STATE OF WISCONSIN

DEPARTMENT OF TRANSPORTATION

FFY 2023 HIGHWAY SAFETY PLAN

TONY EVERS
GOVERNOR OF WISCONSIN

CRAIG THOMPSON
GOVERNOR'S REPRESENTATIVE FOR HIGHWAY SAFETY
SECRETARY, WISCONSIN DEPARTMENT OF TRANSPORTATION

DAVID PABST
HIGHWAY SAFETY COORDINATOR

CONTENTS

I Highway Safety Plan - Introduction 3
Mission Statement 3
Executive Summary 3
Highway Safety Planning Process 9
Highway Safety Planning Timeline 10
II Program Areas 15
Planning and Administration 15
Occupant Protection Program 17
Impaired Driving Program 25
Police Traffic Program 34
Law Enforcement 37
Traffic Records Improvement Plan 40
Emergency Medical Service (EMS) Improvement Plan 43
Motorcyclist Safety Program 46
Pedestrian and Bicyclist Safety Program 55
Community Traffic Safety Outreach and Media Programs 63
III Appendices 74
Appendix 1: Law Enforcement Grant Targeting Methodology 74
Appendix 2: 405(B) Requirements 78
Appendix 3: 405(C) Requirements 84
Appendix 3A: Quantitative Improvement 89
Appendix 3B: Traffic Safety Information Systems Plan 91
Appendix 4: Motorcycles Registered By County 2021 129
Appendix 5: Partners, Committees, and Organizations 130
Appendix 6: Detailed Budget 132
Appendix A: NHTSA Appendix A to Part 1300 135
Appendix B: NHTSA Appendix B to Part 1300 136

I Highway Safety Plan - Introduction

Mission Statement

Our mission is simple: Zero fatalities on Wisconsin's roadways.

Our transportation system plays a vital role in economic growth, moving people to jobs, products to markets and connects citizens and visitors to a variety of destinations. As a society, we should not accept casualties as a foregone consequence of using the highway system. Wisconsin residents, state and local government officials must work collectively toward achieving zero fatalities and incapacitating injuries on our roadways. Our belief is that any death is one too many, and we must work toward preventing as many injuries and saving as many lives as possible using the resources available. The COVID-19 pandemic impacted programming and resulted in an unexpected increase in crashes. This impact affected how communities addressed traffic safety needs. Our commitment to safety enforcement and awareness remained steadfast.

Executive Summary

The Wisconsin Department of Transportation's Bureau of Transportation Safety (BOTS) coordinates a statewide behavioral highway safety program using federal funds administered through the National Highway Traffic Safety Administration (NHTSA), state funds and other resources. Funds are primarily used to change system users' behaviors by:

- enforcing traffic laws
- increasing drivers' perception of the risk of being ticketed for non-compliance
- increasing public awareness of the dangers of high-risk behavior
- informing system users of the best way to avoid or reduce the severity of a crash

Through data analysis and targeted use of resources, BOTS provides leadership, innovation, and program support in partnership with state, county, and community traffic safety leaders, professionals, and organizations.

Figure 1 uses Fatality Analysis Reporting System (FARS) fatality data (preliminary) until 2021. The number of traffic fatalities has trended slightly downward over the last five years.

The 615 fatalities Wisconsin recorded in 2021 represents an increase from the prior year and is also above the five-year (2017-2021) rolling average of 599. There were 615 fatalities on Wisconsin roads in 2021: up from 614 fatalities in 2020.

As **Figure 2** indicates, serious injury crashes spiked to 3,492 in 2017. There were 3,288 serious injuries in 2021 according to preliminary figures from Wisconsin's state crash data files.

Wisconsin achieved the national goal of one fatality per 100 million Vehicle Miles Traveled (VMT) in 2009, two years ahead of the national target date. As **Figure 3** indicates, Wisconsin fatalities per 100 million Vehicle Miles Traveled (VMT) increased to 1.03 in 2021.

The lead state agency for any grant type is the Wisconsin Department of Transportation (WisDOT). Match for maintenance of effort is achieved using the following table.

405b	Division of State Patrol (DSP) traffic enforcement
405c	DSP Traffic and Criminal Software (TraCS) staff, a BOTS safety data analyst, DSP Mobile Architecture for Communications Handling (MACH) and TraCS support, and MACH MiFi hardware expenditures
405d	DSP traffic enforcement and safe-ride grant program alternative transportation funds

Goal C1: To decrease traffic fatalities 2% each year from the 2017-2021 five-year moving average to 587 by December 31, 2023.

