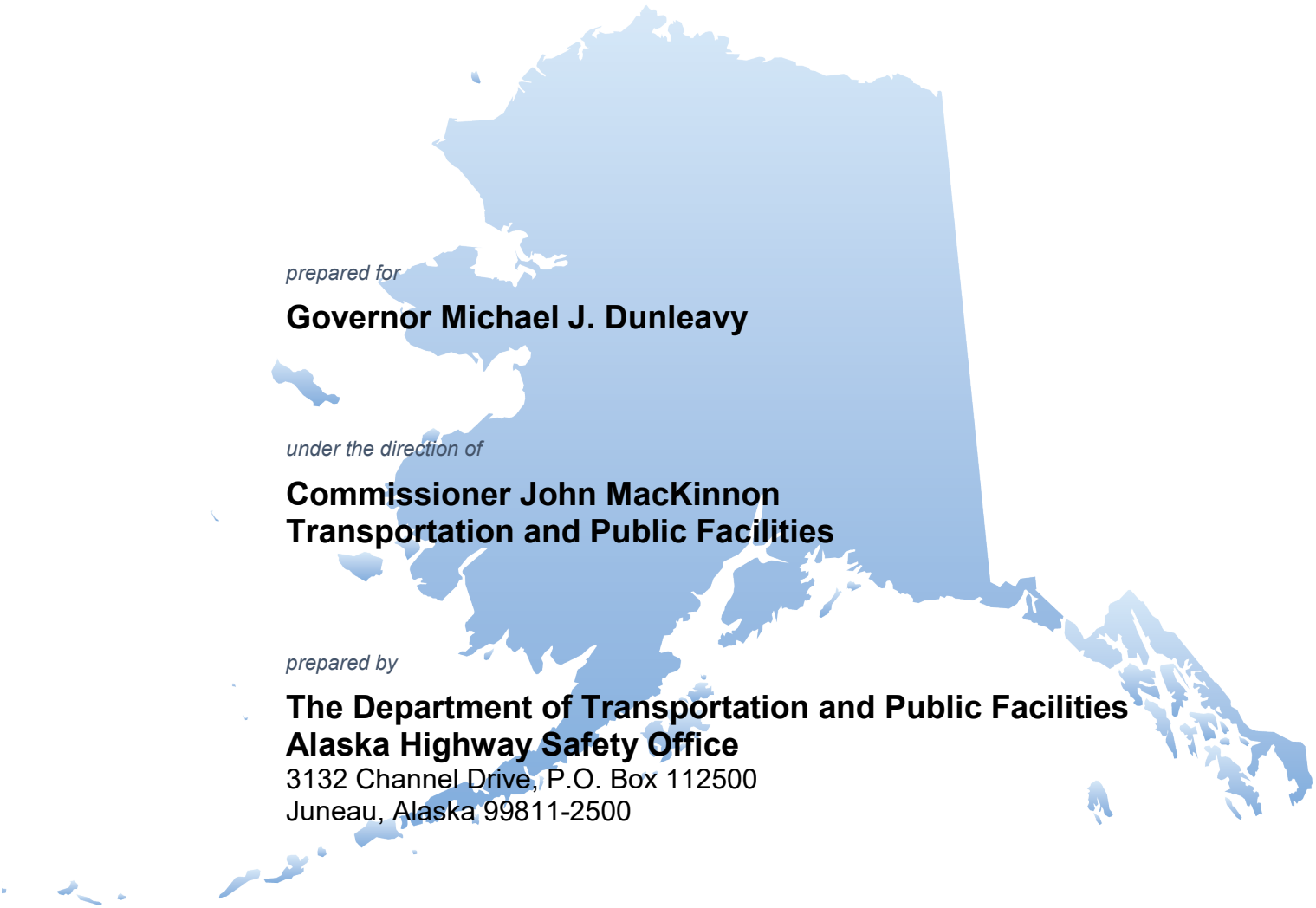
Alaska Highway Safety Plan

Federal Fiscal Year 2021



prepared for

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August 3, 2020

Toward Zero Deaths
Everyone Counts on Alaska's Roadways

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Acronym Guide

ACS	Alaska Court System
AHSO	Alaska Highway Safety Office
AIPC	Alaska Injury Prevention Center (DBA Center for Safe Alaskans)
ALVIN	Alaska License Vehicle Information Network
ANTHC	Alaska Native Tribe Health Consortium
APSIN	Alaska Public Safety Information Network
ARIDE	Advanced Roadside Impaired Driving Enforcement
ASTEP	Alaska Strategic Enforcement Partnership
ATR	Alaska Trauma Registry
ATRCC	Alaska Traffic Records Coordinating Committee
BAC	Blood Alcohol Concentration
CARE	Crash Analysis and Reporting Environment
CDC	Centers for Disease Control
CDES	Crash Data Entry System
CDR	Crash Data Repository
CPS	Child Passenger Safety
CIOT	Click It or Ticket
CTW	Countermeasures That Work
DDACTS	Driven Approaches to Crime and Traffic Safety
DOT&PF	Department of Transportation and Public Facilities
DITEP	Drug Impairment Training for Education Professionals
DUI	Driving Under the Influence
DWI	Driving While Intoxicated
DRE	Drug Recognition Expert
EIMOR	Electronic Minor Offense Repository
FARS	Fatality Analysis Reporting System
FAST	Fixing America's Surface Transportation Act
FFY	Federal Fiscal Year
FHWA	Federal Highway Administration
FMCSA	Federal Motor Carrier Safety Administration
GDL	Graduated Driver's License
GHSA	Governors Highway Safety Association
HAS	Highway Analysis System
HDDS	Alaska Hospital Discharge Data System
HVE	High-Visibility Enforcement
HSP	Highway Safety Plan
IDTF	Impaired Driving Task Force
JOL	Judicial Outreach Liaison
LEL	Law Enforcement Liaison
MOU	Memorandum of Understanding

MADD	Mothers Against Drunk Driving
MAJIC	Multi-Agency Justice Integration Consortium
MAP-21	Moving Ahead for Progress in the 21st Century
NEMSIS	National Emergency Medical Service Information System
NHTSA	National Highway Traffic Safety Administration
OPTF	Occupant Protection Task Force
OPUS	Occupant Protection Use Survey
REDDI	Report Every Dangerous Driver Immediately
SFST	Standard Field Sobriety Test
SK	Safe Kids
SHSP	Strategic Highway Safety Plan
STSI	State Traffic Safety Information
TDMS	Traffic Data Management System
TraCS	Traffic and Criminal Software
TRCC	Traffic Records Coordinating Committee
TRIPRS	Traffic Records Improvement Program Reporting System
TSRP	Traffic Safety Resource Prosecutor
UMOT	Uniform Minor Offense Table
UOCT	Uniform Offense Citation Table
VMT	Vehicle Miles Traveled

Introduction

The Alaska Highway Safety Office (AHSO) is responsible for administering the federally funded State and Community Highway Safety Program, which was established in 1966 to reduce motor vehicle crashes and the resulting fatalities and injuries prompted by unsafe roadway user behaviors. Under this mandate, states identify their most critical traffic safety problems and annually develop a Highway Safety Plan (HSP) that provides a framework for creating a safer, more efficient transportation system. HSPs include clearly articulated goals and objectives that link to performance measures and targets established through data analysis and stakeholder input. The end game, as outlined in Alaska's HSP, and in concert with the Strategic Highway Safety Plan (SHSP), is to move toward zero deaths on the state's roadways.

Alaska's HSP is directly linked to the SHSP, which was revised in 2018 by the Alaska Department of Transportation and Public Facilities (DOT&PF) with the help of AHSO and many safety partners. The SHSP leverages the "4 Es" of traffic safety – engineering, enforcement, education, and emergency services – to address the state's most significant highway safety challenges. The plan is data-driven and includes statewide goals, objectives, and emphasis areas. Alaska's Federal Fiscal Year (FFY) 2021 HSP addresses two of the three emphasis areas outlined in the SHSP – Driver Behavior (young drivers, impaired drivers, older drivers, and occupant protection) and Special Users (bicyclists, pedestrians, and motorcyclists). Alaska's FFY 2021 HSP includes a continued focus on public outreach and strategies for conducting behavioral safety communications campaigns.

The FFY 2021 HSP is composed of six sections: 1) Planning Process, 2) Performance Plan, 3) Highway Safety Plan for FFY 2021, 4) Performance Report, 5) FFY 2021 Planned Activities and Project List, and 6) Certifications and Assurances. Section 1.0, Highway Safety Planning Process, describes the data sources, partners, and processes used to identify the state's highway safety problems, describes the state's overall highway safety performance measures, and describes the process to select evidence-based countermeasure strategies, planned activities, and projects. The participants involved in these processes and efforts to coordinate with the Highway Safety Improvement Program (HSIP) and SHSP, as well as new traffic safety related legislation are described in this section.

The Performance Plan (Section 2.0) provides performance trends, details the problem identification process, lists Alaska's annual quantifiable and measurable highway safety performance targets, identifies at least one performance measure and data-driven performance target for each program area, and includes a justification for each performance target.

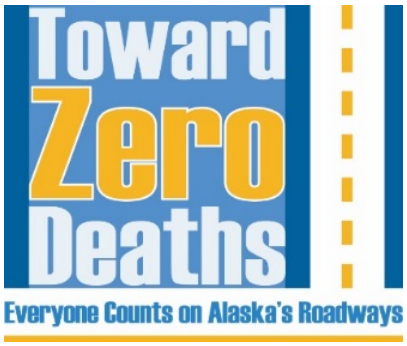
The Highway Safety Plan (Section 3.0) provides an overview of the state's evidence-based traffic safety enforcement program, and describes the planned activities and projects the AHSO and its partners will implement to achieve the performance targets presented in the Performance Plan. Section 3.0 details how Federal funds provided under the Section 402 State and Community Highway Safety Program, 405 National Priority Safety Programs grant programs, and other funding, will be used to support these initiatives and Alaska's traffic records system. Continued assessment and investment in the latter is essential for maximizing the efficiency and effectiveness of traffic records data collection and analysis used in the HSP, SHSP, and by many of the state's safety stakeholders.

The Performance Report (Section 2.0) is a Federal requirement. This program area-level report focuses on the state's success in meeting the performance targets set for the core performance measures identified in the FFY 2020 HSP. The Planned Activities and Project List (Section 4.0) provides a list of planned activities

and each activity's unique identifier, and details the state's proposed allocation of funds for the projects and activities outlined in the Highway Safety Plan (Section 3.0).

Section 5.0 includes Appendices A and B. Appendix A - Certifications and Assurances for Highway Safety Grants include a certification statement signed by the Governor's Representative for Highway Safety. Appendix A outlines the measures the state will take to ensure compliance with all applicable laws and regulations, and financial and programmatic requirements mandated under the Section 402 program. The Section 405 application is summarized in Appendix B - Application Requirements for Section 405 Grants. In FFY 2021, Alaska is applying for four Section 405 funds and will follow Fixing America's Surface Transportation Act (FAST) requirements.

Our Mission



The Alaska Highway Safety Office is committed to enhancing the health and well-being of the state's citizens and visitors through a comprehensive statewide behavioral safety program that prevents crashes and saves lives. Any loss of life or injury sustained in a traffic crash is unacceptable and likely preventable. The AHSO embraces, and actively promotes, the state's Toward Zero Deaths campaign in collaboration with its partners.

1.0 Alaska's Highway Safety Planning Process

1.1 Planning Process

The Alaska Highway Safety Office (AHSO) coordinates highway safety programs focused on enforcement, integration of public health strategies, public outreach and education, and promotion of new safety technology through collaboration with safety and private sector organizations, and cooperation with state and local governments. Alaska's Highway Safety Plan (HSP) is developed through discussions and meetings with individuals within the Department of Transportation and Public Facilities (DOT&PF); state and local government agencies, including law enforcement, planners, engineers, health and social service agencies, and the Division of Motor Vehicles; the Alaska Traffic Records Coordinating Committee, Impaired Driving and Occupant Protection Task Forces, community coalitions, and other interested parties; and in collaboration with the state's Strategic Highway Safety Plan (SHSP) stakeholders who participate in the emphasis area teams. For the Federal Fiscal Year (FFY) 2021 HSP, the AHSO will hire a consultant to assist with internal planning meetings, tracking progress, webinars with safety partners, and the development of the HSP and Annual Report; no federal funds will be used for this contract.

Section 1.0 also describes the data sources and processes used by the AHSO to identify Alaska's highway safety problems, set performance targets based on highway safety problems, and develop and select evidence-based countermeasure strategies. The participants involved in these processes also are identified.

1.2 Alaska's Traffic Safety Challenges

Problem Identification Process

Alaska is the largest state in the U.S., encompassing 570,641 square miles. Despite its large land mass, the state ranks 48th in population with 731,545 residents (U.S. Census Bureau) and an average person per square mile rate of 1.2 (compared to 90.2 for the U.S.). Nearly one-third of Alaskans live within the Arctic Circle, and nearly 3.5 million acres are designated state park land. Approximately two-thirds (65.3 percent) of Alaskans are Caucasian, 15.6 percent are American Indian/Alaska Native, 7.3 percent are Latino, 6.5 percent are Asian, 3.7 percent are Black, and the remaining 7.5 percent represent persons of multiple or other origins.

The state is composed of 19 organized boroughs and one unorganized borough (similar to counties in the lower 48). Anchorage has the largest population (291,538) of all boroughs, while Yukon-Koyukuk encompasses the largest land mass (145,900 square miles). According to the U.S. Census Bureau's 2018 estimates, the state's 10 largest cities include Anchorage, 291,538; Fairbanks, 31,516; Juneau (also its capital), 32,113; Wasilla, 10,529; Sitka, 8,647; Ketchikan, 8,289;; Kenai, 7,778; Palmer, 7,306; Bethel, 6,493; and Kodiak, 5,968. .

Unlike the lower 48 U.S. states, Alaska's highway system, while modern and well maintained, does not provide access to its many rural communities. Some roadways, including the Denali, Dalton, and Top of the World highways and McCarthy Road, as well as portions of the Steese and Taylor highways, are unpaved. According to statistics published by the Federal Highway Administration (FHWA) for 2017[1], there are almost three times as many registered trucks (591,079) as there are registered passenger vehicles (173,487) in the state. Airplanes often are the most efficient and sometimes the only way to travel between communities.

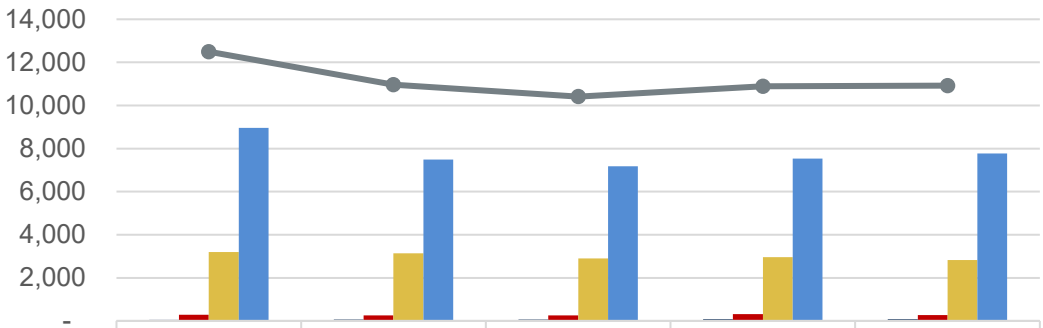
The AHSO uses two primary crash data sources to analyze and identify the state's most significant traffic safety problems, as well as high-risk populations for traffic injuries and fatalities. The AHSO is responsible for counting and analyzing the state's motor vehicle fatalities through the National Highway Traffic Safety Administration's (NHTSA) Fatality Analysis Reporting System (FARS) program. In addition to the FARS database, AHSO also uses Alaska's Crash Analysis and Reporting Environment (CARE) maintained by the Transportation Information Group within the DOT&PF. The latter contains crash, roadway, and traffic information for the entire state.

Despite Alaskans' strong propensity and need to travel by air, the state experiences an approximant average of 11,000 reportable motor vehicle-related crashes annually. As shown in Figure 1.1, total crashes have fluctuated since 2013. The number of roadway fatalities in Alaska has varied greatly from 2009 to 2017 according to Figure 1.2. Fatal crashes have generally increased since 2013 when they rose from 49 in 2013 to 75 in 2017 (Figure 1.1). Figure 1.1 also shows that serious injury crashes have remained relatively flat from 2013 to 2017.

The AHSO and its partners query these data sources to identify who (e.g., age, sex, gender, high-risk populations) is crashing and what (e.g., single vehicle fixed object crash, multiple vehicle crash, pedestrian-motor vehicle crash) specifically occurred. These data also are analyzed to determine when (e.g., time of day, day of the week, weather conditions) and where (e.g., roadway type, jurisdiction) crashes are taking place, and why (e.g., speed, alcohol, inattention). Understanding the data help the AHSO and Alaska's safety stakeholders identify the state's most critical traffic safety problem areas and identify strategies to address them.

[1] Highway Statistics 2017 (FHWA Policy Information/Statistics - 2014).

Figure 1.1 Statewide Crashes by Severity



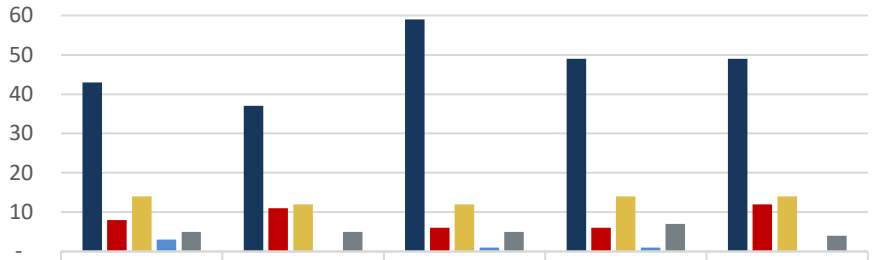
	2013	2014	2015	2016	2017
Fatal Crashes	49	68	60	78	75
SI Crashes	280	260	262	311	271
Minor Inj Crashes	3,202	3,144	2,900	2961	2825
PDO Crashes	8,957	7,488	7,184	7534	7764
All Crashs	12,496	10,959	10,410	10,889	10,918

Source/ Date Accessed: Alaska CARE and FARS, May 2020.

Note: Crash data are from both FARS (fatal crashes) and CARE (all crashes including fatalities). The number of "All Crashes" may not equal the totals for each column above due to CARE capturing fatal crashes which do not meet FARS criteria (e.g., a fatal motor vehicle crash occurring on a frozen lake or on a trail system which is not a public roadway).

Figure 1.2 shows fatalities by roadway user group and illustrates that passenger vehicle occupants consistently make up the bulk of roadway fatalities. 2015 was one of the safest years for passenger vehicle occupants involved in fatal crashes, with 37 fatalities (followed by 2014 which had 43 fatalities for this user group). For motorcyclists, however, 2018 was the most dangerous year, with 12 motorcyclist fatalities.

Figure 1.2 Fatalities by Roadway User Group

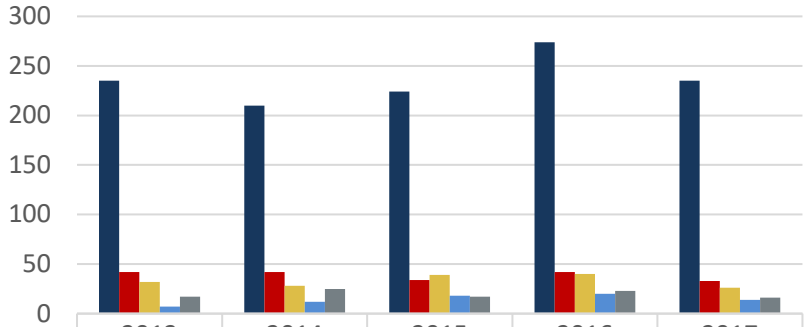


	2014	2015	2016	2017	2018
Passenger Vehicle Occupant	43	37	59	49	49
Motorcyclist	8	11	6	6	12
Pedestrian	14	12	12	14	14
Bicyclist	3	0	1	1	0
ATV Operator *	5	5	5	7	4

Source/ Date Accessed: NHTSA STSI/FARS. Accessed May 2020.

Note: ATV operator may also include snowmobiles, four wheelers and three wheelers.

Figure 1.3 Serious Injuries by Roadway User Group



	2013	2014	2015	2016	2017
Automobile Occupant	235	210	224	274	235
Motorcyclist	42	42	34	42	33
Pedestrian	32	28	39	40	26
Bicyclist	7	12	18	20	14
ATV Operator*	17	25	17	23	16

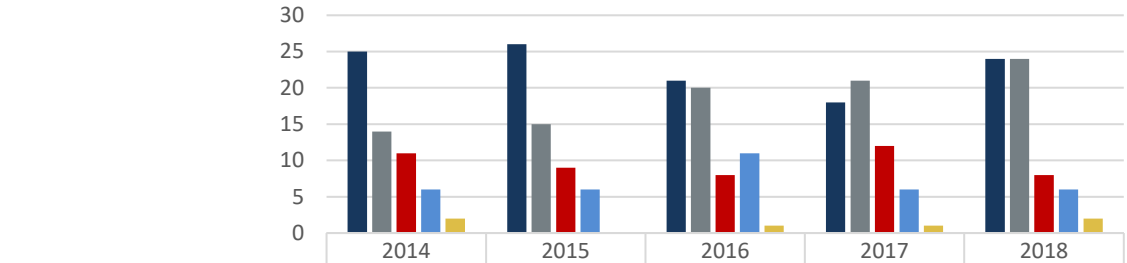
Source/ Date Accessed: Alaska CARE, May 2020.

Note: ATV operator may also include snowmobiles, snow machines, four wheelers, three wheelers, and gators. At the time of this report all 2017 data is preliminary.

Serious injuries were overwhelmingly sustained by automobile occupants. Serious injuries were relatively high across all users in 2016, as serious injuries peaked at 399 that year.

Roadway users in the State's five most populous boroughs comprised the bulk (80 percent) of all roadway fatalities in 2018. The number of fatalities in Anchorage, Alaska's largest municipality, remained high from 2014 to 2018 relative to the overall number of fatalities in the state. Fatalities in the Matanuska Susitna (Mat-Su) Borough, just outside of Anchorage, were also high relative to the overall number of fatalities in the State and tied Anchorage in 2018 with 24 fatalities in the fastest growing area in the state. Fairbanks City/Borough saw a decrease in fatalities from 2014 to 2018 while the Kenai Peninsula Borough saw no change between 2014 and 2018 (Figure 1.4).

Figure 1.4 Fatalities for Five Most Populous Boroughs

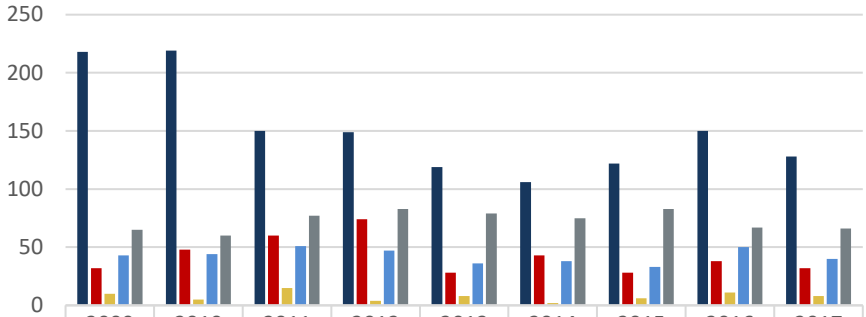


	2014	2015	2016	2017	2018
Anchorage Municipality	25	26	21	18	24
Matanuska Susitna Borough	14	15	20	21	24
Fairbanks North Star Borough	11	9	8	12	8
Kenai Peninsula Borough	6	6	11	6	6
Juneau City and Borough	2	0	1	1	2

Source/ Date Accessed: NHTSA STSI, May 2020.

Figure 1.5 shows the number of serious injuries for the five most populous boroughs between 2009 and 2017. Anchorage roadway users sustain the highest proportion of serious injuries when compared to the other most populous boroughs; 40 percent of serious injuries in 2017 occurred in the municipality. Matanuska Susitna Borough was the second highest borough in serious injuries, with 20 percent of serious injuries. Serious injuries decreased in each of the five most populous boroughs from 2016 to 2017.

Figure 1.5 Serious Injuries for Five Most Populous Boroughs



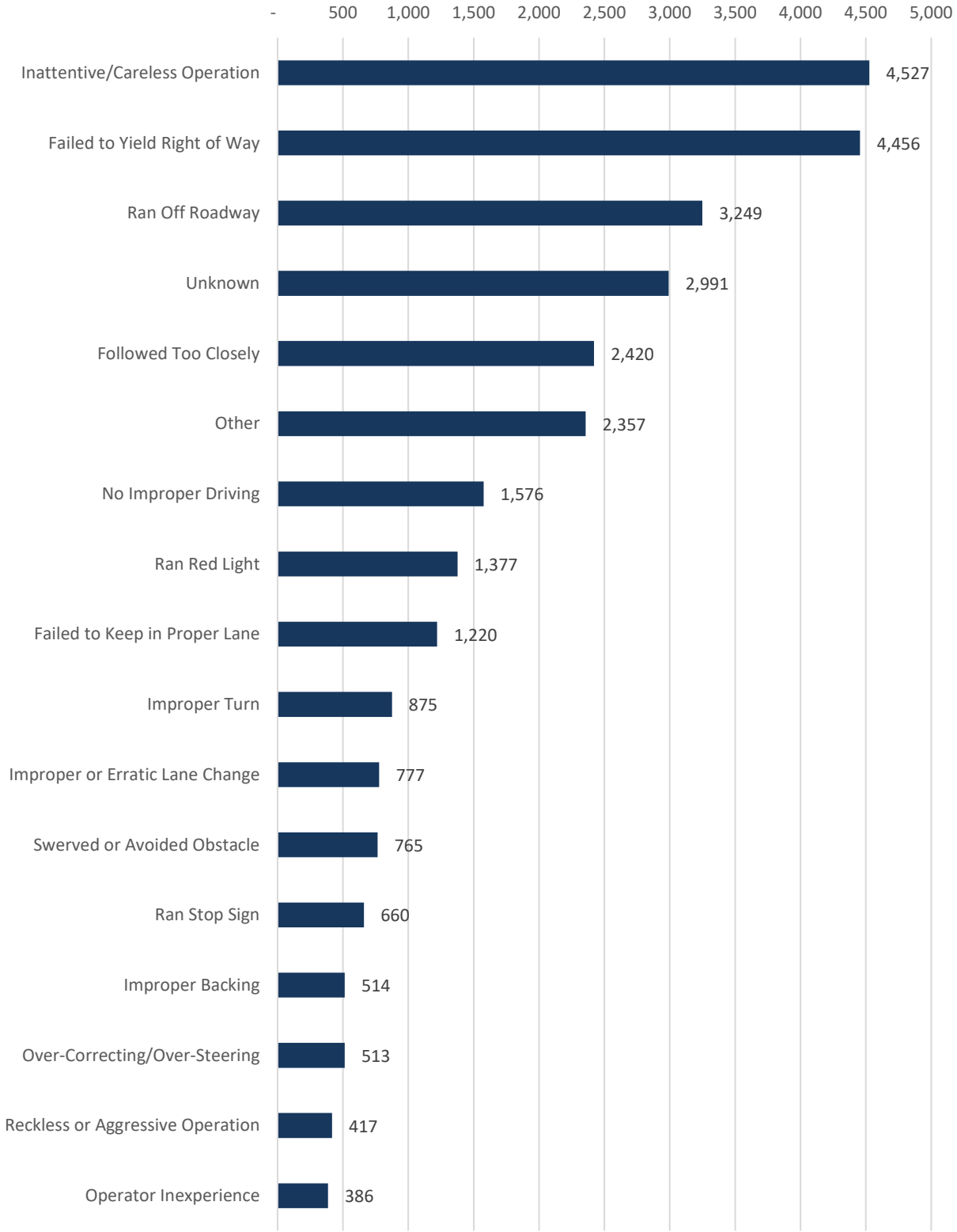
	2009	2010	2011	2012	2013	2014	2015	2016	2017
Anchorage Municipality	218	219	150	149	119	106	122	150	128
Fairbanks North Star Borough	32	48	60	74	28	43	28	38	32
Juneau City and Borough	10	5	15	4	8	2	6	11	8
Kenai Peninsula Borough	43	44	51	47	36	38	33	50	40
Matanuska Susitna Borough	65	60	77	83	79	75	83	67	66

Source/ Date Accessed: Alaska CARE, July 2020.
Note: 2018 data was not available at the time of this report. At the time of this report all 2017 data is preliminary.

Analysis of Alaska's crash data yields significant information about driver behavior. Between 2013 and 2017, over 4,456 crashes involved failure to yield as a crash causation factor, and 4,527 crashes were due to inattentive or careless operation. Ran off road accounted for the third greatest number of crashes on the state's roadways.

Figure 1.6 Crash Causation Factors

2013 to 2017



Source/ Date Accessed: Alaska CARE, July 2020.

Core Performance Measures

Table 1.1 identifies the program areas and related core performance, and how each will be measured, in Alaska's FFY 2021 HSP. These performance measures mirror the 11 outcome and one behavior performance measures developed by the National Highway Traffic Safety Administration (NHTSA), in collaboration with the Governors Highway Safety Association (GHSA).

Table 1.1 Core Performance Measures for FFY 2021

Program Area	NHTSA Measure	Core Performance Measures	Measured By
Overall AHSO Program Area Goals	C-1	Reduce fatalities	Number of traffic-related fatalities
	C-2	Reduce serious injuries	Number of traffic-related serious injuries
	C-3	Reduce fatality rate per 100 million Vehicle Miles Traveled (VMT)	Fatalities per 100 million VMT
Occupant Protection	C-4	Reduce unrestrained fatalities	Number of unrestrained fatalities
	B-1	Increase observed belt use	Observed belt use
Impaired Driving	C-5	Reduce fatalities at 0.08 Blood Alcohol Content (BAC) or above	Number of fatalities at 0.08 BAC or above
Speeding	C-6	Reduce speeding-related fatalities	Number of speeding-related fatalities
Motorcycle Safety	C-7	Reduce motorcyclist fatalities	Number of motorcyclist fatalities
	C-8	Reduce unhelmeted motorcyclist fatalities	Number of unhelmeted motorcyclist fatalities
Novice Drivers	C-9	Reduce drivers 20 or under involved in fatal crashes	Drivers 20 or under involved in fatal crashes
Pedestrian and Bicycle Safety	C-10	Reduce pedestrian fatalities	Number of pedestrian fatalities
	C-11	Reduce bicyclist fatalities	Number of bicyclist fatalities

Supporting Data

Recognizing the impact speed, alcohol use, and seat belts use – all behavior-based activities – have on the safety of the state's roadway users makes assessing the attitudes, beliefs, and perceptions of Alaska's licensed drivers essential. This information provides insight at both the state and local level that is used by the AHSO and its partners to identify and implement targeted strategies and proven countermeasures that result in fewer crashes, injuries, and fatalities.

Under AHSO grants, the Alaska Injury Prevention Center (DBA Center for Safe Alaskans) has conducted the annual seat belt observation survey of front seat motor vehicle occupants and an attitudinal phone survey of licensed Alaska motorists who are at least 16 years of age. Safe Alaskans 2019 attitudinal survey gauged driver attitudes, awareness of highway safety enforcement and communication activities, and self-reported driving behavior. Topics addressed included the use of seat belts, drinking and driving, headlight use, talking and texting while driving, speeding, and safety corridors.

The attitudinal survey, designed and implemented in compliance with NHTSA guidelines had a total margin of error of plus or minus 5 percent with a 95-percent confidence rating. 383 licensed drivers (52 percent male, 48 percent female) at least 16 years of age were surveyed, 60 percent of which were reached via cell phones. Findings from the 2018 survey also were compared to responses from previous years (for similar questions) to determine changes in attitudes and/or behaviors.

- 92 percent of Alaskan drivers said they always wore a seatbelt. Women, however, are more likely than men to buckle up.
- 49 percent of Alaskan drivers recalled seeing or hearing an ad about seat belt use enforcement by police in 2019, up from 47 percent in 2018.
- 61 percent of Alaskan drivers said that the likelihood for being arrested for driving after drinking is likely or very likely, down from 66 percent in 2018.
- 31 percent of Alaskan drivers self-reported at least some texting while driving, however, 72 percent believe that it is very or somewhat dangerous to text while driving.
- Out of the 33 percent of Alaskans who report driving with a child between the ages of four and eight, 79 percent of them report always or often using a booster seat, down from 84 percent in 2018.
- Two out of five (40 percent) Alaska drivers think that they are likely or very likely to be arrested for speeding.

The AHSO uses findings from the state crash data queries and surveys, along with the data analysis and information in Alaska's SHSP and FARS, to identify and understand what is happening on the state's roadways. The SHSP emphasis areas include Driver Behavior (impaired driving, occupant protection, and young drivers); Special Users (motorcycles, pedestrians, bicycles, and off-highway vehicles); and Roadways. Each emphasis area action plan identifies action steps for enforcement, education, engineering, and data.

At the project level, safety stakeholders query additional data sources from Alaska's traffic records system, which includes the Alaska License Vehicle Information Network or ALVIN, CourtView, and the Alaska Trauma Registry. Operated by the Division of Motor Vehicles, ALVIN contains vehicle and driver information. CourtView is operated by the Office of the Administrative Director of the Alaska Court System, and contains citation and adjudication information for both criminal and minor offenses. The Division of Public Health, housed within the Department of Health and Social Services, oversees the state Trauma Registry, which contains serious injury information, including circumstances, treatments, and outcomes. These data sources are used to identify specific problem areas, support problem identification in grant applications, and track progress.

Additional data sources used by the AHSO and safety stakeholders include NHTSA State Traffic Safety Information (STSI) web site; FHWA VMT data; Federal Motor Carrier Safety Administration (FMCSA) SAFETYNET; National Emergency Medical Service Information System (NEMSIS); Centers for Disease Control (CDC) Web-based Injury Statistics Query and Reporting System (WISQARS); U.S. Census data; NHTSA assessments, research reports, and Traffic Safety Facts; other state HSPs and Annual Reports; Alaska state agency reports; and local and state organization reports (e.g., Mother Against Drunk Driving (MADD), Alaska School Activities Association, Forget Me Not Mission).

Table 1.2 lists the data sources used to develop the HSP.

Table 1.2 Data Sources

Federal	Alaska	Other Sources
• FARS • STSI FHWA VMT Data • Occupant Protection Use Survey • U.S. Census Data • FMCSA SAFETYNET • CDC WISQARS • NHTSA Assessments, Management Review, and FAST Act Guidance • NHTSA HSP Approval Letter	• Crash and Injury • Licensing • Vehicle • Citation • Court System • Treatment • Trauma Registry • Strategic Highway Safety Plan • State Legislation and Policy • Attitudinal and Observational Surveys • State Agency Reports • Stakeholder Reports • Population	• *Countermeasures That Work (CTW): A Highway Safety Countermeasure Guide for State Highway Safety Offices, Ninth Edition, 2017* • Publications and Studies (e.g., *Promoting Parent Involvement in Teen Driving: An In-Depth Look at the Importance and the Initiatives*) • Other State Highway Safety Plans and Annual Evaluation Reports

1.3 Performance Measure and Target-Setting Process

The highway safety performance targets contained in Alaska's SHSP match those in the HSP. In the development of the SHSP, Alaska adopted a goal to reduce fatalities and serious injuries by one-half by 2030. To attain the goal, Alaska must achieve an average 3.7 percent annual reduction in the number of fatalities, a 3.6 percent average annual reduction in serious injuries, and a 4.0 percent average annual reduction in the number of fatalities per 100 million miles traveled. The baseline year in the SHSP was 2008, which at the time was the last year with complete and verified fatality and serious injury data. A three-year moving average was used to set the 2008 baseline in the SHSP. New Federal regulations require the baseline average for both the HSP and SHSP to be five years, instead of three years; therefore, the HSP three-year average has been changed to a five-year average of 2014 to 2018.

Alaska's highway safety performance targets are revisited by DOT&PF and its safety partners on an annual basis and are revised, if necessary. These fatality and serious injury targets were set in the areas of overall fatalities, overall serious injuries, and fatalities for impaired driving, young drivers, lane departure crashes, intersection crashes, bicyclists, pedestrians, and motorcyclists. Alaska's FFY 2021 HSP addresses two of the key emphasis areas outlined in the 2018-2022 SHSP: 1) Driver Behavior (occupant protection, older drivers, young drivers, and impaired drivers); and 2) Special Users (bicyclists, pedestrians, and motorcyclists).

The performance targets were reviewed by each SHSP emphasis area team during the SHSP update effort, as well as a Leadership Group that provided oversight. Alaska's HSP is developed through a collaborative process that involves stakeholders at the local, state, and Federal level. The AHSO relies on their expertise to help guide and direct the goal-setting process and ensure resources are targeted not only to address the state's most critical traffic safety problems, but in specific areas overrepresented by the crash data.

The AHSO regularly consults with stakeholders during the planning process (Table 1.3), including the Alaska Traffic Records Coordinating Committee (ATRCC) and the Alaska Traffic and Criminal Software (TraCS) Steering Committee (see member agencies below). The AHSO is an active member in the SHSP Driver

Behavior and Special Users Emphasis Area teams through which staff gain insight on problems and input from a wide variety of Alaska's safety partners. AHSO meets with law enforcement agencies during the annual Alaska Strategic Enforcement Partnership (ASTEP) Summit. In addition, AHSO is working to reestablish a network of Law Enforcement Liaisons (LEL) in FFY 2021 to serve as liaisons between AHSO and local and state law enforcement agencies. These agencies implement many of the state's safety initiatives, including the national high-visibility enforcement campaigns (e.g., Click It or Ticket) conducted annually. Other key AHSO partners include the Alaska Injury Prevention Center (DBA Center for Safe Alaskans) and child passenger safety community, which provide outreach, education, and evaluation in support of key initiatives.

