneha Balakrishnan, Climate Change Team	
	B.S., Botany, University of Delhi M.S., Environmental Studies, TERI School of Advanced Studies 8 years of experience in climate change and sustainability analysis
Jenna Briscoe, Public Comments Team	
	M.S., Environmental Science and Policy, Johns Hopkins University B.A., Environmental Studies, University of Maryland, Baltimore County 9 years of experience in technical document management and other policy and regulatory support
Jasmina Buresch, Energy Team	
	M.A., Economics, Fordham University B.A., International Political Economy, Fordham University 2 years of experience in environmental impact analysis
Eva Burgos, Climate Change Team	
	B.A., Physics and Music, University of Chicago 3 years of experience in climate change and sustainability analysis
Noah Carpenter, Climate Change Team	
	M.S., Meteorology, University of Oklahoma 4 years of experience in climate change and sustainability analysis
Ed Carr, Photochemical Analysis Lead	
	M.S., Atmospheric Science, University of Washington B.S., Meteorology, San Jose State University 42 years of experience in air quality and meteorological modeling
Mollie Carroll, Climate Change Team	
	B.A., Economics and Environmental Policy, Washington University in St. Louis 5 years of experience in climate change and sustainability analysis
Anna Cliche, Climate Change Team	
	M.Eng., Civil Engineering, Cornell University B.S., Environmental Engineering, Cornell University 1 year of experience in climate change and sustainability analysis
David E. Coate, Other Environmental Impacts Team, Noise Analyst	
	M.S., Nuclear Engineering, Massachusetts Institute of Technology B.A., Mathematics, Physics, and Chemistry, Westminster College 41 years of experience in acoustics and vibration
Natalie Dixon, Life-Cycle Assessment Team and Energy Team	
	M.E.M., Environmental Economics and Policy, Duke University B.A., International Relations and Economics, American University 1 year of experience in environmental impact analysis
David Ernst, Air Quality Team Lead	
	M.C.R.P., Environmental Policy, Harvard University B.S., Urban Systems Engineering, Brown University B.A., Ethics and Politics, Brown University 44 years of experience preparing air quality analyses for NEPA documents

Lizelle Espinosa, Administrative Record Team Lead	
	B.S., Government Administration, Christopher Newport University 18 years of experience in environmental impact assessment, policy analysis, environmental management, and regulatory compliance
Mallory Giesie, Climate Change Team	
	M.EDS., Environmental Data Science, University of California, Santa Barbara (Bren School of Environmental Science & Management) B.S., Quantitative Environmental Science, The American University of Paris 1 year of experience in climate change and sustainability analysis
Anthony Ha, Publications Specialist	
	B.A., English Literature, Saint Mary’s College of California 17 years of experience in document development, formatting, and technical methods for publications; MS Word expert
Christopher Holder, Air Quality Team	
	M.S., Meteorology, North Carolina State University B.S., Meteorology, North Carolina State University 16 years of experience in hazardous air pollutant risk assessment, climate change impacts, and greenhouse gas emissions estimation
Sophie Johnson, Climate Change Team	
	M.A., Climate and Society, Columbia University 5 years of experience in climate change and sustainability analysis
Gray Jones, Other Environmental Impacts Team, Environmental Justice Analyst	
	B.A., Environmental Sociology, Vanderbilt University 6 years of experience in environmental impact analysis
Jason Jones, Energy Team	
	Ph.D., Agricultural Economics, Texas A&M University 12 years of experience in environmental impact analysis
Andrew Kindle, Energy Team	
	Ph.D., Ecological Economics, Rensselaer Polytechnic Institute B.A., Economics and Political Science, Denison University 8 years of experience in environmental impact analysis
Hannah Krauss, Climate Change Team	
	M.S., Energy Policy and Climate, Johns Hopkins University B.A., Environmental Studies, Anthropology, St. Mary’s College of Maryland 5 years of experience in climate change and sustainability analysis
Alexander Lataille, Climate Change Lead	
	B.S., Meteorology, Lyndon State College B.A., Global Studies, Lyndon State College 13 years of experience in climate change and sustainability analysis
Dasha Latvis, Climate Change Team	
	B.S., Supply Chain, Environmental Policy, Syracuse University 2 years of experience in climate change and sustainability analysis

Appendix G List of Preparers and Reviewers

Alyssa Le, Other Environmental Impacts Team, Environmental Justice Analyst	
	M.S., Geosciences, University of North Carolina, Wilmington B.S., Geology and Environmental Studies, Tufts University 8 years of experience in environmental regulatory analysis
Jamie Liu, Other Environmental Impacts Team, Environmental Justice Analyst	
	B.S., Environmental Science and minor in Environmental Engineering, University of California, Los Angeles 6 years of experience in climate change adaptation and resilience
Deanna Lizas, Life-Cycle Assessment Lead and Climate Team	
	M.E.M., Environmental Management, Yale University B.S., Environmental Science and Sociology, University of Michigan 16 years of experience in climate change, sustainability, and life-cycle materials management and energy analyses
Kristen Lundstrom, Lead Editor	
	B.A., English and Expository Writing, University of Washington 20 years of experience in editing and document management
Audrey Magnuson, Climate Change Team	
	B.A., Public Policy, Environmental Science and Policy, Duke University 2 years of experience in climate change and sustainability analysis
Howard Marano, Climate Change Team	
	M.P.P., Environmental Policy, George Washington University B.A., Government and International Politics, George Mason University 7 years of experience in climate change and sustainability analysis and climate change policy research
Christine McCrory, Lead Editor	
	Ph.D. candidate, Germanic Languages and Literatures, Washington University in St. Louis M.Phil., European Literature, Lincoln College, Oxford University, Oxford, England B.A., Anthropology and German, University of California, Berkeley 16 years of experience in editing and document management
Ryan McNamara, Climate Change Team	
	B.S., Economics, Duke University 2 years of experience in climate change and sustainability analysis
Jasmyn Noel, Climate Change Team	
	M.S., Environment and Sustainability, University of Michigan B.A., Environmental Science, University of Virginia B.A., Global Sustainability, University of Virginia 3 years of experience in climate change and sustainability analysis
Anna Pierce, Energy Team	
	B.A., Economics, University of Georgia 1 year of experience in environmental impact analysis

Eliza Puritz, Life-Cycle Assessment and Climate Change Teams	
	J.D., George Washington University Law School, In Progress M.A., Energy and Environment, Boston University B.A., Environmental Science, Boston University 6 years of experience in climate change and sustainability analysis and energy, policy, and supply chain research
Ajo Rabemiarisoa, Life-Cycle Assessment Team	
	M.B.A., Environmental Sustainability, Wilmington University B.S., Chemical and Environmental Engineering, McGill University 10 years of experience in environmental engineering and sustainability; 3 years of experience building technical analysis and support documentation for life cycle assessment processes
Beth Rodehorst, Climate Change Team	
	M.E.M., Environmental Management, Yale University B.A., Environmental Sciences and Policy, Economics, Duke University 20 years of experience in climate change and sustainability analysis
Kimberly Stevens, Document Quality Control Lead	
	B.S., Geography, University of Utah 21 years of experience in preparation, management, and review of NEPA documents
John Venezia, Climate Change Senior Advisor	
	M.S., Environmental Science and Policy, Johns Hopkins University B.S., Biology and Environmental Science and Policy, Duke University 23 years of experience analyzing climate change, greenhouse gas emissions sources, and options for reducing emissions, focusing on the energy sector
Jenna Wheaton, Other Environmental Impacts Team, Historical and Cultural Resources Analyst	
	B.A., Anthropology, Mercyhurst University 11 years of experience in Section 106 and cultural resources analysis, as well as NEPA environmental permitting and planning
Carson Young, Climate Change Team	
	B.S., Natural Resource Conservation, University of Florida B.A., Sustainability Studies, University of Florida 3 years of experience in climate change analysis, focusing on natural infrastructure, vulnerability, and risk assessment

APPENDIX H

References

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APPENDIX I

Distribution List

APPENDIX I DISTRIBUTION LIST

The Council on Environmental Quality National Environmental Policy Act (NEPA) implementing regulations specify requirements for transmitting an environmental impact statement (EIS).¹ In accordance with those requirements, the National Highway Traffic Safety Administration (NHTSA) is mailing notification of the availability of this EIS, as well as instructions on how to access it, to the elected officials and federally recognized Native American Tribes listed in this appendix. NHTSA is also sending an electronic notification of the availability of this EIS and instructions on how to access it to the federally recognized Native American Tribes listed in this appendix. NHTSA will send electronic notification to the agencies and other stakeholders listed in this appendix, which includes individuals who submitted comments in response to NHTSA's August 2022 notice of intent to prepare an EIS² and August 2023 notice of availability of the Draft EIS,³ and provided an email address.