Figure 1: Traffic Fatality Trends (FARS until 2021)

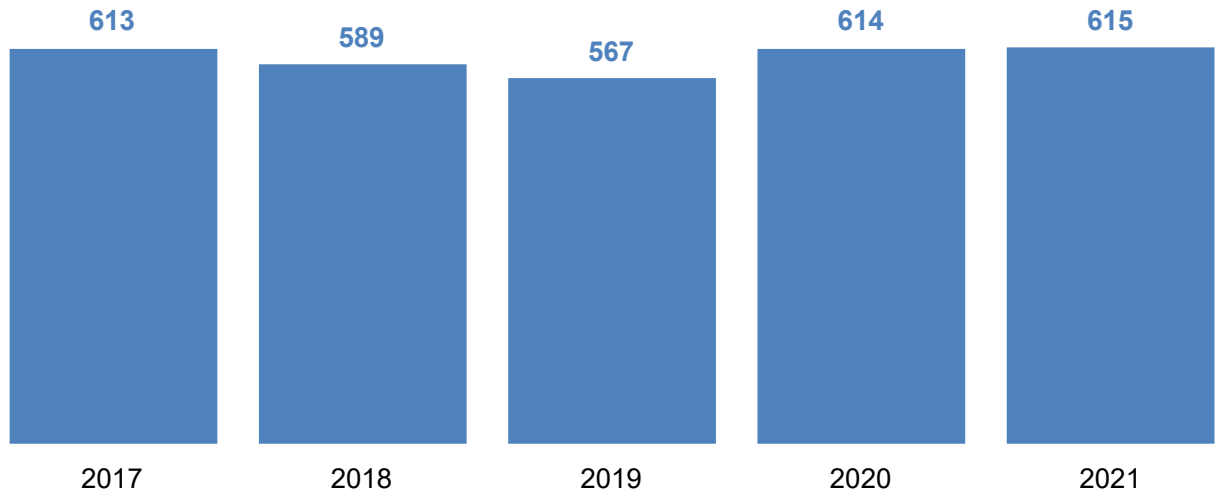


Figure 2: Serious Injury Traffic Trends (State crash data)

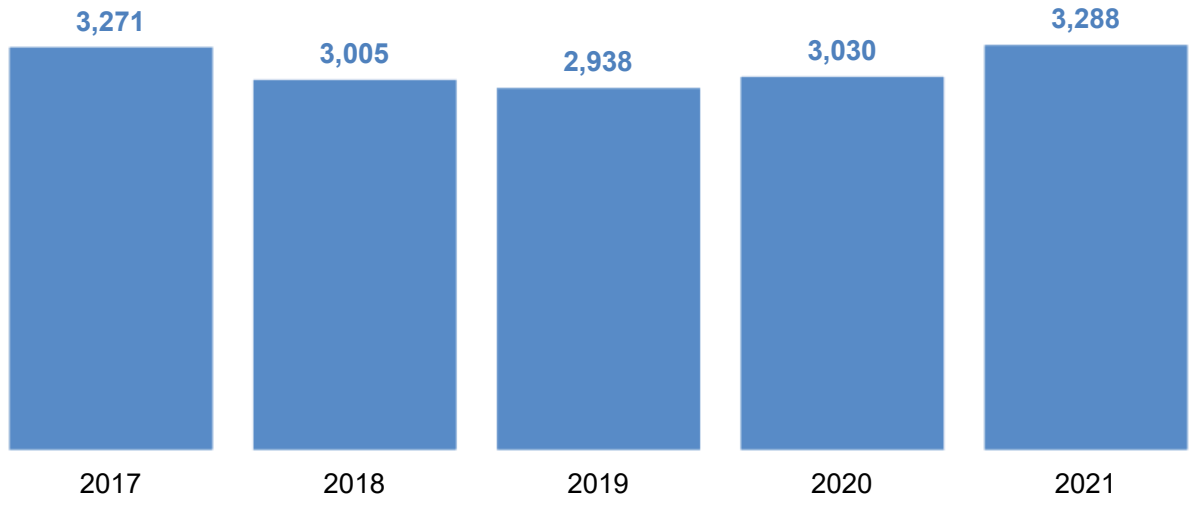


Figure 3: Fatalities per 100M VMT (FARS)