Table 1.3 Stakeholders in the Planning Process

ATRCC Steering Committee Member Agencies

- Alaska Alcohol Safety Action Program
- Alaska Court System
- Alaska Department of Transportation & Public Facilities
- Alaska Injury Prevention Center (DBA Center for Safe Alaskans)
- Division of Measurement Standards/Commercial Vehicle Enforcement
- Alaska Highway Safety Office
- Alaska Division of Motor Vehicles
- Alaska Health and Social Services
- Alaska State Troopers
- Federal Highway Administration
- Local law enforcement
- National Highway Traffic Safety Administration
- University of Alaska Anchorage

TraCS Steering Committee Member Agencies

- Alaska Court System
- Alaska Division of Motor Vehicles
- Alaska Health & Social Services
- Alaska Department of Transportation & Public Facilities
- Division of Measurement Standards/Commercial Vehicle Enforcement
- Alaska Highway Safety Office
- Alaska Railroad Corporation
- Alaska State Troopers
- Local law enforcement

SHSP Driver Behavior and Special Users Emphasis Area Teams

- ABATE of Alaska
- Alaska Association of Chiefs of Police
- Alaska Court System
- Alaska Department of Administration, Division of Motor Vehicles
- Alaska Department of Health and Social Services
- Alaska Department of Transportation and Public Facilities
- Alaska Injury Prevention Center (DBA Center for Safe Alaskans)
- Alaska Native Health Tribal Health Consortium
- Alaska State Troopers
- Alaska Trails
- Alaska Trucking Association
- Anchorage Metropolitan Area Transportation Solutions
- Anchorage Police Department
- Bike Anchorage
- City of Fairbanks

- Fairbanks Memorial Hospital
- Fairbanks Metropolitan Area Transportation System
- Fairbanks Police Department
- Federal Highway Administration
- Federal Motor Carrier Safety Administration
- Horst Expediting and Remote Operation
- Juneau Police Department
- Laborers' International Union of North America Local 942
- Mat-Su Borough
- Mat-Su Services for Children and Adults
- Municipality of Anchorage
- National Highway Traffic Safety Administration
- R&M Consultants, Inc.
- Sitka Bicycle Friendly Community Coalition and Walk Sitka
- SPAN Alaska Transportation
- United Freight and Transport
- Yukon-Kuskokwim Health Corporation, Injury Control & EMS

1.4 Countermeasure and Strategy Selection Process

Selection Process

The process for selecting state and local safety projects began in April, when the AHSO announced via emails to stakeholders and an online public notice in the state's system the availability of grant funding through an open solicitation process. The AHSO posted a PowerPoint in April 2020 that addressed the critical points of applying for a grant and made the information available to interested stakeholders, which included representatives from state and local government agencies (e.g., law enforcement, health and social services, courts, licensing, planners/engineers); community coalitions; and nonprofit safety-related organizations. Grant applicants were required to sign a form indicating that they had reviewed the PowerPoint and contacted the AHSO with any questions prior to submitting a grant application.

The PowerPoint presented the fatal and serious injury trends (overall and by crash type and roadway user). Although many of Alaska's stakeholders are actively engaged in the SHSP, the plan's priorities and implementation process were provided. The SHSP emphasis areas include Driver Behavior (impaired driving, occupant protection, young drivers, and older drivers); Special Users (motorcycles, pedestrians, bicycles, and off-highway vehicles); and Roadways. Each emphasis area action plan identifies action steps for enforcement, education, engineering, and data, which are being implemented and tracked over the next five years. Potential applicants were encouraged to review the SHSP and submit grant application(s) that addressed the SHSP emphasis area strategies.

New federal requirements, recent changes to the grant funding programs, and the associated performance measures that include quantifiable, evidence-based annual performance targets also were addressed, as were the importance and need for evidence-based traffic safety enforcement and deploying high-visibility law enforcement campaigns that aligns with the HSP and the SHSP. An overview of NHTSA's focus on data-driven programs that address a state's most serious traffic safety problems followed. Potential grantees were reminded of the need to leverage proven countermeasures that include ongoing assessment or, if implementing a new, unproven initiative, include an evaluation component in their project plans.

The grant application process and the criterion used to review, score, and approve funding, include the following:

- Completeness of the application package (meets all required criteria) and clarity of the problem statement and proposed project/intervention;
- The degree to which the proposed project/intervention addresses a specific traffic safety problem identified as a priority through data analysis;
- The degree to which the applicant is able to identify, analyze, and comprehend the specific traffic safety problem the project/intervention is attempting to address;
- The assignment of specific and measurable objectives with performance indicators assessing project activity;
- The extent to which the estimated cost justifies the anticipated results; and
- The ability of the proposed project/intervention to generate additional highway traffic safety activity in the program area, and to become self-sufficient to enable project efforts to continue once Federal funds are no longer available.

All grant applications are rated for ability to address a clearly identified problem supported by current data and potential traffic safety impact. Consideration is given to previous performance for applicants seeking additional funding for a project initiated in the previous grant year. Grant reviewers score each grant application using a form and criteria provided by AHSO. Priority for funding is given to grant applications that demonstrate a highway safety problem identified in the Alaska SHSP, HSP, Traffic Records Strategic Plan, and/or by NHTSA; and outline a clear plan employing proven countermeasures linked to measurable objectives.

Additional Funding Sources

The AHSO receives 50 percent of the fines collected by the Alaska Court System for traffic violations in Alaska's highway safety corridors and in state Fiscal Year 2021 will receive $37,716. The funds will be used for additional enforcement by Anchorage Police Department (APD) on the Seward Highway, corridor education and media. The AHSO identifies projects to fund, however, the funds are state money and therefore are not provided as a grant.

1.5 Coordination with the Strategic Highway Safety Plan

Alaska's HSP is directly aligned with the fatality, serious injury, and fatality per 100 million vehicle miles traveled performance targets as the state's SHSP, which was revised in 2018. As stated earlier, federal regulations from the FAST Act require the baseline average for both the HSP and SHSP coordinated measures to be five years. The SHSP leverages the "4 Es" of traffic safety – engineering, enforcement, education, and emergency services – to address the state's most significant highway safety challenges. The plan is data driven and includes statewide goals, objectives, and emphasis areas. Alaska's FFY 2021 HSP addresses the Driver Behavior and Special Users 2018-2022 SHSP emphasis areas. Alaska's FFY 2021 HSP, as well as the SHSP, includes a strong focus on public outreach and strategies for conducting behavioral safety communications. The AHSO's Communications contractor is charged with assisting the state in its efforts to change the safety culture to one where "everyone counts on Alaska's roadways." The HSP and SHSP are

further linked by the consistent use of safety data from the same sources, including data collected, processed, and disseminated by the DOT&PF, the Alaska Injury Prevention Center (DBA: Center for Safe Alaskans), and others.

1.6 New Legislation

The recently concluded 2020 legislative session was dominated by the ongoing budgetary struggles in Alaska. No new traffic safety related legislation was fully passed or will be going into effect this year.

2.0 Highway Safety Performance Plan

2.1 Program Area Level Reporting Issues

The AHSO is unable to provide the detail provided previously in the HSP of the State's progress towards meeting State performance targets from the previous fiscal year's HSP (FFY 2020). The Alaska DOT receives crash information from the Department of Motor Vehicles (DMV) which is inputted into their Crash Data Entry System (CDES) and transferred into the Crash Analysis and Reporting Environment (CARE) where crash data can be queried. In May 2019 the CDES system crashed which prevented any new data from being entered into the CDES or transferred to the CARE system for analysis. When the crash occurred, the most recent data available was 2017 data, however, that data was preliminary and subject to change. In July 2020, the 2017 crash data was uploaded to CARE again and is now confirmed to be final. No 2018 data had been entered into the CDES system prior to the crash so unfortunately program area level reporting is unavailable. The 2018 data referenced in this HSP is what was available on the NHTSA FARS database. The AHSO intends to award a new data entry contractor in FFY 2021.

The AHSO used the most recent statistical data available for showing any progress of targets and trends in the data noted throughout the tables and charts of this HSP. Under each table or chart the source of the data is noted along with the date the data was last able to be accessed. In some circumstances additional notations and footnotes about the data are noted.

2.2 Performance Report

Table 2.1 provides the results of Alaska's progress in meeting the state's core performance measures identified in the FFY 2021 HSP.

Progress on Performance Targets

Table 2.1 Progress on Performance Targets

	Actual					Targets		
Performance Measures	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**
Fatalities (Actual)	73	65	84	79	80			
2017-2021 targets			*58*	*55*	*80*	*80*	*80*	*75*
Five-Year Average of Fatalities	62	64	66	70	76			
2017-2021 targets			*58*	*55*	*73*	*76*	*80*	*75*
Serious Injuries (all crashes)	317	332	399	324	N/A			
2017-2021 targets			*366*	*353*		*377*	*400*	*330*
Fatality Rate/100 Million VMT	1.50	1.29	1.60	1.43	1.46			
2017-2021 targets			*1.20*	*1.32*	*1.31*	*1.29*	*1.50*	*1.40*
Unrestrained Passenger Vehicle Occupant Fatalities	21	15	37	17	20			
2017-2021 targets			*17*	*20*	*20*	*20*	*19*	*21*
Fatalities Involving with ≥.08 BAC	22	22	31	22	29			
2017-2021 targets			*17*	*22*	*22*	*22*	*22*	*25*
Speeding-Related Fatalities	18	22	36	26	42			

2017-2021 targets			*20*	*25*	*25*	*25*	*25*	*29*
Motorcyclist Fatalities	8	11	6	6	12			
2017-2021 targets			*8*	*8*		*8*	*7*	*8*
Unhelmeted Motorcyclist Fatalities	3	4	2	3	5			
2017-2021 targets			*3*	*3*	*3*	*3*	*3*	*2*
Drivers age 20 or Younger Involved in Fatal Crashes	11	6	16	6	8			
2017-2021 targets			*8*	*9*	*9*	*9*	*8*	*8*
Pedestrian Fatalities	14	12	12	14	14			
2017-2021 targets			*8*	*12*	*12*	*12*	*12*	*12*
Bicyclist Fatalities	3	0	1	1	0			
2017-2021 targets			*0*	*1*	*1*	*1*	*1*	*0*
Percent Observed Belt Use for Passenger Vehicles – Front Seat Outboard Occupants	88.4%	89.3%	88.5%	90.1%	91.6%	94.1%		
2017-2021 targets			*90%*	*91%*	*91%*	*91%*	*92%*	*94%*

	2014	**2015**	***2016***	***2017***	***2018***	***2019***
Seat Belt Citations [a]	612	725	966	1,232	1107	1,533
Impaired Driving Arrests [a]	80	192	202	156	769	809
Speeding Citations [a]	438	457	747	966	3,497	6,627

[a] Targets are not set for the number of citations and arrests issued during grant-funded enforcement activities; numbers are per Federal Fiscal Year

Note: Due to COVID-19, an observational seat belt survey was not conducted in FFY 2020.

Lessons Learned

When comparing the targets against the FARS numbers for 2018, Alaska exceeded the targets set for bicyclist fatalities and drivers age 20 or younger involved in a fatal crash. Alaska met the target for total fatalities and unrestrained passenger vehicle occupant fatalities, for the behavioral target of observed seat belt use rate, Alaska exceeded that target in 2019, which has led to an all-time high observed usage rate of 94.1 percent. Increasing seat belt use among motorists is one of the most effective tools to reduce fatalities and the AHSO remains committed to continuing this trend with our countermeasure strategies.

The priority areas detailed in the FFY 2021 and past HSPs align with NHTSA's priorities. Data supports that these problem areas are consistent throughout Alaska so we will continue to address them statewide through a multi-pronged approach of enforcement and education. Alaska has consistently set reasonable targets in all priority areas in an effort to move Towards Zero Deaths as outlined and planned for in our SHSP in which our HSP plays a vital role. Given Alaska's rise in or missing the performance targets for fatalities/VMT, impaired driving, speeding, motorcycle, unhelmeted motorcycle, and pedestrian fatalities, the AHSO will work with our program partners to conduct and review programs in their area to refine their approach or develop strategies to reduce serious injuries and fatalities. We will continue to support Anchorage Police Department's Impaired Driving Enforcement Unit which continues to show progress in fighting impaired driving. We will also continue speed enforcement efforts and provide more training to law enforcement officers on occupant protection and child passenger safety to increase their understanding of occupant restraint laws and encourage enforcement throughout their shifts. In addition, in FFY 2021 the AHSO plans to enhance the awareness and education of

our citizens through a more robust communication and media effort, combined with sports marketing, to address our high-risk demographics based on the latest data and attitudinal telephone survey results.

2.3 Statewide Performance Trends and Problem Identification

Details on Alaska's highway safety trends between 2014 and 2018 are provided in Table 2.1. The state's progress on the performance measures are shown in Figure 2.1 through Figure 2.12. The 2014-2018 five-year average is used as the baseline for all performance measures illustrated in the tables and figures of this section unless otherwise noted. Previous years' data have been revised where necessary. Throughout this document 2018 data that could not be located from the NHTSA FARS database was not available from the states CARE system at the time of this report. The AHSO used the most recent statistical data available for showing any progress of targets and trends in the data noted throughout the tables and charts of this HSP. Under each table or chart the source of the data is noted along with the date the data was last able to be accessed. In some circumstances additional notations and footnotes about the data are noted.

Table 2.2 Alaska Traffic Safety Trends

2012 to 2018

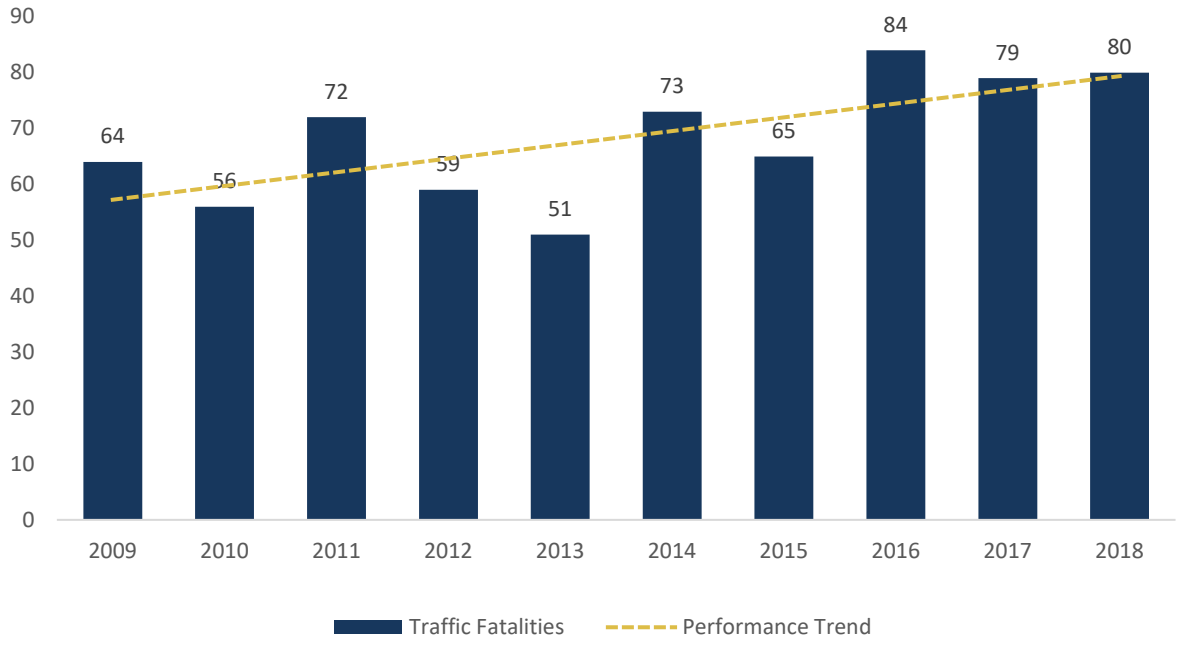
	Core Performance Measure	2012	2013	2014	2015	2016	2017	2018	2017-2018 Percent Change	Average Annual Change
	Outcome Measures									
C-1	Traffic Fatalities	59	51	73	65	84	79	80	1%	6%
C-2	Serious Traffic Injuries	466	333	317	332	399	324	N/A		
C-3	Fatalities/VMT	1.23	1.05	1.5	1.29	1.6	1.43	1.46	2%	3%
C-4	Unrestrained Passenger Vehicle Occupant Fatalities, all Seating Positions	19	12	21	15	37	17	20	18%	1%
C-5	Alcohol-Impaired Fatalities (driver or motorcycle operator with 0.08 BAC or greater)	15	16	22	22	31	22	29	32%	16%
C-6	Speeding-Related Fatalities	14	22	18	22	36	26	42	62%	33%
C-7	Motorcyclist Fatalities	9	9	8	11	6	6	12	100%	6%
C-8	Unhelmeted Motorcyclist Fatalities	5	2	3	4	2	3	5	67%	0%
C-9	Drivers Age 20 or Younger Involved in Fatal Crashes	7	8	11	6	16	6	8	33%	2%
C-10	Pedestrian Fatalities	8	6	14	12	12	14	14	0%	13%
C-11	Bicycle Fatalities	1	1	3	0	1	1	0	-100%	-17%
	Behavior Measure									
	Core Performance Measure	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2018-2019 Percent Change**	**Average Annual Change**

B-1	Observed Seat Belt Use (Front Seat Passenger Vehicle Occupants)	88%	86%	88%	89%	89%	90%	92%	94%	2.7%	1%

Source/ Date Accessed: NHTSA FARS and Alaska CARE, June 2020.
NOTE: **2018 Serious Injury data is unavailable at time of reporting.

As shown in Figure 2.1, fatalities in Alaska, have trended upward since 2012 despite recent years where fatality totals were less than 60, including 2012, and 2013. Fatalities resulting from motor vehicle crashes decreased almost six percent from 84 in 2016 to 79 in 2017, and fatalities have held relatively steady since, increasing only one percent from 79 in 2017 to 80 in 2018.

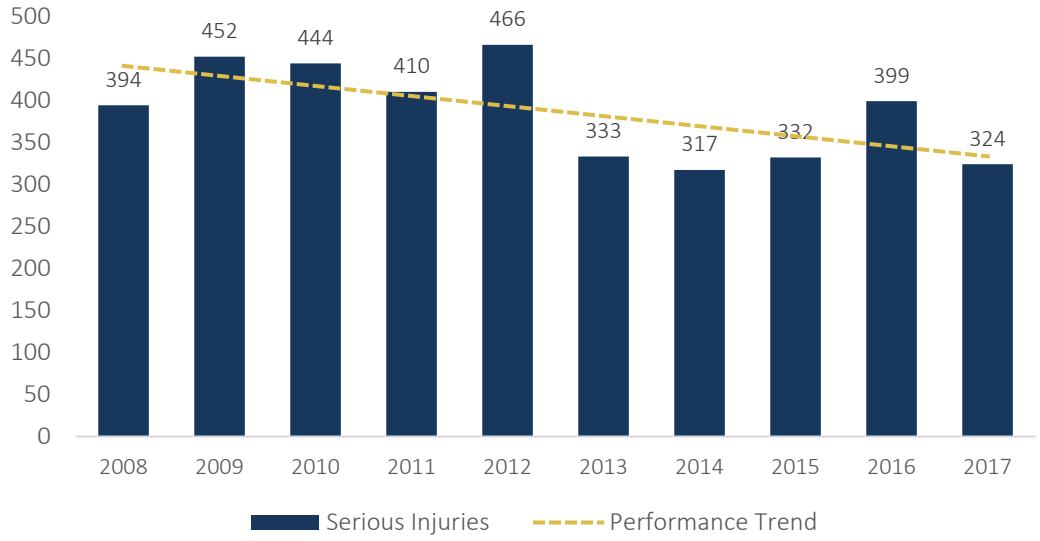
Figure 2.1 Statewide Fatalities



Source/ Date Accessed: FARS, May 2020.

Serious injuries in Alaska are trending downward since 2008. Serious injuries have declined 19 percent from 399 in 2016 to 324 in 2017 (Figure 2.2).

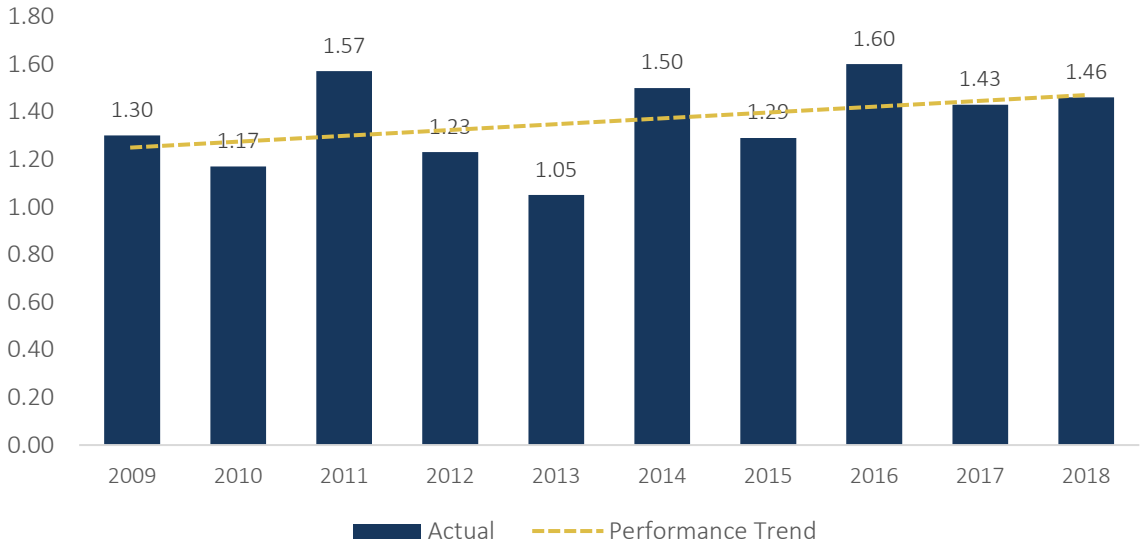
Figure 2.2 Statewide Serious Injuries



Source/ Date Accessed: Alaska CARE, July 2020.

Less than 100 fatalities a year on Alaska roadways means any change in fatality numbers from one year to the next can create volatility in the trend lines, such as vehicle miles traveled (VMT). Alaska has experienced various gains and losses in its statewide motor vehicle fatality rate (Figure 2.3). The trend line for fatality rate per 100 million VMT has remained fairly flat. However, Alaska experienced several sharp increases, including the 43 percent increase from 1.05 in 2013 to 1.50 in 2014, as well as the 24 percent increase from 1.29 in 2015 to 1.60 in 2016. However, the fatality rate decreased to 1.43 in 2017 and rose slightly in 2018.

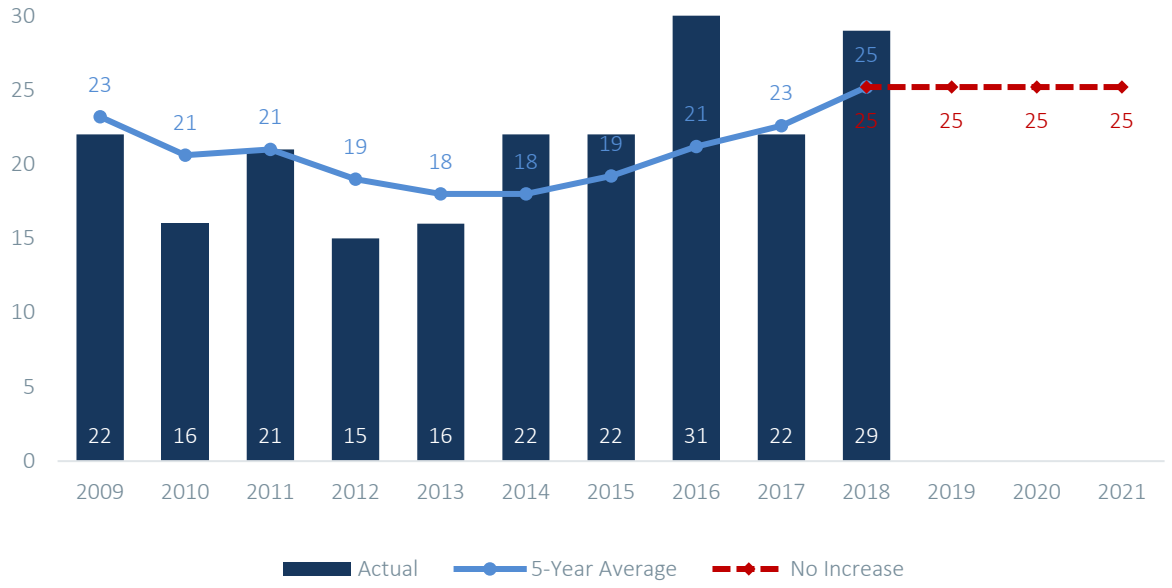
Figure 2.3 Statewide Fatality Rate per 100 MVMT



Source/ Date Accessed: FARS, May 2020.

Fatalities involving drivers or motorcycle operators with a BAC of 0.08 or greater has been fluctuating over the years. After remaining steady between 2014 and 2015, then rose significantly in 2016, and then dropped again in 2017 and rose again in 2018 as shown in Figure 2.4.

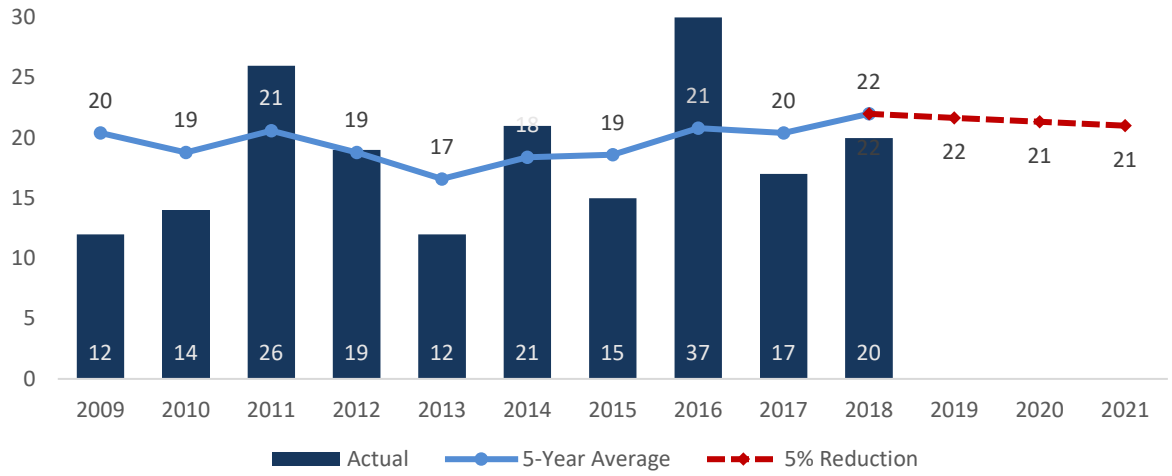
Figure 2.4 Fatalities Involving Driver or Motorcycle Operator with Greater Than 0.08 BAC



Source/ Date Accessed: Alaska Highway Safety Office and FARS, May 2020.

In addition, unrestrained passenger vehicle occupant fatalities saw a considerable decrease of 54 percent between 2016 and 2017 and edged up slightly in 2018 (Figure 2.5).

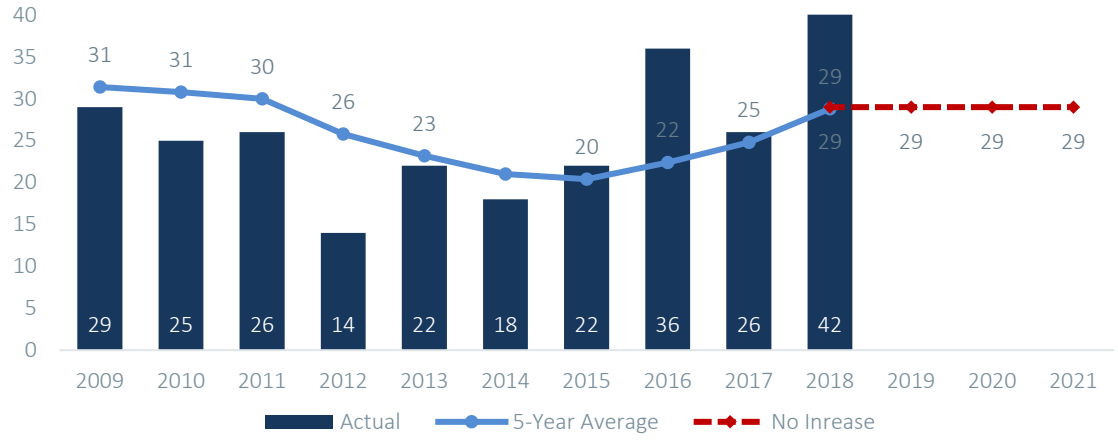
Figure 2.5 Unrestrained Passenger Vehicle Occupant Fatalities



Source/ Date Accessed: Alaska Highway Safety Office and FARS, May 2020.

After reaching a low of 14 in 2012, speeding-related fatalities increased by 157 percent to 36 in 2016 before decreasing by 28 percent to 26 in 2017 and increasing to a recent high of 42 in 2018 (Figure 2.6).

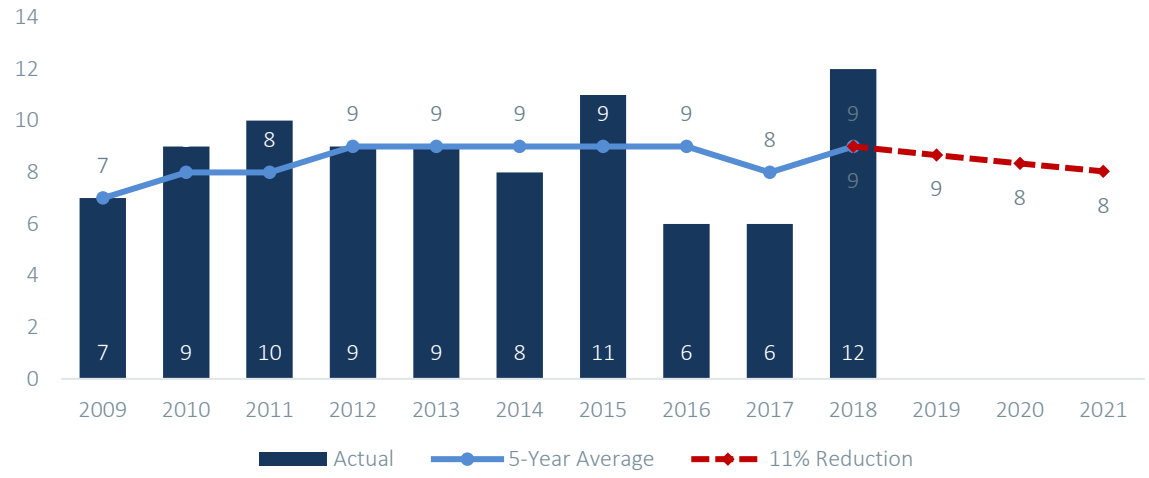
Figure 2.6 Speeding-Related Fatalities



Source/ Date Accessed: Alaska Highway Safety Office and FARS, May 2020.

Motorcycle fatalities climbed to 11 in 2015, the highest number recorded in over 10 years, as shown in Figure 2.7. However, fatalities decreased by 45 percent to six fatalities in 2016 and held steady in 2017 before moving up again in 2018.

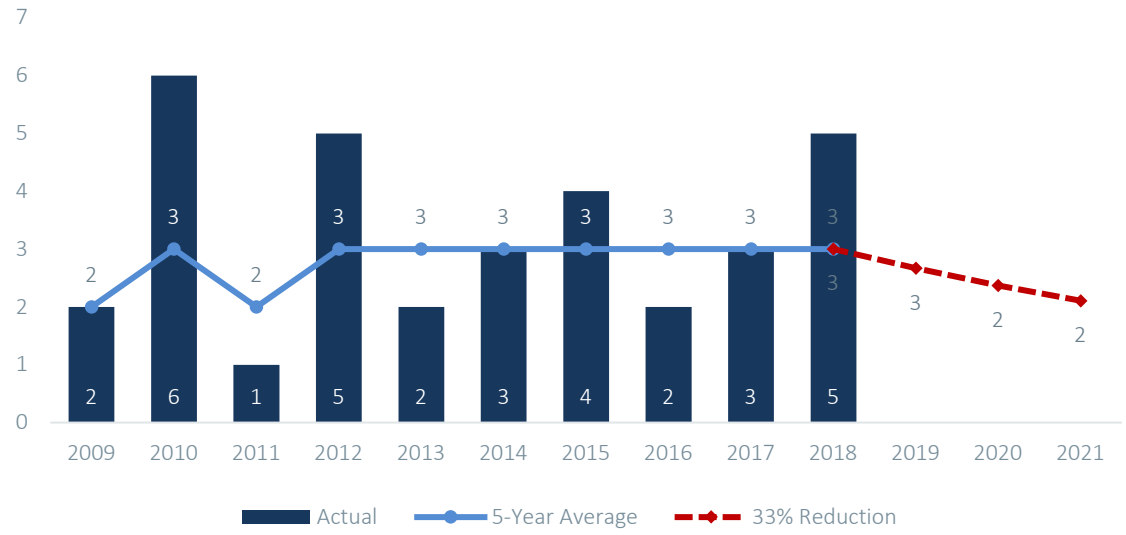
Figure 2.7 Motorcycle Fatalities



Source / Date Accessed: Alaska Highway Safety Office and FARS, May 2020.

Unhelmeted motorcycle fatalities decreased slightly between four in 2015 and two in 2016, as shown in Figure 2.8. However, they increased to five in 2018.

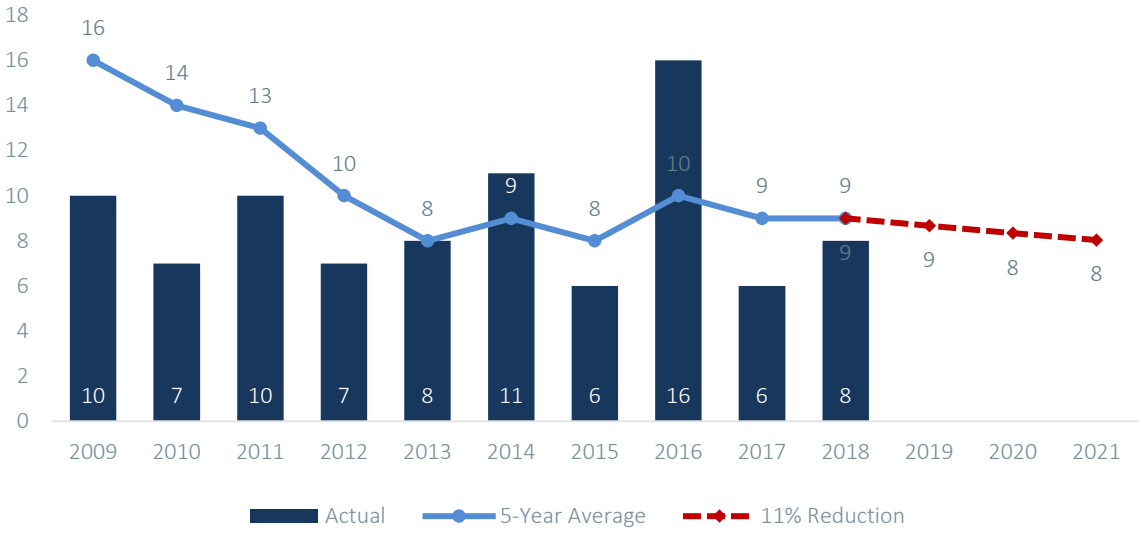
Figure 2.8 Unhelmeted Motorcycle Fatalities



Source/ Date Accessed: Alaska Highway Safety Office and FARS, May 2020.

The number of drivers age 20 or younger involved in fatal crashes decreased by 63 percent between 2016 and 2017, and increase slightly in 2018 as shown in Figure 2.9.