I.1 Federal Agencies

- Advisory Council on Historic Preservation, Office of Federal Agency Programs
- Appalachian Regional Commission, Office of the General Counsel
- Argonne National Laboratory
- Armed Forces Retirement Home, Campus Operations
- Board of Governors of the Federal Reserve System, Division of Consumer and Community Affairs
- Board of Governors of the Federal Reserve System, Engineering and Facilities
- Board of Governors of the Federal Reserve System, Facility Business Operations
- Central Intelligence Agency, Environmental and Compliance Branch
- Committee for Purchase From People Who Are Blind or Severely Disabled/U.S. AbilityOne Commission, Office of the General Counsel
- Consumer Product Safety Commission, Directorate for Economic Analysis
- Defense Nuclear Facilities Safety Board
- Delaware River Basin Commission
- Denali Commission
- Executive Office of the President, Office of Science and Technology Policy
- Export-Import Bank of the United States, Environmental and Social Policy and Review Program
- Federal Communications Commission, Office of General Counsel
- Federal Communications Commission, Wireless Telecommunications Commission, Competition and Infrastructure Policy Division

¹ 40 CFR § 1502.20.

² Notice of Intent To Prepare an Environmental Impact Statement for Model Years 2027 and Beyond Corporate Average Fuel Economy Standards and Model Years 2029 and Beyond Heavy-Duty Pickup Trucks and Vans Vehicle Fuel Efficiency Improvement Program Standards, 87 FR 50386 (Aug. 16, 2022).

³ Notice of Availability of an Environmental Impact Statement for Model Years 2027 and Beyond Corporate Average Fuel Economy Standards and Model Years 2029 and Beyond Heavy-Duty Pickup Trucks and Vans Vehicle Fuel Efficiency Improvement Program Standards, 88 FR 51812 (August 4, 2023).

- Federal Deposit Insurance Corporation, Corporate Services Branch, Administration Division, Health, Safety and Environmental Programs Unit
- Federal Maritime Commission
- Federal Trade Commission, General Counsel for Litigation
- General Services Administration, Federal Permitting Improvement Steering Council
- General Services Administration, Public Buildings Service, Office of Portfolio Management and Customer Engagement
- International Boundary and Water Commission, U.S. & Mexico, Environmental Management Division
- International Trade Commission, Office of External Relations
- Marine Mammal Commission, Office of the General Counsel
- Millennium Challenge Corporation, Environmental and Social Assessment
- National Aeronautics and Space Administration, Environmental Management Division, Office of Strategic Infrastructure
- National Capital Planning Commission, Office of Urban Design and Plan Review Division
- National Credit Union Administration, Office of General Counsel, Division of Operations
- National Endowment for the Arts
- National Endowment for the Humanities
- National Indian Gaming Commission, Office of the General Counsel
- National Indian Gaming Commission, Office of the Chief of Staff
- National Institutes of Health, Division of Environmental Protection
- National Science Foundation, Office of the General Counsel
- Nuclear Regulatory Commission, Office of Nuclear Material Safety and Safeguards
- Oak Ridge National Laboratory
- Overseas Private Investment Corporation, Environmental Group
- Presidio Trust, NEPA Compliance
- Small Business Administration, Office of the General Counsel, Department of Litigation
- Social Security Administration, Office of Environmental Health and Occupational Safety
- Tennessee Valley Authority, Environmental Policy and Planning
- U.S. Access Board (Architectural and Transportation Barriers Compliance Board), Office of the General Counsel
- U.S. Agency for International Development
- U.S. Chamber of Commerce
- U.S. Department of Agriculture, Agriculture Research Service, Natural Resources and Sustainable Agricultural Systems
- U.S. Department of Agriculture, Animal and Plant Health Inspection Service, Environmental Risk and Analysis Services
- U.S. Department of Agriculture, Farm Service Agency
- U.S. Department of Agriculture, National Institute of Food and Agriculture,
- U.S. Department of Agriculture, Natural Resources Conservation Service, Ecological Services Division

- U.S. Department of Agriculture, Rural Development, Rural Utilities Service, Engineering and Environmental Staff
- U.S. Department of Agriculture, U.S. Forest Service—Ecosystem Management Coordination
- U.S. Department of Commerce, Economic Development Administration
- U.S. Department of Commerce, Energy and Environmental Law Division, Office of the General Counsel for Administration and Transactions
- U.S. Department of Commerce, First Responder Network Authority (FirstNet)
- U.S. Department of Commerce, National Institute of Standards and Technology, Office of Safety, Health, and Environment
- U.S. Department of Commerce, National Oceanic and Atmospheric Administration, Environmental Review and Coordination Section, Office of the General Counsel
- U.S. Department of Defense, Army Corps of Engineers (Civil Works), Office of the Assistant Secretary of the Army
- U.S. Department of Defense, Army Corps of Engineers, Planning and Policy Division, Office of Water Project Review
- U.S. Department of Defense, Defense Logistics Agency, DLA Installation Support, Environmental Management
- U.S. Department of Defense, Department of Air Force, Air Force Civil Engineer, Strategic Plans and Programs Division, DCS/Logistics, Installations, and Mission Support
- U.S. Department of Defense, Department of Air Force, NEPA Center
- U.S. Department of Defense, Department of the Army, Office of the Assistant Secretary of the Army for Installations, Energy, and Environment
- U.S. Department of Defense, Department of the Navy, Office of the Deputy Assistant Secretary of the Navy, Environmental Planning and Terrestrial Resources
- U.S. Department of Defense, Department of the Navy, Office of the Chief of Naval Operations, Energy and Environmental Readiness Division, Environmental Planning and Conservation Branch
- U.S. Department of Defense, Missile Defense Agency, Environmental Management
- U.S. Department of Defense, National Guard Bureau
- U.S. Department of Defense, National Guard Bureau, Military Construction Branch, Installations and Environment Division
- U.S. Department of Defense, National Guard Bureau, Real Estate Branch Installations and Environment Division
- U.S. Department of Defense, National Guard Bureau, Environmental Installations and Environment Division
- U.S. Department of Defense, National Security Agency
- U.S. Department of Defense, Office of the Deputy Assistant Secretary of Defense, Environment, Safety, and Occupational Health
- U.S. Department of Defense, U.S. Marine Corps, Headquarters
- U.S. Department of Education, Office of the General Counsel
- U.S. Department of Energy, Bonneville Power Administration, Environmental Planning and Analysis
- U.S. Department of Energy, Office of the General Counsel, Office of NEPA Policy and Compliance