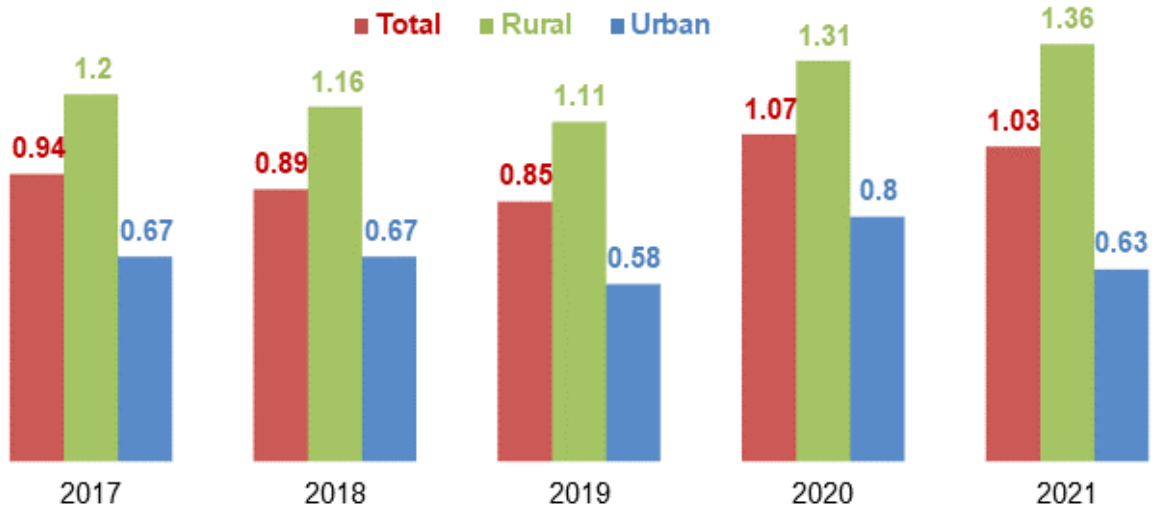


Figure 4 below provides the performance measures and goal statements developed by the Governors Highway Safety Association (GHSA) and NHTSA. FARS data was not available at the time of this application for 2021 and state numbers were used.

	GHSA/NHTSA PERFORMANCE PLAN CHART		2017	2018	2019	2020	2021
C-1	Traffic Fatalities	FARS Annual, 2021 is State	613	589	567	614	615
	Reduce total fatalities to **587.2** (2017 - 2021 rolling average) by 2023	5-Year Rolling Avg.	599				
C-2	Serious Injuries in Traffic Crashes	State	3,492	3,212	3,133	3,186	3,288
	Reduce serious traffic injuries to **3,044.3** (2017 - 2021 rolling average) by 2023	5-Year Rolling Avg.	3,106				
C-3	Fatalities/100M VMT	FARS Annual, 2021 is State	0.94	0.89	0.85	1.07	1.03
	Reduce fatalities/100 MVMT to **0.937** (2017 - 2021 rolling average) by 2023.	5-Year Rolling Avg.	0.96				
C-4	Unrestrained Passenger Vehicle Occupant Fatalities, All Seat Positions	FARS Annual, 2021 is State	180	154	142	179	166
	Reduce unrestrained passenger vehicle occupant fatalities, all seat positions 2% percent from 164 (2017 - 2021 rolling average) to **161** by 2023.	5-Year Rolling Avg.	164				

C-5	Alcohol-Impaired Driving Fatalities	FARS Annual, 2021 is State	185	206	186	210	184
	Reduce alcohol impaired driving fatalities 2% percent from 194 (2017 - 2021 rolling average) to **190** by 2023.	5-Year Rolling Avg.	194				
C-6	Speeding-Related Fatalities	FARS Annual, 2021 is State	180	186	173	216	186
	Reduce speeding-related fatalities by 2% percent from 188 (2017 - 2021 rolling average) to **184** by 2023.	5-Year Rolling Avg.	188				
C-7	Motorcyclist Fatalities	FARS Annual, 2021 is State	76	83	85	116	121
	Reduce motorcyclist fatalities by 2% percent from 96 (2017 - 2021 rolling average) to **94** by 2023.	5-Year Rolling Avg.	96				
C-8	Unhelmeted Motorcyclist Fatalities	FARS Annual, 2021 is State	42	53	54	83	86
	Reduce unhelmeted, motorcyclist fatalities 2% percent from 64 (2017 - 2021 rolling average) to **63** by 2023.	5-Year Rolling Avg.	64				
C-9	Drivers Age 20 or Younger involved in Fatal Crashes	FARS Annual, 2021 is State	90	57	81	67	92
	Reduce drivers age 20 and younger involved in fatal crashes by 2% percent from 77 (2017 - 2021 rolling average) to **75** by 2023.	5-Year Rolling Avg.	77				
C-10	Pedestrian Fatalities	FARS Annual, 2021 is State	56	56	59	50	51
	Reduce pedestrian fatalities by 2% percent from 54 (2017-2021 rolling average) to **53** by 2023.	5-Year Rolling Avg.	54				
C-11	Bicyclist Fatalities	FARS Annual, 2021 is State	7	4	14	12	9
	Reduce bicyclist fatalities 2% percent from 9 (2017 - 2021 rolling average) to **9** by 2023.	5-Year Rolling Avg.	9				
B-1	Observed Seat Belt Use for Passenger Vehicles, Front Seat	State Annual	89.4	89.3	90.2	89.2	88.1