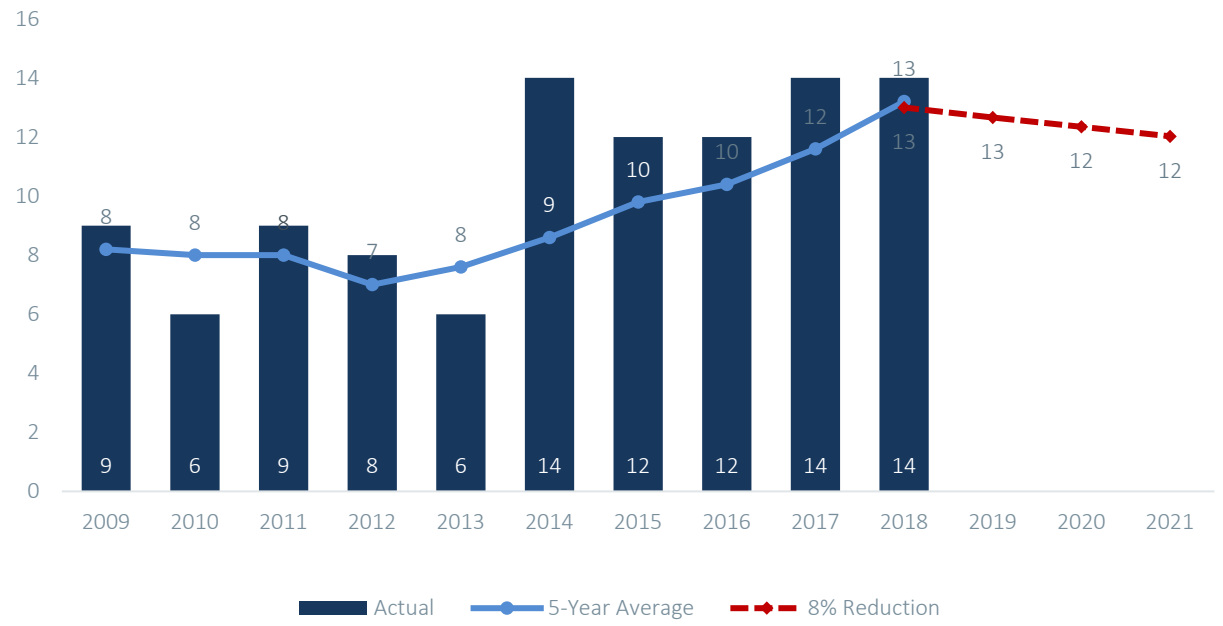
Figure 2.9 Drivers Age 20 or Younger Involved in Fatal Crashes



Source/ Date Accessed: Alaska Highway Safety Office and FARS, May 2020.

Alaska has seen pedestrian fatalities climb in recent years, including an increase from 12 in 2016 to 14 in 2017 and remaining steady in 2018 as illustrated in Figure 2.10.

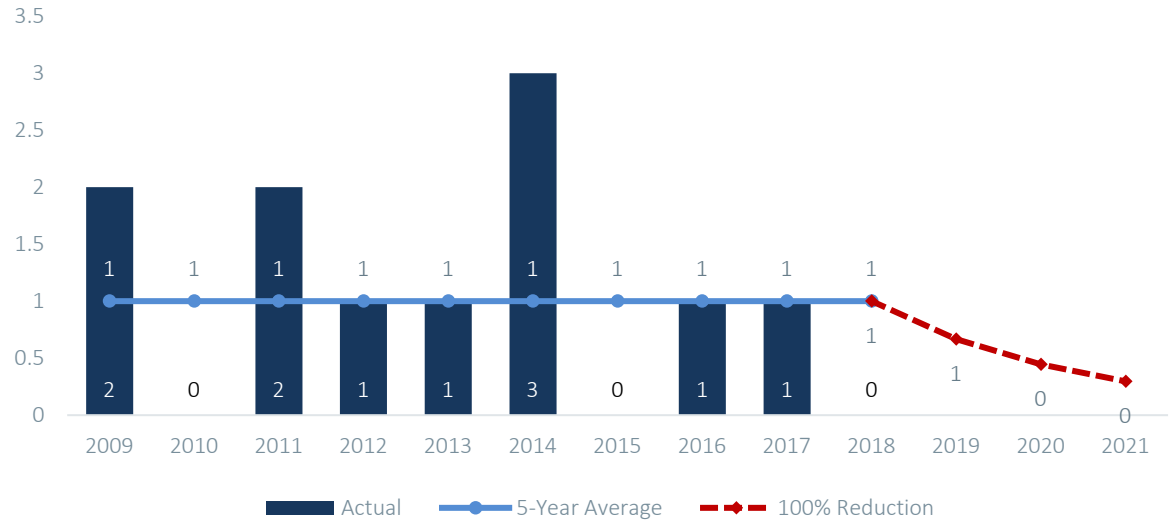
Figure 2.10 Pedestrian Fatalities



Source/ Date Accessed: Alaska Highway Safety Office and FARS, May 2020.

As seen in Figure 2.11, Alaska had zero bicyclist fatalities recorded in 2015, the first time that has occurred since 2010 and had zero fatalities again in 2018.

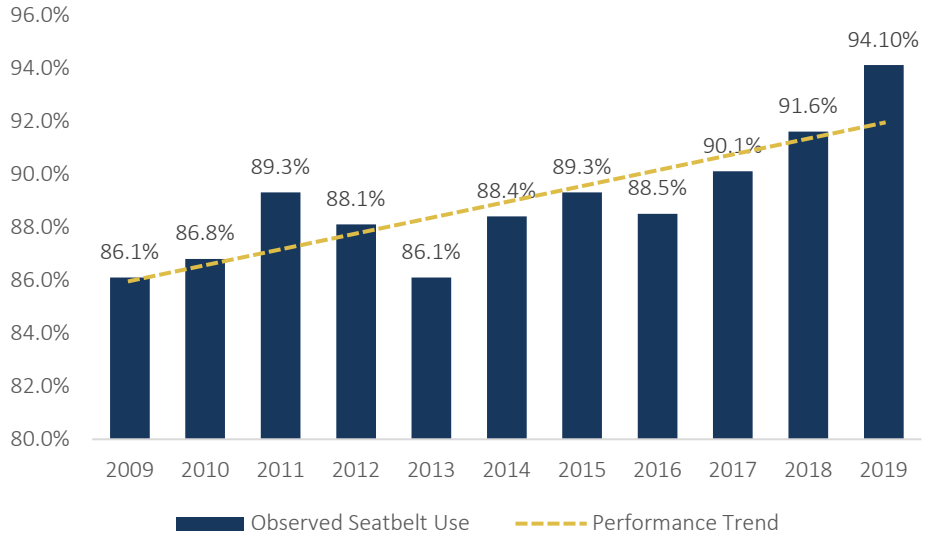
Figure 2.11 Bicyclist Fatalities



Source/ Date Accessed: Alaska Highway Safety Office and FARS, May 2020.

Alaska saw a 3.3 percentage point increase in observed belt use between 2013 and 2015, a slight drop in 2016 and another 5.6 percentage point increase between 2016 to 2019 bringing the observed belt usage rate to an historic high of 94.1 percent in 2019 (Figure 2.12).

Figure 2.12 Observed Belt Use for Passenger Vehicles



Source/ Date Accessed: Alaska Highway Safety Office, May 2020.

2.4 Highway Safety Performance Targets for FFY 2021

During the problem identification process, particular emphasis is given to assessing changes in severity over a five-year period to establish trend lines. While the HSP is a one-year plan, behavioral change takes time. A countermeasure instituted to address a particular traffic safety problem may not show measurable impact for several years or more. For this reason, the AHSO establishes performance targets that reflect small, but incremental, gains in safety. Measured over a series of years, these decreases in crashes and the resulting injuries and fatalities involving specific user groups and causation factors add up to a safer trip for everyone traveling Alaska's roadways.

The FFY 2021 HSP aligns with Alaska's SHSP goal to reduce fatalities, serious injuries, and fatalities per 100 million VMT by half by 2030, based on the 2014-2018 five-year averages of each of these measures. The SHSP also changed to a five-year moving average in the 2018 update to meet new Federal requirements.

Table 2.3 identifies the program areas, performance targets, and measures that are the focus of AHSO HSP efforts for FFY 2021. These performance targets were established based on reviewing five-year average trends from recent years, as well understanding the overall long-term objective of reaching zero fatalities. Under a new Federal requirement the targets for fatalities, serious injuries, and fatality rate must be in alignment in both the HSP and the Highway Safety Improvement Plan (HSIP) for FFY 2021. In March of 2020, safety stakeholders from the AHSO and DOT&PF met to review the trends for these three measures and set agreed upon targets. The stakeholder group looked at FARS data and 2018 state data for these measures and determined targets by rounding average values for the five year moving average and set the performance target calculation by using 2014-2018 actual average value (with fraction).

Table 2.3 FFY 2021 Performance Targets and Measures

	CORE OUTCOME MEASURES		2013	2014	2015	2016	2017	2018
C-1	Traffic Fatalities (FARS)	Annual	51	73	65	84	79	80
		5-Year Moving Average	60	62	64	66	70	76
	To decrease traffic fatalities by 2 percent from 76 (2014-2018 average) to 75 (2017-2021 average) by December 31, 2021.							
C-2	Serious Injuries in Traffic Crashes (State Crash File)	Annual	333	317	332	399	324	N/A
		5-Year Moving Average	421	394	372	369	341	N/A
	To decrease serious traffic injuries by 3 percent from 341 (2013-2017 average) to 330 (2017-2021 average) by December 31, 2021.							
C-3	Fatalities/VMT (FARS/FHWA)	Annual	1.05	1.5	1.29	1.6	1.43	1.46
		5-Year Moving Average	1.26	1.30	1.33	1.33	1.37	1.46
	Rural Fatalities/VMT	Annual	1.42	2.08	1.55	2.37	1.94	1.8
	Urban Fatalities/VMT	Annual	0.71	1.09	1.06	0.99	1.03	1.21
	To decrease the traffic fatalities/100 VMT by 4 percent from 1.46 (2014-2018 average) to 1.40 (2017-2021 average) by December 2021.							
C-4	Unrestrained Passenger Vehicle Occupant Fatalities, All Seat Positions (FARS)	Annual	12	21	15	37	17	20
		5-Year Moving Average	17	18	19	21	20	22
	To decrease unrestrained passenger vehicle occupant fatalities by 5 percent from 22 (2014-2018 average) to 21 (2017-2021 average) by December 31, 2021.							
C-5	Alcohol-Impaired Driving Fatalities (FARS)	Annual	16	22	22	31	22	29
		5-Year Moving Average	18	18	19	21	23	25
	Maintain alcohol-impaired driving fatalities at 25 (2014-2018 average) through the 2017-2021 average by December 31, 2021.							
C-6	Speeding-Related Fatalities (FARS)	Annual	22	18	22	36	26	42
		5-Year Moving Average	23	21	20	22	25	29
	Maintain speeding-related fatalities at 29 (2014-2018 average) through the 2017-2021 average by December 31, 2021.							
C-7	Motorcyclist Fatalities (FARS)	Annual	9	8	11	6	6	12
		5-Year Moving Average	9	9	9	9	8	9
	To decrease motorcyclist fatalities by 11 percent from 9 (2014-2018 average) to 8 (2017-2021 average) by December 31, 2021.							
C-8	Unhelmeted Motorcyclist Fatalities (FARS)	Annual	2	3	4	2	3	5
		5-Year Moving Average	3	3	3	3	3	3
	To decrease unhelmeted motorcyclist fatalities by 33 percent from 3 (2014-2018 average) to 2 (2017-2021 average) by December 31, 2021.							
C-9	Drivers Age 20 or Younger Involved in Fatal Crashes (FARS)	Annual	8	11	6	16	6	8
		5-Year Moving Average	8	9	8	10	9	9
	To decrease drivers age 20 or younger fatalities by 11 percent from 9 (2014-2018 average) to 8 (2017-2021 average) by December 31, 2021.							

C-10	Pedestrian Fatalities (FARS)	Annual	6	14	12	12	14	14	
		5-Year Moving Average	8	9	10	10	12	13	
	To decrease pedestrian fatalities by 9 percent from 13 (2014-2018 average) to 12 (2017-2021 average) by December 31, 2021.								
C-11	Bicyclist Fatalities (FARS)	Annual	1	3	0	1	1	0	
		5-Year Moving Average	1	1	1	1	1	1	
	To decrease bicyclist Fatalities by 100 percent from 1 (2014-2018 average) to 0 (2017-2021 average) by December 31, 2021.								
	CORE BEHAVIOR MEASURE		**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**
B-1	Observed Seat Belt Use for Passenger Vehicles, Front Seat Outboard Occupants (State Survey)	Annual	86.10%	88.40%	89.30%	88.50%	90.10%	91.60%	94.10%
	Maintain observed seat belt use for passenger vehicle at 94 percent by December 31, 2021.								

A five-year moving average was used to review all 11 core safety measures. The rationale for each 2021 performance target is as follows:

- **Overall Fatalities.** As aforementioned, unlike in previous years now the agreement in the target involves more than just AHSO staff which played a factor in the selection. Based on historical FARS data and reviewing preliminary state numbers for 2019 the trend has been moving upwards. Alaska has a relatively low fatality count in comparison to other states so a small increase in fatalities can drastically impact the 5 year moving average of 76 from 2014-2018, along with other factors like low gas prices and an increasing VMT. Based on these factors, a target to reduce fatalities to no more than 75 fatalities was chosen for 2017-2021 average.

- **Serious Injuries.** For the coordinated injury target many factors were considered; overall fatalities and impaired driving fatalities have been rising recently, budgetary pressures have forced municipalities to reduce hours and staff of law enforcement on the roadways, while VMT and licensed drivers have been increasing in the state. Taking all of this into consideration, with the most recent data from 2017, the safety stakeholders determined that the number of serious injuries may be trending slightly downward so the reasonable action was to note a decrease in serious injuries in traffic crashes by three percent from the average of 341 in 2013-2017 to 330 for 2017-2021.

- **Fatality Rate.** For the coordinated fatalities per 100 MVMT target many factors were considered; overall fatalities, speeding fatalities, and impaired driving fatalities have been rising recently while VMT and licensed drivers have been increasing in the state. Taking all of this into consideration, along with crash data for 2018, planned safety countermeasures, and COVID-19, the safety stakeholders determined that the rate of fatalities per 100 MVMT will be trending downward so the reasonable action was to note a decrease in rate of fatalities per 100 MVMT by four percent from the average of 1.46 in 2014-2018 to 1.40 for 2017-2021.

- **Unrestrained Fatalities.** Based on historical data, the unrestrained fatalities have fluctuated year to year over the last five years. Observed seat belt usage rates have increased the last three years and reached over 94 percent in 2019. A five percent reduction to 21 over the five year average of 22 was chosen as

the most practical justification for determining the 2017-2021 target based on trends and current countermeasure programs enacted to address unrestrained fatalities.

- **Impaired Driving Fatalities.** The number of fatalities involving an impaired driver has increased in recent years. For the last four years, the AHSO partnered with the Anchorage Police Department to implement a DUI taskforce, the results have been encouraging. Therefore, maintaining fatalities from the 2014-2018 average of 25 fatalities in the 2017-2021 average was chosen as a reasonable target.

- **Speeding.** The average number of speed-related fatalities per year between 2014 and 2018 was 29. In 2018 there was a dramatic increase in speed related fatalities and it is unclear at this time if these fatalities are trending up or down. The Alaska SHSO has invested additional enforcement and media funding to counter this rise. However, programs to address unbelted occupants and impaired drivers may have a correlation in affecting speeding-related fatalities. Maintaining speeding-related fatalities at 29 for the 2017-2021 average appears to be attainable based on recent performance.

- **Motorcycles.** The 2014-2018 five-year average of motorcyclist fatalities is nine. Motorcycle fatalities have fluctuated over the last five years therefore it is believed a decrease of one fatality or 11 percent for the 2017-2021 average is reasonable.

- **Unhelmeted Motorcyclists.** With low numbers to begin with, it becomes increasingly difficult to account for fluctuations from one year to the next. Because of this, a five-year trend line was chosen as the most practical justification for determining the 2021 target. The 2014-2018 five-year average of unhelmeted motorcyclist fatalities is three, therefore a target of no more than two fatalities for the 2017-2021 average is reasonable.

- **Novice Drivers.** In recent years AHSO has been putting additional resources towards programming and education of young drivers and has seen fatalities fall from 16 in 2016 to 8 in 2018. The number of drivers 20 or under involved in fatal crashes averaged nine per year between 2014 and 2018, therefore a goal of eight in the 2017-2021 average appears to be target that can be achieved based on the five-year moving average.

- **Pedestrians.** Based on historical fluctuations in the data, the linear trend line shows that this estimated target could be challenging since the numbers are low and have more recently been rising. While the number of pedestrian fatalities have averaged 13 per year between 2014 and 2018, countermeasure strategies implemented in 2019 and continuing into 2021 should allow Alaska to decrease pedestrian fatalities to 12 through the 2017-2021 average and keep Alaska on pace with the goal of reducing fatalities to half by 2030.

- **Bicyclists.** Few bicyclist fatalities occur annually in Alaska. With low numbers to begin with, it becomes increasingly hard to account for fluctuations from one year to the next. For example in 2014, bicycle fatalities spiked up to three from one. Early indications in reviewing those fatalities in 2014 point towards texting and impairment as contributing factors. Because of the AHSO's work in several other program areas, such as impaired driving, Alaska believes this is a program area where zero fatalities per year based on the five-year moving average for 2017-2021 is achievable.

- **Seat Belt Use.** Seat belt use has significantly increased in Alaska over the past several years rising from under 78 percent in 2005 to an all-time high of 94.1 percent in 2019. A goal of maintaining an observed rate of 94 percent is a reasonable target to achieve over multiple years. Furthermore, with the COVID-19

pandemic in 2020 the AHSO will not conduct an observational seat belt survey in 2020. The decision was made for safety reasons as well as the general disruption of travel and reduction in VMT during the pandemic it is unlikely that a reliable survey could be conducted.

3.0 Highway Safety for FFY 2021

3.1 Overview

Based on data analysis, behavioral survey findings, and discussions with key partners and stakeholder groups, Alaska's FFY 2021 HSP addresses the following program areas: impaired driving, occupant protection with an emphasis on unrestrained or improperly restrained motor vehicle passengers, speeding, motorcycle safety, pedestrian and bicycle safety, novice drivers (under 21 years of age), and traffic records. This continues to support the Driver Behavior and Special Users emphasis areas in Alaska's SHSP, which calls upon AHSO and its partners to address driver behavior (impairment, occupant protection, older drivers, and young drivers) and special users (pedestrians, bicyclists, and motorcycles). Additionally, the FFY 2021 HSP outlines how enforcement, education, and data will be used to achieve the identified performance measures and targets, such as high-risk populations.

On February 24, 2015, Alaska became the third state in the United States to allow for the legal consumption of marijuana. AHSO continues to monitor the effects of the law on traffic safety and follows the impact of similar legislation in other states. Over the last several years, the AHSO has been working with the Impaired Driving Coalition and the Alaska Traffic Records Coordinating Committee to develop programs to counter marijuana's potential impact on traffic safety and strengthen methods of tracking the data.

Alaska bans all motorists from texting while driving. The state's texting while driving law, which became effective July 1, 2016, reduced the texting-while-driving penalty in cases that do not involve physical injury or death to another person. Under the previous law, texting while driving was a Class A misdemeanor with a maximum penalty of a $10,000 fine and one-year prison sentence for a first offense. Under the current law, texting while driving will result in a citation punishable by a $500 fine, with no threat of jail time. The new law does not change the penalties if a texting-related crash results in injury – the violation escalates to a felony, the maximum fine is $50,000, and the maximum prison sentence is five years. Serious injury crashes carry a maximum $100,000 fine, while the maximum fine for a fatality resulting from a texting-related crash is $250,000 and 20 years in prison.

It is important to note that, while distracted driving is not included in the program areas detailed below, AHSO and its partner agencies are monitoring the problem and implementing appropriate strategies and employing proven countermeasures as more citation and crash data become available. However, attaining accurate data on distracted driving related crashes is a difficult task so it is unclear how prevalent distracted driving is. The AHSO also worked with their media contractor to develop more robust messaging for the driving public about the dangers of distracted driving.

The AHSO is also aware of the issue of unsecured loads that was raised in the FAST Act. These concerns and dangers of unsecured loads have been discussed with our law enforcement grantees to address during regular patrol. The AHSO continues to look into any data and research that may be available regarding unsecured loads specific to the state of Alaska.

Section 3.2 provides an overview of Alaska's Evidence-Based Traffic Safety Enforcement Program. Sections 3.3 through 3.10 provide details on the program areas, including problem identification, performance targets and measures, countermeasures and planned activities, and funding levels and sources. The planned activity/project descriptions following the countermeasure descriptions include citations referencing the performance targets and evidence of effectiveness. The performance targets are numbered in each of the

program area descriptions, and the same numbering is followed in the program/project description. Furthermore, unique identifiers are noted for each project. A glossary for the unique identifiers can be found in Section 4, Table 4.1. The AHSO used the *Countermeasures That Work (CTW): A Highway Safety Countermeasure Guide for State Highway Safety Offices,* Ninth Edition, 2017, as a reference to aid in the selection of effective, evidence-based countermeasure strategies for the FFY 2021 HSP program areas. Evidence of effectiveness citations reference CTW, followed by the chapter and related countermeasure section (e.g., CTW, Chapter 2, and Section 2.1), denote the effectiveness of the related countermeasure strategy, where appropriate, and are identified in the program/project descriptions. Note that CTW is not referenced for traffic records countermeasures or AHSO administrative functions and activities. The 2017 edition of CTW can be viewed on NHTSA's website at Countermeasures That Work, 2017.

3.2 Evidence-Based Traffic Safety Enforcement Program

A significant portion of Alaska's highway safety grant funds are awarded to law enforcement agencies each year. The AHSO has policies and procedures to ensure enforcement resources are used efficiently and effectively to support the goals of the state's highway safety program. Funding decisions for subsequent years are based on the effectiveness of the implementation and performance of each agency's enforcement project. Alaska incorporates an evidence-based approach in its statewide enforcement program through the three components discussed below. The planned activities that comprise Alaska's evidence-based traffic safety enforcement program include:

- Impaired Driving HVE (ID-1)
- Occupant Protection HVE (OP-1)
- Speed Enforcement (SP-1)

A complete listing of planned activities for FFY 2021 can be found in Table 4.1.

Data-Driven Problem Identification

The statewide problem identification process used in the development of the HSP is described in Chapter 2.0. The data analyses are designed to identify users who are overinvolved in crashes (such as high-risk populations) and when, where, and why crashes are occurring. Key results summarizing the problems identified are presented in the statewide and individual program area sections of the HSP.

All enforcement agencies receiving AHSO grant funding also must use a data-driven approach to identify the enforcement issues in their jurisdictions. Data documenting the highway safety issue identified are required in the funding application submitted to AHSO, along with strategies that will be implemented to address the problem.

Implementation of Evidence-Based Strategies

To ensure that enforcement resources are deployed effectively, law enforcement agencies are directed to implement evidence-based strategies using the data provided. Alaska's integrated evidence-based traffic safety enforcement methodology uses a hybrid between an integrated enforcement approach and saturation patrols; both of which can be found in the NHTSA publication *Countermeasures That Work: A Highway Safety Countermeasure Guide for State Highway Safety Offices* for their problem areas. Examples of proven strategies include targeted enforcement, focusing on enforcement of traffic laws pertaining to impairment and

speeding, or on specific times of day when more violations occur, such as nighttime impaired driving road checks and seat belt enforcement. High-visibility enforcement, including participation in national seat belt and impaired driving mobilizations, also is required.

The Data Driven Approach to Crime and Traffic Safety (DDACTS) model and other strategies that use data to identify high-crash locations also are proven strategies. By implementing strategies that research has shown to be effective, more efficient use is made of the available resources, and the success of enforcement efforts is enhanced. Multijurisdictional enforcement efforts are encouraged and supported by the AHSO.

Continuous Monitoring

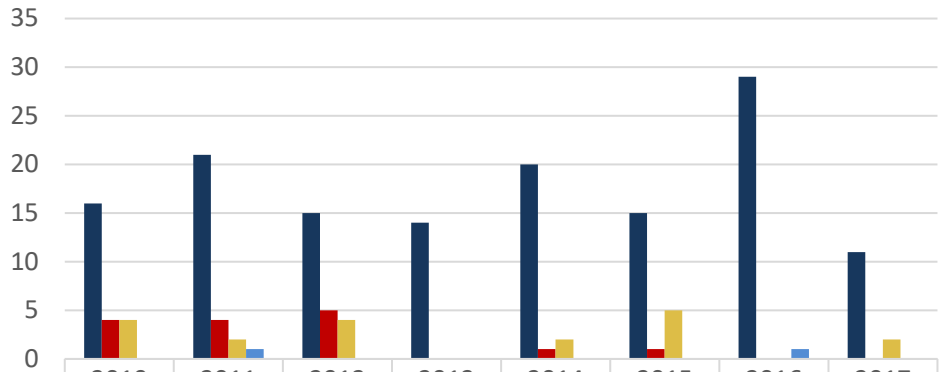
Continuous monitoring of the implementation of enforcement programs is another important element of the enforcement program. To ensure these law enforcement projects remain nimble with the ability to adjust to any situation, various tracking mechanisms are utilized to enable program managers and law enforcement managers with quick insights into the progress of each project. Contact with enforcement agencies is maintained through meetings, conferences, grant monitoring sessions, phone calls, and press events. Monthly progress reports are required from each law enforcement agency receiving grant funding to ensure an understanding of the goals and outcomes of each project. These reports must include data on the activities conducted, such as the area and times worked and the number of tickets issued. This monthly monitoring will allow for subtle or major adjustments within each jurisdiction in sufficient time to provide the greatest use of resources to address impaired driving. Special projects are implemented, as needed.

3.3 Impaired Driving Program Area

Problem Identification

In 2018, alcohol impaired driving fatalities accounted for 36 percent of all fatalities on Alaska's roadways compared to 29 percent nationally. From 2014-2018 the average number of impaired driving fatalities in Alaska was 25.2 and the average number of total fatalities was 76.2. This equates to 43 percent of all fatalities in Alaska from 2014-2018 were impaired driving related. While impaired drivers with BACs greater than .08 accounted for 86 percent of these fatalities, pedestrians, motorcyclists, and bicyclists also died on the state's roadways because of alcohol impairment (Figure 3.1).

Figure 3.1 Alcohol Suspected Fatalities Involving Driver, Motorcycle Operator, Pedestrian, or Bicyclist

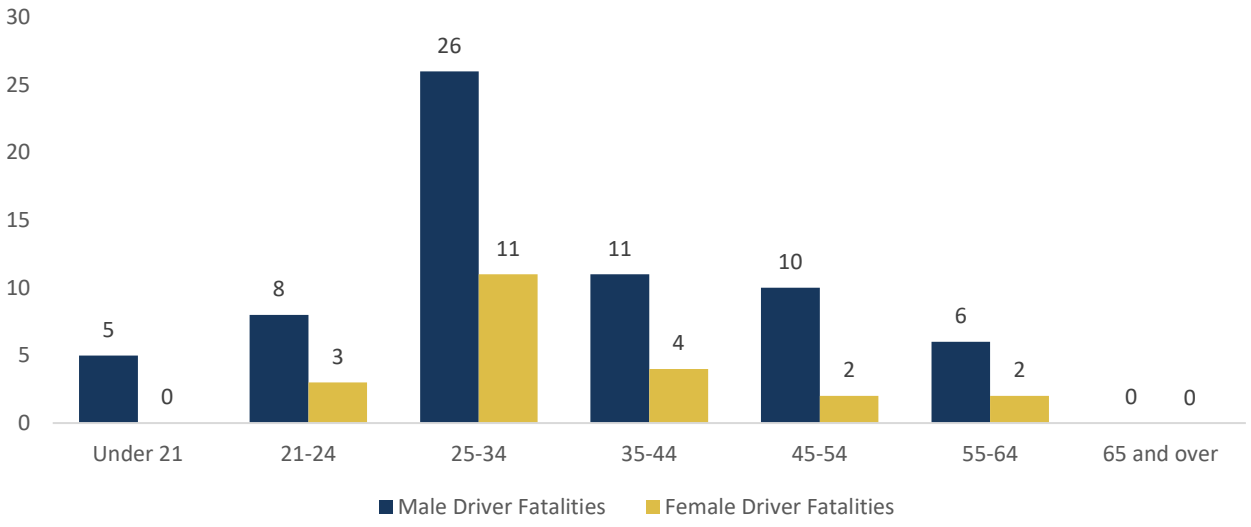


	2010	2011	2012	2013	2014	2015	2016	2017
Driver	16	21	15	14	20	15	29	11
Motorcycle Operator	4	4	5	0	1	1	0	0
Pedestrian	4	2	4	0	2	5	0	2
Bicyclist	0	1	0	0	0	0	1	0

Source/ Date Accessed: Alaska CARE, July 2020.

Impaired driving fatalities were greatest among 25 to 34-year-olds (37 fatalities), and lowest among those 65 and older (0) between 2013 and 2017, as seen in Figure 3.2. Overall, male drivers were three times as likely to be involved in an impaired driving fatality than females.

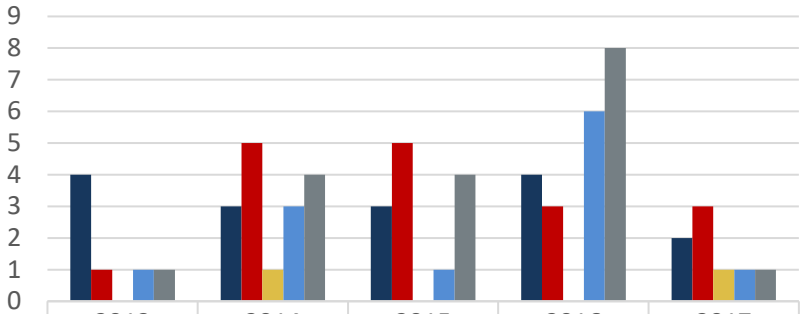
Figure 3.2 Alcohol Suspected Driving Fatalities by Driver Gender and Age Group 2013-2017



Source/ Date Accessed: Alaska CARE, July 2020.

Between 2013 and 2017, the Mat-Su Borough accounted for most of these fatalities followed by Anchorage, Fairbanks, Kenai, and Juneau, as seen in Figure 3.3. Overall, the five most populous boroughs saw alcohol suspected driving fatalities increase from seven in 2013 to eight in 2017.

Figure 3.3 Alcohol Suspected Fatalities by Five Most Populous Boroughs

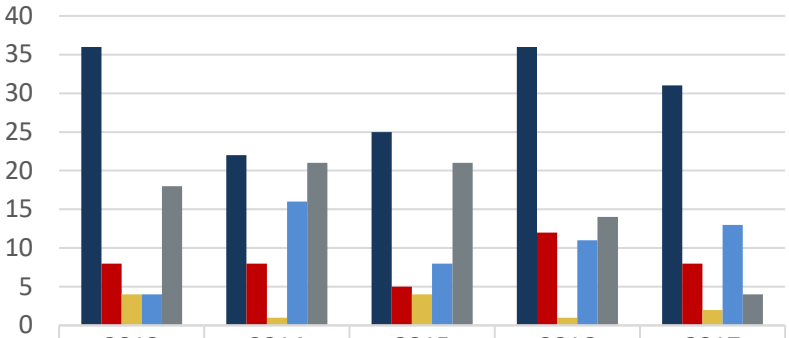


	2013	2014	2015	2016	2017
Anchorage Municipality	4	3	3	4	2
Fairbanks North Star Borough	1	5	5	3	3
Juneau City and Borough	0	1	0	0	1
Kenai Peninsula Borough	1	3	1	6	1
Matanuska Susitna Borough	1	4	4	8	1

Source/ Date Accessed: Alaska CARE, July 2020.

Between 2013 and 2017, 72 percent of alcohol suspected serious injuries occurred in the state's five most populous boroughs. Anchorage accounted for 33 percent of all alcohol suspected serious injuries, followed by Mat-Su, Fairbanks, Kenai, and Juneau (Figure 3.4).

Figure 3.4 Alcohol Suspected Serious Injuries by Five Most Populous Boroughs

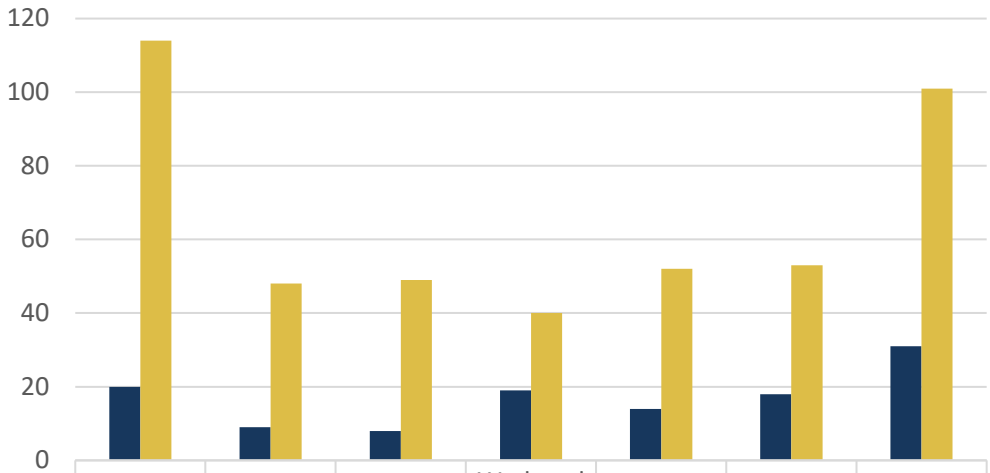


	2013	2014	2015	2016	2017
Anchorage Municipality	36	22	25	36	31
Fairbanks North Star Borough	8	8	5	12	8
Juneau City and Borough	4	1	4	1	2
Kenai Peninsula Borough	4	16	8	11	13
Matanuska Susitna Borough	18	21	21	14	4

Source/ Date Accessed: Alaska CARE, July 2020.

Between 2013 and 2017, the most alcohol suspected fatalities occurred on Wednesdays, Fridays, Saturdays or Sundays, with Saturday (31) recording the greatest number of deaths, followed by Sunday (20). Alcohol suspected serious injuries peaked on Saturday (101) and Sunday (114), and were lowest on Wednesday (40), as shown in Figure 3.5.

Figure 3.5 Alcohol Suspected Fatalities and Serious Injuries by Day of Week

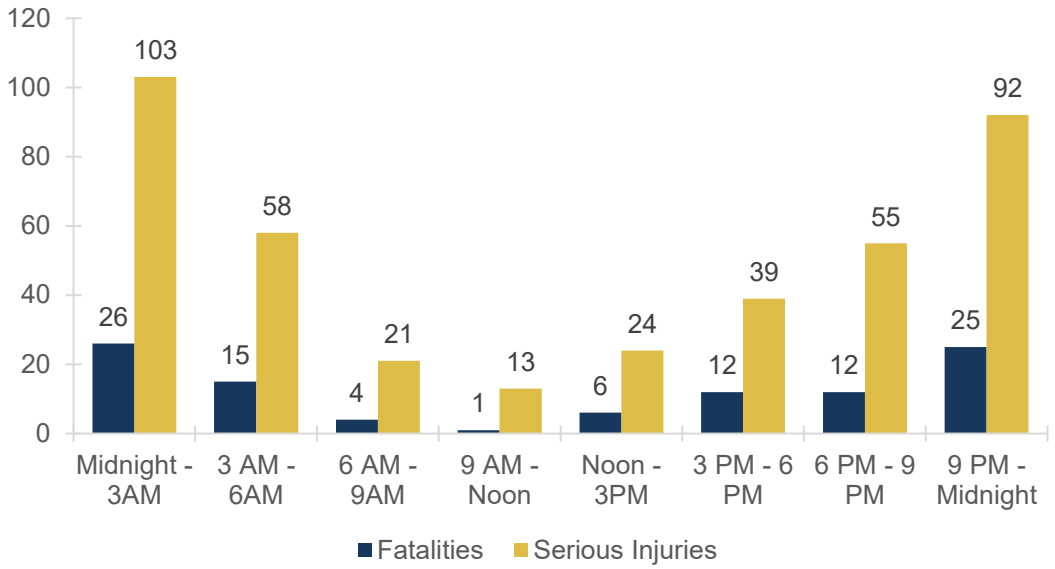


	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Fatalities	20	9	8	19	14	18	31
Serious Injuries	114	48	49	40	52	53	101

Source/ Date Accessed: Alaska CARE and FARS, July 2020.
Note: Serious injury and fatality data are from 2013 to 2017.

Meanwhile, alcohol suspected driving-related fatalities and serious injuries occurred most frequently between the hours of 6:00 p.m. and 6:00 a.m. (Figure 3.6).

Figure 3.6 Alcohol Suspected Fatalities and Serious Injuries by Time of Day



Source/ Date Accessed: Alaska CARE and FARS, July 2020.
Note: Serious injury and fatality data are from 2013 to 2017.

Impairment caused by drugs also is affecting safety on Alaska's roadways. Of the 323 fatalities that occurred between 2013 and 2017, 11 percent (37) were attributed to drugged driving. According to the Alaska Department of Public Safety, 170 drug-related Driving Under the Influence (DUI) violations were documented in 2015, 183 in 2016, 160 in 2017 and 221 in 2018. In addition to the 221 DUI-D arrests in 2018. As of May 2020, Alaska has 38 Drug Recognition Experts (DRE) working across the state to assist police agencies apprehend and remove drug-impaired drivers from the state's roadways.

Performance Targets

1. Maintain alcohol-impaired driving fatalities at 25 (2014-2018 average) through the 2017-2021 average by December 31, 2021.

Countermeasure Strategies

Alaska's Impaired Driving Task Force (IDTF) has met quarterly since being established in 2013. The IDTF met in September 2019 to review progress in addressing the strategies and verify the action steps in the Impaired Driving Strategic Plan to ensure they address the most pressing impaired driving problems currently facing the state. Following are the plan's strategies and actions steps (A.S.):

Strategy 1: Strengthen leadership and participation to enhance impaired driving improvements.	
AS 1.1:	Build partnerships designed to reduce impaired driving.
AS 1.2:	Enhance enforcement in safety corridors.
AS 1.3:	Effectively integrate traffic enforcement with other enforcement activities at agencies, i.e., Data Driven Approaches to Crime and Traffic Safety.