- U.S. Department of Energy, Office of General Counsel, National Nuclear Security Administration, NEPA Program
- U.S. Department of Energy, Office of Environmental Management
- U.S. Department of Energy, Western Area Power Administration
- U.S. Department of Health and Human Services
- U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, Office of Safety, Security, and Asset Management
- U.S. Department of Health and Human Services, Food and Drug Administration, Center for Food Safety and Applied Nutrition
- U.S. Department of Health and Human Services, Health Resources and Services Administration, Strategic Initiatives and Planning Division
- U.S. Department of Health and Human Services, Indian Health Service, Division of Sanitation Facilities Construction
- U.S. Department of Health and Human Services, National Institute of Health
- U.S. Department of Health and Human Services, Planning and Logistics Division, Office of Refugee Resettlement
- U.S. Department of Health and Human Services, U.S. Public Health Service, Real Property Management Service
- U.S. Department of Homeland Security
- U.S. Department of Homeland Security, Customs and Border Protection
- U.S. Department of Homeland Security, Environmental Planning and Historic Preservation Program
- U.S. Department of Homeland Security, Federal Emergency Management Agency—Office of Environmental Planning and Historic Preservation
- U.S. Department of Homeland Security, Federal Law Enforcement Training Center, Environmental and Safety Division
- U.S. Department of Homeland Security, Immigration and Customs Enforcement, Environmental Program
- U.S. Department of Homeland Security, Transportation Security Administration, Office of Occupational Safety, Health and Environment
- U.S. Department of Homeland Security, U.S. Citizenship and Immigration Services, Facilities Management Division, Planning, Programming & Environmental Branch
- U.S. Department of Homeland Security, U.S. Coast Guard, Office of Environmental Management
- U.S. Department of the Interior, Bureau of Indian Affairs, Division of Environmental and Cultural Resources Management, Office of Trust Services
- U.S. Department of the Interior, Bureau of Indian Education
- U.S. Department of the Interior, Bureau of Land Management, Division of Decision Support, Planning, and NEPA
- U.S. Department of the Interior, Bureau of Ocean Energy Management, Office of Environmental Programs
- U.S. Department of the Interior, Bureau of Ocean Energy Management, Branch of Environmental Coordination, Division of Environmental Assessment

- U.S. Department of the Interior, Bureau of Reclamation
- U.S. Department of the Interior, Bureau of Safety and Environmental Enforcement, Environmental Compliance Division
- U.S. Department of the Interior, National Park Service, Environmental Planning and Compliance Branch
- U.S. Department of the Interior, Office of Environmental Policy and Compliance
- U.S. Department of the Interior, Office of Surface Mining Reclamation and Enforcement, Division of Regulatory Support
- U.S. Department of the Interior, U.S. Fish and Wildlife Service
- U.S. Department of the Interior, U.S. Geological Survey, Environmental Management Branch
- U.S. Department of Justice, Drug Enforcement Administration, Civil Litigation Section
- U.S. Department of Justice, Environment and Natural Resources Division
- U.S. Department of Justice, Federal Bureau of Investigation, Occupational Safety & Environmental Programs Unit, Environmental Compliance Program
- U.S. Department of Justice, Federal Bureau of Prisons, Real Estate and Environmental Law
- U.S. Department of Justice, Justice Management Division, Environmental and Sustainability Services
- U.S. Department of Labor, Office of the Assistant Secretary for Administration and Management
- U.S. Department of Labor, Office of the Assistant Secretary for Policy
- U.S. Department of State, Bureau of Oceans and International Environmental and Scientific Affairs
- U.S. Department of Transportation, Infrastructure Permitting Improvement Center
- U.S. Department of Transportation, Federal Aviation Administration, Environmental Policy and Operations, Office of Environment and Energy
- U.S. Department of Transportation, Federal Highway Administration, Office of Project Development and Environmental Review
- U.S. Department of Transportation, Federal Motor Carrier Safety Administration, Regulatory and Legislative Affairs Division, Office of the Chief Counsel
- U.S. Department of Transportation, Federal Railroad Administration, Environmental and Corridor Planning, Office of Program Delivery
- U.S. Department of Transportation, Federal Transit Administration, Office of Environmental Programs
- U.S. Department of Transportation, Maritime Administration, Office of Environment
- U.S. Department of Transportation, Pipeline and Hazardous Materials Safety Administration, Hazardous Materials Safety
- U.S. Department of Transportation, Saint Lawrence Seaway Development Corporation, Office of the Chief Counsel
- U.S. Department of Transportation, Volpe Center, Policy Analysis and Strategic Planning Division
- U.S. Department of the Treasury, Office of Environment, Safety, and Health
- U.S. Department of Veterans Affairs, Green Management Program Service
- U.S. Department of Veterans Affairs, Office of Construction and Facilities Management
- U.S. Department of Veterans Affairs, Veterans Health Administration, Office of General Counsel

- U.S. Environmental Protection Agency
- U.S. Environmental Protection Agency, Office of Policy
- U.S. Environmental Protection Agency, NEPA Compliance Division, Office of Federal Activities
- U.S. Environmental Protection Agency, NEPA Office Region 1
- U.S. Environmental Protection Agency, NEPA Office Region 2
- U.S. Environmental Protection Agency, NEPA Office Region 3
- U.S. Environmental Protection Agency, NEPA Office Region 4
- U.S. Environmental Protection Agency, NEPA Office Region 5
- U.S. Environmental Protection Agency, NEPA Office Region 6
- U.S. Environmental Protection Agency, NEPA Office Region 7
- U.S. Environmental Protection Agency, NEPA Office Region 8
- U.S. Environmental Protection Agency, NEPA Office Region 9
- U.S. Environmental Protection Agency, NEPA Office Region 10
- U.S. Postal Service, Environmental Compliance/Risk Management
- U.S. Securities and Exchange Commission, Office of Support Operations

I.2 State and Local Government Organizations

- American Samoa Office of Grants Policy/Office of the Governor, Department of Commerce, American Samoa Government
- Arizona Department of Environmental Quality
- Arkansas Department of Environmental Quality
- Arkansas Office of Intergovernmental Services, Department of Finance and Administration
- Boulder County Public Health
- California Air Resources Board
- California State Clearinghouse, Office of Planning and Research, Grants Coordination
- California Office of the Attorney General
- City of Los Angeles, City Attorney's Office
- County of Los Angeles, Public Health
- Connecticut Department of Environmental Protection
- Connecticut Department of Transportation
- Connecticut Office of the Attorney General
- Delaware Department of Justice
- Delaware Office of Management and Budget, Budget Development, Planning, and Administration
- District of Columbia Office of the City Administrator
- District of Columbia Office of the Attorney General
- Florida State Clearinghouse, Florida Department of Environmental Protection
- Guam State Clearinghouse, Office of I Segundo na Maga'lahaen Guahan, Office of the Governor
- Hawaii Office of the Attorney General

- Hawaii Office of Environmental Quality
- Illinois Office of the Attorney General
- Iowa Department of Management
- Iowa Office of the Attorney General
- Los Angeles County, Public Health
- Maine Department of Environmental Protection
- Maine State Planning Office
- Maine Office of the Attorney General
- Maryland Department of Planning
- Maryland Department of Transportation
- Maryland State Clearinghouse for Intergovernmental Assistance
- Maryland Office of the Attorney General
- Massachusetts Office of the Attorney General
- Michigan Department of Transportation
- Minnesota Department of Commerce, Division of Energy Resources
- Minnesota Department of Environmental Protection
- Minnesota Office of the Attorney General
- Missouri Federal Assistance Clearinghouse, Office of Administration, Commissioner's Office
- Nevada Division of State Lands
- New Hampshire Department of Energy
- New Jersey Environmental Practice Group, Division of Law
- New York State Department of Environmental Conservation
- New York Office of the Attorney General
- North Carolina Department of Environmental Quality
- North Carolina Department of Justice
- North Dakota Department of Commerce
- Oakland City Attorney
- Oregon Department of Environmental Quality
- Oregon Office of the Attorney General
- Oregon Department of Justice, Natural Resources Section
- Pennsylvania Department of Environmental Protection
- Pennsylvania Department of Transportation
- Pennsylvania Office of the Attorney General
- Pima County, Department of Environmental Quality
- Puerto Rico Highway and Transportation Authority
- Puerto Rico Planning Board, Federal Proposals Review Office
- Regional Air Pollution Control Agency, Clark, Darke, Greene, Miami, Montgomery, and Preble Counties, Ohio