Strategy 2: Prevent excessive drinking, underage drinking, and impaired driving.	
AS 2.1:	Continue mandatory alcohol server training.
AS 2.2:	Conduct well publicized compliance checks of alcohol retailers to reduce sales to underage persons.
AS 2.3:	Improve understanding of impaired driving among youth and implement outreach programs.
AS 2.4:	Improve and enhance the effectiveness of Alaska's Ignition Interlock (IID) program through an effective and consistent policy and oversight.
Strategy 3: Enhance law enforcement training in alcohol and drug detection.	
AS 3.1:	Increase the number of officers trained in standardized DUI/Drugged driving detection and apprehension, i.e., Standard Field Sobriety Test (SFST), Drug Recognition Evaluation (DRE), and Advanced Roadside Impaired Driving Enforcement (ARIDE).
AS 3.2:	Develop a Statewide Law Enforcement Liaison (LEL) program.
Strategy 4: Enforce and publicize DUI laws.	
AS 4.1:	Continue statewide, high-visibility saturation enforcement and media campaigns to reduce impaired driving.
Strategy 5: Encourage consistent and vigorous DUI prosecution.	
AS 5.1:	Educate prosecutors and court system on traffic safety issues specifically impaired driving.
Strategy 6: Use licensing sanctions shown to be effective at reducing recidivism and protecting the public.	
AS 6.1:	Suspend driver license administratively upon arrest.
AS 6.2:	Increase penalties for repeat offenders.
Strategy 7: Support impaired driving priority policies and program efforts.	
AS 7.1:	Establish a comprehensive communications plan that includes impaired driving initiatives.
Strategy 8: Establish programs to facilitate close monitoring of impaired drivers.	
AS 8.1:	Develop a program to increase enforcement of drug impaired driving.
AS 8.2:	Develop and implement a screening, treatment, and rehabilitation program.
Strategy 9: Provide timely, accurate, integrated, and accessible traffic records data.	
AS 9.1:	Explore the feasibility of allowing crash and Trauma Registry data to be linked.
Strategy 10: Access to forensic drug toxicology services.	
AS 10.1	Improve toxicology services for impaired driving cases.

Based upon the problem identification and guided by the Impaired Driving Strategic Plan, the AHSO will focus on the following countermeasure strategies in FFY 2021.

Law Enforcement Liaison

The AHSO continues to work towards filling an LEL coordinator position to support the state's impaired driving sustained enforcement activities. The full-time LEL would play a pivotal role in assisting police agencies in analyzing their crash data to identify impaired driving hot spots and corridors, implementing high-visibility enforcement strategies, and collecting and reporting citation data. However, with no eligible candidates available to fill this position, the AHSO plans to release a Request for Proposal (RFP) to secure an LEL coordinator position to support the state's impaired driving sustained enforcement activities.

Integrated Enforcement

Recognizing the significant impact impaired driving has on roadway safety, the AHSO remains firmly committed to working with its law enforcement partners to remove alcohol and drug impaired drivers, bicyclists, pedestrians, and motorcyclists from the state's roadways using Integrated Enforcement which includes high visibility enforcement and saturation patrols. The State of Alaska's integrated evidence-based traffic safety enforcement methodology will use a hybrid between an integrated enforcement approach and saturation patrols; both of which are known proven countermeasures. The methodology will include enforcement of traffic laws pertaining to impairment, speeding, and seatbelt use, coupled with enforcement patrols that saturate an area and are well advertised in the local media, and describe the effort as an impaired driving campaign. This effort will include uniformed law enforcement officers "saturating" a high DUI-related crash area and engaging the driving public by pulling over as many traffic violators as possible to serve as a deterrent to impaired driving. This hybrid approach will provide a public perception of risk that driving impaired will result in an arrest. This overall approach, along with associated national crackdowns and mobilizations, will provide continuous direct and general deterrence in impaired driving.

AHSO will provide funding for high-visibility enforcement using saturation patrols (checkpoints are not permitted under Alaska law). Alaska will continue to participate in the national impaired driving mobilization, Drive Sober or Get Pulled Over, in summer, during holiday periods, and during specialized state events, such as Saturation Patrol for the Solstice and the Crab Fest. Particular emphasis will be given to engaging law enforcement agencies in areas identified as having a high impaired driving crash rate, including Anchorage, which consistently leads the state in alcohol-involved crashes resulting in death and serious injury.

Alaska's data show the five most populated boroughs also have the largest impaired driving problems. The municipality of Anchorage's population is 40 percent of the state's total, while the metro area is home to approximately 52 percent of Alaska's total population. The population of the city of Fairbanks is 13 percent of the total population; thus, projects in both areas would cover roughly 65 percent of the state's total population. The FFY 2021 Highway Safety Plan includes Impaired Driving HVE DUI Enforcement projects in Anchorage and Fairbanks that will address the impaired driving problems in these two regions of the state. The Anchorage Impaired Driving Taskforce and Fairbanks DUI Unit projects will conduct highly visible and sustained enforcement through deployment of saturation patrols in areas that have shown a high incidence of impaired driving-related crashes. Data-driven enforcement operations will be conducted throughout the year, and in coordination with the national crackdowns.

Impaired driving/riding earned and paid media messaging developed by AHSO and its partners (who will be supplied press release templates highlighting the dangers of drinking and driving) will be prominent during the national Drive Sober or Get Pulled Over mobilizations in December and August/September, and other holiday periods (including St. Patrick's Day) in addition to appropriate local campaigns. Particular emphasis will be given to targeting messages to adult males highlighting their increased risk of dying or being seriously injured because of drinking and driving.

As mentioned in Section 2.0, Alaska utilizes data driven decision-making to select, assess, and monitor projects that in combination with the totality of our safety planning will lead toward safer roadways. Alaska's high visibility Integrated Enforcement impaired driving countermeasure strategy is evidence-based and begins with an analysis of relevant data to form problem identification and deployment of proven countermeasures is targeted at the problems identified during the analysis. The State's impaired driving enforcement activities will be focused on when and where impaired driving crashes occur. Continuous follow up will be conducted and necessary adjustments will be made to programs and projects as warranted. The AHSO uses input collected

throughout the year from planning partners identified in the Highway Safety Planning Process section and the *Countermeasures That Work (CTW): A Highway Safety Countermeasure Guide for State Highway Safety Offices*, Ninth Edition, 2017 in the selection of effective, evidence-based countermeasure strategies for the FFY 2021 Impaired Driving program area. Alaska's integrated evidence-based traffic safety enforcement methodology will again use a hybrid between an integrated enforcement approach and saturation patrols; both of which can be found in CTW. By using these evidence-based high visibility enforcement strategies as an impaired driving strategy, the likelihood of reaching our performance targets increases. Enforcement efforts for impaired driving, speeding, and nonrestraint use are based on available data and focused on problem locations. In addition, after enforcement waves are completed, crash-reduction data is analyzed to understand enforcement's effectiveness and enhance future campaigns.

Evidence of Effectiveness: CTW, Chapter 1: Section 2.2 and 2.5; Chapter 1: Section 5.2

The AHSO estimates that approximately $617,500 in 405d funds will be expended for impaired driving enforcement, combined with approximately $700,000 in 405d in paid media to aggressively fight impaired driving in Alaska. Additional details can be located in the Paid Media section of the HSP. An additional $60,000 in 402 funds will be used to support LEL activities.

Toxicology Services

In addition to alcohol-impaired driving, impairment caused by drugs is affecting safety on Alaska's roadways. Of the 809 fatalities that occurred between 2008 and 2019, 37.3 percent (302 fatalities) were attributed to drugged driving. According to the Alaska Department of Public Safety, 170 drug-related Driving Under the Influence (DUI) violations were documented in 2015, 183 in 2016, 160 in 2017 and 221 in 2018, in addition to the 221 DUI-D arrests in 2018.

The AHSO is also committed to working with its law enforcement partners to ensure drunk and drugged driving offenders are prosecuted to the fullest extent of the law. Providing grant funding for forensic toxicology services, between the Alaska Scientific Crime Detection Laboratory (ASCDL) and the Alaska State Public Health Laboratory (ASPHL), will ensure that evidence collected from alcohol and drug-impaired drivers is properly analyzed in a timely and professional capacity. Activities will include development of in-state expert witness testimony skills for the criminal prosecution of individuals for Driving Under the Influence (of alcohol) and Driving Under the Influence of Drugs. Anticipated results include in-state analysis and in-person expert forensic testimony at a reduced expense to previous years when toxicology services were provided out of state, as well as an increase in the prosecution of drug impaired drivers in the state.

As discussed in Section 2.0, Alaska utilizes data driven decision-making to select, assess, and monitor projects that in combination with the totality of our safety planning will lead toward safer roadways. To provide the maximum impact and likelihood for reducing impaired driving, the AHSO provides leadership, training and technical assistance to other state agencies, law enforcement agencies, and to local impaired driving projects. The AHSO conducts problem identification to identify the areas and populations that have the highest rate of impaired driving fatalities. The AHSO uses input collected throughout the year from planning partners identified in the Highway Safety Planning Process section and the *Countermeasures That Work (CTW): A Highway Safety Countermeasure Guide for State Highway Safety Offices*, Ninth Edition, 2017 in the selection of effective, evidence-based countermeasure strategies for the FFY 2021 Impaired Driving program area. Whenever possible the most effective proven strategies, such as those with two stars or greater, are selected and implemented. By using these evidence-based selection strategies for impaired driving countermeasures, the likelihood of our strategies reaching our goals increases in reducing impaired driving-related fatalities.

Furthermore, the AHSO and its partners review literature and attend conferences to stay current on innovative and effective countermeasures to implement. The State considers the most recent proven countermeasures when planning legislative and programmatic strategies, based on the State's priorities, fiscal standing, staffing and other factors.

Several studies have shown Drug Recognition Expert (DRE) judgments of drug impairment are corroborated by toxicological analysis in 85 percent or more of cases (NHTSA, 1996).

Evidence of Effectiveness: CTW, Chapter 1, Section 2.2, 2.5 and 7.1

It is estimated that $221,077 in 402 funds will be spent on Toxicology Services.

Drug Recognition Expert Program

The AHSO provides traffic safety leadership, training and technical assistance to Alaska's law enforcement community. The AHSO has developed policies and procedures to ensure that enforcement resources are used efficiently and effectively to support the goals of the State's highway safety program. The AHSO is also committed to working with its law enforcement partners, prosecutors and judges to ensure drunk and drugged driving offenders are prosecuted to the fullest extent of the law.

The recreational use of marijuana, which became legal in Alaska in early 2015, heightened the importance of Alaska's Drug Recognition Expert (DRE) Program. The AHSO strengthened its training programs offered to DREs, expanded training to more officers and identified a State DRE Coordinator to oversee the program. Alaska currently has 38 DREs working across the state to assist police agencies apprehend and remove drug-impaired drivers from the roadways. With the opioid crisis, Anchorage Police Department's DUI Traffic Enforcement Unit is seeing an increase in DRE evaluations. Five of the unit's officers are DRE certified which reduces the costs and time associated with the evaluation.

The AHSO understands the importance of establishing a strong network to fight impaired driving and that LELs, a TSRP, and a JOL form the foundation of that network. With the legalization of recreational marijuana, the AHSO is cognizant that solidifying these positions is a top priority the state. The establishment of these positions will strengthen Alaska's efforts to address both drunk and drug-impaired driving.

The LEL also will work with Alaska's DREs to address deployment and training/recertification for law enforcement (ARIDE – Advanced Roadside Impaired Driving Enforcement) and education professionals (DITEP – Drug Impairment Training for Education Professionals). The TSRP will provide critical support and training to both prosecutors and law enforcement. The JOL will help to strengthen the linkage between police agencies and the courts, and ensure the proper and efficient adjudication of drunk- and drugged-driving-related cases.

Alaska's Impaired Driving Task Force and the Traffic Records Coordinating Committee, work closely with the State DRE Coordinator to stay ahead of the potential increase in drug impaired driving. The Task Force looks for new partners who can provide additional insight into addressing all forms of impaired driving. The State DRE Coordinator also attends the IACP Region I State Coordinators Meeting to learn from and network with colleagues. When the LEL coordinator position is filled, that individual will work with Alaska's State DRE Coordinator to address training/recertification for law enforcement in Advanced Roadside Impaired Driving Enforcement (ARIDE) and education professionals in Drug Impairment Training for Education Professionals (DITEP) courses.

With the legalization of marijuana and the rise in opioid use, the AHSO will continue to focus our efforts to maintain our current and train new DREs through the Drug Recognition Expert Course. The AHSO will also support law enforcement officers' attendance at the National DRE Conference which allows them to attend various courses and breakout sessions to further their education. Attendance at the Annual IACP DRE National Conference for both officers and prosecutors will also be supported in FFY 2021.

Enforcement of drug-impaired driving laws can be difficult. Typically, drug-impaired driving is only investigated when a driver is obviously impaired but the driver's BAC is low. If drivers have BACs over the illegal limit, many officers and prosecutors do not probe for drugs. The AHSO plans to utilize DREs to assist in investigating potential drug-impaired driving cases. NHTSA recommends that DREs participate in HVE activities and checkpoints, and respond to serious and fatal crashes (CTW).

Alaska's DRE Program is an evidence-based effort that begins with an analysis of relevant data to form problem identification; deployment of proven countermeasures targeted at the problems identified during the analysis; and continuous follow up and necessary adjustments to programs and projects. The AHSO uses input collected throughout the year from planning partners identified in the Highway Safety Planning Process section and the *Countermeasures That Work (CTW): A Highway Safety Countermeasure Guide for State Highway Safety Offices*, Ninth Edition, 2017 in the selection of effective, evidence-based countermeasure strategies for the FFY 2021 Impaired Driving program area. Whenever possible the most effective proven strategies, such as those with two stars or greater, are selected and implemented. By using these evidence-based selection strategies for DRE countermeasures, the likelihood of our strategies reaching our goals increases. DREs work across the state to assist police agencies who are conducting impaired driving, seat belt, and speeding enforcement effort to apprehend and remove drug-impaired drivers from the state's roadways.

Several studies have shown DRE judgments of drug impairment are corroborated by toxicological analysis in 85 percent or more of cases (NHTSA, 1996).

Evidence of Effectiveness - CTW, Chapter 1: Section 7.1

It is estimated that approximately $300,500 Section 405d funds will be used for DRE, SFST, and ARIDE training in FFY 2021. Other countermeasures, such as HVE impaired driving enforcement, will incorporate enforcement with DRE/ARIDE certified officers. With greater awareness by officers of the signs of drug impaired driving it is believed that greater detection, apprehension, and conviction of drug impaired drivers will occur.

Planned Activities/Projects Description

The following planned activities will support these countermeasures in FFY 2021:

- Impaired Driving HVE (ID-1)
- Impaired Driving Focus (ID-2)
- Toxicology Services (ID-2)
- Impaired Driving Public Education (ID-3)
- Impaired Driving Training (ID-4)

Target: 1

Planned Activity: Impaired Driving HVE, ID-1

Project Title: High-Visibility DUI Enforcement

Project Number: 405d M5HVE-21-01-FA (A)

Description: Highly visible enforcement is widely recognized as an effective countermeasure for reducing impaired driving fatalities and serious injuries. The AHSO will fund the Alaska State Troopers (AST) and local agencies (Haines, Juneau, Kenai, Palmer and Soldotna Police Departments) to conduct data-driven integrated enforcement which includes high visibility enforcement and saturation patrols in areas of high risk for impaired driving crashes in coordination with the national mobilizations.

Grantee: Local LEA's, Alaska State Troopers

Budget/Funding Source: $200,000 Section 405d

Eligible Use of Funds: 405d Impaired Driving Mid (FAST)

Match: $0

Local Benefit: $0

Evidence of Effectiveness: CTW, Chapter 1, Section 2.2, 2.5

Target: 1

Planned Activity: ID-2

Project Title: Anchorage Police Department Impaired Driving Enforcement Unit

Project Number: 405d M5X-21-01-FA (D)

Description: This project will support the Anchorage Police Department Impaired Driving Enforcement Unit's (IDEU) enforcement effort. The IDEU will focus on sustained, high visible enforcement using data driven methods to improve efficiency and effectiveness. The IDEU will continue to combat impaired driving with targeted enforcement, high-visibility patrols and continued partnership and community outreach with the AHSO. IDEU officers will maintain a visible presence in geographical areas of Anchorage associated with drinking establishments. IDEU will also review the list of catering permit applications to determine the need for additional presence in locations where events take place. The IDEU will deploy resources as needed on federal, state and local holidays, events, and other dates that are supported by arrest data, including but not limited to the Alaska State Fair, opening of sport fishing season, Anchorage community events that involve alcohol, and all HVE dates provided by the AHSO (e.g., the national You Drink, You Drive. You Lose. campaign).

Grantee: Anchorage Police Department

Budget/Funding Source: $1,744,000 Section 405d

Eligible Use of Funds: 405d (FAST)

Match: $95,448

Local Benefit: $1,738,000

Evidence of Effectiveness: CTW, Chapter 1, Section 2.2

Target: 1

Planned Activity: ID-2

Project Title: Fairbanks DUI Traffic Enforcement Unit

Project Number: 405d M5X-21-01-FA (B)

Description: The Fairbanks DUI Traffic Enforcement Unit will conduct highly visible and sustained enforcement through deployment of saturation patrols in areas of high risk for impaired driving crashes. An officer will be assigned by command staff to work 40 hours per week focused solely on DUI enforcement Wednesday through Sunday when data suggests DUI related crashes are most prevalent. Data-driven enforcement operations will be conducted throughout the year and in coordination with the national mobilizations.

Grantee: City of Fairbanks Police Department

Budget/Funding Source: $110,000 Section 405d

Eligible Use of Funds: 405d Impaired Driving Mid (FAST)

Match: $110,000

Local Benefit: $0

Evidence of Effectiveness: CTW, Chapter 1, Section 2.2

Target: 1

Planned Activity: Impaired Driving Focus, ID-2

Project Title: Statewide LEL – Impaired Driving

Project Number: 402 PT-21-06-FA(C)

Description: This project will fund the activities of the statewide and regional Law Enforcement Liaisons who will function as an extension of the AHSO. The LELs will assist with recruiting law enforcement agencies to work impaired driving projects and will help police agencies in analyzing their crash data to identify impaired driving hot spots and corridors, implement high-visibility enforcement strategies, and collect and report citation and HVE data. The LELs also will work with Alaska's Drug Recognition Experts (DRE) to address deployment and training/recertification for law enforcement (ARIDE – Advanced Roadside Impaired Driving Enforcement) and education professionals (DITEP – Drug Impairment Training for Education Professionals). AHSO will utilize the services of the Region 10 LEL to coordinate the LELs until a statewide coordinator can be identified.

Grantee: LEL Contractor & Local LEA's

Budget/Funding Source: $60,000 Section 402

Eligible Use of Funds: NHTSA 402PT (FAST)

Match: $0

Local Benefit: $60,000

Evidence of Effectiveness: CTW, Chapter 1, Sections 2.2, 2.5, 7.1

Target: 1

Planned Activity: Impaired Driving Focus, ID-2

Project Title: Statewide DRE Program

Project Number: 405d M5X-21-01-FA (A)

Description: Project will support the expansion of Alaska's DRE program activities. Alaska's 38 DREs will conduct sustained high-visibility enforcement in conjunction with education and media. The grant funding also will support updated filed sobriety testing, DUI detection, drug recognition expert training for new DREs, drug interdiction, an annual DRE in-service training, instruction of ARIDE and DITEP classes, attendance at the National Annual DRE Training Conference, travel for up to five DREs to attend an out-of-state DRE Instructor school, and DRE related equipment for officers.

Grantee: Alaska State Troopers

Budget/Funding Source: $300,500 Section 405d

Eligible Use of Funds: 405d Int Drug and Alcohol Training (FAST)

Match: $33,300

Local Benefit: $0

Evidence of Effectiveness: CTW, Chapter 1, Section 7.1

Target: 1

Planned Activity: Toxicology Services, ID-2

Project Title: Alaska State Public Health Laboratory (ASPHL) Toxicology Services

Project Number: 402 AL-21-01-FA (A)

Description: Previously the State of Alaska outsourced forensic drug toxicology services out of State. In FFY 2019 the Alaska State Public Health Laboratory (ASPHL) began providing in-state forensic drug toxicology services for criminal prosecution. In order to increase the rate of prosecution of drug facilitated impaired driving cases, toxicology services must be performed in-state. The project will provide forensic toxicology services between the Alaska Scientific Crime Detection Laboratory (ASCDL) and ASPHL to analyze evidence collected from drug- impaired driving offenses. Grant funding will support a mechanism for Alaska law enforcement agencies to submit evidence to a forensic toxicology laboratory for the analysis of samples in drug-impaired driving cases. Project activities also include development of in-state expert witness testimony skills for the criminal prosecution of individuals for Driving Under the Influence of Drugs. Anticipated results will include in-state analysis and in-person expert forensic testimony at a reduced expense as well as an increase in the prosecution of drug impaired drivers in the state.

Grantee: Alaska Department Health & Social Services

Budget/Funding Source: $221,077 Section 402

Eligible Use of Funds: NHTSA 402 AL (FAST)

Match: $44,300

Local Benefit: $0

Evidence of Effectiveness: Chapter 1, Section 2.2, 2.5 and 7.1

Planned Activity: Public Education, PE-3

Project Title: Educational Traffic Safety Media Buys (Impaired Driving)

Project Numbers: 405d M5PEM-21-01-FA (A)

Description: This project funds the media buys on behalf of the AHSO to assist in fulfillment of its goals for the HSP and SHSP to reduce impaired driving related crashes. A mass media campaign consists of intensive communications and outreach activities regarding alcohol-impaired driving that use radio, television, print, and other mass media, both paid and/or earned. Mass media campaigns are a standard part of every State's efforts to reduce alcohol- impaired driving. Some campaigns publicize a deterrence or prevention measure such as a change in a State's DWI laws or a checkpoint or other highly visible enforcement program. Others promote specific behaviors such as the use of designated drivers, illustrate how impaired driving can injure and kill, or simply urge the public not to drink and drive. Campaigns vary enormously in quality, size, duration, funding, and many other ways. Effective campaigns identify a specific target audience and communications goal and develop messages and delivery methods that are appropriate to – and effective for – the audience and goal. Funding will also help to support the national You Drink. You Drive. You Lose. campaign.

Grantee: Media Agency

Paid Media: $700,000, Section 405d

Eligible Use of Funds: 405d (FAST)

Match: $0

Local Benefit: $200,000

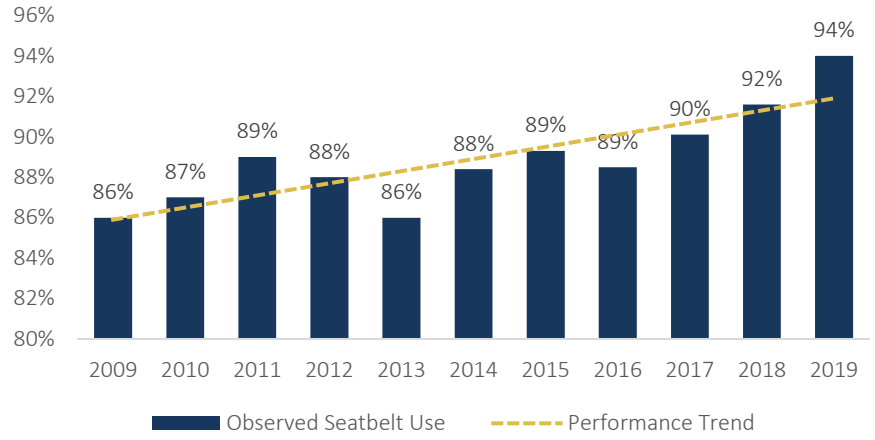
Evidence of Effectiveness: CTW, Chapter 1: Section 5.2

3.4 Occupant Protection Program Area

Problem Identification

Alaska's front seat belt usage rate has increased from 86 percent in 2009 to 94.1 percent in 2019, an all-time high observed usage rate. Figure 3.7 illustrates the rising trend in the observed seat belt use rate of front seat outboard occupants from 2009 to 2019. For illustration purposes the figure shows labels using only whole numbers. Table 2.3 shows the actual observed usage rates for each year. Ensuring that all drivers and passengers are properly restrained every trip is essential for achieving Alaska's zero fatality goal.

Figure 3.7 Observed Belt Use Rate for Passenger Vehicles, Front Seat Outboard Occupants



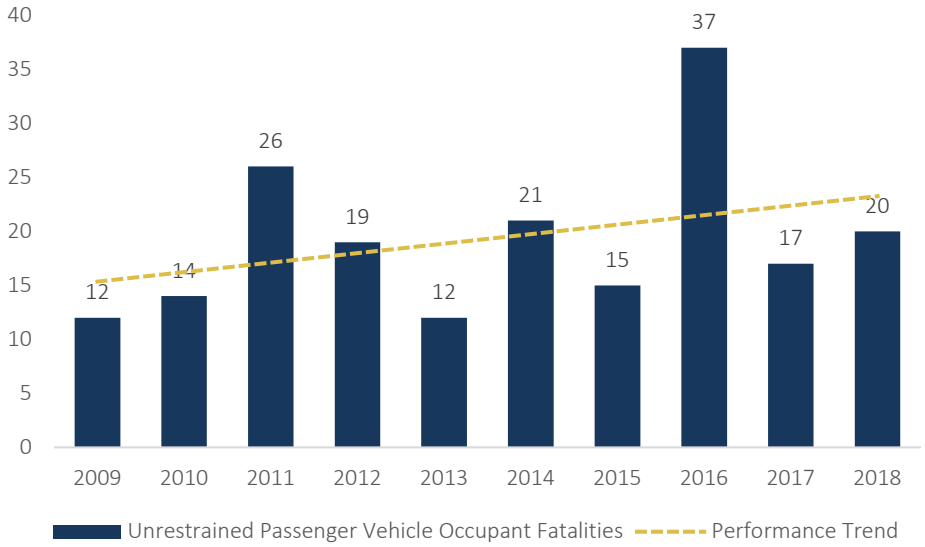
Source/ Date Accessed: Alaska Highway Safety Office and FARS, May 2020.

Deeper analysis of the 2019 observational seat belt survey data shows that usage rates by vehicle type vary. SUV occupants have the highest belt usage rate at 95.5 percent, followed by van drivers and their passengers (95.4 percent), and car (94.4 percent) and truck (91.6 percent) occupants. Usage of restraints by truck occupants has increased the most over the last several years. Truck occupants only buckled up 83.7 percent in 2013, and their observed usage rate has increased steadily each year. Belt use in the five most populous boroughs currently stands at 96.5 percent for Anchorage, 91.2 percent for Fairbanks, 84.7 percent for Juneau, 96.8 percent for Kenai, and 91.6 percent for Mat-Su.

Increasing seat belt and child restraint use is the simplest and most effective way to reduce serious injury and death in the event of a motor vehicle crash. Alaskan children under seven years of age and less than 64 pounds or 57-inches tall must be restrained in a child safety seat or booster seat when riding in a motor vehicle. Seat belts are required for all other motor vehicle occupants. Failure to comply with Alaska's occupant protection statutes is a primary offense and carries a $50 fine plus points.

Despite this mandate, 20 (25 percent) of the motor vehicle occupants killed in crashes in 2018 were unrestrained. An analysis of crashes between 2009 and 2018 finds that 193 of fatalities on Alaska's roadways were unrestrained. (Figure 3.8).

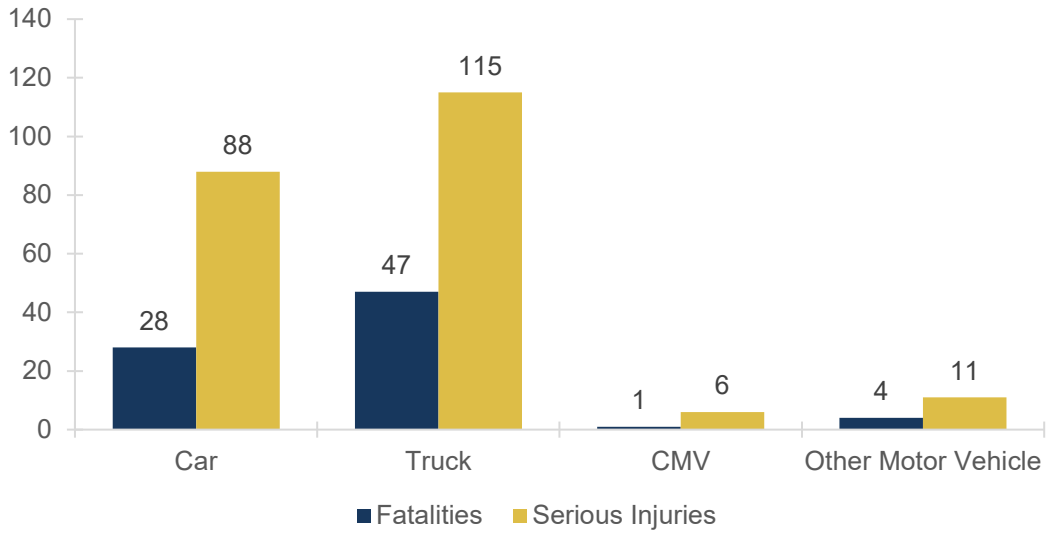
Figure 3.8 Unrestrained Passenger Vehicle Occupant Fatalities



Source/ Date Accessed: FARS, May 2020.

Unrestrained fatalities were highest among passenger cars and light trucks, accounting for 28 and 47 fatalities between 2013 and 2017. Unrestrained serious injuries were highest among these same vehicles types with passenger car and light truck occupants accounting for 88 and 115 serious injuries respectively between 2013 and 2017 (Figure 3.9).

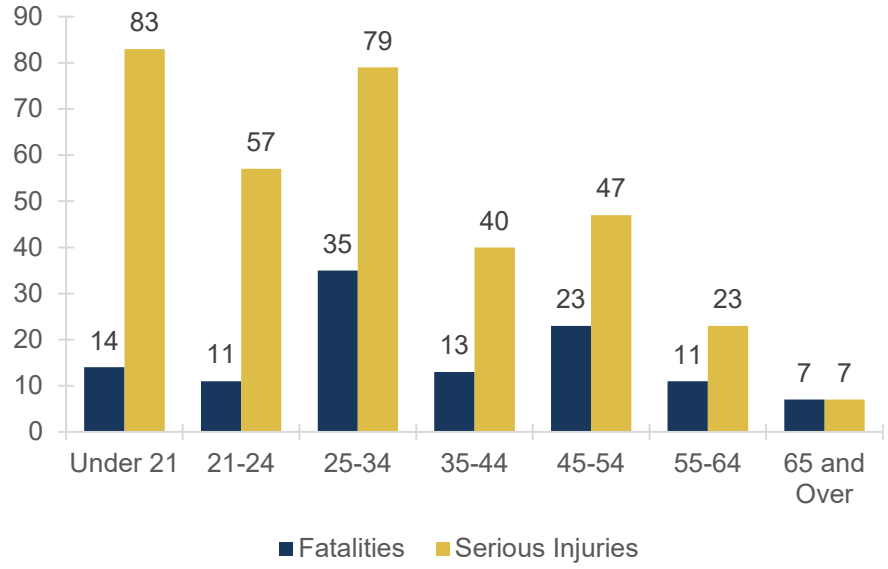
Figure 3.9 Unrestrained Fatalities and Serious Injuries by Vehicle Type



Source/ Date Accessed: Alaska CARE, July 2020.
Note: Fatality and injury data are for 2013-2017.

Motor vehicle occupants, specifically males, under 35 years of age are less likely to wear seat belts and accounted for 32 percent of all of unrestrained fatalities between 2013 and 2017, as seen in Figure 3.10. This same age group accounted for nearly 71 percent of all unrestrained fatalities for female drivers.

Figure 3.10 Unrestrained Fatalities by Age Group



Source/ Date Accessed: Alaska CARE, July 2020.
Note: Fatality and injury data are for 2013-2017.

Performance Targets

1. To decrease unrestrained passenger vehicle occupant fatalities by 5 percent from 22 (2014-2018 average) to 21 (2017-2021 average) by December 31, 2021.

2. Maintain observed seat belt use for passenger vehicle occupants at 94 percent by December 31, 2021.

Countermeasure Strategies

Proper and consistent use of seat belts and child safety seats is known to be the single most effective protection against death and a mitigating factor in the severity of traffic crashes. The Alaska Highway Safety Office remains committed to improving the seat belt use rate. AHSO's goal is to maintain the recent all-time observed usage rate of 94 percent by the end of the year in 2021.

The AHSO convened a multidisciplinary Occupant Protection Task Force (OPTF) in 2013 to review data, proven countermeasures, and best practices. Based, in part, on recommendations from a NHTSA occupant protection assessment conducted in 2013, the task force developed a comprehensive Occupant Protection Strategic Plan to reduce injuries and fatalities by increasing seat belt and child restraint use. This multiyear plan is reviewed by the task force on an annual basis, with changes made as needed. This comprehensive approach utilizes city, borough, and state law enforcement agencies, community partners, and the media to implement the plan. Statewide coordination by the AHSO's Occupant Protection Coordinators keep the implementation on track. The assessment provided several recommendations, including the development of an Occupant Protection Strategic Plan, a survey to determine seat belt use policies at law enforcement

agencies, high-visibility enforcement coordination, additional focus on high-risk populations with lower than average CPS usage (Alaska's Native population), increasing communication and outreach coordination, strengthening occupant protection programs for children, and increased use of electronic crash and citation data for evaluation needs. Following are the plan's strategies and actions steps (A.S):

Strategy 1: Continue high-visibility enforcement (Click It or Ticket) programs and stress occupant protection in all standard enforcement activities.
AS 1.1: Collect data on when and where unrestrained fatalities and serious injuries occur and conduct high-visibility enforcement campaigns when and where occupant protection crashes are highest.
AS 1.2: Provide more direction and information to law enforcement agencies through the law enforcement liaisons and provide guidance and expectations in written and verbal (webinar) formats.
AS 1.3: Conduct a pilot project on seat belt enforcement based on times of day when unrestrained fatalities and injuries are occurring to overcome supervisor concerns and utilize spotters to identify violators.
AS 1.4: Ensure law enforcement agencies receive the results of the Alaska Occupant Protection Use Survey.
AS 1.5: Target enforcement at groups that have low seat belt use rates.
AS 1.6: Distribute the Injury Prevention Center reference guide on child passenger safety to law enforcement statewide, particularly those in rural areas.
Strategy 2: Conduct education and awareness efforts to promote the importance and need for occupant protection.
AS 2.1: Utilize the Occupant Protection Task Force as a way to promote sharing of occupant protection problems between stakeholders and law enforcement agencies.
AS 2.2: Standardize occupant restraint messages for all ages and coordinate their use throughout the state.
AS 2.3: Work with media outlets to encourage them to report lack of occupant protection when reporting on traffic crashes when information is available from the police report.
AS 2.4: Increase earned media by reaching out to businesses and requesting them to help display messages and signage during high-visibility enforcement campaigns.
AS 2.5: Develop a communications plan.
AS 2.6: Determine demand and needs for an annual occupant protection workshop.
AS 2.7: Conduct traffic safety programs in high schools that address occupant protection.
AS 2.8: Establish a speaker's bureau as a resource for the media and speaking requests.
Strategy 3: Continue and expand child passenger safety programs.
AS 3.1: Work with the Injury Prevention Group from the Alaska Native Tribe Health Consortium (ANTHC) to encourage people to use child safety seats and emphasize occupant protection education to families traveling to regional and state hubs.
AS 3.2: Partner and share data from the Trauma Registry on child incidents involving off-highway vehicles operating on public roads with agencies servicing rural Alaska.
AS 3.3: Increase booster seat use through seat checks, consultations and outreach opportunities with special emphasis on Stage 3 use.
AS 3.4: Determine the need for additional child passenger safety technicians or for law enforcement training on child passenger safety.
Strategy 4: Provide data on occupant protection.
AS 4.1: Identify sources of occupant protection data and make it accessible to stakeholders, i.e., Trauma Registry, crash data, etc.
AS 4.2: Determine the cost of occupant protection crashes and promote the information through education and outreach efforts.

Strategy 5: Pursue statutory or regulatory changes which encourage occupant restraint use.
AS 5.1: Explore options to reduce fines or other punishments for child passenger safety violators who take action to properly restrain their children, i.e., receive a certificate for attending a class.
AS 5.2: Investigate ways to overturn the law that allows passengers to ride on the floorboards of vehicles.

The AHSO will continue to partner with law enforcement, nationally certified child passenger safety technicians, hospitals, and injury prevention organizations to ensure all motor vehicle occupants regardless of seating position, vehicle type, and age are properly restrained as outlined in the state's Occupant Protection Strategic Plan. The Occupant Protection Strategic Plan as well as stakeholders from the Occupant Protection Task Force informed the following funding decisions for FFY 2021.

Short-term, High Visibility Seat Belt Law Enforcement

Alaska's integrated evidence-based traffic safety enforcement methodology also will be used for enforcement of occupant restraint laws. In FFY 2021, each law enforcement partner will be encouraged to arrange at least one seat belt enforcement activity in each of their areas every month. Alaska State Troopers (AST) coordinators will schedule a minimum of one seatbelt enforcement activity within each troop areas every two weeks. Some nighttime enforcement will be encouraged, although the amount of available daylight will be impacted by the season; however, the enforcement activities will be conducted primarily during daylight hours and in high crash location areas. Enforcement activities will also be focused on roadways that produced low seat belt use rates, as determined by Alaska's annual Occupant Protection Use Survey (OPUS). The AHSO coordinates the efforts of all Alaska law enforcement partners covering 100 percent of the state. Approved examples of "High Visibility Enforcement Activities" are:

- **Directed Patrols**. Officers will patrol areas identified as low seat belt use rate areas as determined by the annual Occupant Protection Use Survey (e.g., Fairbanks and Juneau). Since many of the low use rate areas have historically been in rural parts of the state, agencies will target rural areas, particularly those that contain an official seat belt survey site. Patrol sites will also include areas near high schools and at locations near movie theaters, shopping areas, and other areas where teenagers typically congregate, and during times they would most likely be traveling to and from these locations.