- Rhode Island Office of the Attorney General
- Rhode Island Division of Planning
- Sacramento Municipal Utility District
- San Francisco Office of the City Attorney
- San Jose Office of the City Attorney
- South Carolina Office of State Budget
- Southeast Michigan Council of Governments
- State of Vermont Agency of Natural Resources
- The Governor of Kentucky’s Office for Local Development
- Town of Brookhaven, Planning, Environment, and Land Management
- Town of Brookline
- Utah State Clearinghouse, Governor’s Office of Planning and Budget Utah State
- Vermont Office of the Attorney General
- Virginia Office of the Attorney General
- Virgin Islands, Office of Management and Budget
- Washington State Department of Ecology
- Washington State Office of the Attorney General
- West Virginia Development Office
- Wisconsin Department of Natural Resources

I.3 Elected Officials

- The Honorable Karl Racine, Attorney General of the District of Columbia
- The Honorable Tom Miller, Attorney General of Iowa
- The Honorable Aaron Frey, Attorney General of Maine
- The Honorable Brian Frosh, Attorney General of Maryland
- The Honorable Maura Healey, Attorney General of Massachusetts
- The Honorable Letitia James, Attorney General of New York
- The Honorable Ellen Rosenblum, Attorney General of Oregon
- The Honorable Josh Shapiro, Attorney General of Pennsylvania
- The Honorable Thomas J. Donovan, Attorney General of Vermont
- The Honorable Bob Ferguson, Attorney General of Washington
- The Honorable Kay Ivey, Governor of Alabama
- The Honorable Michael Dunleavy, Governor of Alaska
- The Honorable Lemanu Peleti Mauga, Governor of American Samoa
- The Honorable Katie Hobbs, Governor of Arizona
- The Honorable Sarah Huckabee Sanders, Governor of Arkansas
- The Honorable Gavin Newsom, Governor of California
- The Honorable Jared Polis, Governor of Colorado

- The Honorable Ned Lamont, Governor of Connecticut
- The Honorable John Carney, Governor of Delaware
- The Honorable Ron DeSantis, Governor of Florida
- The Honorable Brian Kemp, Governor of Georgia
- The Honorable Lourdes Leon Guerrero, Governor of Guam
- The Honorable Josh Green, Governor of Hawaii
- The Honorable Brad Little, Governor of Idaho
- The Honorable JB Pritzker, Governor of Illinois
- The Honorable Eric Holcomb, Governor of Indiana
- The Honorable Kim Reynolds, Governor of Iowa
- The Honorable Laura Kelly, Governor of Kansas
- The Honorable Andy Beshear, Governor of Kentucky
- The Honorable Jeff Landry, Governor of Louisiana
- The Honorable Janet Mills, Governor of Maine
- The Honorable Wes Moore, Governor of Maryland
- The Honorable Maura Healey, Governor of Massachusetts
- The Honorable Gretchen Whitmer, Governor of Michigan
- The Honorable Tim Walz, Governor of Minnesota
- The Honorable Tate Reeves, Governor of Mississippi
- The Honorable Michael L. Parson, Governor of Missouri
- The Honorable Greg Gianforte, Governor of Montana
- The Honorable Jim Pillen, Governor of Nebraska
- The Honorable Joe Lombardo, Governor of Nevada
- The Honorable Christopher Sununu, Governor of New Hampshire
- The Honorable Philip Murphy, Governor of New Jersey
- The Honorable Michelle Lujan Grisham, Governor of New Mexico
- The Honorable Kathy Hochul, Governor of New York
- The Honorable Roy Cooper, Governor of North Carolina
- The Honorable Doug Burgum, Governor of North Dakota
- The Honorable Arnold Palacios, Governor of the Commonwealth of the Northern Mariana Islands
- The Honorable Michael DeWine, Governor of Ohio
- The Honorable Kevin Stitt, Governor of Oklahoma
- The Honorable Tina Kotek, Governor of Oregon
- The Honorable Josh Shapiro, Governor of Pennsylvania
- The Honorable Pedro Pierluisi, Governor of Puerto Rico
- The Honorable Daniel McKee, Governor of Rhode Island
- The Honorable Henry McMaster, Governor of South Carolina
- The Honorable Kristi Noem, Governor of South Dakota

- The Honorable Bill Lee, Governor of Tennessee
- The Honorable Greg Abbott, Governor of Texas
- The Honorable Albert Bryan, Governor of the United States Virgin Islands
- The Honorable Spencer Cox, Governor of Utah
- The Honorable Phil Scott, Governor of Vermont
- The Honorable Glenn Youngkin, Governor of Virginia
- The Honorable Jay Inslee, Governor of Washington
- The Honorable Jim Justice, Governor of West Virginia
- The Honorable Tony Evers, Governor of Wisconsin
- The Honorable Mark Gordon, Governor of Wyoming
- The Honorable Muriel Bowser, Mayor of the District of Columbia

I.4 Federally Recognized Native American Tribes

- Absentee-Shawnee Tribe of Indians of Oklahoma
- Agdaagux Tribe of King Cove
- Agua Caliente Band of Cahuilla Indians of the Agua Caliente Indian Reservation, California
- Ak-Chin Indian Community
- Akiachak Native Community
- Akiak Native Community
- Alabama-Coushatta Tribe of Texas
- Alabama-Quassarte Tribal Town
- Alatna Village
- Algaaciq Native Village (St. Mary's)
- Allakaket Village
- Alturas Indian Rancheria, California
- Alutiiq Tribe of Old Harbor
- Angoon Community Association
- Anvik Village
- Apache Tribe of Oklahoma
- Arctic Village
- Asa'carsarmiut Tribe
- Assiniboine & Sioux Tribes of the Fort Peck Indian Reservation, Montana
- Augustine Band of Cahuilla Indians, California
- Bad River Band of Lake Superior Tribe of Chippewa Indians of the Bad River Reservation, Wisconsin
- Bay Mills Indian Community, Michigan
- Bear River Band of the Rohnerville Rancheria, California
- Beaver Village
- Berry Creek Rancheria of Maidu Indians of California

- Big Lagoon Rancheria, California
- Big Pine Paiute Tribe of the Owens Valley
- Big Sandy Rancheria of Western Mono Indians of California
- Big Valley Band of Pomo Indians of the Big Valley Rancheria, California
- Birch Creek Tribe
- Bishop Paiute Tribe
- Blackfeet Tribe of the Blackfeet Indian Reservation of Montana
- Blue Lake Rancheria, California
- Bridgeport Indian Colony
- Buena Vista Rancheria of Me-wuk Indians of California
- Burns Paiute Tribe
- Cabazon Band of Mission Indians, California
- Cachil DeHe Band of Wintun Indians of the Colusa Indian Community of the Colusa Rancheria, California
- Caddo Nation of Oklahoma
- Cahto Tribe of the Laytonville Rancheria
- Cahuilla Band of Indians
- California Valley Miwok Tribe, California
- Campo Band of Diegueno Mission Indians of the Campo Indian Reservation, California
- Capitan Grande Band of Diegueno Mission Indians of California (Barona Group of Capitan Grande Band of Mission Indians of the Barona Reservation, California)
- Capitan Grande Band of Diegueno Mission Indians of California: Viejas (Barona Long) Group of Capitan Grande Band of Mission Indians of the Viejas Reservation, California
- Catawba Indian Nation
- Cayuga Nation
- Cedarville Rancheria, California
- Central Council of the Tlingit & Haida Indian Tribes
- Chalkyitsik Village
- Cheesh-Na Tribe
- Chemehuevi Indian Tribe of the Chemehuevi Reservation, California
- Cher-Ae Heights Indian Community of the Trinidad Rancheria, California
- Cherokee Nation
- Chevak Native Village
- Cheyenne and Arapaho Tribes, Oklahoma
- Cheyenne River Sioux Tribe of the Cheyenne River Reservation, South Dakota
- Chickahominy Indian Tribe
- Chickahominy Indian Tribe—Eastern Division
- Chickaloon Native Village