- **Saturation Patrols**. Enforcement patrols will saturate identified high motor vehicle crash areas. Crash data will provide this information, and help pinpoint locations that are overrepresented crash sites involving teenagers, pick-up trucks, and rural areas. In addition, the patrols will be well advertised in the local media.

- **Participation in the CIOT Mobilization in May**. Alaska's CIOT enforcement campaign will run in conjunction with the National CIOT Mobilization scheduled for May 17-June 6 in 2021. Funds will be granted to law enforcement agencies based on a pre-developed enforcement plan. It is anticipated that the following agencies will participate in the 2021 CIOT Mobilization:

FY 2021 Click It Or Ticket Mobilization Agencies

Alaska State Troopers	Fairbanks P.D.	Kenai P.D.	Haines P.D.
Anchorage P.D.	Juneau P.D.	Palmer P.D.	Soldotna P.D.
Dillingham P.D.	Seward P.D.	Homer P.D.	

Enforcement activities will occur on a daily basis, during all daylight hours, and possibly in some areas, night. The AST will be primarily responsible for patrolling roadways outside of the city and borough jurisdictions and in rural areas where law enforcement agencies are unable to participate due to low staffing levels manpower. Participating agencies will be encouraged to conduct earned media activities and participate in educational events.

The national Click It or Ticket campaign is a key component of AHSO's Communication plan. The plan will support Alaska's participation in the national CIOT high-visibility enforcement (HVE) mobilization. Consistent with NHTSA communications best practices, wherever possible, plan objectives will include both high-visibility messages and tactics, as well as social norming messages and tactics. HVE efforts like Click It or Ticket are the campaign "brand" and are promoted at specific times of the year to coincide with national advertising and local enforcement for maximum impact, optimizing paid media. The AHSO Communication contractor will support Alaska's participation CIOT by providing creative and placing media buys during the campaign targeted to reach key demographic groups. Alaska's Statewide CPS Coordinator and Co-coordinator will also participate in CIOT events and earned media opportunities and other subgrantees will be encouraged to participate in local events and support the campaign through social media.

- **Participation in additional enforcement waves** at other times of the year (e.g., National Child Passenger Safety Week, high school prom and graduation season).

- **Conduct seat belt enforcement during all routine enforcement efforts** (enforcement of traffic laws pertaining to seatbelt use, impairment, and speeding, etc.).

Written seat belt use policies will be required for all law enforcement agencies receiving Federal Highway Safety funds. These policies must be written and outline sanctions for non-compliance.

Once established, the LEL and AHSO representative will request letters of support from the Alaska Association of Chiefs of Police, Alaska State Troopers, and the Alaska Peace Officers Association. Recognizing that motor vehicle crashes are responsible for the greatest number of police officer deaths nationwide, AHSO will deploy the statewide LEL, when hired, to work with Alaska Association of Chiefs of Police and the Alaska State Troopers to ensure that all patrol officers are properly restrained. Emphasis will be placed on developing written seat belt use policies that include sanctions for noncompliance.

As discussed in the Highway Safety Planning Process section, Alaska utilizes data driven decision-making to select, assess, and monitor projects that in combination with the totality of our safety planning will lead toward safer roadways. Alaska's High Visibility Enforcement occupant protection countermeasure strategy is evidence-based and begins with an analysis of relevant data to form problem identification, with deployment of proven countermeasures targeted at the problems identified during this analysis. The State's seat belt-related enforcement activities will be focused on roadways that produced low seat belt use rates, as determined by Alaska's annual OPUS. Continuous follow up will be conducted and necessary adjustments made to programs and projects as warranted. The AHSO uses input collected throughout the year from planning partners identified in the Highway Safety Planning Process section and the *Countermeasures That Work (CTW): A Highway Safety Countermeasure Guide for State Highway Safety Offices*, Ninth Edition, 2017 in the selection of effective, evidence-based countermeasure strategies for the FFY 2021 Occupant Protection program area. Alaska's integrated evidence-based traffic safety enforcement methodology will again use a hybrid between integrated enforcement and saturation patrols; both of which can be found in CTW. By using these evidence-based selection strategies as an occupant protection countermeasure, the likelihood of our

strategies reaching our performance targets increases. Enforcement efforts for nonrestraint use, impaired driving, and speeding are based on available data and focused on problem locations. In addition, after enforcement waves are completed, crash reduction data is analyzed to understand enforcement's effectiveness and enhance future campaigns.

The proven countermeasure strategy of high visibility enforcement, combined with high-visibility and social norming messages and tactics, is the cornerstone of AHSO's occupant protection countermeasures. The primary purpose of publicized highly visible enforcement is to encourage non-users to buckle up by increasing the perceived risk of receiving a ticket. To do this, saturation patrols will be publicized extensively and conducted regularly, as part of an ongoing saturation patrol program. CDC's systematic review of 15 high-quality studies (Dinh-Zarr et al., 2001; Shults et al., 2004) found that short-term, high-visibility enforcement programs increased belt use by about 16 percentage points, with greater gains when pre-program belt use was lower. That same CDC systematic review observed that short-term, high-visibility enforcement campaigns increased belt use more among traditionally lower-belt-use groups, including young drivers, rural drivers, males, African-Americans, and Hispanics (Shults et al., 2004).

Additionally, Nichols and Ledingham (2008) conducted a review of the impact of enforcement, as well as legislation and sanctions, on seat belt use over the past two decades and concluded that sustained enforcement (implemented as a component of regular patrols or as special patrols) is as effective as "blitz" enforcement (short-term, high-visibility enforcement) and unlike blitz campaigns, is not usually associated with abrupt drops in belt use after program completion.

Evidence of Effectiveness: CTW, Chapter 2, Sections 2.1, 2.3 and 3.1

The AHSO estimates that approximately $200,000 in 402 funds will be expended for high visibility occupant protection enforcement and $200,000 in 402 funds will be expended for paid media in FFY 2021. An additional $40,000 in 405b funds will be expended to conduct the Occupant Protection Use Survey (OPUS) which is required by NHTSA but did not occur in 2020 due to COVID-19.

Child Restraint System Inspection Stations

The AHSO oversees implementation of the State's Occupant Protection Strategic Plan with the assistance of the State CPS Coordinator and Assistant State Coordinator who oversee and support CPS activities. Working with nationally certified Child Passenger Safety Technicians statewide, AHSO will promote the proper use of child restraints through child passenger safety seat checks and check-up events held in local communities across the state and at designated inspection stations. These activities will be posted on Car Seats Alaska and promoted via press releases and community outreach. Particular emphasis will be given to educating underserved and indigent populations (high-risk) that typically do not have access to car and booster seats. Both education and age/weight/height appropriate seats will be provided to families as needed.

CPS Technicians will distribute information on the importance and use of child restraints through community clinics, health practitioners, and hospitals. Additionally, the statewide CPS Coordinator and Assistant State Coordinator will plan, implement, and promote a coordinated CPS event in support of National Child Passenger Safety Week/Seat Check Saturday (September) that focuses on both car and booster seats. Alaska's permanent inspection stations will be key sites for this coordinated event.

The state's present active network of fitting stations, including whether they service rural or urban areas of the state, are identified in Table 3.1 below. Most fitting stations provide services for at-risk and low-income populations. These fitting stations are expected to service the state in FFY 2021. The AHSO CPS Coordinator

will support other locations where seat checks can be conducted as needed to ensure statewide coverage continues. The AHSO will also support technician certification, re-certification and instructor certification via in-state conferences and technician certification courses.

Table 3.1 Alaska FFY 2021 Child Restraint Inspection Stations

Name	City	Notes	Rural or Urban
Alaska Injury Prevention Center, DBA Center for Safe Alaskans *	Anchorage	By appointment only. NHTSA Training Resource.	Urban*
Anchorage Fire Department	Anchorage	By appointment only. AFD has 13 Inspection Stations.	Urban
Safe Kids Alaska State Coalition Coordinator, Providence Alaska Medical Center *	Anchorage	By appointment only. Special Needs Transportation Instructor.	Urban
Native Village of Eyak	Cordova	By appointment only.	Rural
Craig Tribal Association	Craig	By appointment only.	Rural
Bristol Bay Area Health Corporation	Dillingham	By appointment only.	Rural
Meg Morse - Volunteer	Eagle River	By appointment only.	Rural
Eielson AFB and Emergency Services	Eielson AFB	By appointment only.	Rural
The Fairbanks Safe Rider Program *	Fairbanks	By appointment only. Checks conducted at Fairbanks Memorial Hospital.	Rural
Girdwood Volunteer Fire & Rescue	Girdwood	By appointment only.	Rural
Safe Kids South Peninsula Haven House *	Homer	By appointment only. Special Needs Transportation Resource.	Rural
Bartlett Regional Hospital	Juneau	By appointment only.	Rural
Juneau Police Department, Safe Kids Alaska CPS Program*	Juneau	By appointment only.	Rural
SEARHC Juneau	Juneau	By appointment only.	Rural
Kenai Fire Department	Kenai	By appointment only.	Rural
City of Nikiski	Kenai	By appointment only.	Rural
Ketchikan Fire Department, Safe Kids Alaska CPS Program	Ketchikan	By appointment only.	Rural
SEARHC Prince of Wales	Klawock	By appointment only.	Rural
Kodiak Bayside Fire Station, Safe Kids Alaska CPS Program	Kodiak	By appointment only.	Rural
Nome Community Center	Nome	By appointment only.	Rural
Seward Providence Mountain Haven	Seward	By appointment only.	Rural
SEARHC Sitka	Sitka	By appointment only.	Rural
Central Emergency Services	Soldotna	By appointment only.	Rural
Safe Kids Kenai Peninsula*	Soldotna	By appointment only. Checks conducted at Central Peninsula Hospital	Rural
Matsu Services for Children and Adults, Safe Kids Matsu *	Wasilla	By appointment only.	Rural
Ft. Wainwright Fire Department	Fairbanks	By appointment only.	Rural
Ester Volunteer Fire Department	Ester	By appointment only.	Rural

* Denotes the station provides a Special Needs Transportation Resource.

The statewide CPS Coordinator and Assistant State Coordinator will determine the current level and geographic distribution of certified CPS technicians in Alaska, monitor the state's recertification rate, and schedule technician trainings. AHSO will provide funding for new technician certification training and technician recertification. Particular emphasis will be given to ensuring that there are certified technicians in remote communities. The anticipated number of CPS technician courses for FFY 2021, their location, and estimated number of participants is shown in Table 3.2. Given current conditions, the statewide CPS Coordinator anticipates that these courses will ensure Alaska will have the needed number of technicians to maintain required coverage at the state's fitting stations and planned events.

Table 3.2 FFY 2021 Child Passenger Safety Technician Courses

Course Location	Number of Courses	Estimated Number of Participants
Anchorage	3	40
Fairbanks	1	10
Juneau	1	10
Palmer/Wasilla	1	10
Soldotna	1	10
TOTAL	**7**	**80**

The statewide CPS Coordinator will also collect, analyze, and report car seat check data to ensure levels of service are being maintained, and identify common misuse problems and other critical information. The statewide CPS coordinator will also identify and publicize other opportunities (e.g., on-line, conferences) for certified technicians to obtain continuing education through Car Seats Alaska and www.cert.safekids.org. Additionally, the statewide CPS Co-Coordinator will help further expand CPS programs into hospitals that currently do not have any type of programs.

AHSO will continue to collaborate with law enforcement and safety advocates to educate children and teens through school and community-based initiatives about the importance of belt use in preventing injuries and fatalities in the event of a crash. According to NHTSA research, teens and young adults (21 to 29), have the lowest belt use rates of any age group on the road. Police will be encouraged to conduct seat belt patrols and checkpoints in and near high schools and other locations typically frequented by these two groups.

In addition, motor vehicle crashes are the second leading cause of serious injury to Alaskans aged 55 and over (Alaska Trauma Registry, 2016). According to the Centers for Disease Control and Prevention, the risk of being injured or killed in a motor vehicle crash increases with age. Alaska's Occupant Protection Program Assessment recommended outreach be made to drivers aged 55 and older. Older drivers are more likely to be killed or seriously injured when a crash does occur due to the greater fragility. Age also brings changes to vision, cognition, flexibility, and speed of reflexes. Concurrently, Alaska's Strategic Highway Safety Plan reports an increase of 51percent between 2015 and 2016 in serious injuries to older adult drivers and points out the need for greater efforts around this area.

Proper restraint, both seat belts and child restraints, also will be addressed through earned and paid media disseminated by AHSO and its law enforcement and injury prevention partners (the latter will be provided press release templates for use in promoting the lifesaving value of seat belts and child restraints). Occupant

protection messaging will be prominent during late May and early June to support the national Click It or Ticket mobilization, throughout the summer when many visitors travel to and around Alaska, during National Child Passenger Safety Week in September, and at other times during the year. Particular emphasis will be given to developing messages targeted to males, pick-up truck drivers and young adults, demographics identified by AHSO and NHTSA research as having low seat belt use rates.

AHSO also will provide funding for a contractor to conduct the statewide OPUS of seat belt use by front seat occupants riding in passenger vehicles. The survey will comply with the observation methodology adopted by NHTSA and include an observation of at least 25,000 motor vehicle occupants in boroughs accounting for 85 percent of the state's passenger vehicle crash-related fatalities.

Alaska utilizes data driven decision-making to select, assess, and monitor projects that in combination with the totality of our safety planning will lead toward safer roadways. To provide the maximum impact and likelihood for increasing restraint use, the AHSO provides leadership, training, and technical assistance to other state agencies, law enforcement agencies, and to local occupant protection projects. The AHSO conducts problem identification to identify the areas and populations that have the highest rate of unrestrained fatalities and lowest usage rates. Alaska's CPS program is comprehensive in its geographic coverage, reach to high-risk populations, engagement with safety partners and advocates who implement evidence-based countermeasures, and the funding support to ensure success. The AHSO uses input collected throughout the year from planning partners identified in in the Highway Safety Planning Process section and the *Countermeasures That Work (CTW): A Highway Safety Countermeasure Guide for State Highway Safety Offices*, Ninth Edition, 2017 in the selection of effective, evidence based countermeasure strategies for the FFY 2021 occupant protection program area. Whenever possible the most effective proven strategies, such as those with two stars or greater, are selected and implemented. By using these evidence-based selection strategies for occupant protection countermeasures, the likelihood of our strategies reaching our goals increases in reducing unrestrained fatalities.

The planned performance target is to reduce the number of unrestrained fatalities in all seating positions, which includes children in child restraints.

The misuse of child restraints has been a concern for many years. A number of programs have been implemented to provide parents and other caregivers with "hands-on" assistance with the installation and use of child restraints in an effort to combat widespread misuse. Child passenger safety (CPS) inspection stations are places or events where parents and caregivers can receive this assistance from certified CPS technicians.

One study found that inspection stations held at car dealerships, hospitals, retail outlets and other community locations positively changed parents' behavior and increased their knowledge over a 6-week follow-up period: children arriving at the second event were restrained more safely and more appropriately than they were at the first (Dukehart, Walker, Lococo, Decina, & Staplin, 2007).

Evidence of Effectiveness: CTW, Chapter 2: Sections 5.1, 6.1, 6.2, 7.1, and 7.2

The AHSO anticipates approximately $276,859.24 in 405b and $168,324.35 in 402 funds will be expended on the statewide Child Passenger Safety Program in FFY 2021.

Alaska's Occupant Protection Task Force (OPTF) has met quarterly since being established in 2013. The OPTF met in early 2019 to review progress on implementation of Alaska's Occupant Protection Strategic Plan. The strategies and action steps from the Occupant Protection Strategic Plan informed the decision to fund the following projects for FFY 2021.

Planned Activities/Projects Description

The following planned activities will support these countermeasures in FFY 2021:

- Occupant Protection HVE (OP-1)
- Community CPS (OP-2)
- OP/CPS Training (OP-4)
- Occupant Protection Evaluation (OP-5)
- Safe Communities Activities (SC-1)
- Public Education (PE-3)

Target: 1 and 2

Planned Activity: Occupant Protection HVE, OP-1

Project Title: Statewide Click It or Ticket Mobilization and State Blitzes

Project Number: 402 PT-21-06-FA (A)

Description: The AHSO will provide grants to AST and local law enforcement agencies to conduct seat belt enforcement activity in their jurisdictions. The AST, in collaboration with local law enforcement agencies (Anchorage, Dillingham, Fairbanks, Haines, Juneau, Kenai, Palmer and Soldotna Police Departments), will conduct high-visibility (overtime) enforcement during the Click It or Ticket mobilization and state blitzes through directed and saturation patrols, and seat belt informational checkpoints. Enforcement will focus on roadways that produce low seat belt use rates, as determined by crash data and the Alaska's annual Observational Survey of Seatbelt Use Occupant Protection Use Survey. Participating agencies also will conduct earned media activities and participate in education events.

Budget/Funding Source: $200,000 Section 402 **Eligible Use of Funds:** NHTSA 402PT (FAST)

Match: $0 **Local Benefit:** $0

Evidence of Effectiveness: CTW, Chapter 2, Section 2.1

Target: 1

Planned Activity: Community CPS, OP-2

Project Title: Safe Kids Kenai Peninsula CPS Program

Project Number: 405b M1CPS-21-04-FA (A)

Description: Safe Kids (SK) Kenai Peninsula will support the CPS component of the state's Occupant Protection Strategic Plan. SK Kenai will coordinate, train, support certification, and mentor CPS technicians in the region, host 19 CPS events (e.g., car seat check events, inspections, seat distribution), support existing and develop additional child safety seat fitting stations, provide CPS education at community events,

implement earned media opportunities, and initiate a CPS media campaign through the Central Peninsula Hospital to educate the public.

Grantee: Kenai Peninsula Hospital

Budget/Funding Source: $28,749.24 Section 405b

Eligible Use of Funds: 405b High Child Restraint (FAST)

Match: $8,687.32

Local Benefit: $0

Evidence of Effectiveness: CTW, Chapter 2, Section 7.1

Target: 1

Planned Activity: Community CPS, OP-2

Project Title: Fairbanks Safe Rider Program

Project Number: 405b M1CPS-21-04-FA (B)

Description: In support of the CPS component of the state's Occupant Protection Strategic Plan, the Fairbanks Safe Rider Program will coordinate, train, support certification, and mentor CPS technicians in the region, host CPS events (e.g., car seat check events, inspections, seat distribution), support existing and develop additional child safety seat fitting stations, provide CPS education at community events, and implement earned media opportunities to educate the public. Specific goals are to conduct 7 CPS events, 20 CSP community educational events, provide CPS education to 927 new parents/ caregivers, conduct 88 car seat fittings through hospital rounds and fitting stations, and conduct 286 car seat checks. The program's CPS Technician will team with local law enforcement and participate in Click It or Ticket mobilization by providing assistance to motorists with improperly or unrestrained children.

Grantee: Fairbanks Memorial Hospital

Budget/Funding Source: $112,138 Section 405b

Eligible Use of Funds: 405b High Child Restraint (FAST)

Match: $79,023

Local Benefit: $0

Evidence of Effectiveness: CTW, Chapter 2, Sections 6.2 and 7.2

Target: 1

Planned Activity: Community CPS, OP-2

Project Title: Mat-Su Child Passenger Safety Program

Project Number: 405b M1CPS-21-04-FA(C)

Description: In support of the CPS component of the state's Occupant Protection Strategic Plan, the Mat-Su Child Passenger Safety Program will coordinate and mentor CPS technicians in the region, conduct community car seat safety checks at least once a month, create and distribute a quarterly newsletter, host and partner with schools and other agencies on CPS events (e.g., car seat check events, inspections, seat distribution),

provide CPS education to parents and family members at the Mat-Su Medical Center Birthing Center and community events, reach out to and track foster parents attending seat check events, and implement earned media opportunities to educate the public.

Grantee: Mat-Su Services for Children & Adults

Budget/Funding Source: $55,972 Section 405b

Eligible Use of Funds: 405b High Child Restraint (FAST)

Match: $20,899

Local Benefit: $0

Evidence of Effectiveness: CTW, Chapter 2, Sections 6.2 and 7.2

Target: 1

Planned Activity: Community CPS, OP-2

Project Title: Statewide CPS Coordinator and Co-Coordinator

Project Number: 405b M1CPS-21-04-FA-(D) and (E)

Description: This project will support activities of the statewide CPS Coordinator and Co-Coordinator who will function as an extension of the AHSO. The Coordinators serve as the point of contact for the CPS community and activities in the state. They maintain the CPS databases (e.g., technician, instructor, training, and child restraint inspection station); schedule training and monitor recertification and distribution of technicians and instructors; publicize a calendar of statewide training, activities, and injury prevention programs; collect and analyze car seat check data; and ensure the CPS content on the AHSO website is accurate and up-to-date. They also help plan and implement a statewide event to support the National CPS Awareness Week and collaborate with the AHSO and law enforcement to ensure technicians are invited to participate in enforcement mobilizations such as Click It Or Ticket.

Grantee: AIPC, DBA: Center for Safe Alaskans and Fairbanks Memorial Hospital

Budget/Funding Source: $40,000(each) Section 405b

Eligible Use of Funds: 405b High Community CPS Services (FAST)

Match: $0

Local Benefit: $0

Evidence of Effectiveness: CTW, Chapter 2, Sections 6.2 and 7.2

Target: 1 and 2

Planned Activity: Public Education, PE-3

Project Title: Educational Traffic Safety Media Buys (occupant protection)

Project Numbers: 402 PM-21-25-FA (B)

Description: This project funds the media buys on behalf of the AHSO to assist in fulfillment of its goals for the HSP and SHSP to improve occupant protection in the state. Effective, high-visibility communications and outreach are an essential part of successful seat belt law high-visibility enforcement programs (Solomon et al.,

2003). Paid advertising can be a critical part of the media strategy. Paid advertising brings with it the ability to control message content, timing, placement, and repetition. Funding will also help to support the national Click It or Ticket campaign.

Grantee: Media Agency

Paid Media: $200,000, Section 402 **Eligible Use of Funds:** NHTSA 402 PM (FAST)

Match: $0 **Local Benefit:** $200,000

Evidence of Effectiveness: CTW, Chapter 2, Section 2 and Section 3.1

Target: 2

Planned Activity: Occupant Protection Evaluation, OP-2

P**roject Title:** Occupant Protection Use Survey (OPUS)

Project Number: 405b M1CPS-21-04-FA (F)

Description: The state is required to evaluate the impact of its programs aimed at increasing seat belt use. Alaska's seat belt use observational survey was redesigned in FFY 2017 and approved by NHTSA. The design allows the capture of demographic data to assist in targeting the occupant protection programs and measuring performance. The survey will be completed two times during the year to evaluate progress and to report a statewide use rate. A complete survey report will be generated. The survey cost includes collection, entry, and analysis and report writing.

Grantee: AIPC, DBA: Center for Safe Alaskans

Budget/Funding Source: $40,000 Section 405b **Eligible Use of Funds:** 405b FAST

Match: $0 **Local Benefit:** $0

Evidence of Effectiveness: N/A

Target: 1

Planned Activity: Safe Communities Activities, SC-1

Project Title: Safe Roads Alaska (CarFit)

Project Number: 402 SA-21-19-FA(C)

Description: This project will fund training of a second CarFit Event Coordinator and three new CarFit event technicians and/or volunteers; ten CarFit check events with three events to be held outside the Anchorage municipality (expected to be in the Matanuska-Susitna Borough and Kenai Peninsula); 70 CarFit checks in Anchorage, Matanuska-Susitna Borough, including in the Kenai Peninsula through CarFit events and at Safe Alaskans' fitting station; and four educational presentations to professionals or groups of older adults in Anchorage, Matanuska-Susitna Borough and/or Kenai Peninsula about older adults' driving concerns. Information about each CarFit check will be collected and used to track the number of seniors assisted as well as motor vehicle changes recommended and changes actually made. In addition, pre- and post-evaluations of all participants will be conducted to measure change in knowledge and behaviors related to car safety.

Grantee: AIPC, DBA: Center for Safe Alaskans

Budget/Funding Source: $52,829.58 Section 402

Eligible Use of Funds: NHTSA 402 SA (FAST)

Match: $5,300

Local Benefit: $52,829.58

Evidence of Effectiveness: CTW, 6.5; Chapter 2, Section 3.2; Section 3.1; Chapter 7, Section 1

Target: 1

Planned Activity: Safe Communities Activities, SC-1

Project Title: FFY 2021 Alaska Child Passenger Safety (CPS)

Project Number: 402 SA-20-19-FA (B)

Description: The Center for Safe Alaskan's CPS program is evidence based and focused on education programs for target low seat belt (car seat and booster seat) users. This project will fund distribution of 175 car and booster seats and CPS education at fitting station and events to families in financial need; 400 car seat checks at full time permanent inspection / fitting station and events; 12 Public CPS checkup events; 15 CPS educational presentations at health and safety fairs events; and one CPS Technician certification training.

Grantee: AIPC, DBA: Center for Safe Alaskans

Budget/Funding Source: $168,324.35 Section 402

Eligible Use of Funds: NHTSA 402 SA (FAST)

Match: $17,000

Local Benefit: $168,324.35

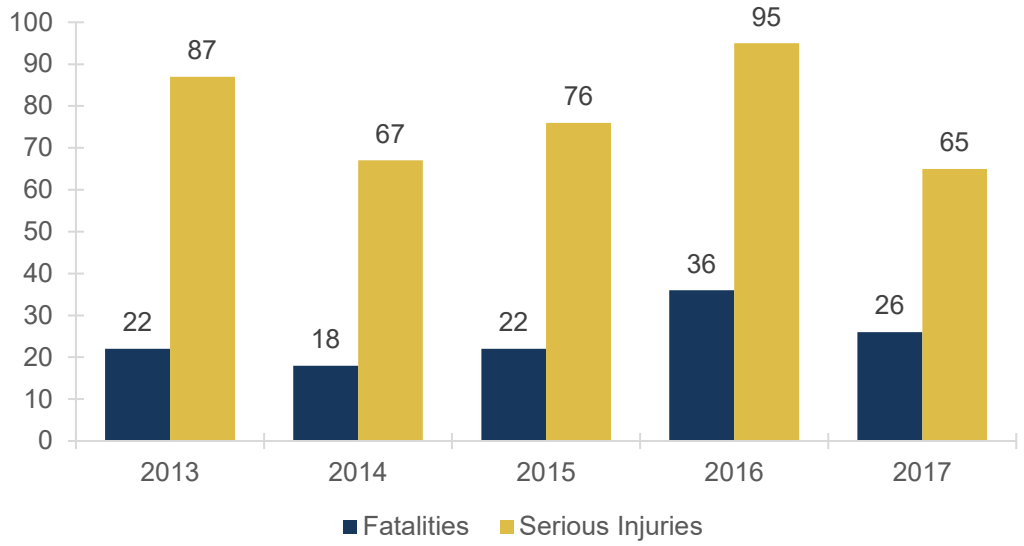
Evidence of Effectiveness: CTW, Chapter 2, Section 3.2; Section 3.1

3.5 Speeding Program Area

Problem Identification

Speeding consistently ranks as one of the top contributing factors in motor vehicle crashes in Alaska and spiked in 2018 with 42 fatalities (Table 2.2), which accounted for more than half of all fatalities. By 2018 the five year moving average of speed-related crash fatalities had increased up to 29 from 23 in 2013. Of the 124 speeding related fatalities from 2013-2017, 30 percent occurred in 2016 (Figure 3.11).

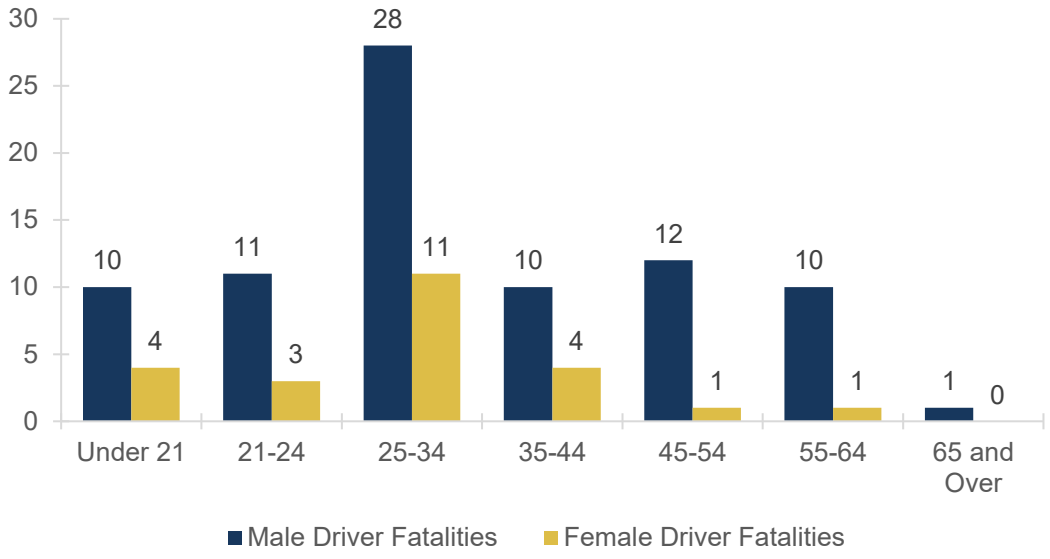
Figure 3.11 Speeding-Related Fatalities and Serious Injuries



Source/Date Accessed: Alaska CARE, July 2020.
Note: Fatality and serious injury data are 2013 to 2017.

Male motorists 25 to 34 years of age were more likely to speed and die on Alaska's roadways than any other age group, accounting for 26 percent of all speed-related fatalities between 2013 and 2017 (Figure 3.12). Drivers 25 to 34 years of age also accounted for the greatest number of speeding fatalities among all female drivers. The risk of being involved in a speed-related crash declines with age in Alaska and is lowest for the oldest and most experienced drivers.

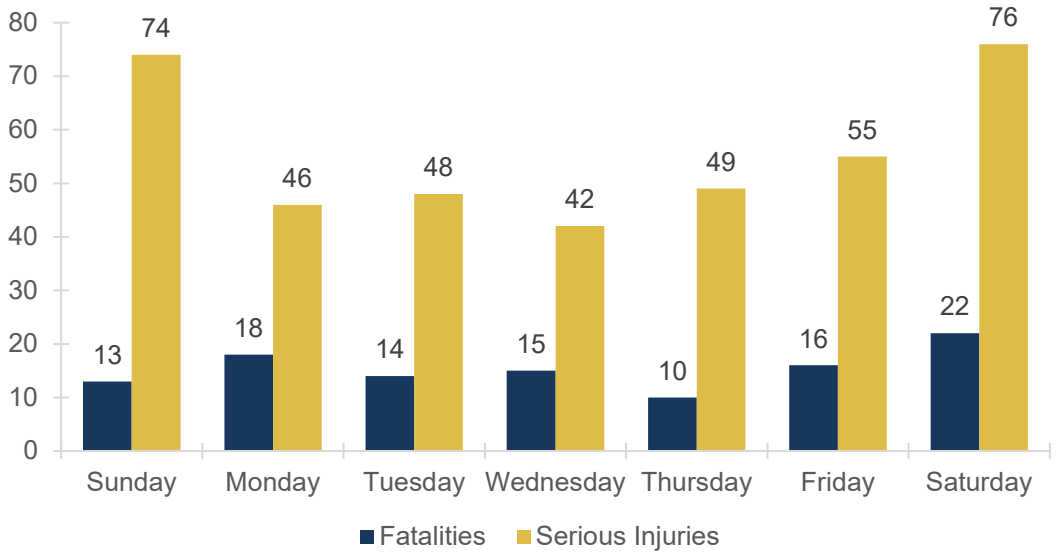
Figure 3.12 Speeding-Related Fatalities by Driver Gender and Age Group



Source/Date Accessed: Alaska CARE, July 2020.
Note: Fatality and serious injury data are 2013 to 2017.

Motorists were generally more likely to be involved in speeding-related fatal and serious injury crashes on the weekend than weekdays. Saturdays saw the most speeding-related serious injuries (76) and the most fatalities (22), as shown in Figure 3.13.

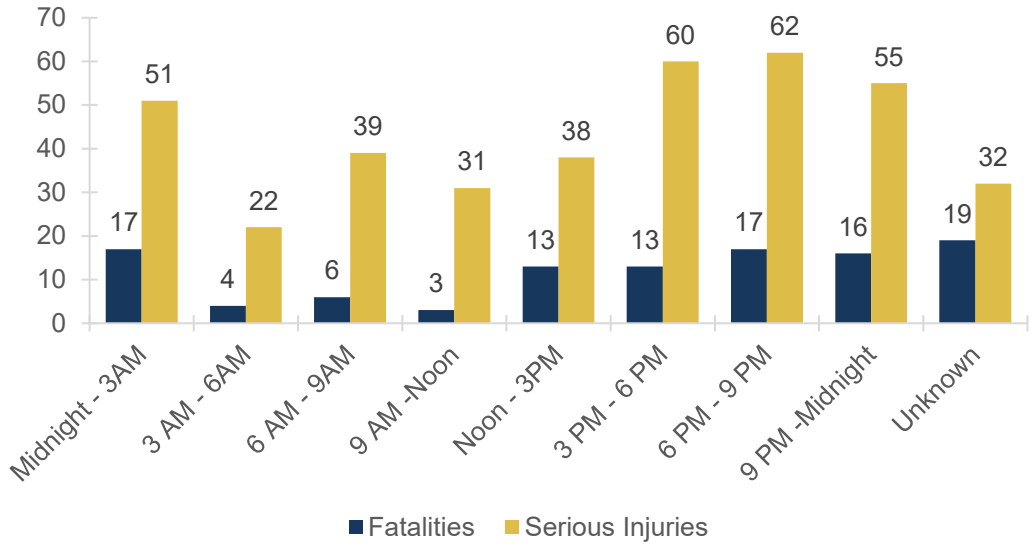
Figure 3.13 Speeding-Related Fatalities and Serious Injuries by Day of Week



Source/Date Accessed: Alaska CARE, July 2020.
Note: Fatality and serious injury data are 2013 to 2017.

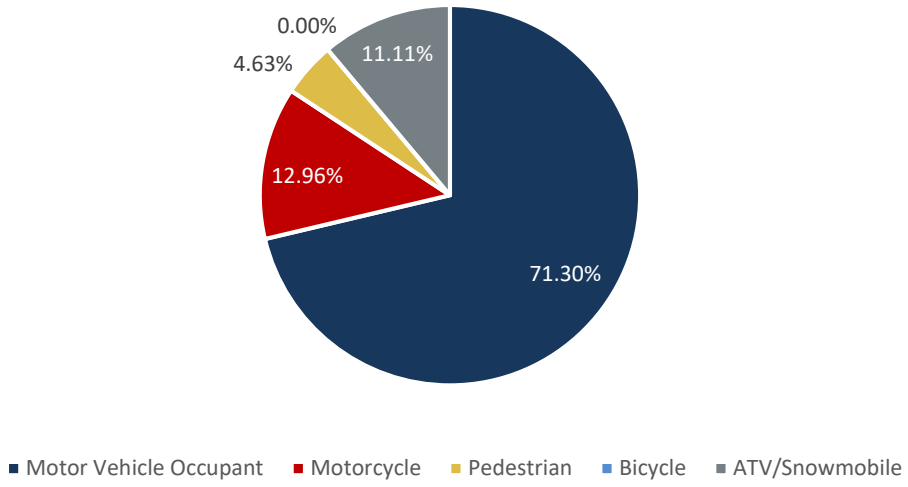
Between 2013 and 2017, speeding-related fatalities and serious injuries occurred most frequently between 3 p.m. and 3 a.m. (Figure 3.14).

Figure 3.14 Speeding-Related Fatalities and Serious Injuries by Time of Day



Source/Date Accessed: Alaska CARE, July 2020.
Note: Fatality and serious injury data are 2013 to 2017.

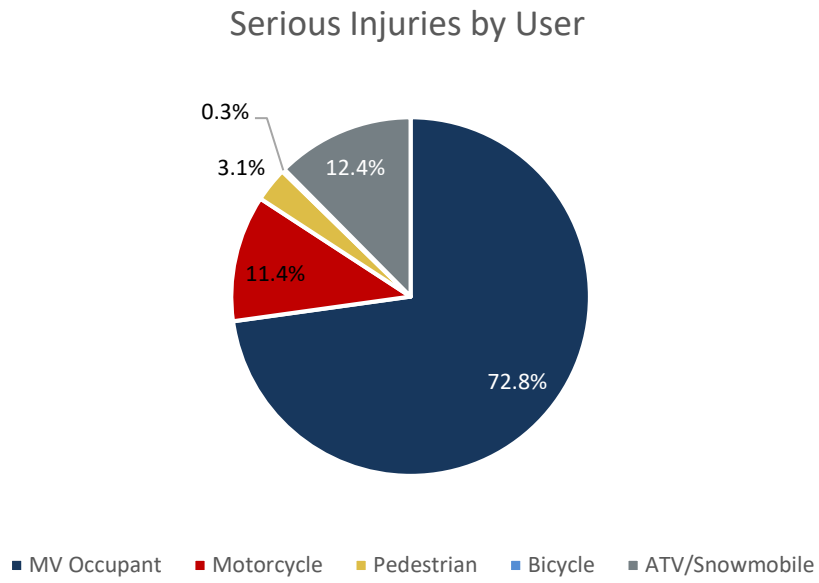
Figure 3.15 Percent of Speeding-Related Fatalities by Roadway User



Source/Date Accessed: Alaska CARE, July 2020.
Note: Fatality and serious injury data are 2013 to 2017.

As Figure 3.15, shows, from 2013 to 2017, speeding related fatalities among all road users were greatest for motor vehicle occupants (71.3 percent), motorcyclists (12.96 percent), ATV/snowmobile riders (11.11 percent), and pedestrians (4.63 percent). Motor vehicles also represented the greatest share of speeding-related serious injuries (Figure 3.16) sustained by a road user group at 73 percent, followed by motorcyclists (11.4 percent) and ATV/snowmobile operators (12.4 percent) from 2013-2017. Bicycles were only reported to be involved in one speeding-related serious injury over this time.

Figure 3.16 Percent of Speeding-Related Serious Injuries by Roadway User



Source/Date Accessed: Alaska CARE, July 2020.
Note: Fatality and serious injury data are 2013 to 2017.

Performance Target

1. Maintain speeding-related fatalities at 29 (2014-2018 average) through the 2017-2021 average by December 31, 2021.

Countermeasure Strategies

Sustained Speed Enforcement

AHSO, in partnership with the Alaska State Troopers and local law enforcement agencies, remains committed to addressing unsafe speed on the state's roadways through enforcement and education. Particular emphasis will continue to be given to monitoring driving speeds and enforcing posted speed limits in identified problem areas and in Alaska's Safety Corridors, which have a higher incidence of crashes. Furthermore, programs to address unbelted occupants and impaired drivers may have a correlation in affecting speeding-related fatalities. Currently, the Seward, Parks, Knik/Goose Bay Road, and Sterling Highways are the four designated Safety Corridors in Alaska. The AHSO will also once again continue focusing on speed reduction on the Glenn Highway in partnership with the Anchorage Police Department.

Proven countermeasures, including the use of high-visibility enforcement, Data-Driven Approaches to Crime and Traffic Safety (DDACTS), and statewide education, including paid and earned media, and the use of radars by law enforcement and mobile radar display units will be deployed to address this problem. Our media contractor will give particular emphasis to developing data driven speed-related messaging that resonates with male, female, novice, motorcyclists and other identified high-risk populations.

As mentioned in the Highway Safety Planning Process section, Alaska utilizes data driven decision-making to select, assess, and monitor projects that in combination with the totality of our safety planning will lead toward safer roadways. Alaska's statewide speed-based program includes prevention strategies focused on people who are most likely to take risks on the road speeding. The AHSO uses the *Countermeasures That Work (CTW): A Highway Safety Countermeasure Guide for State Highway Safety Offices*, Ninth Edition, 2017 in the selection of effective, evidence-based countermeasure strategies for the FFY 2021 speed program area. Whenever possible, the most effective proven strategies, such as those with two stars or greater, are selected and implemented. By using these evidence-based selection strategies for speeding countermeasures, the likelihood of our strategies reaching our performance target increases. Effective traffic safety laws currently in place complement and support the countermeasures which will lead to fewer speed related crashes. The AHSO will continue to assess, seek out best practices, and fund eligible speed related projects which support the FFY 2021 HSP performance target and strategies, including those that provide education and outreach.

The Alaska State Troopers and Anchorage Police Department will conduct speed enforcement with the goal of decreasing the number of speed related crashes. Enforcement of the posted speeding limit will occur at locations based on data-driven locations where speed crashes have occurred and will consist of high-visibility enforcement operations to address specific problem areas, times, and events with a high incidence of speeding and aggressive driving behavior.

Speed enforcement campaigns have been used to deter speeding and aggressive driving through both specific and general deterrence. In the high visibility enforcement model, law enforcement targets selected high-crash or high-violation geographical areas using either expanded regular patrols or designated aggressive driving patrols. This model is based on the same principles as high visibility seat belt and alcohol-impaired-driving enforcement: to convince the public that speeding and aggressive driving actions are likely to be detected and that offenders will be arrested. Officers focus on drivers who commit common aggressive driving actions such

as speeding, following too closely, and running red lights. Enforcement is publicized widely. The strategy is very similar to saturation patrols directed at alcohol-impaired drivers.

Laser speed measuring equipment can provide more accurate and reliable evidence of speeding (NHTSA, 2001a). Unstaffed speed display devices, also known as speed trailers, can show drivers that they are speeding and may encourage some drivers to slow down, but effects may last only as long as the devices are in place (Donnell & Cruzado, 2008). They may also suggest to drivers that speeds are being monitored or enforcement is nearby. Signs that provided either an implication that speeds were being monitored or a social norms message (average speed at the site; your speed) were effective at reducing speeds in a 50 km/h zone although not as much as in earlier studies (Wrapson, Harre, & Murrell, 2006). Other studies have shown that speed trailers or portable changeable message signs, which may include speed feedback plus other messages such as “Slow Down Now” can be effective in reducing speeds in work zones (Brewer, Pesti, & Schneider, 2006; Mattox, Sarasua, Ogle, Eckenrode, & Dunning, 2007) and school zones (Lee, Lee, Choi, & Oh, 2006).

Evidence of Effectiveness: CTW, Chapter 3, Sections 2.2, 2.3 and 4.1

The AHSO anticipates spending approximately $444,000 in 402 funds on speed reduction activities in FFY 2021.

Planned Activities/Projects Description

The following planned activity will support this countermeasure in FFY 2021:

- Speed Enforcement (SP-1)

Target: 1

Planned Activity: Speed Enforcement, SP-1

Project Title: AST Speeding Fatality Reduction Effort

Project Number: 402 PT-21-06-FA (B)

Description: The Alaska State Troopers will conduct speeding enforcement in FFY 2021 with the goal of decreasing the number of speed related crashes and the percentage of motorists who travel more than five miles per hour over the posted speed limits by 12 percent. Enforcement of the posted speed limit will occur at locations based on data-driven locations where speed-related crashes have occurred and will consist of high-visibility enforcement operations to address specific problem areas, times, and events with a high incidence of speeding and aggressive driving behavior.

Grantee: Alaska State Troopers

Budget/Funding Source: $444,000 Section 402

Eligible Use of Funds: NHTSA 402 PT Speed Enforcement (FAST)

Match: $200,958

Local Benefit: $0

Evidence of Effectiveness: CTW, Chapter 3, Sections 2.2 and 4.1

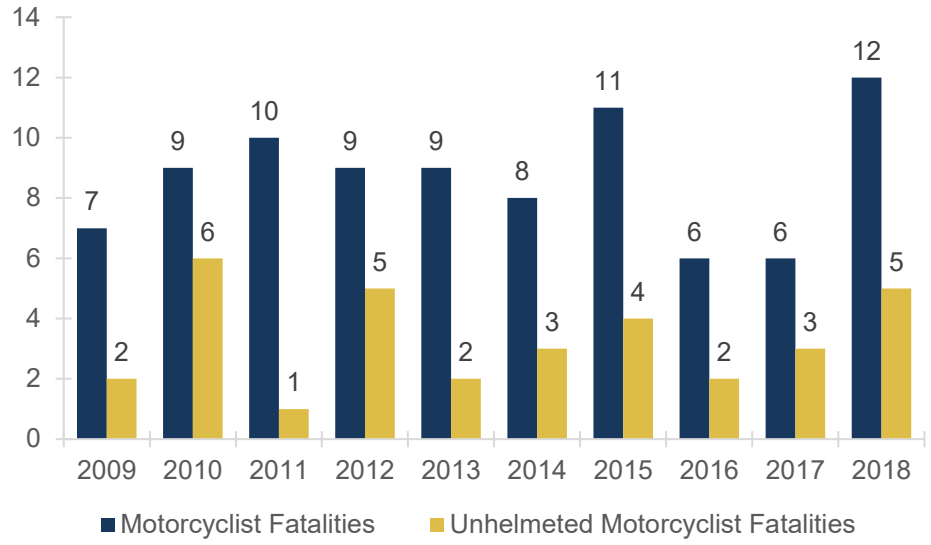
3.6 Motorcycle Safety Program Area

Problem Identification

In 2018, Alaska's Division of Motor Vehicles registered 31,542 motorcycles. Alaskan motorcyclists (operators and their passengers), and the many visiting riders who come to experience the "Last Frontier", are vulnerable on the state's roadways. Between 2013 and 2018, there were 52 motorcycle fatalities, an average of over eight fatalities per year.

While motorcycle helmets are not required in Alaska, their effectiveness in protecting riders in the event of a crash cannot be overstated. During this time period, 19 (37 percent) of the fatally injured riders were not wearing helmets. In some years, that percentage has been as high as 42 percent (five out of 12 riders in 2018) (Figure 3.17).

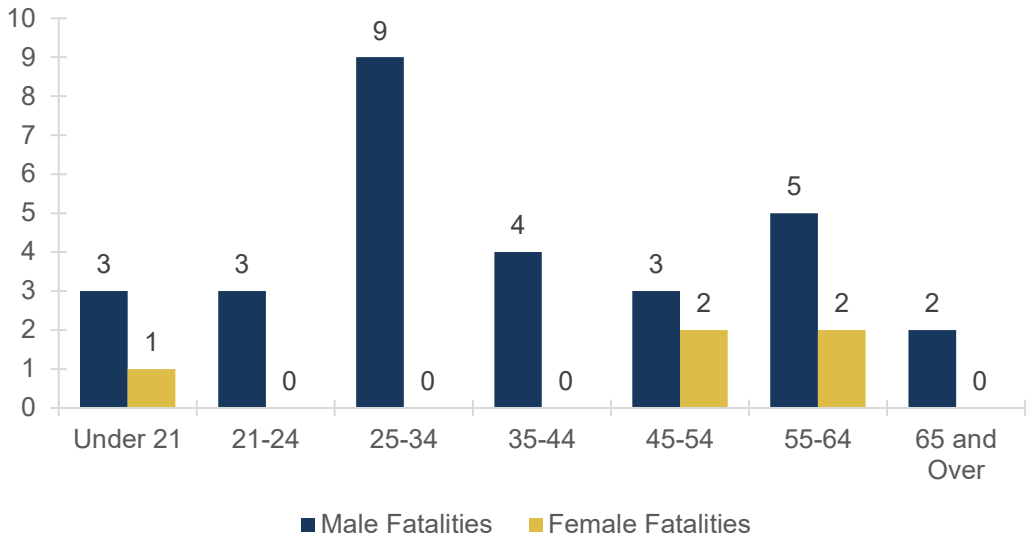
Figure 3.17 Motorcyclist Fatalities



Source/Date Accessed: FARS, June 2020.

Motorcyclist fatalities for males far exceeded female motorcyclist fatalities across all age groups. From 2013 to 2017, where operator's gender is known, females account for just 15 percent of motorcyclist fatalities. During this same time period males, 25 to 54 years of age, accounted for 48 percent of all motorcyclist fatalities, as shown in Figure 3.18.

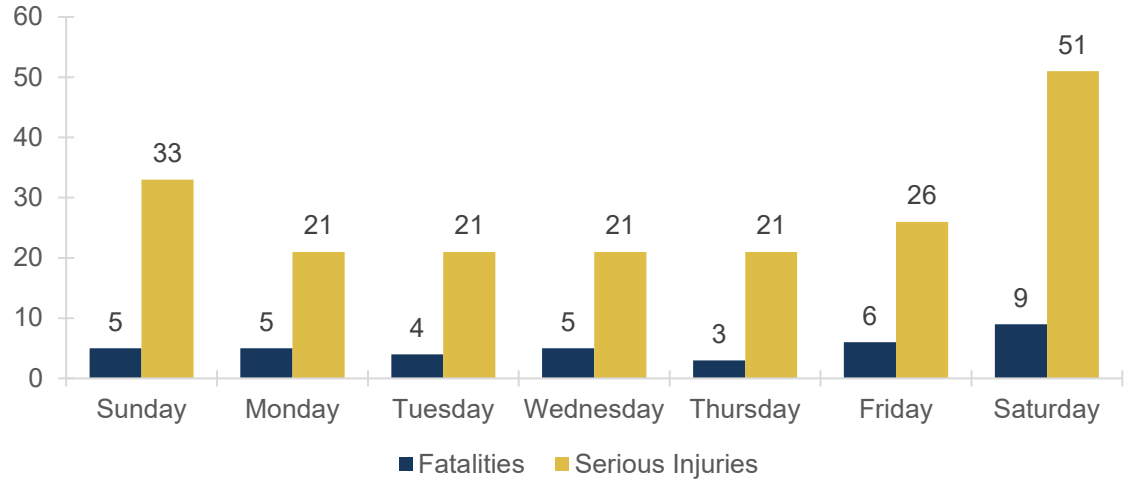
Figure 3.18 Motorcyclist Fatalities by Gender and Age



Source/Date Accessed: Alaska CARE, July 2020.
Note: Fatality data are 2013 to 2017.

Motorcyclist fatalities and serious injuries are most prevalent on weekends from 2013 to 2017, with 54 percent of motorcyclist fatalities occurring on Friday, Saturday, or Sundays. Motorcyclist serious injuries increase over the weekend as well, with most seen on Saturday (51). However, most days of the week still show a significant number of motorcyclist injuries as shown in Figure 3.19.

Figure 3.19 Motorcyclist Fatalities and Serious Injuries by Day of Week

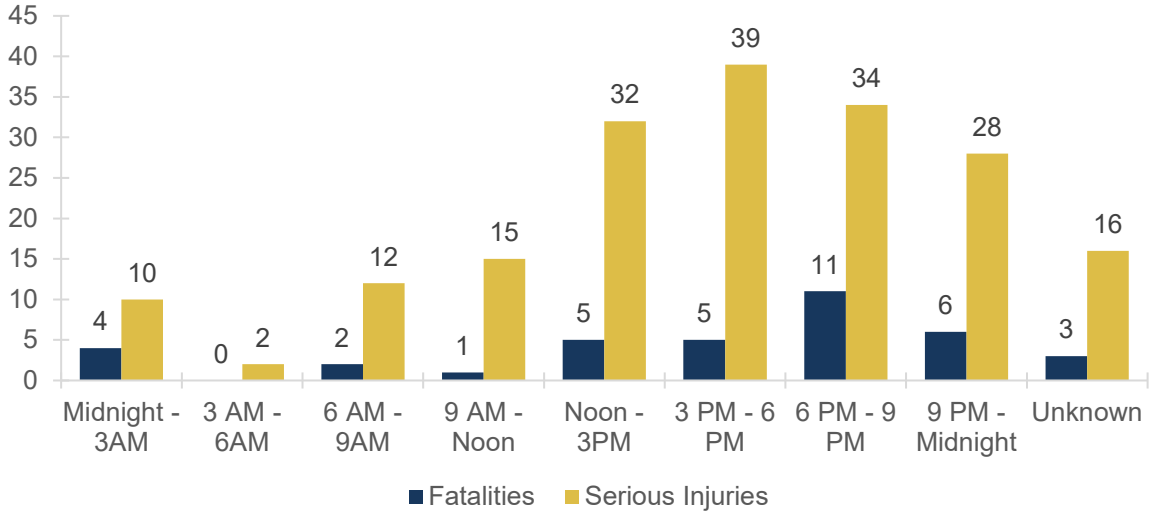


Source/Date Accessed: Alaska CARE, July 2020.
Note: Fatality and injury data are 2013 to 2017.

More motorcyclists (30 percent) are killed between 6 p.m. and 9 p.m. than any other period, as shown in Figure 3.20. The greatest number of serious injuries (21 percent) occurred between 3 p.m. and 6 p.m., followed

by 6 p.m. to 9 p.m. (18 percent). Outreach promoting motorcyclist visibility and motorists sharing the road as well as the dangers of riding impaired are important for addressing crashes during these times.

Figure 3.20 Motorcyclist Fatalities and Serious Injuries by Time of Day



Source/Date Accessed: Alaska CARE, July 2020.
Note: Fatality and injury data are 2013 to 2017.

Performance Targets

1. To decrease motorcyclist fatalities by 11 percent from 9 (2014-2018 average) to 8 (2017-2021 average) by December 31, 2021.

2. To decrease unhelmeted motorcyclist fatalities by 33 percent from 3 (2014-2018 average) to 2 (2017-2021 average) by December 31, 2021.

Countermeasure Strategies

Alaska's SHSP includes a Special Users Emphasis Area which addresses motorcycle, pedestrian, and bicycle safety. The AHSO is a member of the Emphasis Area's Motorcycle Subcommittee and will consider funding various strategies and action steps in the Subcommittee's action plan.

Communication Campaign

The AHSO will also utilize the expertise of our media contractor to develop targeted messaging focusing on motorist awareness messages during Motorcyclist Awareness Month in May through paid radio messaging which is a proven countermeasure. The goal of this campaign is to make drivers aware of the presence of motorcyclists on the roadways during the summer months. The message will be aired frequently in May to reach the audience during Motorcycle Awareness Month. May is also the month where motorcyclists tend to start riding in Alaska as the winter snow and ice start to disappear. Demographics of drivers and motorcyclists involved in crashes are reviewed to determine the top stations in each market listened to by the key demographic audience(s) to air this message. The goal is that the target audience will hear the message on

average 12 times throughout the campaign which will air through July 31st. To change a behavior, a message should be heard at least six times.

Motorcyclists are identified as a secondary target audience for the paid media buys that will support the high-visibility enforcement associated with the Drive Sober or Get Pulled Over mobilization. AHSO will incorporate the Ride Sober message into the impaired driving campaigns and target media outlets that are popular with motorcyclists to deliver the message. Furthermore, as noted in the impaired driving section of the HSP, the impaired driving countermeasures planned for FFY 2021 will also prove beneficial in addressing impaired motorcyclists. Similarly, programs to address speeding may have a correlation in affecting motorcycle fatalities, including the enforcement efforts on Alaska's four designated Safety Corridors.

As mentioned in the Highway Safety Planning Process section, Alaska utilizes data driven decision-making to select, assess, and monitor projects that in combination with the totality of our safety planning will lead toward safer roadways. That approach is especially true for the geographic and demographic placement of our paid media campaigns to maximize their impact and reach the right audience(s). The descriptions and analysis of our traffic safety problems are detailed in each program area section of this Plan. Informed by our analysis, AHSO's FFY 2021 communications plan will consist of paid media focused heavily on impaired driving and occupant protection, with motorcycle safety and some local ATV, as well as distracted driving messaging which can also benefit motorcyclists. The media messaging will be accompanied by AHSO, subgrantee and partner earned media to help maximize impact of the messaging, support enforcement activities, and inform the public about Alaska's laws.

In multi-vehicle motorcycle crashes, the other vehicle driver is frequently cited for having violated the motorcyclist's right-of-way (Clarke et al., 2007; Elliott et al., 2007; Raborn et al., 2008, Strategy F3; NHTSA, 2000). Motorcycles and motorcyclists are smaller visual targets than cars or trucks, resulting in low conspicuity (see Chapter 5, Section 4.1). Also, drivers may not expect to see motorcycles on the road (Raborn et al., 2008, Strategy F3; NHTSA, 2000). Clarke et al. (2007) reported that even when motorcyclists were using headlights and high-conspicuity clothing drivers sometimes failed to notice them.

Several States have conducted communications and outreach campaigns to increase motorists' awareness of motorcyclists. Typical themes are "Share the Road" or "Watch for Motorcyclists." Some States build campaigns around "Motorcycle Awareness Month," often in May, early in the summer riding season. Many motorcyclist organizations, including the Motorcycle Safety Foundation (MSF), State Motorcycle Safety Administrator (SMSA), the Gold Wing Road Riders Association (GWRRA), and State and local rider groups, have driver awareness material available. See NHTSA (2006a, Section 5) and Raborn et al. (2008, Strategy F3) for links and references.

Evidence of Effectiveness: CTW, Chapter 5: Section 4.2

The AHSO estimates that approximately $19,000 in 402 funds will be spent on motorcycle safety related paid media in FFY 2021.

Planned Activities/Projects Description

The following planned activity will support this countermeasure in FFY 2021:

- Public Education (PE-3)

Program costs to support motorcyclist safety include Section 402 funds for paid media buys and are also listed in Section 3.12 – Paid Media.

Target: 1

Planned Activity Identifier: Public Education, PE-3

Project Title: Educational Traffic Safety Media Buys (Motorcycle)

Project Numbers: 402 PM-21-25-FA (D)

Description: This project funds the media buys on behalf of the AHSO to assist in fulfillment of its goals for the HSP and SHSP in reducing motorcycle crashes.

Grantee: Media Agency

Paid Media: $19,000, Section 402

Eligible Use of Funds: NHTSA 402 PM (FAST)

Match: $0

Local Benefit: $19,000

Evidence of Effectiveness: CTW, Chapter 5, Section 4.2

3.7 Pedestrian and Bicycle Safety Program Area

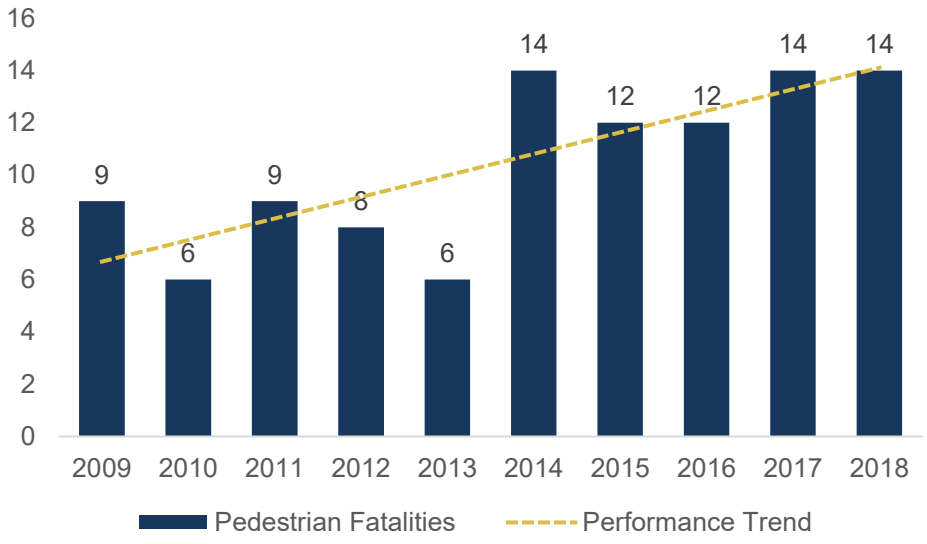
Problem Identification

Pedestrians and bicyclists, like motorcyclists, are more vulnerable than other roadway users in crashes. A review of reported pedestrian crashes in Alaska found that pedestrian fatalities have risen in recent years and also that the pedestrians themselves were often times impaired. Between the smaller number of fatal crashes and lack of detail on the crash reports involving pedestrians it is difficult to determine causation, however, jay-walking and crossing poorly lighted streets have been considered contributing factors along with impairment.

In 2018, crashes involving pedestrians and bicyclists accounted for 18 percent of all fatal crashes in Alaska. Pedestrian-related crashes reached a high of 14 in 2014 and again in 2017 and 2018.

The trend for pedestrian fatalities has been volatile since 2009, as shown in Figure 3.21. The fewest fatalities (six) occurred in 2010 and 2013, but recent trends in 2014 through 2018 (13 fatalities per year on average) affirm the need for continued vigilance in addressing pedestrian safety.

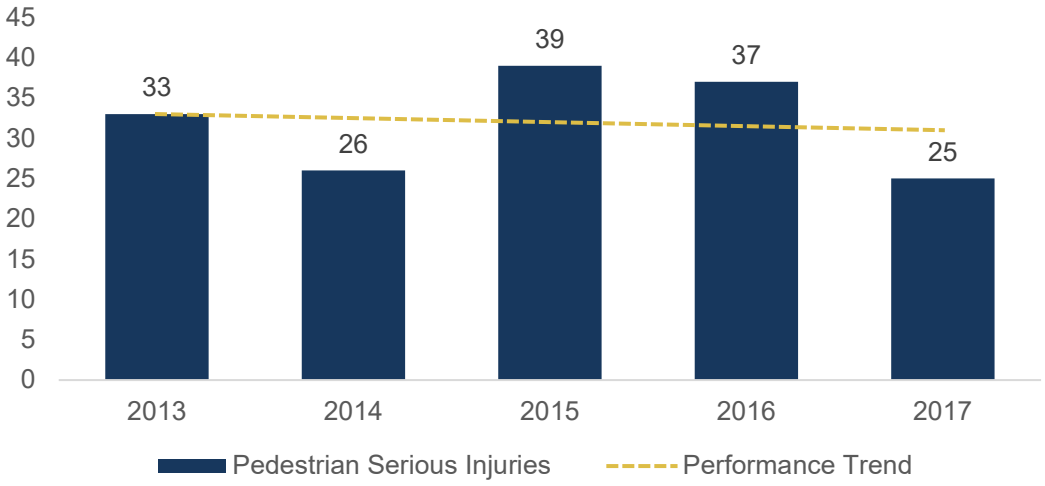
Figure 3.21 Pedestrian Fatalities by Year



Source/Date Accessed: FARS, July 2020.

Serious injuries involving pedestrians has been inconsistent in recent years with a peak of 39 in 2015 and a low of 25 in 2017 as shown in Figure 3.22. The general trend has been slightly downward, with serious injuries between 2013 and 2017, going from 33 in 2013 to 25 in 2017.

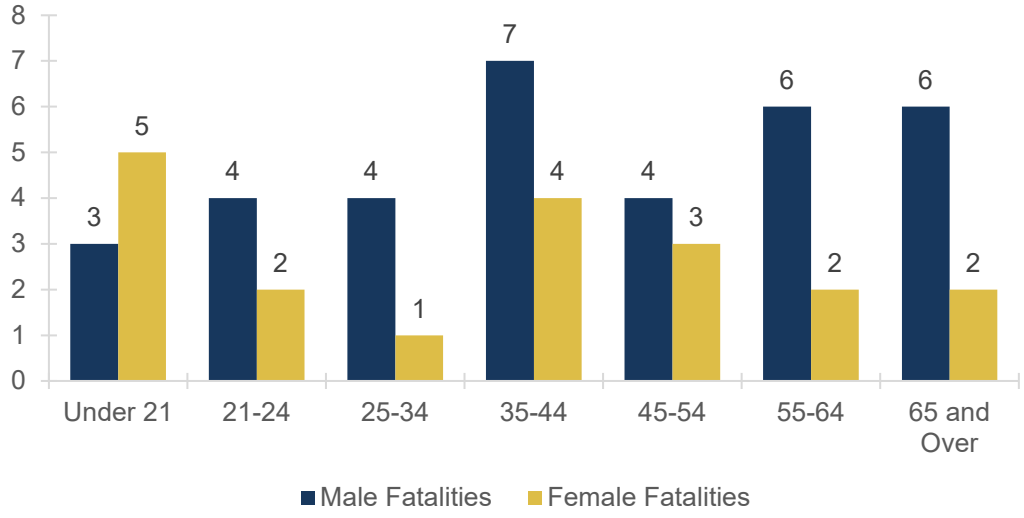
Figure 3.22 Pedestrian Serious Injuries by Year



Source/Date Accessed: Alaska CARE, July 2020.

Pedestrians age 45 years and older accounted for 23 fatalities (40 percent) of the 57 fatalities that occurred between 2013 and 2017, (Figure 3.23). The 20-year-old and under age group were 14 percent of total fatalities. While outreach and education efforts for pedestrians typically target children and seniors, who historically are overrepresented in pedestrian crashes, it is important to note that all age groups are at risk.

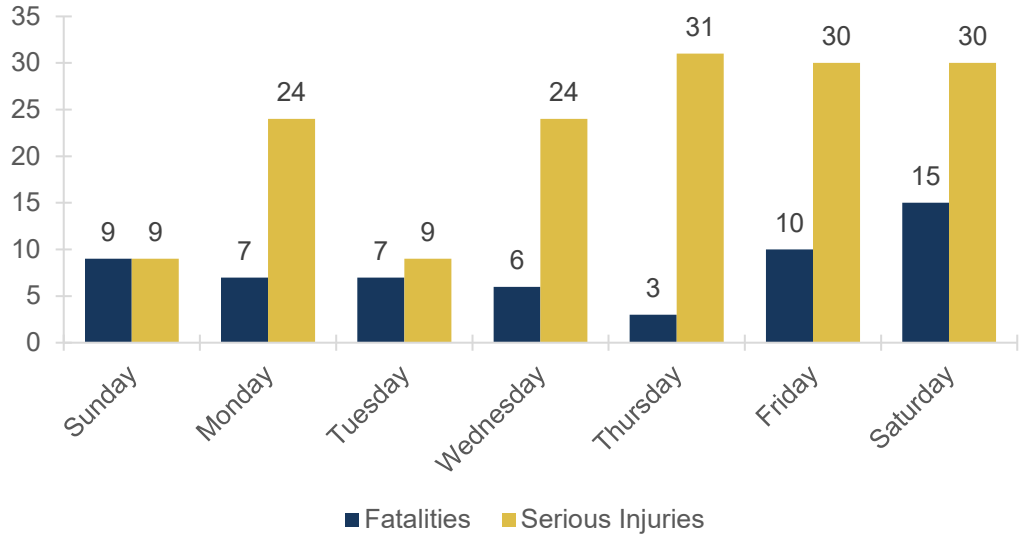
Figure 3.23 Pedestrian Fatalities by Age and Gender



Source/Date Accessed: Alaska CARE, July 2020.
Note: Fatality and injury data are 2013 to 2017.

From 2013 to 2017, pedestrian fatalities were highest on Saturday (15), followed by Friday (10). Serious injuries peaked at 31 on Thursday, with 30 each on Saturday and Sunday as shown in Figure 3.24.

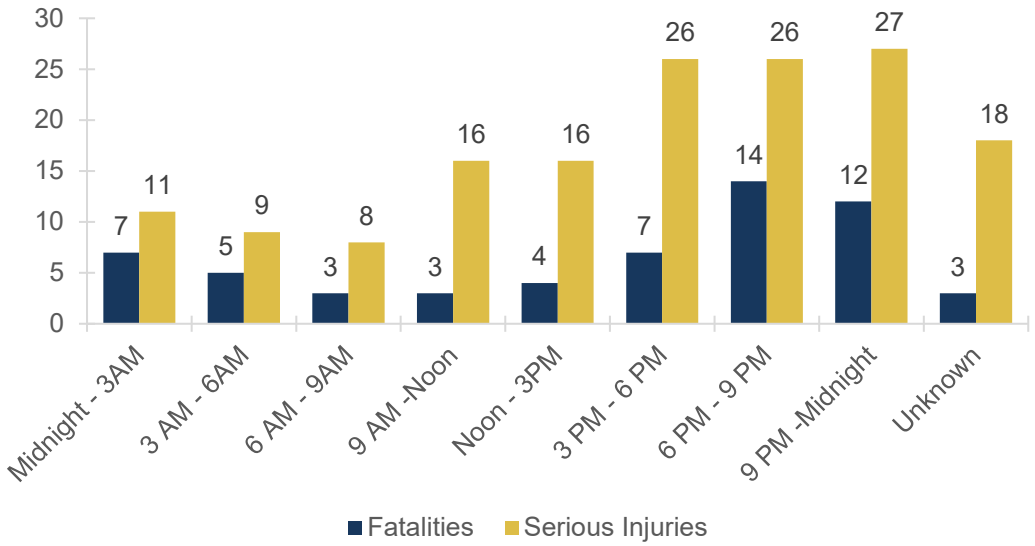
Figure 3.24 Pedestrian Fatalities and Serious Injuries by Day of Week



Source/Date Accessed: Alaska CARE, July 2020.
Note: Fatality and injury data are 2013 to 2017.

From 2013 to 2017, the time of day with the greatest number of pedestrian fatalities was 6 p.m. to midnight, with 26 deaths occurring during this time. Pedestrian serious injuries were highest from 3 p.m. to midnight. (79), as shown in Figure 3.25.

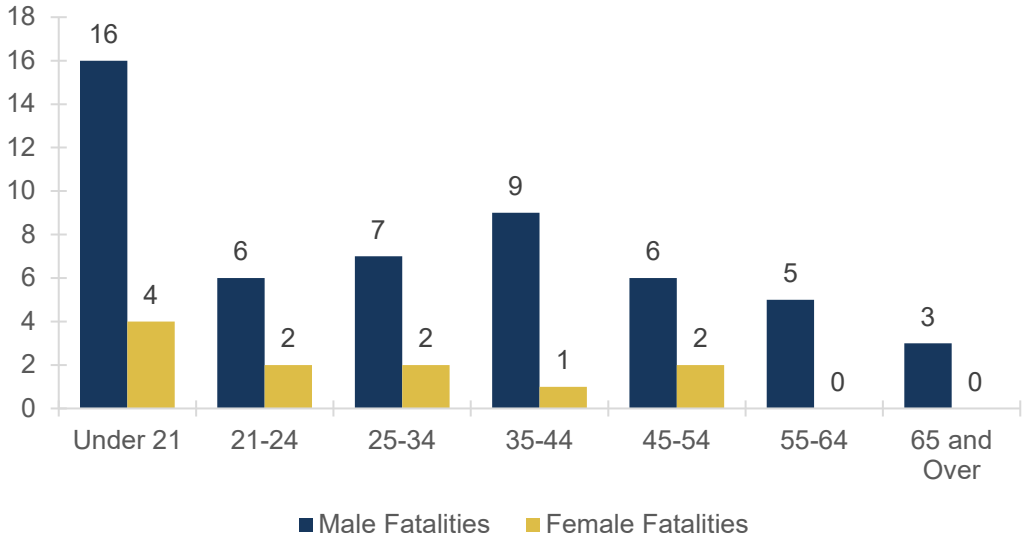
Figure 3.25 Pedestrian Fatalities and Serious Injuries by Time of Day



Source/Date Accessed: Alaska CARE, July 2020.
Note: Fatality data are 2013 to 2017.

An analysis of serious injury crash data found that bicyclists under 21 have the highest risk. Between 2013 and 2017, 39 percent of all bicycle fatalities involved this age group. Across all ages, males are involved in fatal crashes then females. (Figure 3.26).

Figure 3.26 Bicycle Fatalities by Age Group and Gender

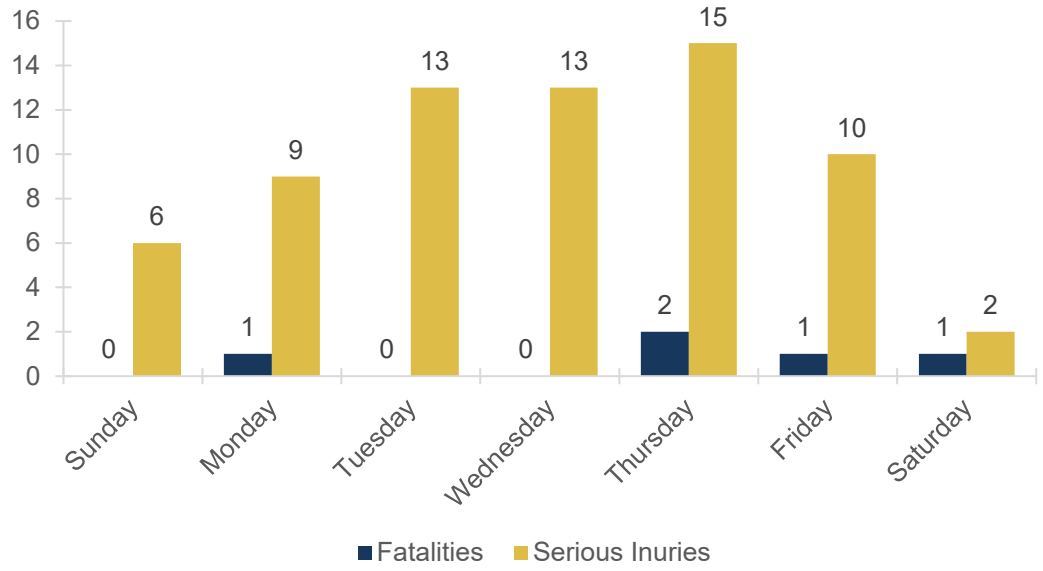


Source/Date Accessed: Alaska CARE, July 2020.
Note: Serious injury data are 2013 to 2017.

When bicyclists ride also influences crash risk. Bicyclists were more frequently killed on Thursday, and seriously injured during weekdays, as seen in Figure 3.27. As more children bike to school (Alaska has an

active Safe Routes to School Program), and adults seek healthy and/or less costly alternatives to driving to work, bicycles are replacing cars as a primary mode of transportation in some Alaska communities.

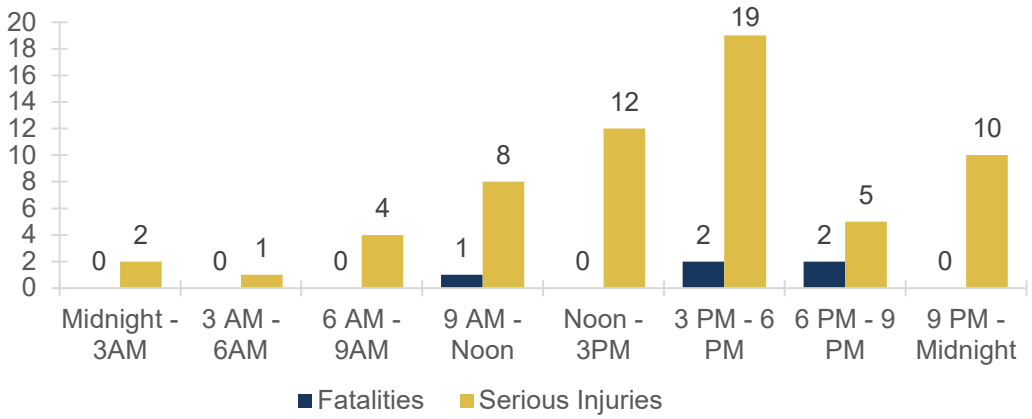
Figure 3.27 Bicycle Fatalities and Serious Injuries by Day of Week



Source/Date Accessed: Alaska CARE, July 2020.
Note: Fatality and injury data are 2013 to 2017.