- Chicken Ranch Rancheria of Me-wuk Indians of California
- Chignik Bay Tribal Council
- Chignik Lake Village
- Chilkat Indian Village (Klukwan)
- Chilkoot Indian Association (Haines)
- Chinik Eskimo Community (Golovin)
- Chippewa Cree Indians of the Rocky Boy's Reservation, Montana
- Chitimacha Tribe of Louisiana
- Chuloonawick Native Village
- Circle Native Community
- Citizen Potawatomi Nation, Oklahoma
- Cloverdale Rancheria of Pomo Indians of California
- Cocopah Tribe of Arizona
- Coeur D'Alene Tribe
- Cold Springs Rancheria of Mono Indians of California
- Colorado River Indian Tribes of the Colorado Indian Reservation, Arizona and California
- Comanche Nation, Oklahoma
- Confederated Salish and Kootenai Tribes of the Flathead Reservation
- Confederated Tribes and Bands of the Yakama Nation
- Confederated Tribes of Coos, Lower Umpqua and Siuslaw Indians
- Confederated Tribes of Siletz Indians of Oregon
- Confederated Tribes of the Chehalis Reservation
- Confederated Tribes of the Colville Reservation
- Confederated Tribes of the Goshute Reservation, Nevada and Utah
- Confederated Tribes of the Grand Ronde Community of Oregon
- Confederated Tribes of the Umatilla Indian Reservation
- Confederated Tribes of the Warm Springs Reservation of Oregon
- Coquille Indian Tribe
- Coushatta Tribe of Louisiana
- Cow Creek Band of Umpqua Tribe of Indians
- Cowlitz Indian Tribe
- Coyote Valley Band of Pomo Indians of California
- Craig Tribal Association
- Crow Creek Sioux Tribe of the Crow Creek Reservation, South Dakota
- Crow Tribe of Montana
- Curyung Tribal Council
- Delaware Nation, Oklahoma
- Delaware Tribe of Indians

- Douglas Indian Association
- Dry Creek Rancheria Band of Pomo Indians, California
- Duckwater Shoshone Tribe of the Duckwater Reservation, Nevada
- Eastern Band of Cherokee Indians
- Eastern Shawnee Tribe of Oklahoma
- Eastern Shoshone Tribe of the Wind River Reservation, Wyoming
- Egegik Village
- Eklutna Native Village
- Elem Indian Colony of Pomo Indians of the Sulphur Bank Rancheria, California
- Elk Valley Rancheria, California
- Ely Shoshone Tribe of Nevada
- Emmonak Village
- Enterprise Rancheria of Maidu Indians of California
- Evansville Village (aka Bettles Field)
- Ewiiapaayp Band of Kumeyaay Indians, California
- Federated Indians of Graton Rancheria, California
- Flandreau Santee Sioux Tribe of South Dakota
- Forest County Potawatomi Community, Wisconsin
- Fort Belknap Indian Community of the Fort Belknap Reservation of Montana
- Fort Bidwell Indian Community of the Fort Bidwell Reservation of California
- Fort Independence Indian Community of Paiute Indians of the Fort Independence Reservation, California
- Fort McDermitt Paiute and Shoshone Tribes of the Fort McDermitt Indian Reservation, Nevada and Oregon
- Fort McDowell Yavapai Nation, Arizona
- Fort Mojave Indian Tribe of Arizona, California and Nevada
- Fort Sill Apache Tribe of Oklahoma
- Gila River Indian Community of the Gila River Indian Reservation, Arizona
- Grand Traverse Band of Ottawa and Chippewa Indians, Michigan
- Greenville Rancheria
- Grindstone Indian Rancheria of Wintun-Wailaki Indians of California
- Guidiville Rancheria of California
- Gulkana Village Council
- Habematolel Pomo of Upper Lake, California
- Hannahville Indian Community, Michigan
- Havasupai Tribe of the Havasupai Reservation, Arizona
- Healy Lake Village
- Ho-Chunk Nation of Wisconsin

- Hoh Indian Tribe
- Holy Cross Tribe
- Hoonah Indian Association
- Hoopa Valley Tribe, California
- Hopi Tribe of Arizona
- Hopland Band of Pomo Indians, California
- Houlton Band of Maliseet Indians
- Hualapai Indian Tribe of the Hualapai Indian Reservation, Arizona
- Hughes Village
- Huslia Village
- Hydaburg Cooperative Association
- Igiugig Village
- Iipay Nation of Santa Ysabel, California
- Inaja Band of Diegueno Mission Indians of the Inaja and Cosmit Reservation, California
- Inupiat Community of the Arctic Slope
- Ione Band of Miwok Indians of California
- Iowa Tribe of Kansas and Nebraska
- Iowa Tribe of Oklahoma
- Iqumiut Traditional Council
- Ivanof Bay Tribe
- Jackson Band of Miwok Indians
- Jamestown S'Klallam Tribe
- Jamul Indian Village of California
- Jena Band of Choctaw Indians
- Jicarilla Apache Nation, New Mexico
- Kaguyak Village
- Kaibab Band of Paiute Indians of the Kaibab Indian Reservation, Arizona
- Kaktovik Village (aka Barter Island)
- Kalispel Indian Community of the Kalispel Reservation
- Karuk Tribe
- Kashia Band of Pomo Indians of the Stewarts Point Rancheria, California
- Kasigluk Traditional Elders Council
- Kaw Nation, Oklahoma
- Kenaitze Indian Tribe
- Ketchikan Indian Community
- Keweenaw Bay Indian Community, Michigan
- Kialegee Tribal Town
- Kickapoo Traditional Tribe of Texas

- Kickapoo Tribe of Indians of the Kickapoo Reservation in Kansas
- Kickapoo Tribe of Oklahoma
- King Island Native Community
- King Salmon Tribe
- Kiowa Indian Tribe of Oklahoma
- Klamath Tribes
- Klawock Cooperative Association
- Kletsel Dehe Wintun Nation of the Cortina Rancheria (previously listed as Kletsel Dehe Band of Wintun Indians)
- Knik Tribe
- Koi Nation of Northern California
- Kokhanok Village
- Kootenai Tribe of Idaho
- Koyukuk Native Village
- La Jolla Band of Luiseno Indians, California
- La Posta Band of Diegueno Mission Indians of the La Posta Indian Reservation, California
- Lac Courte Oreilles Band of Lake Superior Chippewa Indians of Wisconsin
- Lac du Flambeau Band of Lake Superior Chippewa Indians of the Lac du Flambeau Reservation of Wisconsin
- Lac Vieux Desert Band of Lake Superior Chippewa Indians of Michigan
- Las Vegas Tribe of Paiute Indians of the Las Vegas Indian Colony, Nevada
- Levelock Village
- Lime Village
- Little River Band of Ottawa Indians, Michigan
- Little Shell Tribe of Chippewa Indians of Montana
- Little Traverse Bay Bands of Odawa Indians, Michigan
- Lone Pine Paiute-Shoshone Tribe
- Los Coyotes Band of Cahuilla and Cupeno Indians, California
- Louden Tribe (previously listed as Galena Village [aka Louden Village])
- Lovelock Paiute Tribe of the Lovelock Indian Colony, Nevada
- Lower Brule Sioux Tribe of the Lower Brule Reservation, South Dakota
- Lower Elwha Tribal Community
- Lower Sioux Indian Community in the State of Minnesota
- Lummi Tribe of the Lummi Reservation
- Lytton Rancheria of California
- Makah Indian Tribe of the Makah Indian Reservation
- Manchester Band of Pomo Indians of the Manchester Rancheria, California
- Manley Hot Springs Village