The time of day that bicycle crashes occur in Alaska suggests a school/work connection as well as issues with conspicuity. Most bicyclists (67 percent) were killed between noon and midnight. The 3 p.m. to 6 p.m. timeframe also accounted for over one-quarter (29 percent) of the serious injuries for all bicyclists involved in crashes. The second most dangerous time for bicyclists was noon to 3 p.m., when 18 percent of serious injuries occurred (Figure 3.28). Ensuring bicyclists can see and be seen is essential to their safety.

Figure 3.28 Bicycle Fatalities and Serious Injuries by Time of Day



Source/ Date Accessed: Alaska CARE, July 2020.
Note: Fatality and injury data are from 2013 to 2017.

Performance Targets

1. To decrease pedestrian fatalities by 9 percent from 13 (2014-2018 average) to 12 (2017-2021 average) by December 31, 2021.

2. To decrease bicyclist fatalities by 100 percent from 1 (2014-2018 average) to 0 (2017-2021 average) by December 31, 2021.

Countermeasure Strategies

Roadway design that accommodates pedestrians and bicyclists is essential for accessibility and safety. Alaska is committed to maintaining an infrastructure that encourages all modes of travel. At the same time, the AHSO recognizes the critical role education and enforcement play in protecting these most vulnerable roadway users. Similar to the motorcycle program area, bicycle and pedestrian safety strategies are addressed in the SHSP Special Users Emphasis Area action plan. The AHSO is an active member of the Emphasis Area's Bicycle/Pedestrian Subcommittee.

The AHSO will fund two projects in FFY 2021 to address pedestrian and bicycle crashes. Between 2014 and 2018, crashes involving pedestrians and bicyclists accounted for slightly more than 18 percent of all fatal crashes in Alaska. Pedestrian fatalities reached a high of 14 in 2017 and again in 2018 (Figure 3.19). Pedestrians 45 years of age and over accounted for about one-half of the fatalities that occurred between 2013 and 2017 (Figure 3.21). The under 21-year-old age group comprised 14 percent of total pedestrian fatalities. While outreach and education efforts for pedestrians typically target children and seniors, who historically are overrepresented in pedestrian crashes, it is important to note all age groups are at risk.

Conspicuity Enhancement

The Alaska Injury Prevention Center (DBA Center for Safe Alaskans) will work with partners in Anchorage to engage community stakeholders specifically to educate bicyclists and pedestrians on the use of high visibility gear. This project is intended to reach 5,000 pedestrians and cyclists on becoming more visible. In addition, educational focus groups with high school youth will be conducted to gain qualitative data regarding bicycle helmet use. Project solutions will be coordinated with DOT engineers, AHSO staff, and the media contractor to help address pedestrian bicycle safety.

As mentioned in the Highway Safety Planning Process section, Alaska utilizes data driven decision-making to select, assess, and monitor projects that in combination with the totality of our safety planning will lead toward safer roadways. To provide the maximum impact and likelihood for increasing pedestrian and bicyclist safety, the AHSO provides leadership, data, and technical assistance to other state agencies, law enforcement agencies and to local pedestrian and bicyclist safety projects. The AHSO conducts problem identification to identify the areas and populations that have the highest rate of pedestrian and bicyclist crashes. Alaska's pedestrian and bicyclist safety program is comprehensive in its geographic coverage, reach to high-risk populations that includes engagement with a strong network of safety partners and advocates who implement evidence-based countermeasures. The AHSO uses input collected throughout the year from planning partners identified in the Highway Safety Planning Process section and the *Countermeasures That Work (CTW): A Highway Safety Countermeasure Guide for State Highway Safety Offices*, Ninth Edition, 2017 in the selection of effective, evidence-based countermeasure strategies for the FFY 2021 pedestrian and bicyclist program area. Whenever possible the most effective proven strategies, such as those with two stars or greater, are selected and implemented. By using these evidence-based selection strategies for pedestrian and bicyclist

safety countermeasures, the likelihood of our strategies reaching our performance targets increases in reducing pedestrian and bicyclist fatalities and serious injuries.

A second project administered by the Alaska Injury Prevention Center (DBA Center for Safe Alaskans) will address pedestrian safety in the Anchorage area and engage with community stakeholders who are involved with the Vision Zero Anchorage commitment. The Center for Safe Alaskans not only participates on the Vision Zero committee to ensure safety measures are adopted to address pedestrian safety but will seek methods to address pedestrian safety by reaching out to area businesses in in high-risk areas alerting them and their customers of issues with pedestrian safety in the area. Solutions will also be coordinated with DOT engineers, AHSO staff, and the media contractor to help address pedestrian safety.

Both projects will help address Alaska's pedestrian and bicycle fatality performance targets C-10 and C-11.

A body of research in the past several decades has established numerous factors associated with pedestrian crashes. Pedestrian and driver pre-crash actions and behaviors (such as distraction, driver speed and alcohol use), vehicle type and design, pedestrian and vehicle volumes/exposure, and elements of the built environment (including roadway design, presence of pedestrian facilities, and street-crossing facilities) all contribute to pedestrian crashes. Several studies have provided evidence of the role of the transportation environment in pedestrian safety and summarized best practices in engineering and design for pedestrian safety (FHWA, 2011; Redmon, 2011; Retting, Ferguson & McCartt, 2003). Enacting and implementing Complete Streets policies has been identified as one of the more low-cost and impactful countermeasures, as evidenced by numerous cities and States across the United States.

In the Hunter et al. (1996) study, bicyclist factors contributing to crashes, especially at intersections or other junctions, included bicyclists riding the wrong way. Thirty-two percent of all bicyclists in the study were riding against traffic; for intersection collisions, the proportion was 42 percent. In 15 percent of crashes, bicyclist riding wrong way was coded as a contributing factor to the crash (Hunter et al., 1996). A bicyclist's failure to yield was coded in 21 percent of the study crashes and stop sign violations were coded in eight percent of the crashes. Children riding a bicycle were overrepresented in stop sign and yield violations and crashes on local and two-lane streets, whereas adult bicyclists were more likely to contribute to their crashes through alcohol or drug use and lane position and lane change errors. The most common driver contributing factor was yield violation at either an intersection or midblock locations; however, as mentioned the bicyclist riding the wrong way may have been a contributing factor in such crashes.

Widespread use of retroreflective materials would increase the ability of drivers to detect pedestrians at night in time to avoid crashes. Pedestrians wearing good retroreflective materials, particularly materials that highlight a person's shape and moving extremities (i.e., wrists and ankles), or widespread use of active (flashing) lights can be detected hundreds of feet farther than can pedestrians in normal clothing, even with low-beam illumination (Koo & Huang, 2015; Karsh, Hedlund, Tyson & Leaf, 2012; Zegeer et al., 2004, Strategy B5). A study in a controlled (closed road) environment also validated that pedestrians are detected more readily when they wear reflective elements on their moving body parts rather than attached to the torso (Tyrrell et al., 2009).

A Cochrane review of studies of pedestrian and bicycle conspicuity aids concluded that "fluorescent materials in yellow, red, and orange improved driver detection during the day ..." (Kwan & Mapstone, 2004). Even low beam headlights can illuminate figures wearing florescent materials hundreds of feet away, much farther than figures wearing normal clothing (Zegeer et al., 2004, Strategy B5; Raborn et al., 2008, Strategy F2). One study among a cohort of riders who had participated in a large mass bicycle event found results suggesting that consistent use of fluorescent colors provides a protective effect against crashes and injuries (Thornley,

Woodward, Langley, Ameratunga, & Rodgers, 2008). Another Cochrane systematic review and meta-analysis of twenty-two studies evaluating non-legislative helmet promotion programs aimed at children under 18 found the odds of observed helmet wearing were significantly greater among those receiving the interventions (Owen, Kendrick, Mulvaney, Coleman, & Royal, 2011).

Bicyclists come in all ages with many levels of knowledge, skill, perception, and judgment. Thus, educational and enforcement programs must take these factors into account and be designed to target age-specific concerns and the knowledge, skills and behavioral attributes of these different groups of riders. Several studies have also identified demographic differences in injury risk, amounts of bicycled riding, and helmet use. Davison et al. (2013) found being male and a recent immigrant were both associated with increased bicycling injury risk among Canadian youth. Lower socioeconomic class was associated with lower helmet use. Richard, Thélot, and Beck (2013) found helmet use to be lower among females, younger and older ages, lower income persons, and urban dwellers than among rural and suburban residents.

Both short lecture-based programs and more extensive programs with on-bicycle training can increase children's knowledge of laws and safe behaviors (Ellis, 2014; Hooshmand, Hotz, Neilson, & Chandler, 2014; Lachapelle, Noland, & Von Hagen, 2013; Thomas et al., 2005) or observed behaviors in an educational context (Ducheyne et al., 2013, 2014), but whether these translate into adoption of the safe behaviors is less certain. A 2005 study for NHTSA described four school-based, on-bicycle training programs that each achieved sustained knowledge gains, and higher average knowledge compared to students who had never had a training course (Thomas et al., 2005). Self-reports from students and parents also suggested that safe riding behaviors and enjoyment of riding improved, more so in the courses taught on road than those taught in a closed course (on the school grounds).

The aforementioned programs are proven countermeasure that the AHSO believes will help to impact the pedestrian and bicyclist performance targets (C-10 and C-11).

Evidence of Effectiveness: CTW, Chapter 8: Section 4.3; and Chapter 9: Sections 1.3, 2.2, 3.1, and 3.2

The AHSO anticipates spending approximately $57,255.02 in 402 on pedestrian and bicycle programming in FFY 2020.

Communication Campaign

A third project to fund an evidence-based media campaign will allocate substantially more resources than in years past to help address the upward fatality trend and educate the pedestrian public. Different messaging will be utilized via radio, digital, and social media to educate school age children on safe pedestrian concepts and behaviors around schools; and older pedestrians on the dangers of impairment and walking as evidence has shown a number of impaired pedestrians killed while crossing the street at non-intersections The Anchorage area which has seen the majority of the fatal pedestrian crashes will be a focus of the campaign. The current plan includes the top eight stations in Anchorage and top four in Kenai, Juneau and Fairbanks for our demographic to run intermittently throughout the summer. In August and September when children will be returning to school, the messaging for that demographic will commence. The goal is to have the message heard at least six times per listener throughout the entire campaign to modify the behavior of the target audiences and ultimately to keep our pedestrians safer.

As mentioned previously, Alaska utilizes data driven decision-making to select, assess, and monitor projects that in combination with the totality of our safety planning will lead toward safer roadways. To provide the maximum impact and likelihood for increasing pedestrian safety, the AHSO provides leadership, data, and

technical assistance to other state agencies, law enforcement agencies and to local pedestrian safety projects. The AHSO conducts problem identification to identify the areas and populations that have the highest rate of pedestrian crashes. Alaska's pedestrian safety program is comprehensive in its geographic coverage, reach to high-risk populations including engagement with a strong network of safety partners and advocates who implement evidence-based countermeasures. The AHSO uses input collected throughout the year from planning partners identified in in the Highway Safety Planning Process section and the *Countermeasures That Work (CTW): A Highway Safety Countermeasure Guide for State Highway Safety Offices*, Ninth Edition, 2017 in the selection of effective, evidence-based countermeasure strategies for the FFY 2021 pedestrian program area. Whenever possible the most effective proven strategies, such as those with two stars or greater, are selected and implemented. By using these evidence-based selection strategies for pedestrian safety countermeasures, the likelihood of our strategies reaching our performance targets increases in reducing pedestrian fatalities.

These efforts will help address Alaska's pedestrian fatality performance targets C-10.

NHTSA successfully implemented one zone-based program in Baltimore, Maryland that included public service announcements, posters, flyers, and interventions aimed at alcohol-impaired pedestrians, but the program is not currently active. Using 5.5 years of before data and 2 years of after data, Blomberg and Cleven (2000) found a 22 percent decrease in crashes among males 30 to 59 in the targeted zones where the intervention took place. Although encouraging, there have been no demonstrations of crash or injury reductions unless the communications and outreach is part of a comprehensive program that includes engineering measures and some form of law enforcement involvement, as in the case of Blomberg and Cleven.

Evidence of Effectiveness: CTW, Chapter 8: Section 4.3; and Chapter 9: Sections 1.3, 2.2, 3.1, and 3.2

The AHSO anticipates spending approximately $75,000 in 405h funds on pedestrian-related paid media buys in FFY 2021.

Planned Activities/Projects Description

The following planned activities will support these countermeasures in FFY 2021:

- Pedestrian/Bicycle Education & Safety (PB-2)
- Public Education (PE-3)

Target: 1 and 2

Planned Activity: Pedestrian/Bicycle Education & Safety, PB-2

Project Title: Alaska Injury Prevention Center (DBA Center for Safe Alaskans) Bicyclist and Pedestrian Safety

Project Number: 402 PS-21-05-FA (A)

Description: This project will fund work with partners to address pedestrian and bicyclist safety in Alaska. Center for Safe Alaskans will engage with community stakeholders to educate bicyclists, pedestrians, and school age children who walk to promote the use of high visibility gear and reflective tape. This project is intended to reach 5,000 pedestrians and cyclists on becoming more visible and distribute 10,000 conspicuity items to pedestrians and bicyclists. This project will also continue to integrate helmet use/ bicycle safety

education through this project. Solutions will also be coordinated with DOT&PF engineers, AHSO staff, and the media contractor to help address pedestrian safety.

Grantee: AIPC, DBA: Center for Safe Alaskans

Budget/Funding Source: $57,255.02 Section 402

Eligible Use of Funds: NHTSA 402 Pedestrian/Bicycle Safety (FAST)

Match: $5,700

Local Benefit: $57,255.02

Evidence of Effectiveness: CTW, Chapter 1, Section 14; Chapter 6, Sections 1 and 2; Chapter 7, Section 1

Target: 1

Planned Activity: Public Education, PE-3

Project Title: Educational Traffic Safety Media Buys (bicyclists and pedestrians)

Project Numbers: 405h FHPE-21-00-FA (A)

Description: This project funds the media buys on behalf of the AHSO to assist in fulfillment of its goals for the HSP and SHSP to reduce pedestrian related crashes.

Grantee: Media Agency

Paid Media: $75,000, Section 405h

Eligible Use of Funds: 405h Paid Media (FAST)

Match: $0

Local Benefit: $75,000

Evidence of Effectiveness: CTW, Chapter 8, Section 3.1

3.8 Novice Drivers (20 and Under) Program Area

Problem Identification

Novice drivers 20 years of age and younger have the highest crash risk of any age group on the road. Teen crash risk is impacted by developmental and behavioral issues coupled with inexperience. While many teens crash because of risk-taking, most crashes occur because the teen behind the wheel does not have the skills or experience needed to recognize a hazard and take corrective action. Like their peers in the lower 48 states, Alaskan teens are most likely to crash due to driver error with recognition (e.g., inadequate surveillance, distraction/inattention) and decision errors (e.g., following too closely, driving too fast for conditions/speeding) topping the list.

Alaskan teens, however, may begin driving at an earlier age than most U.S. teens. Under the state's graduated driver license program (GDL), teens under 18 years of age, with parental consent, may obtain a learner's or instruction permit at the age of 14. To progress from the learner's to provisional (unsupervised) stage of Alaska's GDL, the teen must log at least 40 hours (10 at night and/or in inclement weather) of supervised practice driving under the guidance of a licensed driver who is at least 21 years of age. The teen also must have completed a minimum of 6 months of practice driving, pass a road test, and be at least 16 years of age. If a teen is convicted of a traffic violation at any time during the learner's phase, a 6-month wait is required before applying for a provisional driver license.

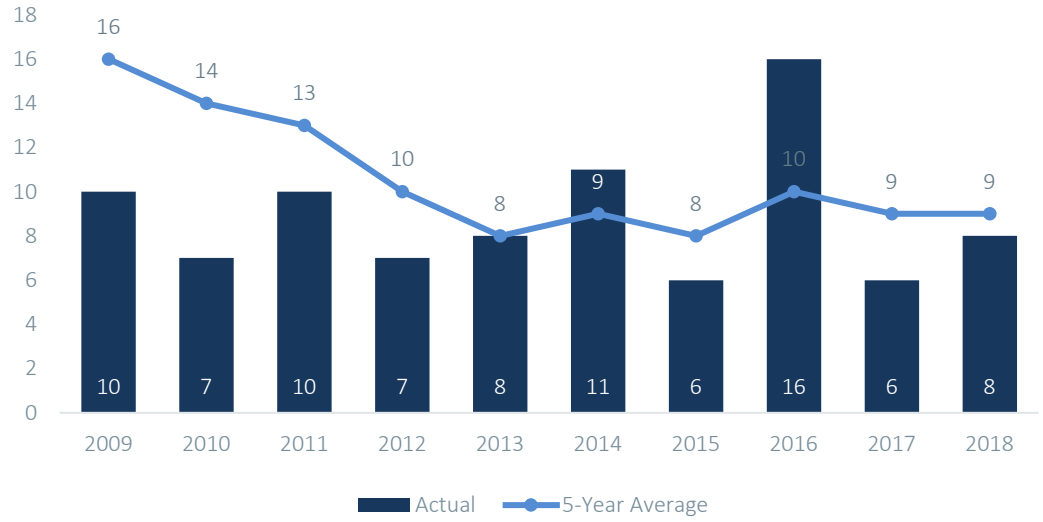
Once granted a provisional license, a teen may not drive between 1 a.m. and 5 a.m. for the first 6 months of licensure, or transport any passengers under 21 years of age. To graduate to a full, unrestricted license, the teen must have held a provisional license for at least 6 months and be 16 and one-half years of age. If at any time during the GDL program the teen accumulates a total of six or more motor vehicle points in a 12-month period or nine or more points in a 24-month period, the teen must complete a nationally certified defensive driving course. Failure to complete the course results in the suspension of driving privileges. These restrictions do not apply once the teen is 18 years of age. A violation of Alaska's GDL provisions is a primary offense and carries a $200 fine plus two penalty points on the driver history file.

It is important to note that no other state has as many rural communities separated from connecting road systems as Alaska. For that reason, the State's Division of Motor Vehicles (DMV) issues an "off-highway" license that allows an individual, including teens, to drive in specific Alaskan communities (most are issued in Juneau). The applicant for an off-highway license must complete all licensing requirements with the exception of the road test and photograph identification. An off-highway license allows the holder to drive on roads that are not connected to the state highway system and on roads that are not connected to a highway or vehicular way with an average daily traffic volume not greater than 499. The off-highway restriction can be removed at any time following successful completion of a road test at a DMV office or through a third-party testing provider.

Since one of the difficulties facing Alaska's rural youth is finding viable employment, and a driver license is often required as a condition of employment, the provision of an off-highway license is important. However, under Alaska statute rural residents are not required to obtain a driver license and there is no requirement for rural drivers to obtain an instruction permit. DMV strongly encourages rural drivers to practice driving with a licensed driver. For 16- and 17-year-old teens holding a "provisional off-highway" license, the nighttime driving and passenger restrictions do not apply. To convert from a provisional off-highway to a regular provisional license, the teen must have held a permit for at least six months; have certification from a parent or guardian of at least 40 hours of driving experience with 10 hours of progressively challenging circumstances such as driving in inclement weather; and be free of any traffic convictions in the six months preceding application.

While many teen crashes are single vehicle, property damage only incidents (many run-off-the-road), some result in serious injury and death. Between 2013 and 2018, 55 novice drivers were involved in fatal crashes in Alaska. Teen crashes have generally been declining over the past six years, with the most significant recent peaks occurring in 2016 (16 fatalities), as shown in Figure 3.29.

Figure 3.29 Drivers Under 21 Involved in Fatal Crashes



Source/Date Accessed: FARS, May 2020.

Almost 1 in 5 fatal and injury crashes in Alaska involve teens, confirming that young drivers continue to be disproportionately involved in motor vehicle crashes. While we celebrate that the Alaska Strategic Highway Safety Plan: 2018-2022 indicates that the five-year average of young driver fatalities has decreased from 13 in 2011 to 9 in 2018, the marked increase in young driver fatalities and serious injuries from 48 in 2015 to 87 in 2016 is alarming.

Results from the 2017 Alaska Youth Risk Behavior Survey (YRBS) indicate there is continued work to be done to improve unsafe driving behavior (seat belt, impaired, distracted driving – cell phone use) by Alaska youth. Survey results show that 83.5 percent of Alaska high school students most of the time or always wore a seat belt. Similarly, in May 2019, Safe Alaskans observed 83.8 percent seat belt use during lunchtime at eight Anchorage high schools. While youth that report driving when they have been drinking has decreased to 4.3 percent (5.6 percent YRBS, 2015), a startling 16 percent reported that they drive when they have been using marijuana. Over 16 percent reported riding in a vehicle driven by someone who has been drinking alcohol, which has steadily increased from 13.1 percent (2013 YRBS). Furthermore, data from the 2017 YRBS indicates that distracted driving continues to be a transportation safety issue as 37.2 percent of young drivers in Alaska drove a car while talking on a cell phone, and 28.6 percent texted or emailed while driving on at least one day in the 30 days before the survey. Through the teen driving campaign surveys, Safe Alaskans has identified significant gaps in young driver knowledge of Alaska's Graduated Driver's Licensing (GDL) requirements.

While crashes involving a lack of seat belt use, impaired driving, and speeding were discussed previously, it is important to point out the significance of teens in the data. When it comes to impaired driving, males under 21 years of age are more likely than their female counterparts to die in an alcohol-related crash. Between 2013 and 2017, 6 male drivers under age 21 died compared to 2 female drivers in the same age group.

Female drivers under 21 years of age were more likely than any of their older female counterparts to die in a speed-related crash—this age group accounted for nearly one-third (29 percent) of female speeding related fatalities. Additionally, teens of both sexes accounted for more serious injuries than any other age group by

nearly two to one. Alaska has made progress in the number of male teen drivers killed in speed related crashes, however. Between 2005 and 2014, fewer male drivers under 21 (15) died because of speeding than any other male cohort under 55 years of age.

Performance Target

To decrease drivers age 20 or younger fatalities by 11 percent from 9 (2014-2018 average) to 8 (2017-2021 average) by December 31, 2021.

Countermeasure Strategies

School Programs

The AHSO will continue to partner with the Alaska Injury Prevention Center, DBA Center for Safe Alaskans to educate teens about critical safe driving practices, including seat belt use, the importance of refraining from drinking and driving, inattentive/distracted driving, aggressive driving, and sharing the road with pedestrians and cyclists. The Center for Safe Alaskans, with AHSO funding, will conduct various teen peer-to-peer projects in high schools which safe driving. The peer-to-peer intervention is designed to educate teens about the lifesaving importance of seat belts by rewarding drivers and passengers "caught" buckling up. Since its introduction in 2006, teen belt use at participating high schools has increased from 70 to 91 percent; the highest observed use at one school was 94 percent.

AHSO also will provide grant funding to the Homer Police Department to implement its youth-oriented alcohol education program, Project Drive. The Homer Police Department will conduct Project Drive clinics that provide sixth- through twelfth-grade students in the middle and high schools the opportunity to experience what it is like to drive impaired. Wearing fatal vision goggles which simulate BACs from .07 to .25, students will drive (under the supervision of a police officer) go-kart/utility vehicles on a closed course. At least five Project Drive clinics will be completed in FFY 2021 with the goal to reach at least 200 students.

The AHSO will identify evidence based communications strategies for reaching teen drivers with safe driving messages focusing on speed, impairment, distraction, and seat belt use. Parents, who have tremendous influence over their teen drivers, also will be the focus of this outreach. Ensuring that parents are fully informed about the crash risk for their teen drivers, and how Alaska's graduated driver licensing program works to address that risk, is essential. Key themes that AHSO will seek to convey to parents include the importance of significant practice during the learner's phase, the use of a parent-teen driving agreement, and controlling the keys and staying involved after licensure. AHSO will leverage the findings from the most current Governors Highway Safety Association report, *Promoting Parent Involvement in Teen Driving: An In-Depth Look at the Importance and the Initiatives*, to guide its work.

In recent years the AHSO has been putting additional resources towards programming and education of young drivers. While teen crashes have generally been trending down over the past eight years, significant increases occurred in 2014 and 2016 with 11 and 16 fatalities respectively. Disturbingly, teens of both sexes accounted for more serious injuries than any other age group by nearly two to one. It's clear additional resources aimed at novice drivers needs to continue in FFY 2021.

As mentioned in the Highway Safety Planning Process section, Alaska utilizes data driven decision-making to select, assess, and monitor projects that in combination with the totality of our safety planning will lead toward safer roadways. The AHSO conducts problem identification to identify the areas and populations that have the highest rate of unrestrained fatalities and lowest usage rates. The statewide youth-based program efforts that

include peer-to-peer education and prevention strategies funded for FFY 2021 are targeted towards novice drivers under 20 who are the most likely to take risks on the road, including drinking and driving. The AHSO uses input collected throughout the year from planning partners identified in in the Highway Safety Planning Process section and the *Countermeasures That Work (CTW): A Highway Safety Countermeasure Guide for State Highway Safety Offices*, Ninth Edition, 2017 in the selection of effective, evidence based countermeasure strategies for the FFY 2021 novice driver program area. Whenever possible the most effective proven strategies, such as those with two stars or greater, are selected and implemented. By using these evidence-based selection strategies for novice driver countermeasures, the likelihood of our strategies reaching our performance targets increases. With an effective GDL law in place, these evidence-based education programs were chosen to complement and support the law which will lead to fewer novice driver crashes. The AHSO will continue to assess, seek our best practices, and fund eligible youth-based projects which support the FFY 2021 HSP performance targets and strategies including those that provide education and outreach to counter underage drinking, encourage seat belt use, and curb distracted driving.

Schools provide well-defined and somewhat controlled audiences for numerous traffic safety messages, such as seat belt use, and impaired and distracted driving. Education and other communication strategies can be tailored to a specific audience. School programs have been shown to increase seat belt use in the few evaluations of school programs that have been conducted.

Evidence of Effectiveness: CTW, Chapter 1, Section 6.5; Chapter 2, Section 3.2; Chapter 6, Section 3.1; and Section 4.1

The AHSO anticipates spending approximately $250,151.85 in 402 funds and $7,000 in 405d funds on the novice driver program in FFY 2021.

Planned Activities/Projects Description

The following planned activities will support these countermeasures in FFY 2021:

- Public Education, PE-3
- Safe Communities Activities, SC-1
- Impaired Driving Focus, ID-2

Target: 1

Planned Activity: Safe Communities Activities, SC-1

Project Title: Safe Roads Alaska – Young Drivers

Project Number: 402 SA-21-19-FA (A)

Description: The principal objective of this project is to increase knowledge of individual driving behavior as well as increase positive safe driving behaviors through implementation of self-regulation training, which will lead to decrease in motor vehicle crashes and reduce death and injury for young drivers.

Safe Alaskans will engage 1,500 youth in evidence-based peer-to-peer social norms campaigns related to substance use/ misuse associated with impaired driving, reaching 10,000 middle and high school students annually. At least five Alaskan high schools or youth serving organizations will be recruited and the Center will provide support in designing, implementing, and evaluating transportation safety projects related to occupant

protection, distracted and impaired driving (both alcohol and marijuana impairment). In addition, the Center's teen advisory committee will design (or adapt) and implement a transportation safety resource guide for youth groups and organizations.

Safe Alaskans will also conduct self-regulation training for 50 young drivers and evaluate improvement in participants' driving behavior to include distracted driving, aggressive driving, and speeding. Evaluation will include self-reported attitudes, knowledge, and beliefs as well as pre- and post-simulated driving assessments (Ready Assess) for each participant.

Grantee: AIPC, DBA: Center for Safe Alaskans

Budget/Funding Source: $175,151.85 Section 402 **Eligible Use of Funds:** 402 SA (FAST)

Match: $17,500 **Local Benefit:** $175,151.85

Evidence of Effectiveness: CTW, Chapter 1, 6.5; Chapter 2, Section 3.2; Chapter 6, Section 3.1;

Target: 1

Planned Activity: Impaired Driving Focus, ID-2

Project Title: Homer Police Department – Project Drive

Project Number: 405d M5X-21-01-FA(C)

Description: This project will support the Homer Police Department's youth-oriented alcohol education program, Project Drive, activities. A series of Project Drive clinics will be conducted around the area that provide 6th through 12th grade students in the middle and high schools the opportunity to experience what it is like to drive impaired (under the supervision of a police officer).

Grantee: City of Homer Police Department

Budget/Funding Source: $7,000 Section 405d **Eligible Use of Funds:** 405d Mid (FAST)

Match: $700 **Local Benefit:** $7,000

Evidence of Effectiveness: CTW, Chapter 6, Section 4.1

Target: 1

Planned Activity: Public Education, PE-3

Project Title: Educational Traffic Safety Media Buys (young drivers)

Project Numbers: 402 PM-21-25-FA (E)

Description: This project funds the media buys on behalf of the AHSO to assist in fulfillment of its goals for the HSP and SHSP to reduce young driver crashes.

Grantee: Media Agency

Paid Media: $33,000, Section 402 **Eligible Use of Funds:** NHTSA 402 PM (FAST)

Match: $0 **Local Benefit:** $33,000

Evidence of Effectiveness: CTW, Chapter 8, Section 2.1, 3.1 and 4, 1

3.9 Traffic Records Program Area

Problem Identification

Traffic records are a key component in the effort to improve safety on the State's transportation system by allowing for the analysis of crash data to aid in the deployment, and evaluation of traffic safety countermeasures to move Alaska Toward Zero Deaths (TZD) on our roadways. The traffic records systems underpin the overall effort to make the maximum use of resources to improve safety.

The last assessment of Alaska's traffic records system was completed on July 15, 2016. A new five-year (2017 to 2021) Traffic Records Strategic Plan was adopted in the spring of 2017. The plan is based on the findings and recommendations documented in the 2016 traffic records assessment and the information provided by the State to the project team. Minor revisions were made in 2020 to show the current list of ATRCC members, the three ATRCC meetings conducted in FY 2020, and to document the interim progress report for the FY2021 405c grant application. The plan provides a comprehensive data-driven approach to traffic records.

The purpose of the strategic plan is to provide the Alaska Traffic Records Coordinating Committee (ATRCC), DOT&PF, AHSO, and other traffic safety stakeholders a blueprint to improve their traffic records systems and increase the quality of the data for decision makers and researchers who rely on traffic records data. The plan is directed primarily at actions the ATRCC can help accomplish through its member agencies while pursuing the goal of improving traffic records. As such, it touches on the activities of all stakeholder agencies within the State. The Strategic Plan also helps the ATRCC fulfill the broad role of communication, coordination, and assistance among collectors, managers, and users of the various data systems in Alaska.

The traffic records data system stakeholders reviewed all findings from the assessment rated as *does not meet* or *partially meets* and developed a matrix to prioritize the findings as high, medium, or low priority for the Strategic Plan. Based on the comments in the interviews, assessment findings were categorized as either: high priority/ accomplishments possible in the near future, mid priority/ accomplishments possible within the next five years and/or possible after other questions rated as a high priority are accomplished, and low priority/ accomplishments possible in distant future. Although some findings were labeled as medium or low priority they could be elevated to high priority within a year or two once other accomplishments have been achieved. As priorities evolve and benchmarks are achieved for high priority findings they will trigger the prioritization of others findings and the establishment of performance measures. The data system stakeholders and the ATRCC were consulted in the development of performance measures. The ATRCC and data system stakeholders developed quantitative performance measures, action steps, and leaders to develop traffic records improvement strategies rated as very important. All assessment findings can be found in Alaska's Traffic Records Strategic Plan, which is available on the AHSO website.

Performance Targets

Table 3.3 summarizes the priority recommendations from the assessment. All improvements made are expected to reflect the best practices identified in the Traffic Records Program Assessment Advisory.

Table 3.3 Traffic Records Assessment Priority Recommendations

Data System	Recommendations
Crash	Improve the data dictionary for the Crash data system.
	Improve the interfaces with the Crash data system.
	Improve the data quality control program for the Crash data system.
Vehicle	Improve the procedures/ process flows for the Vehicle data system.
	Improve the data quality control program for the Vehicle data system.
Driver	Improve the data dictionary for the Driver data system.
	Improve the data quality control program for the Driver data system.
Roadway	Improve the applicable guidelines for the Roadway data system.
	Improve the data dictionary for the Roadway data system.
	Improve the data quality control program for the Roadway data system.
Citation / Adjudication	Improve the applicable guidelines for the Citation and Adjudication systems.
	Improve the interfaces with the Citation and Adjudication systems.
	Improve the data quality control program for the Citation and Adjudication systems.
EMS / Injury Surveillance	Improve the description and contents of the Injury Surveillance systems.
	Improve the interfaces with the Injury Surveillance systems.
	Improve the data quality control program for the Injury Surveillance systems.
Data Use and Integration	Improve the traffic records systems capacity to integrate data.

Countermeasure Strategies

In FFY 2021, the AHSO will provide funding for five projects that support the Traffic Records Strategic Plan. The five projects address one or more priority recommendations.

Improve the Interfaces of Injury and Crash Data (Anchorage crash and Alaska Trauma Registry data)

The AHSO will fund a project with the Alaska Injury Prevention Center (DBA Center for Safe Alaskans) to refine the data linkage system between Anchorage crash data and the Alaska Trauma Registry.

Improve the Interfaces with the Crash Data System/Improve the Data Quality Control Program for the Crash Data System (Crash Data Entry Services)

The AHSO will continue to contract with a vendor to provide crash data entry services to help reduce the backlog of data and improve the timeliness of crash data analysis. The vendor will enter motor vehicle crash data from the driver (12-209) and law enforcement (12-200) forms into DOT&PF's crash data entry system to continue help on catching up on the backlog of data. This program will help to improve the interfaces with the crash data system, improve the data quality control program for the crash data system, as well as improve the timeliness of the data available for analysis.

Improve the interfaces with the Citation and Adjudication systems. Improve the data quality control program for the Citation and Adjudication systems. Improve the interfaces with the Crash data system.

Improve the data quality control program for the Crash data system. (*(TraCS) Licensing Fee, Anchorage Airport Police Department, and Kodiak Police Department*)

The Alaska Highway Safety Office has paid, and anticipates continuing to pay, for the license and maintenance fees for TraCS, Easy Street Draw, Incident Locator Tool, and any additional license or maintenance fees (such as MACH) necessary for State and Local Law Enforcement Agencies to successfully use the TraCS program. By providing these fees, State and Local Law Enforcement use these tools without cost, such as the addition of Anchorage Airport Police and Kodiak Police Department's plans for utilizing TraCS. The AHSO does not provide funding support for proprietary crash and citation software.

The Traffic Records Strategic Plan is the guiding document for the ATRCC, a body composed of members from the different data owners, and stakeholders involved in collecting and using data related to highway safety. Section 405c funds provide guidance for traffic records projects planned, implemented, and managed by the ATRCC. The Strategic Plan is based on expert recommendations from the 2016 traffic records assessment. By following the assessment recommendations many of the planned strategies will help achieve our goals. The plan is the committee's charter, and provides guidance and helps monitor progress.

As mentioned previously, Alaska utilizes data driven decision-making to select, assess, and monitor projects that in combination with the totality of our safety planning will lead toward safer roadways. The AHSO will continue to partner with the ATRCC to address areas like timeliness, accuracy, completeness, and accessibility because traffic records impacts all areas of safety programming. The performance targets and performance measures noted below support the State's Section 405c grant application. The projects identified for FFY 2021 were chosen to support the Traffic Records Strategic Plan strategies, strengthen Alaska's traffic records information systems, and improve the quality of data used by partners and stakeholders to make safety investment decisions and safety improvements. In turn, these strategies and projects will combine to improve the quality, accessibility, and timeliness of traffic records throughout the State. All proposed strategies will aid in the identification of traffic safety problem areas in the State and help in the development of countermeasures to address them.

The Traffic Records Assessment priority recommendations addressed by the 2021 projects include:

- Improve the Interfaces of Injury and Crash Data;
- Improve the Interfaces with the Crash Data System
- Improve the Data Quality Control Program for the Crash Data System;
- Improve the interfaces with the Citation and Adjudication Systems;
- Improve the data quality control program for the Citation and Adjudication Systems;
- Improve the interfaces with the Crash Data System; and.
- Improve the data quality control program for the Crash Data System.

The AHSO has previously funded the development of TraCS software which includes the uniform citation form, DUI citation form, DUIPak, long and short form crash reports, and the update/continuation form. This software is available at no charge to all Alaska law enforcement agencies. As a result, the AHSO does not provide funding support for proprietary crash and citation software. The AHSO will continue to support the maintenance and upgrade of TraCS software and training activities for agencies that implement TraCS. Items eligible for funding under a TraCS project may include: computer software (other than citation and crash form software) and hardware needed to implement TraCS or traffic records management systems. The AHSO will continue to support the TraCS through payment of the license fee that enables state and local law enforcement to submit

crash reports and citations electronically through the TraCS program. Anticipated improvements will be improved interfaces, data quality, and timeliness with the citation and adjudication and crash data systems.

The AHSO provides support to the TRCC in implementation of the FFY 2018 Traffic Records Strategic Plan. The Traffic Records Coordinator serves as the champion for safety data initiatives and markets the traffic records ideal throughout the State, and administers the daily business of the committee. All aspects of the Strategic Plan are maintained and managed by the Coordinator, as well as providing regular progress reports to Federal sponsors about its implementation. The AHSO Administrator serves as the Chair of the Alaska Traffic Records Coordinating Committee.