- Manokotak Village
- Manzanita Band of Diegueno Mission Indians of the Manzanita Reservation, California
- Mashantucket Pequot Indian Tribe
- Mashpee Wampanoag Tribe
- Match-e-be-nash-she-wish Band of Pottawatomis Indians of Michigan
- McGrath Native Village
- Mechoopda Indian Tribe of Chico Rancheria, California
- Menominee Indian Tribe of Wisconsin
- Mentasta Traditional Council
- Mesa Grande Band of Diegueno Mission Indians of the Mesa Grande Reservation, California
- Mescalero Apache Tribe of the Mescalero Reservation, New Mexico
- Metlakatla Indian Community, Annette Island Reserve
- Miami Tribe of Oklahoma
- Miccosukee Tribe of Indians
- Middletown Rancheria of Pomo Indians of California
- Mi'kmaq Nation (previously listed as Aroostook Band of Micmacs)
- Minnesota Chippewa Tribe
- Minnesota Chippewa Tribe—Bois Forte Band (Nett Lake)
- Minnesota Chippewa Tribe—Fond du Lac Band
- Minnesota Chippewa Tribe—Grand Portage Band
- Minnesota Chippewa Tribe—Leech Lake Band
- Minnesota Chippewa Tribe—Mille Lacs Band
- Minnesota Chippewa Tribe—White Earth Band
- Mississippi Band of Choctaw Indians
- Moapa Band of Paiute Indians of the Moapa River Indian Reservation, Nevada
- Mohegan Tribe of Indians of Connecticut
- Modoc Nation
- Monacan Indian Nation
- Mooretown Rancheria of Maidu Indians of California
- Morongo Band of Mission Indians, California
- Muckleshoot Indian Tribe
- Naknek Native Village
- Nansemond Indian Nation
- Narragansett Indian Tribe
- Native Village of Afognak
- Native Village of Akhiok
- Native Village of Akutan
- Native Village of Aleknagik

- Native Village of Ambler
- Native Village of Atka
- Native Village of Atqasuk
- Native Village of Barrow Inupiat Traditional Government
- Native Village of Belkofski
- Native Village of Brevig Mission
- Native Village of Buckland
- Native Village of Cantwell
- Native Village of Chenega (aka Chanega)
- Native Village of Chignik Lagoon
- Native Village of Chitina
- Native Village of Chuathbaluk (Russian Mission, Kuskokwim)
- Native Village of Council
- Native Village of Deering
- Native Village of Diomedede (aka Inalik)
- Native Village of Eagle
- Native Village of Eek
- Native Village of Ekuok
- Native Village of Ekwok
- Native Village of Elim
- Native Village of Eyak (Cordova)
- Native Village of False Pass
- Native Village of Fort Yukon
- Native Village of Gakona
- Native Village of Gambell
- Native Village of Georgetown
- Native Village of Goodnews Bay
- Native Village of Hamilton
- Native Village of Hooper Bay
- Native Village of Kanatak
- Native Village of Karluk
- Native Village of Kiana
- Native Village of Kipnuk
- Native Village of Kivalina
- Native Village of Kluti Kaah (aka Copper Center)
- Native Village of Kobuk
- Native Village of Kongiganak
- Native Village of Kotzebue

- Native Village of Koyuk
- Native Village of Kwigillingok
- Native Village of Kwinhagak (aka Quinhagak)
- Native Village of Larsen Bay
- Native Village of Marshall (aka Fortuna Ledge)
- Native Village of Mary's Igloo
- Native Village of Mekoryuk
- Native Village of Minto
- Native Village of Nanwalek (aka English Bay)
- Native Village of Napaimute
- Native Village of Napakiak
- Native Village of Napaskiak
- Native Village of Nelson Lagoon
- Native Village of Nightmute
- Native Village of Nikolski
- Native Village of Noatak
- Native Village of Nuiqsut (aka Nooiksut)
- Native Village of Nunam Iqua
- Native Village of Nunapitchuk
- Native Village of Ouzinkie
- Native Village of Paimiut
- Native Village of Perryville
- Native Village of Pilot Point
- Native Village of Point Hope
- Native Village of Point Lay
- Native Village of Port Graham
- Native Village of Port Heiden
- Native Village of Port Lions
- Native Village of Ruby
- Native Village of Saint Michael
- Native Village of Savoonga
- Native Village of Scammon Bay
- Native Village of Selawik
- Native Village of Shaktoolik
- Native Village of Shishmaref
- Native Village of Shungnak
- Native Village of Stevens
- Native Village of Tanacross

- Native Village of Tanana
- Native Village of Tatitlek
- Native Village of Tazlina
- Native Village of Teller
- Native Village of Tetlin
- Native Village of Tuntutuliak
- Native Village of Tununak
- Native Village of Tyonek
- Native Village of Unalakleet
- Native Village of Unga
- Native Village of Venetie Tribal Government (Arctic Village and Village of Venetie)
- Native Village of Wales
- Native Village of White Mountain
- Navajo Nation, Arizona, New Mexico and Utah
- Nenana Native Association
- New Koliganek Village Council
- New Stuyahok Village
- Newhalen Village
- Newtok Village
- Nez Perce Tribe
- Nikolai Village
- Ninilchik Village
- Nisqually Indian Tribe
- Nome Eskimo Community
- Nondalton Village
- Nooksack Indian Tribe
- Noorvik Native Community
- Northern Arapaho Tribe of the Wind River Reservation, Wyoming
- Northern Cheyenne Tribe of the Northern Cheyenne Indian Reservation, Montana
- Northfork Rancheria of Mono Indians of California
- Northway Village
- Northwestern Band of the Shoshone Nation
- Nottawaseppi Huron Band of the Potawatomi, Michigan
- Nulato Village
- Nunakauyarmiut Tribe
- Oglala Sioux Tribe
- Ohkay Owingeh, New Mexico
- Omaha Tribe of Nebraska

- Oneida Indian Nation
- Oneida Nation
- Onondaga Nation
- Organized Village of Grayling (aka Holikachuk)
- Organized Village of Kake
- Organized Village of Kasaan
- Organized Village of Kwethluk
- Organized Village of Saxman
- Orutsararmiut Traditional Native Council
- Oscarville Traditional Village
- Otoe-Missouria Tribe of Indians, Oklahoma
- Ottawa Tribe of Oklahoma
- Paiute Indian Tribe of Utah (Cedar Band of Paiutes, Kanosh Band of Paiutes, Koosharem Band of Paiutes, Indian Peaks Band of Paiutes, and Shivwits Band of Paiutes)
- Paiute-Shoshone Tribe of the Fallon Reservation and Colony, Nevada
- Pala Band of Mission Indians
- Pamunkey Indian Tribe
- Pascua Yaqui Tribe of Arizona
- Paskenta Band of Nomlaki Indians of California
- Passamaquoddy Tribe
- Pauloff Harbor Village
- Pauma Band of Indians (previously listed as Pechanga Band of Luiseno Mission Indians of the Pauma & Yuima Reservation, California)
- Pawnee Nation of Oklahoma
- Pechanga Band of Luiseno Mission Indians of the Pechanga Reservation, California
- Pedro Bay Village
- Penobscot Nation
- Peoria Tribe of Indians of Oklahoma
- Petersburg Indian Association
- Picayune Rancheria of Chukchansi Indians of California
- Pilot Station Traditional Village
- Pinoleville Pomo Nation, California
- Pit River Tribe, California (includes XL Ranch, Big Bend, Likely, Lookout, Montgomery Creek, and Roaring Creek Rancherias)
- Pitka's Point Traditional Council
- Platinum Traditional Village
- Poarch Band of Creek Indians
- Pokagon Band of Potawatomi Indians, Michigan & Indiana