The NHTSA Traffic Records Program Assessment Advisory, which is the framework for the conduct of Traffic Records Assessments notes that the TRCC coordinator is designated by the committee to aid the technical TRCC chair, the executive TRCC, and technical TRCC. The coordinator may be an employee of a key custodial agency or a contractor. In Alaska, the TRCC Coordinator is housed in the AHSO. Specific duties include coordination of the technical TRCC at the direction of the chair; coordination of the development, implementation, and maintenance of the TRCC strategic plan; and providing secretariat support for the executive TRCC.

The AHSO fully supports the evidence of the effectiveness of having a Traffic Records Coordinator. The Traffic Records Coordinator in conjunction with the ATRCC will work to continue to improve the accessibility, timeliness, uniformity, and accuracy of traffic records in the state. Grant awards will be based on the outcomes of the ATRCC's proposal review, the availability of 405c funding, and each project's ability to improve traffic records in the State.

The AHSO anticipates spending approximately $660,000 in 405c funds on data improvement programming in FFY 2021.

Planned Activities/Projects Description

The following planned activities will support these countermeasures in FFY 2021:

- Data Program Activities (TR-2)

Target: Improve the interfaces of Injury and Crash data.

Planned Activity: Data Program Activities**,** TR-2

Project Title: Data Linkage

Project Number: 405c M3DA-21-00-FA (E)

Description: The Center for Safe Alaskans, in collaboration with the Municipality of Anchorage, will work to refine the probabilistic data linkage system between Anchorage crash data and the Alaska Trauma Registry. With 40 percent of Alaska's population in Municipality of Anchorage (MOA), this will provide substantial access to integrated crash and injury data. The Municipality of Anchorage includes roads from the Knik River Bridge to Portage.

The goals and objectives for FFY21 center on enhancements to expand information and obtain beneficial trend data. Work includes: additional data loading and analyses, improved query filters, expansion of trauma reports and capabilities, useful trend graphing, assessment of other relevant data (acquisition, gauging viability,

evaluation of integration effort, recommendation regarding worthiness, etc.), improved mapping functionality and interface, crash versus trauma costs, required enrichments to graphical user interface for reports and data management, added integration with system statistics, enhancements for useful outward system capabilities, improvements and additional data exports, required quality assurance and record security, and improvements to module performance. All work includes bug testing, meetings, and necessary platform rollouts. Anticipated improvements from this project will address the following Traffic Records Strategic Plan attributes of integration, timeliness, and accessibility. 1.) Crash data management reports on items such as timeliness will be provided to the TRCC on at least an annual basis. 2.) Move from approximately 40 percent of ATR transportation records from 2009-2012 and 2018-2019 to 100 percent to be processed through the linkage protocols to the Anchorage crash records with major injuries by September 30, 2021. 3.) Complete the interface between trauma registry managers and data users. 4.) Report to the TRCC on an annual basis the accessibility of performance measures tailored to the needs of trauma registry managers and data users

Grantee: AIPC, DBA: Center for Safe Alaskans

Budget/Funding Source: $103,124.25 Section 405c

Eligible Use of Funds: 405c Data Program (FAST)

Match: $10,400

Local Benefit: $0

Evidence of Effectiveness: Improves accessibility and integration between one or more core highway Safety databases; Supports the Traffic Records Strategic Plan

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Targets: Improve the interfaces with the Crash data system. Improve the data quality control program for the Crash data system.

Planned Activity: Data Program Activities**,** TR-2

Project Title: Crash Data Entry Services

Project Number: 405c M3DA-21-00-FA (B)

Description: The AHSO will contract with a vendor to provide crash data entry services. The vendor will enter motor vehicle crash data from the driver (12-209) and law enforcement (12-200) forms into DOT&PF's crash data entry system to catch up on the backlog of the years 2018 & 2019 by March 2021. Anticipated improvements from this project will address the following Traffic Records Strategic Plan attributes of integration, timeliness and accuracy. 1.) Crash data management reports on items such as timeliness will be provided to the TRCC on at least an annual basis. 2.) Continuously improve upon each of these metrics on an annual basis: Average days from crash to date of availability for stakeholder use into system was 624 days in 2019 (last crash entered into the system occurred on 8/15/2017 and was entered into the system on 5/1/2019). It is anticipated in FFY 2021 the data entry contractor will have entered all 2018 and 2019 crash data so then the time of availability of the crash data being available for analysis will be reduced down to 180 days.

Grantee: Data Entry Contractor

Budget/Funding Source: $350,000 Section 405c

Eligible Use of Funds: 405c Data Program (FAST)

Match: $0

Local Benefit: $0

Evidence of Effectiveness: Improves timeliness of a core highway safety database

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Targets: Improve the interfaces with the Citation and Adjudication systems. Improve the data quality control program for the Citation and Adjudication systems. Improve the interfaces with the Crash data system. Improve the data quality control program for the Crash data system.

Planned Activity: Data Program Activities, TR-2

Project Title: Traffic and Criminal Software (TraCS) Licensing Fee

Project Number: 405c M3DA-21-00-FA (A)

Description: The Alaska Highway Safety Office anticipates continuing to pay for the license and maintenance fees for TraCS, Easy Street Draw, Incident Locator Tool, and any additional license or maintenance fees (such as MACH) necessary for state and local law enforcement agencies to successfully use the TraCS program and its related tools without cost.

The AHSO has funded the development of TraCS software which includes the uniform citation form, DUI citation form, DUIPak, long and short form crash reports, and the update/continuation form and will continue to support the maintenance and upgrade of TraCS software and training activities for agencies that implement TraCS. This software is available at no charge to all Alaska law enforcement agencies. Anticipated improvements from this project will address the following Traffic Records Strategic Plan attributes of integration, uniformity, timeliness and accuracy. 1.) Increase the number of authorized agencies to begin e-filing via TraCS from 15 agencies in 2016 to 20 agencies by 2022. 2.) By the end of 2022 move from 43.1 percent of police reports received electronically to 90 percent annually. 3.) Increase percentage of electronically filed citations by agencies authorized to file electronically from 83 percent (State agencies) and 86 percent (local agencies) to 95 percent e-filing by 2022. 4.) Crash data management reports on items such as timeliness will be provided to the TRCC on at least an annual basis.

Grantee: Alaska Highway Safety Office - IOWA DOT, PAE National Security Solutions

Budget/Funding Source: $100,000 Section 405c

Eligible Use of Funds: 405c Data Program (FAST)

Match: $0

Local Benefit: $0

Evidence of Effectiveness: Improves accuracy & integration between one or more core highway safety databases; Supports the Traffic Records Strategic Plan

Target: Improve the interfaces with the Citation and Adjudication systems. Improve the data quality control program for the Citation and Adjudication systems. Improve the interfaces with the Crash data system. Improve the data quality control program for the Crash data system.

Planned Activity: Data Program Activities, TR-2

Project Title: Anchorage Airport Police Traffic Records Improvement Project

Project Number: 405c M3DA-21-00-FA(C)

Description: The Anchorage Airport Police Department employs 60 sworn law enforcement officers making it the third largest law enforcement department in Alaska. From 2017-2019 officers have averaged over 600 traffic citations a year. These citations were all hand written, which is time consuming and prone to human error and inaccuracies before being manually entered into the Court View system. To improve the timeliness, accuracy, and completeness of these citations, this project will implement connected mobile data terminals in each of the department's 15 patrol vehicles. This will allow officers to electronically submit traffic citations through TraCS which will dramatically improve the timeliness and accuracy of these citations in the Court View system. Officers will receive training on the mobile data terminals. Anticipated improvements from this project will address the following Traffic Records Strategic Plan attributes of integration, timeliness, uniformity and accuracy. 1.) Increase the number of authorized agencies to begin e-filing via TraCS from 15 agencies in 2016 to 20 agencies by 2022. 2.) By the end of 2022 move from 43.1 percent of police reports received electronically to 90 percent annually. 3.) Increase percentage of electronically filed citations by agencies authorized to file electronically from 83 percent (State agencies) and 86 percent (local agencies) to 95 percent e-filing by 2022. 4.) Crash data management reports on items such as timeliness will be provided to the TRCC on at least an annual basis.

Grantee: Alaska Department of Transportation & Public Faculties: Anchorage Airport Police & Fire

Budget/Funding Source: $77,200 **Eligible Use of Funds:** 405c Data Program (FAST)

Match: $19,300 **Local Benefit:** $0

Evidence of Effectiveness: Improves accessibility, accuracy, completeness, timeliness and integration between one or more core highway safety databases; Supports the Traffic Records Strategic Plan

Target: Improve the interfaces with the Citation and Adjudication systems. Improve the data quality control program for the Citation and Adjudication systems. Improve the interfaces with the Crash data system. Improve the data quality control program for the Crash data system.

Planned Activity: Data Program Activities, TR-2

Project Title: Kodiak PD TraCS Computers

Project Number: 405c M3DA-21-00-FA (D)

Description: This project will allow the Kodiak Police Department (KPD) to fully utilize the TraCS software so it can run properly. Currently, the laptops used by KPD are over nine years old, some are broken, and the rest have hardware and connectivity issues with the TraCS application due to their age and general wear and tear, preventing it from running properly. They also lack the memory and up to date operating system (current computers use Windows 7) which also has issues with TraCS. By purchasing rugged laptop computers and docking stations KPD will have the equipment needed to provide the needed service for utilizing TraCS. The grant will equip the Kodiak Police Department with mobile data and docking stations in patrol vehicles and office work stations. The KPD's utilization of TraCS will assist with the standardization, timeliness, and accuracy of citation and crash reports submitted via the TraCS system. KPD currently writes between 300-400

citations with 1/3 of those citations having to be written manually due to the malfunction of the current computers/software. The average time of a TraCs citation to arrive at the Court System is one day, while the manually written citations take up to two days if not longer. With the new updated computers/software KPD will be able to return to 100% TraCs citations showing an increase in the number of citations by 1/3 as well as a decrease in the number of days the 1/3 of citations filed with the Court System. Anticipated improvements from this project will address the following Traffic Records Strategic Plan attributes of integration, timeliness, uniformity and accuracy. 1.) Increase the number of authorized agencies to begin e-filing via TraCS from 15 agencies in 2016 to 20 agencies by 2022. 2.) By the end of 2022 move from 43.1 percent of police reports received electronically to 90 percent annually. 3.) Increase percentage of electronically filed citations by agencies authorized to file electronically from 83 percent (State agencies) and 86 percent (local agencies) to 95 percent e-filing by 2022. 4.) Crash data management reports on items such as timeliness will be provided to the TRCC on at least an annual basis.

Grantee: City of Kodiak Police Department

Budget/Funding Source: $30,000

Eligible Use of Funds: 405c Data Program (FAST)

Match: $30,000

Local Benefit: $0

Evidence of Effectiveness: Improves accessibility, accuracy, completeness, timeliness and integration between one or more core highway safety databases; Supports the Traffic Records Strategic Plan

3.10 Planning and Administration Program Area

The Alaska Highway Safety Office will serve as the primary agency responsible for ensuring that the state's highway safety concerns are identified and addressed through the development and implementation of appropriate countermeasures.

Goal

To administer a fiscally responsible, effective highway safety program that is data driven, includes strategic partners and stakeholders, and addresses the state's specific safety characteristics.

Performance Targets

1. Conduct a Stakeholders' meeting to receive input for development of the FFY 2022 Highway Safety Performance Plan.
2. Deliver the FFY 2020 Annual Report by December 31, 2020.
3. Deliver the Federal Fiscal Year 2022 Highway Safety Plan by July 1, 2021.

Countermeasure Strategies

The Alaska Highway Safety Office will serve as the primary agency responsible for ensuring the State's highway safety concerns are identified and addressed through the development and implementation the State

and Community Highway Safety Grant Program and other state- and Federally-funded highway safety programs. To fulfill this responsibility, the AHSO conducts analysis of data to identify the State's overall highway safety problems and set performance targets, selects and implements countermeasure strategies and programs, monitors progress and evaluates program results each year. The AHSO works with a wide variety of partners and safety stakeholders at the federal, state and local level to impact highway safety and reduce traffic related crashes, fatalities and injuries. A more complete description of the process followed by the AHSO is in the Highway Safety Planning Process section.

The AHSO provides management, supervision, and support services for the activities necessary to carry out this responsibility. Planning and Administration provides for the management of the AHSO programs, including employment of personnel to manage programs, associated travel, conference fees, and operating expenses.

The AHSO's goal is to administer a fiscally responsible and effective highway safety program that is data-driven, includes strategic partners and stakeholders, and addresses the State's specific safety characteristics.

In FFY 2021, the AHSO will:

1. Administer the statewide traffic safety program:
    a. Implement the FFY 2021 HSP and develop future initiatives;
    b. Provide sound fiscal management for traffic safety programs;
    c. Continue coordination of the HSP with the SHSP and other state plans through collaboration with other Federal, state, and local agencies; and
    d. Assess program outcomes.
2. Provide data required for Federal and state reports.
3. Provide program staff, professional development, travel funds, space, equipment, materials, and fiscal support, as needed.
4. Provide data and information to policy and decision-makers on the benefits of various traffic safety laws.
5. Continuously identify and prioritize highway safety problems for future AHSO attention, programming, and activities.
6. Implement program management and oversight for all activities within this program area as a tool to enhance risk management of grantees.

The AHSO estimates spending approximately $300,000 in 402 funds to provide management, supervision, and support services for the activities necessary to carry out its responsibilities.

The following planned activity will support this countermeasure in FFY 2021:

- Planning and Administration (PA-2)

Planned Activities/Projects Description

Planned Activity: Planning and Administration, PA-2

Project Title: AHSO Operations/ Planning and Administration

Project Number: 402 PA-21-00-FA

Description: Personnel costs, operating costs, travel expenses, conferences and training, memberships (e.g., GHSA, APOA, AACOP, WIP, and SMSA), supplies, equipment costs, and contractual services will provide the statewide program direction, financial, and clerical support, property management, and audit for the 402 statewide programs.

Budget/Funding Source: $300,000 Section 402

Eligible Use of Funds: NHTSA 402 Planning and Administration (FAST)

Match: $87,496.77

Local Benefit: $0

Planned Activity: Planning and Administration, PA-2

Project Title: Alaska Highway Safety Summit

Project Number: 402 PT-21-06-FA (D)

Description: After the first successful Alaska Highway Safety Summit in 2020 the AHSO may host a two-day Highway Safety Summit in 2021 if COVID-19 is under control. The purpose of the conference is to gather highway safety professionals and stakeholders from around the state to discuss what is being done to address highway safety issues, update the state's safety community on best practices and new initiatives, and discuss future plans. Expenses related to hosting the conference include speaker costs, meeting space, and travel assistance for select attendees.

Grantee: AHSO

Budget/Funding Source: $150,000.00 Section 402

Eligible Use of Funds: NHTSA 402PT (FAST)

Match: $0

Local Benefit: $150,000

Planned Activity: Safe Communities Evaluation, SC-5

Project Title: Attitudinal Survey

Project Number: 402 SA-21-19-FA (E)

Description: The AHSO will contract with a vendor to conduct the annual attitudinal surveys to assess self-reported behavior, campaign recognition, and judge effective messaging of various campaigns. These surveys assist the AHSO in determining appropriate messaging for our target demographics and judge effectiveness on the AHSO's ability to affect social marketing of traffic safety issues. In addition, the surveys will provide a breakdown of the respondents' answers by region of the state, vehicle type, age, sex, and race. Survey findings will inform the development of enforcement and educational efforts to address these groups.

Grantee: AIPC, DBA Center for Safe Alaskans

Budget/Funding Source: $30,000.00 Section 402

Eligible Use of Funds: NHTSA 402 SA (FAST)

Match: $0

Local Benefit: $30,000

Planned Activity: Safe Communities Evaluation, SC-5

Project Title: Distracted Driving Observational Survey

Project Number: 405e FESX-21-00-FA (A)

Description: The AHSO will contract with a vendor to conduct a distracted driving observational survey. The AHSO is serious about addressing distracted driving but without a clear baseline of data it will be difficult to track progress and identify meaningful projects and activities in this area.

This survey will assist the AHSO in determining appropriate messaging for our target demographics and judge effectiveness on the AHSO's ability to affect social marketing of traffic safety issues. In addition, the survey could potentially provide a breakdown of observed distracted driving habits by region of the state, vehicle type, age, sex, and race. Specific enforcement and educational efforts to address these groups can then be developed.

Grantee: Survey Contractor

Budget/Funding Source: $45,000.00 Section 405e

Eligible Use of Funds: 405e Safe Communities (FAST)

Match: $0

Local Benefit: $0

3.11 Strategic Communications Plan

The Alaska Highway Safety Office will once again implement a more robust statewide strategic communications plan that supports the strategies outlined in the FFY 2021 HSP and Alaska's Strategic Highway Safety Plan. The AHSO will contract with a communications consultant to oversee the development and implementation of the plan which will have an overarching/umbrella campaign focus of "Toward Zero Deaths, Everyone Counts on Alaska's Roadways" in alignment with the SHSP. The goals of the campaign are to:

- Educate roadway users about their roles and responsibilities for safely sharing the road with all users;
- Change the behavior and attitudes of roadway users in key demographics resulting in a decrease in the incidence of crashes resulting in property damage, injury and or death; and
- Increase public awareness of the enforcement of traffic safety laws in an effort to achieve a zero deaths goal.

To augment the communications plan, the AHSO will also again contract with a sports marketing consultant to deliver a combination of impaired driving, proper restraint use, speed, young drivers, pedestrian, motorcycle, and aggressive driving (includes speeding) messages to target key demographics and engage fans during sporting and entertainment events and in high schools around the state. In scenarios where the COVID-19 pandemic prevents in-person school visits, presentations will be delivered virtually through Zoom or a similar platform where possible. Should school visits or presentations not be feasible, the project will be completed as a digital campaign virtual presentations. Engaging fans will also shift to more of a digital focus.

Countermeasure Strategies

Communication Campaign

The strategic communications plan will support the initiatives outlined in AHSO's FFY 2021 HSP and Alaska's SHSP with a particular focus on alcohol impaired and aggressive driving (which includes speeding) and proper restraint use for motor vehicle occupants of all ages; and focusing on the designated safety corridors. Messaging for ATV operators will be developed this year to address a growing concern with these vehicles on the roadways. The plan will support Alaska's participation in the national *Click It or Ticket* and *Drive/Ride Sober or Get Pulled Over* high-visibility enforcement mobilizations. Consistent with NHTSA communications best practices, wherever possible, plan objectives include both high-visibility messages and tactics, as well as social norming messages and tactics. HVE efforts like *Click It or Ticket* are the campaign "brand" and are promoted at specific times of the year to coincide with national advertising and local enforcement for maximum impact, optimizing paid media.

Over the past five years the AHSO has increased funding for paid, earned, and owned media, including social media, to address the behavioral emphasis areas in both the HSP and SHSP. The communications consultant will work with AHSO's partners to develop Alaska-specific radio and television spots and/or to retag spots available from NHTSA's Office of Communications and Consumer Information. Outdoor advertising (e.g., billboards, bus backs) also will be included in the plan, if appropriate.

The creative and media buys will be targeted to reach key demographic groups (e.g., males between 18 and 35 years of age, alcohol impaired motorcyclists) with critical safety messages (e.g., Drive/Ride Sober or Get Pulled Over) at key times of the year (e.g., in conjunction with national mobilizations and appropriate state events). All media materials will be tagged with Alaska's Zero Fatalities logo.

All media will be evaluated to assess its effectiveness in reaching the target audience. Particular measures will include:

- Paid media tactics employed, along with channel, duration, and impressions generated;
- Type and amount of collateral material (e.g., brochure, poster, safety aid) distributed, to whom and for what;
- Media coverage generated by AHSO and/or partner-related public outreach tactics (e.g., press releases/conference, safety fairs, campaigns), including channel, estimated audience reach/impressions, tone (e.g., neutral, positive, negative), and value/advertising equivalency; and
- On-line engagement, including unique visits to the AHSO web site, page clicks, and social media activities.

AHSO also will include questions in its annual behavioral safety attitudinal survey that measure public awareness of its key safety messages disseminated through paid, owned, and earned media.

Additionally, the AHSO will support a project designed to reach Alaska's high-risk target audiences attending sporting events and entertainment venues located across the state. The messaging for this project will be tailored to meet the strategic communication campaign objectives of impaired driving, proper restraint use, speed, young drivers, pedestrian, and aggressive driving (includes speeding). The reach of this effort will blanket the state in geographic location and season, and will include the following venues/events: summer league baseball, college athletics, high school state athletic tournaments, motorsports, premier winter sporting events, professional hockey and arena events, beer and wine festivals, and other fairs and festivals. The

sports marketing consultant will also oversee implementation of a School Influencer Curriculum, which is a program created on the concepts and principles of the 2015 Governor's Highway Safety Association's (GHSA) report "UNDER THEIR INFLUENCE: The New Teen Safe Driving Champions". The consultant will also work with the AHSO to promote an impaired driving app for smart phones to educate their drivers and provide them tools and resources to reduce impaired driving.

This project will be part of a comprehensive traffic safety public information program that will be implemented to raise awareness and change behavior in an effort to eliminate death, injuries and economic losses in traffic crashes in the impaired driving, occupant protection, and speeding focus areas. Materials and supplies developed through this project provide the general population with safe driving messages relevant to impaired driving at sporting events and entertainment venues. Impaired driving related PSAs in the form of signage and public address announcements will be produced and distributed, and an interactive display will be set up at venues fully staffed with public information and education items. Public opinion survey questions specific to impaired driving will be conducted.

The consultant will also work to implement a peer to peer program in a minimum of 40 high schools throughout the state called *Choices Matter* which will focus on speed, bike/pedestrian, occupant protection, and impaired driving messages. *Choices Matter* will engage high schools around the state with in-person or virtual presentations with impactful stories focused on impaired driving, and speed. In addition, where possible an interactive display will be set up in each school with activities such as a driving simulator, seat belt game, and/or video selfie station where students are invited to record a video or take a photo with a highway safety message to share on their social media. Campaign materials will be given to each school to reinforce safety messages throughout the year, including campaign banners and posters to hang in the schools, sample announcements to be read, and digital campaign materials. To inform and educate parents about the program, a targeted social media marketing campaign will be promoted to the followers of each school. In scenarios where the COVID-19 pandemic prevents in-person school visits, presentations will be delivered virtually through Zoom or a similar platform where possible. Should school visits or presentations not be feasible, the project will be completed as a digital campaign to coincide with National Youth Traffic Safety Month in May.

The advancement in technology has affected the way people watch sporting events. Sports viewing is now a digitally interactive experience with fans commenting on the events on social media, post photos, track scores, etc. The sports marketing consultant will use this technology to target a very specific demographic during major national sporting events such as the Super Bowl. A segmentation strategy will place digital messages on the mobile devices of sports fans fitting the demographic target who demonstrated an interest in alcoholic beverages with their social media habits during these major events.

The proven countermeasure strategy of high visibility enforcement, combined with high-visibility and social norming messages and tactics, is the cornerstone of AHSO's occupant protection and impaired driving countermeasures. The primary purpose of publicized highly visible enforcement is to encourage non-users to buckle up by increasing the perceived risk of receiving a ticket, and impaired drivers to avoid driving or find an alternative to getting to their destination.

Alaska utilizes data driven decision-making to select, assess, and monitor projects that in combination with the totality of our safety planning will lead toward safer roadways. To provide the maximum impact and likelihood for impacting our high risk drivers' behaviors regarding proper occupant restraint use, impaired and aggressive driving (including speeding), the AHSO conducts problem identification to identify the areas and populations that have the highest rate of impaired and aggressive driving and unrestrained fatalities, and the lowest

restraint usage rates. Alaska's traffic safety program is comprehensive in its geographic coverage, reach to high-risk populations, engagement with safety partners and advocates who implement evidence-based countermeasures, and the funding support to ensure success. The AHSO uses input collected throughout the year from planning partners identified in the Highway Safety Planning Process section and the *Countermeasures That Work (CTW): A Highway Safety Countermeasure Guide for State Highway Safety Offices*, Ninth Edition, 2017 in the selection of effective, evidence based countermeasure strategies for the FFY 2021 occupant protection, impaired driving and speed management program areas. By using evidence-based selection strategies, the likelihood of our programs and projects reaching our performance targets increases our probability of success.

Mass media campaigns are a standard part of every State's efforts to reduce alcohol- impaired driving. Campaigns vary enormously in quality, size, duration, funding, and many other ways. Effective campaigns identify a specific target audience and communications goal and develop messages and delivery methods that are appropriate to – and effective for – the audience and goal (Williams, 2007).

CDC's systematic review of 15 high-quality studies (Dinh-Zarr et al., 2001; Shults et al., 2004) found that short-term, high-visibility enforcement programs increased belt use by about 16 percentage points, with greater gains when pre-program belt use was lower. That same CDC systematic review observed that short-term, high-visibility enforcement campaigns increased belt use more among traditionally lower-belt-use groups, including young drivers, rural drivers, males, African-Americans, and Hispanics (Shults et al., 2004).

Communications and outreach campaigns directed at low-belt-use groups have been demonstrated to be effective for targeted programs that support, and are supported by, enforcement. The effectiveness of stand-alone programs not supported by enforcement is unclear, though North Dakota has demonstrated success with its 2003 "Pick Up the Habit for Someone You Love" campaign. In a November 2004 study, an intensive campaign using the same Buckle Up in Your Truck message was conducted in Amarillo, Texas. The campaign used paid advertising emphasizing belt law enforcement and earned media featuring local law enforcement officers. Belt use in pickup trucks increased by 12 percentage points in Amarillo and belt use in cars increased by 8 percentage points. At the same time, belt use in a comparison community increased by 5 percentage points for pickup truck occupants and by 4 percentage points for car occupants (Solomon, Chaffe, et al., 2007).

The North Dakota and Amarillo campaigns are well-documented examples of successful programs that target low-belt-use groups. They used all the characteristics of effective communications and outreach campaigns: good target audience research, effective and creative message development, and good message placement using both paid and earned media. The overall South Central Region campaign produced only modest gains, but Kentucky (67 percent to 76 percent statewide), Mississippi (58 percent to 65 percent in targeted counties), North Dakota (66 percent to 80 percent in targeted counties), and Wyoming (55 percent to 70 percent in targeted counties) were able to achieve significant increases in seat belt use through their programs (Blomberg, Thomas, & Cleven, 2009).

Social norms marketing campaigns are a more recent approach to reducing alcohol-related crashes. They are built on the premise that an individual's behavior is influenced by his or her perceptions of how most people behave. A study in Montana demonstrated the potential effectiveness of this approach. Surveys of young adults 21 to 34 years old in Montana revealed that only 20 percent had driven in the previous month after consuming two or more alcoholic drinks, although more than 90 percent thought their peers had done so. Based on this finding, a paid media campaign was developed with the normative message, "MOST Montana Young Adults (4 out of 5) Don't Drink and Drive." By the end of the campaign, there was a 13.7 percent difference in young adults who reported driving after drinking relative to a comparison community (Linkenbach & Perkins, 2005).

During the campaign, reported drunk driving among young adults in target counties decreased from 22.9 percent to 20.9 percent, while the percentage in non-targeted counties increased from 16.9 percent to 28.6 percent (Linkenbach & Perkins, 2005).

Evidence of Effectiveness: CTW, Chapter 1, Section 2.2, 5.2, 6.5; Chapter 2, Section 2.1 and 3.2; Under Their Influence: The New Teen Safe Driving Champions (GHSA, 2015)

In FFY 2021, AHSO anticipates spending approximately $60,000 in 402 funds for a media contractor, and the following for paid media: $200,000 in 402 funds for occupant protection and CPS, $75,000 in 402 funds for teen driving, $223,000 in 402 funds for distracted driving, $150,000 in 402 funds for speeding; $19,000 in 402 funds for motorcycle safety; $75,000 in 405h funds for pedestrian and bicyclist safety; and $700,000 in 405d funds for impaired driving. In addition, it is estimated that $800,000 in 402 funds will be spent on the social norming project to address high risk drivers' behaviors regarding proper occupant restraint use, impaired and aggressive driving (including speeding) at sporting events and entertainment venues.

Paid Advertising Budget

The following planned activities will support these countermeasures in FFY 2021:

- Public Education Activities (PE-2)
- Public Education (PE-3)

Planned Activity: Public Education Activities, PE-3

Project Title: Communications Contractor

Project Numbers: 402 PM-21-25-FA (A)

Description: This project will fund the services of the media contractor who will develop media plans and place media buys on behalf of the AHSO to assist in fulfillment of its goals for the HSP and SHSP.

Grantee: Media Agency

Budget/Funding Source: $60,000 NHTSA 402

Eligible Use of Funds: NHTSA 402 PM (FAST)

Match: $0

Local Benefit: $60,000

Planned Activity: Public Education, PE-3

Project Title: Educational Traffic Safety Media Buys

Project Numbers: 402 PM-21-25-FA(B); 402 PM-21-25-FA(C); 402 PM-21-25-FA(D); 402 PM-21-25-FA(E); 402 PM-21-25-FA(F); 405d M5PEM-21-01-FA(A); and FHPE-21-00-FA(A)

Description: This project funds the media buys on behalf of the AHSO to assist in fulfillment of its goals for the HSP and SHSP.

Paid Media: $200,000 Section 402 (OP and CPS); $75,000 Section 402 (teen driving); $223,000 Section 402 (distracted); $150,000 Section 402 (speed); $19,000 Section 402 (motorcycle); $75,000 Section 405h (pedestrian/bike); and $700,000 Section 405d (Impaired Driving)

Grantee: Media Agency

Eligible Use of Funds: NHTSA 402 PM (FAST); 405d Int Paid/Earned Media (FAST)

Match: $0 **Local Benefit:** $0

Evidence of Effectiveness: Refer to appropriate programmatic section.

Planned Activity: Public Education Activities, PE-2

Project Title: Special Events and Sports Marketing

Project Number: 402 PM-21-25-FA (G) (speed); 402 PM-21-25-FA (H) (impaired); 402PM-21-25-FA (I) (occupant protection)

Description: This project is designed to reach a high-risk target demographics gathered for sporting events and entertainment venues located throughout the state which are not currently addressed directly in other paid media activities, thus the need to address them in this additional request for funds. The messaging for this project will be tailored to meet the strategic campaign objectives. This project will also oversee implementation of a high school influence program; promote use of an impaired driving app to provide tools and educate high risk groups about impaired driving; and implement a campaign to engage Native American tribal leadership to promote highway safety messaging. Targeted campaigns of this project will focus on and break down as such:

- Summer Baseball (speeding) - $48,000
- Alaska Fairs (speeding) - $180,000
- College Athletics (speeding) - $60,000
- Motorsports (speed and impaired) -$48,000
- Hockey and Arenas (speed and impaired) -$120,000
- Beer and Wine Festivals (impaired and pedestrian) - $40,000
- High School Tournament (speed) - $80,000
- Choices Matter (speed, bicycle/ pedestrian, occupant protection, impaired) - $240,000

The AHSO plans to work with Alliance Highway Safety to implement this project. Alliance has the personnel and the years of experience in marketing, activation and highway safety, to design, activate and report on successful campaigns. As attendees of GHSA and LifeSavers conferences for over 10 years, the Alliance management staff seeks training and advice from experts in the field of highway safety and regularly trains all levels of staff in new highway safety-related laws and issues. Alliance has successfully executed communication and outreach projects for 25 State Highway Safety Offices over the past 15 years.

The projects planned were all selected based on the high concentration of people attending the events who fit into the high-risk categories of young males prone to self-destructive behaviors. The profile of the attendees at the events fit closely with the profile of the most at-risk drivers for age, gender and proximity to geographic areas with higher highway fatality totals.

Alliance has also worked closely with GHSA and the SADD national office on developing these planned activities.

Grantee: Alliance Highway Safety

Budget/Funding Source: $140,000 (speed); $448,000 (impaired); $228,000 (occupant protection) Section 402

Eligible Use of Funds: NHTSA 402 PM (FAST)

Match: $0 **Local Benefit:** $816,000

Evidence of Effectiveness: CTW, Chapter 1, Section 2.2, 5.2, 6.5; Chapter 2, Section 2.1 and 3.2; Under Their Influence: The New Teen Safe Driving Champions (GHSA, 2015)

3.12 NHTSA Equipment Approval

Alaska's equipment needs and the associated funding are unclear at this time. The AHSO will submit a letter to NHTSA requesting approval prior to any purchase of equipment valued over $5,000.

3.13 164 and 154 Transfer Funds

One hundred percent of all new 164 and 154 penalty transfer funds will be used by the Department of Transportation and Public Facilities for eligible infrastructure-related projects as provided in the Section 164 and 154 regulation.

4.0 FFY 2021 Planned Activities and Project List

Table 4.1 is a list of the planned activities the AHSO will use in FFY 2021. Each planned activity name has an associated unique identifier. The appropriate planned activity name and identifier is noted at the end of the countermeasures section and included in each project description throughout the HSP.

Table 4.1 FFY 2021 Planned Activities Identifiers

Planned Activity Identifier	Planned Activity Name
ID-1	Impaired Driving HVE
ID-2	Impaired Driving Focus
ID-2	Toxicology Services
ID-3	Public Education
ID-4	Impaired Driving Training
OP-1	Occupant Protection HVE
OP-2	Community CPS
OP-3	Public Education
OP-4	OP/CPS Training
OP-5	Occupant Protection Evaluation
PA-2	Planning and Administration
PB-2	Pedestrian/Bicycle Education & Safety
PE-2	Public Education Activities
PE-3	Public Education
PT-2	Police Traffic Services Activities
SC-1	Safe Communities Activities
SC-5	Safe Communities Evaluation
SP-1	Speed Enforcement
TR-2	Data Program Activities

Table 4.2 on the following page is a list of projects and an estimated amount of Federal funds for each project that the state proposes to conduct in FFY 2021 to meet the performance targets identified in the HSP.

Table 4.2 FFY 2021 Project List

Projects	Funding	Source
AST Speeding Fatality Reduction	$444,000	402
AIPC (DBA Center For Safe Alaskans) – Older Adult Drivers (CarFit)	$52,829.58	402
AIPC (DBA Center For Safe Alaskans) – Child Passenger Safety (CPS)	$168,324.35	402
AIPC (DBA Center For Safe Alaskans) – Young Driver	$175,151.85	402
AIPC, DBA Center For Safe Alaskans – Bicycle and Pedestrian Safety	$57,255.02	402
CIOT Enforcement	$200,000	402

Communications Contractor	$60,000	402
Educational/Safety Media Buys (Impaired Driving)	$700,000	405d
Educational/Safety Media Buys (OP & CPS)	$200,000	402
Educational/Safety Media Buys (Teen Driving)	$75,000	402
Educational/Safety Media Buys (Distracted)	$223,000	402
Educational/Safety Media Buys (Speed)	$150,000	402
Educational/Safety Media Buys (Motorcycle)	$19,000	402
Educational/Safety Media Buys (Pedestrian/Bicycle)	$75,000	405h
Highway Safety Summit	$150,000	402
Planning and Administration	$300,000	402
Statewide LEL (Impaired Driving)	$60,000	402
Attitudinal Survey	$30,000	402
Toxicology Services	$221,077	402
Homer Police Department – Project Drive	$7,000	405d
Fairbanks Safe Rider	$112,138	405b
Mat-Su CPS Program	$55,972	405b
Safe Kids Kenai	$28,749.24	405b
OPUS	$40,000	405b
Statewide CPS Coordinator	$40,000	405b
Statewide CPS Co-Coordinator	$40,000	405b
AIPC (DBA: Center for Safe Alaskans) Data Linkage	$103,125	405c
Crash Data Entry Services	$350,000	405c
TraCS License Fee	$100,000	405c
Anchorage Airport Police & Fire Department	$77,200	405c
Kodiak Police Department TraCS	$30,000	405c
Anchorage PD Impaired Driving Unit	$1,744,000	405d
Fairbanks PD Traffic Enforcement Unit (DUI)	$110,000	405d
High-Visibility Enforcement DUI	$200,000	405d
Special Events and Sports Marketing (Speed)	$140,000	402
Special Events and Sports Marketing (Impaired)	$448,000	402
Special Events and Sports Marketing (Occupant Protection)	$228,000	402
Statewide DRE Program	$300,500	405d
Distracted Driving Observational Survey	$45,000	405e

5.0 State Certifications and Assurances

5.1 Certification and Assurances for FFY 2021 Highway Safety Grants

Appendix A to Part 1300 – Certification and assurances for highway safety grants (23 U.S.C. Chapter 4; Sec. 1906, Pub. L. 109-59, as amended by Sec. 4011, pub. L. 114-94) which is signed by Alaska's Governor's Representative for Highway Safety was submitted separately to NHTSA.

5.2 Appendix B to Part 1300 – Application Requirements for Section 405 and Section 1906 Grants

For FFY 2021, Alaska is applying for the following 405 incentive grants programs:

- Part 1 – Occupant Protection (23 CFR 1300.21);
- Part 2 – State Traffic Safety Information System Improvements (23 CFR 1300.22);
- Part 3 – Impaired Driving Countermeasures (23 CFR 1300.23); and
- Part 4 – Nonmotorized Safety (23 CFR 1300.27).

NOTE: The 405 application, which is signed by \Alaska's Governor's Representative for Highway Safety and includes the completed sections of the Appendix B to Part 1300 – Application Requirements for Section 405, was submitted separately to NHTSA.