- Ponca Tribe of Indians of Oklahoma
- Ponca Tribe of Nebraska
- Port Gamble S'Klallam Tribe
- Portage Creek Village (aka Ohgsenakale)
- Potter Valley Tribe, California
- Prairie Band of Potawatomi Nation
- Prairie Island Indian Community in the State of Minnesota
- Pribilof Islands Aleut Communities of St. Paul and St. George Islands (Saint George Island and Saint Paul Island)
- Pueblo of Acoma, New Mexico
- Pueblo of Cochiti, New Mexico
- Pueblo of Isleta, New Mexico
- Pueblo of Jemez, New Mexico
- Pueblo of Laguna, New Mexico
- Pueblo of Nambe, New Mexico
- Pueblo of Picuris, New Mexico
- Pueblo of Pojoaque, New Mexico
- Pueblo of San Felipe, New Mexico
- Pueblo of San Ildefonso, New Mexico
- Pueblo of Sandia, New Mexico
- Pueblo of Santa Ana, New Mexico
- Pueblo of Santa Clara, New Mexico
- Pueblo of Taos, New Mexico
- Pueblo of Tesuque, New Mexico
- Pueblo of Zia, New Mexico
- Puyallup Tribe of the Puyallup Reservation
- Pyramid Lake Paiute Tribe of the Pyramid Lake Reservation, Nevada
- Quapaw Nation
- Qagan Tayagungin Tribe of Sand Point
- Qawalangin Tribe of Unalaska
- Quartz Valley Indian Community of the Quartz Valley Reservation of California
- Quechan Tribe of the Fort Yuma Indian Reservation, California and Arizona
- Quileute Tribe of the Quileute Reservation
- Quinault Indian Nation
- Ramona Band of Cahuilla, California
- Rampart Village
- Rappahannock Tribe, Inc.
- Red Cliff Band of Lake Superior Chippewa Indians of Wisconsin

- Red Lake Band of Chippewa Indians, Minnesota
- Redding Rancheria, California
- Redwood Valley or Little River Band of Pomo Indians of the Redwood Valley Rancheria California
- Reno-Sparks Indian Colony, Nevada
- Resighini Rancheria, California
- Rincon Band of Luiseno Mission Indians of Rincon Reservation, California
- Robinson Rancheria
- Rosebud Sioux Tribe of the Rosebud Indian Reservation, South Dakota
- Round Valley Indian Tribes, Round Valley Reservation, California
- Sac & Fox Tribe of the Mississippi in Iowa
- Sac and Fox Nation of Missouri in Kansas and Nebraska
- Sac and Fox Nation, Oklahoma
- Saginaw Chippewa Indian Tribe of Michigan
- Saint George Island (Pribilof Islands Aleut Communities of St. Paul and St. George Islands)
- Saint Paul Island (Pribilof Islands Aleut Communities of St. Paul and St. George Islands)
- Saint Regis Mohawk Tribe
- Salamatof Tribe
- Salt River Pima-Maricopa Indian Community of the Salt River Reservation, Arizona
- Samish Indian Nation
- San Carlos Apache Tribe of the San Carlos Reservation, Arizona
- San Juan Southern Paiute Tribe of Arizona
- San Pasqual Band of Diegueno Mission Indians of California
- Santa Rosa Band of Cahuilla Indians, California
- Santa Rosa Indian Community of the Santa Rosa Rancheria, California
- Santa Ynez Band of Chumash Mission Indians of the Santa Ynez Reservation, California
- Santee Sioux Nation, Nebraska
- Santo Domingo Pueblo
- Sauk-Suiattle Indian Tribe
- Sault Ste. Marie Tribe of Chippewa Indians, Michigan
- Scotts Valley Band of Pomo Indians of California
- Seldovia Village Tribe
- Seminole Tribe of Florida
- Seneca Nation of Indians
- Seneca-Cayuga Nation
- Shageluk Native Village
- Shakopee Mdewakanton Sioux Community of Minnesota
- Shawnee Tribe
- Sherwood Valley Rancheria of Pomo Indians of California

- Shingle Springs Band of Miwok Indians, Shingle Springs Rancheria (Verona Tract), California
- Shinnecock Indian Nation
- Shoalwater Bay Indian Tribe of the Shoalwater Bay Indian Reservation
- Shoshone-Bannock Tribes of the Fort Hall Reservation
- Shoshone-Paiute Tribes of the Duck Valley Reservation, Nevada
- Sisseton-Wahpeton Oyate of the Lake Traverse Reservation, South Dakota
- Sitka Tribe of Alaska
- Skagway Village
- Skokomish Indian Tribe
- Skull Valley Band of Goshute Indians of Utah
- Snoqualmie Indian Tribe
- Soboba Band of Luiseno Indians, California
- Sokaogon Chippewa Community, Wisconsin
- South Naknek Village
- Southern Ute Indian Tribe of the Southern Ute Reservation, Colorado
- Spirit Lake Tribe, North Dakota
- Spokane Tribe of the Spokane Reservation
- Squaxin Island Tribe of the Squaxin Island Reservation
- St. Croix Chippewa Indians of Wisconsin
- Standing Rock Sioux Tribe of North and South Dakota
- Stebbins Community Association
- Stillaguamish Tribe of Indians of Washington
- Stockbridge Munsee Community, Wisconsin
- Summit Lake Paiute Tribe of Nevada
- Sun'aq Tribe of Kodiak
- Suquamish Indian Tribe of the Port Madison Reservation
- Susanville Indian Rancheria, California
- Swinomish Indian Tribal Community
- Sycuan Band of the Kumeyaay Nation
- Table Mountain Rancheria
- Takotna Village
- Tangirnaq Native Village
- Tejon Indian Tribe
- Telida Village
- Te-Moak Tribe of Western Shoshone Indians of Nevada (four constituent bands: Battle Mountain Band, Elko Band, South Fork Band, and Wells Band)
- The Chickasaw Nation
- The Choctaw Nation of Oklahoma

- The Muscogee (Creek) Nation
- The Osage Nation
- The Seminole Nation of Oklahoma
- Thlopthlocco Tribal Town
- Three Affiliated Tribes of the Fort Berthold Reservation, North Dakota
- Timbisha Shoshone Tribe
- Tohono O'odham Nation of Arizona
- Tolowa Dee-Ni' Nation
- Tonawanda Band of Seneca
- Tonkawa Tribe of Indians of Oklahoma
- Tonto Apache Tribe of Arizona
- Torres Martinez Desert Cahuilla Indians, California
- Traditional Village of Togiak
- Tulalip Tribes of Washington
- Tule River Indian Tribe of the Tule River Reservation, California
- Tuluksak Native Community
- Tunica-Biloxi Indian Tribe
- Tuolumne Band of Me-Wuk Indians of the Tuolumne Rancheria of California
- Turtle Mountain Band of Chippewa Indians of North Dakota
- Tuscarora Nation
- Twenty-Nine Palms Band of Mission Indians of California
- Twin Hills Village
- Ugashik Village
- Umkumiut Native Village
- United Auburn Indian Community of the Auburn Rancheria of California
- United Keetoowah Band of Cherokee Indians in Oklahoma
- Upper Mattaponi Tribe
- Upper Sioux Community, Minnesota
- Upper Skagit Indian Tribe
- Ute Indian Tribe of the Uintah & Ouray Reservation, Utah
- Ute Mountain Ute Tribe
- Utu Utu Gwaitu Paiute Tribe of the Benton Paiute Reservation, California
- Village of Alakanuk
- Village of Anaktuvuk Pass
- Village of Aniak
- Village of Atmautluak
- Village of Bill Moore's Slough
- Village of Chefornak

- Village of Clarks Point
- Village of Crooked Creek
- Village of Dot Lake
- Village of Iliamna
- Village of Kalskag
- Village of Kaltag
- Village of Kotlik
- Village of Lower Kalskag
- Village of Ohogamiut
- Village of Red Devil
- Village of Sleetmute
- Village of Solomon
- Village of Stony River
- Village of Venetie
- Village of Wainwright
- Walker River Paiute Tribe of the Walker River Reservation, Nevada
- Wampanoag Tribe of Gay Head (Aquinnah)
- Washoe Tribe of Nevada and California (Carson Colony, Dresslerville Colony, Woodfords Community, Stewart Community, and Washoe Ranches)
- White Mountain Apache Tribe of the Fort Apache Reservation, Arizona
- Wichita and Affiliated Tribes (Wichita, Keechi, Waco, and Tawakonie), Oklahoma
- Wilton Rancheria, California
- Winnebago Tribe of Nebraska
- Winnemucca Indian Colony of Nevada
- Wiyot Tribe, California
- Wrangell Cooperative Association
- Wyandotte Nation
- Yakutat Tlingit Tribe
- Yankton Sioux Tribe of South Dakota
- Yavapai-Apache Nation of the Camp Verde Indian Reservation, Arizona
- Yavapai-Prescott Indian Tribe
- Yerington Paiute Tribe of the Yerington Colony and Campbell Ranch, Nevada
- Yocha Dehe Wintun Nation, California
- Yomba Shoshone Tribe of the Yomba Reservation, Nevada
- Ysleta del Sur Pueblo
- Yuhaaviatam of San Manuel Nation (previously listed as San Manuel Band of Mission Indians, California)
- Yupiit of Andreafski

- Yurok Tribe of the Yurok Reservation, California
- Zuni Tribe of the Zuni Reservation, New Mexico

I.5 Manufacturers

- American Honda Motor Company, Inc.
- Aston Martin Lagonda
- BMW of North America, LLC
- BYD Motors, Inc.
- Daimler/ Mercedes-Benz USA, LLC
- Elux Automotive
- FCA US LLC (dba Stellantis North America)
- Ferrari North America, Inc.
- Ford Motor Company
- General Motors, LLC
- Hyundai Kia America Technical Center, Inc.
- Jaguar Land Rover North America, LLC
- Koenigsegg Automotive AB
- Lotus Cars USA, Inc.
- Mazda North American Operations
- McLaren Automotive Limited
- Mitsubishi Motors North America, Inc.
- Nissan North America, Inc.
- RUF Automobile GmbH
- Subaru of America, Inc.
- Suzuki Motor of America, Inc.
- Tesla Motors, Inc.
- Toyota Motor Engineering & Manufacturing North America, Inc.
- Volkswagen Group of America, Inc.
- Volvo Car USA, LLC

I.6 Stakeholders

- AAA Mid-Atlantic
- Alaska Public Interest Research Group
- Alliance for Automotive Innovation
- Alliance to Save Energy
- Allison Transmission, Inc.
- American Association of Blacks in Energy

- American Chemistry Council
- American Council for an Energy-Efficient Economy
- American Fuel & Petrochemical Manufacturers
- American Gas Association
- American International Automobile Dealers Association
- American Iron and Steel Institute
- American Jewish Committee
- American Lung Association
- American Petroleum Institute
- Association of International Automobile Manufacturers, Inc.
- Association of Metropolitan Planning Organizations
- Auto Research Center
- BlueGreen Alliance
- Border Valley Trading LTD
- Boyden Gray & Associates PLLC
- Bridgestone Americas Tire Operations Product Development Group
- California Air Pollution Control Officers Association
- CALSTART
- Cato Institute
- Center for Biological Diversity
- Center for Biological Diversity, Climate Campaign
- Central States Air Resources Agencies
- Ceres and the Investor Network on Climate Risk (INCR)
- ChargePoint, Inc.
- Clean Fuel Development Coalition
- Commission for Environmental Cooperation
- Competitive Enterprise Institute
- Conservation Law Foundation
- Consumer Action
- Consumer Assistance Council of Cape Cod
- Consumer Federation of America
- Consumer Federation of the Southeast
- Consumers for Auto Reliability and Safety
- Consumers Union
- Con-way Inc
- CoPIRG Foundation
- Criterion Economics, L.L.C.
- CSRA

- Dallas Clean Energy LLC
- Dana Holding Corporation
- Defenders of Wildlife
- Ecology Center
- Edison Electric Institute
- Electric Applications Inc.
- Electric Power Research Institute
- Emmett Institute on Climate Change and the Environment
- Empire State Consumer Association
- Environment America
- Environment Illinois
- Environmental Defense Fund
- Environmental Law & Policy Center
- Evangelical Environmental Network
- Evangelical Lutheran Church in America
- FedEx Corporation
- Florida Consumer Action Network
- Florida Power & Light Co.
- FreedomWorks Foundation
- Friends Committee on National Legislation
- Gibson, Dunn & Crutcher LLP
- Greater Washington Interfaith Power and Light c/o Interfaith Conference of Metropolitan Washington
- Growth Energy
- HayDay Farms, Inc.
- Honeywell Transportation Systems
- Hyundai Motor America
- ICM
- Illinois Trucking Association
- Illinois Public Interest Research Group
- Indiana Corn Growers Association
- Indiana University
- Ingevity
- Institute for Policy Integrity at New York University School of Law
- Justice and Witness Ministries
- Kirkland & Ellis LLP
- Manufacturers of Emission Controls Association
- Maryknoll Office of Global Concerns

- Maryland Consumer Rights Coalition
- Maryland Public Interest Research Group
- Massachusetts Consumers Council
- Massachusetts Public Interest Research Group
- MECA Clean Mobility
- Mercatus Center, George Mason University
- Metro 4/SESARM
- Michigan Tech University
- Mid-America Regional Council
- Mid-Atlantic Regional Air Management Association, Inc.
- National Alliance of Forest Owners
- National Association of Counties
- National Association of Regulatory Utility Commissioners
- National Association of State Energy Officials
- National Automobile Dealers Association
- National Biodiesel Board
- National Conference of State Legislatures
- National Corn Growers Association
- National Council of Churches USA
- National Governors Association
- National Groundwater Association
- National Propane Gas Association
- National Wildlife Federation
- Natural Gas Vehicles (NGV) America
- Natural Resources Canada
- Natural Resources Defense Council
- Natural Resources Defense Council, Climate Center
- New York Corn & Soybean Growers Association
- Northeast Ohio Areawide Coordinating Agency
- Northeast States for Coordinated Air Use Management
- Novation Analytics
- NTEA - The Association for the Work Truck Industry
- New York Public Interest Research Group
- Ohio Corn and Wheat
- Pew Environment Group
- Pierobon & Partners
- Plastics Industry Association
- Pollution Probe

- Presbyterian Church (USA)
- Public Citizen
- Recreation Vehicle Industry Association
- Renewable Fuels Association
- Resources for the Future
- Rocky Mountain Institute
- Rubber Manufacturers Association
- Santa Clara Pueblo
- Securing America's Future Energy
- Sierra Club
- Socially Responsible Investing
- SUN DAY Campaign
- Susquehanna River Basin Commission
- Teamsters Joint Council 25
- The Accord Group
- The Aluminum Association, Inc.
- The Council of State Governments
- The Episcopal Church
- The Lee Auto Malls
- The Pew Charitable Trusts
- The United Methodist Church General
- TIAX LLC
- Trillium Asset Management Corporation
- Truck Manufacturer's Association
- Tufts University
- U.S. Chamber of Commerce
- U.S. Conference of Mayors
- U.S. Public Interest Research Group
- Union for Reform Judaism
- Union of Concerned Scientists
- United Auto Workers
- United Automobile, Aerospace and Agricultural Workers of America (UAW)
- United Church of Christ
- United Steelworkers
- University of Colorado School of Law
- University of Michigan Center for Sustainable Systems
- University of Michigan Transportation Research Institute
- University of Southern California

- Utility Consumers Action Network
- Vermont Public Interest Research Group
- Victims Committee for Recall of Defective Vehicles
- Virginia Citizens Consumer Council
- Wayne Stewart Trucking Company
- West Virginia University
- Western Regional Air Partnership
- Wisconsin Consumers League
- World Auto Steel
- World Resources Institute
- Zero Emission Transportation Association (ZETA)

I.7 Individuals

Individual commenters are not named in this distribution list for their privacy. NHTSA will provide notification of the availability of this EIS electronically by email to individual commenters who provided an email address.