	Outboard Occupants (State Survey)		
	Increase observed seat belt use for passenger vehicles, front seat outboard occupants by 2% percentage points from 89.2 percent in (2017 - 2021 rolling average) to **91.0** percent by 2023.	5-Year Rolling Avg	89.2
A1.	Number of seat belt citations issued during grant-funded enforcement activities (FFY 2021)	17,884	
A2.	Number of impaired-driving arrests made during grant-funded enforcement activities (FFY 2021)	3,263	
A.3	Number of speeding citations issued during grant-funded enforcement activities (FFY 2021)	41,861	

The five key performance measures defined by the Federal Highway Administration (FHWA) for use in states' Strategic Highway Safety Plans (SHSPs) are:

- Number of fatalities
- Fatality rate
- Number of serious injuries
- Serious injury rate
- Number of non-motorized fatalities and serious injuries

The first three measures are included in the prior matrix as part of the agreed upon performance measures by the GHSA and NHTSA. We are including the last two in this plan to reflect our commitment to the state's SHSP.

Measure	2017	2018	2019	2020	2021	2017-2021 Avg.	2022 Target
Serious Injury Rate	5.01	4.56	4.43	5.26	5.52	4.96	4.86
*To decrease the serious injury rate by 2% from the 2017-2021 calendar year rolling average of 4.96 to **4.857** by 2023.*							
Number of non-motorized fatalities and serious injuries	379	367	371	342	401	372.0	364.6
*To decrease the number of non-motorized fatalities and serious injuries by 2 percent from the 2017-2021 calendar year rolling average of 372.0 to **364.0** by 2022.*							

	2023 HSP				
Performance Measure:	**Target Period**	**Target Year(s)**	**Target Value FY22 HSP**	**Data Source*/ FY22 Progress Results**	**On Track to Meet FY22 Target YES/NO/In-Progress**
C-1) Total Traffic Fatalities	5 year	2017-2021	584.7	2017-2020 FARS, 2021 State 599	In progress, Trending up
C-2) Serious Injuries in Traffic Crashes	5 year	2017-2021	2,996	2017-2020 FARS, 2021 State 3,106	In progress Trending up
C-3) Fatalities/VMT	5 year	2017-2021	0.92	2017-2020 FARS, 2021 State 0.96	In progress Trending up
C-4) Unrestrained Passenger Vehicle Occupant Fatalities, All Seat Positions	5 year	2017-2021	159	2017-2020 FARS, 2021 State 164	In progress Trending up
C-5) Alcohol-Impaired Driving Fatalities	5 year	2017-2021	178	2017-2020 FARS, 2021 State 194	In progress Trending up
C-6) Speeding-Related Fatalities	5 year	2017-2021	180	2017-2020 FARS, 2021 State 188	In progress Trending up
C-7) Motorcyclist Fatalities	5 year	2017-2021	84	2017-2020 FARS, 2021 State 96	In progress Trending up
C-8) Unhelmeted Motorcyclist Fatalities	5 year	2017-2021	56	2017-2020 FARS, 2021 State 64	In progress Trending up
C-9) Drivers Age 20 or Younger Involved in Fatal Crashes	5 year	2017-2021	71	2017-2020 FARS, 2021 State 77	In progress Trending up
C-10) Pedestrian Fatalities	5 year	2017-2021	52	2017-2020 FARS, 2021 State 54	In progress Trending up
C-11) Bicyclist Fatalities	5 year	2017-2021	9	2017-2020 FARS, 2021 State	In progress

				9	Holding
B-1) Observed Seat Belt Use for Passenger Vehicles, Front Seat Outboard Occupants (State Survey)	Annual	2022	93.8%	State Survey 89.2%	Not made Trending down
S-1) Serious Injury Rate	5 year	2017-2021	4.86	2017-2020 FARS, 2021 State 4.96	In progress Trending up
S-2) Non-motorized Fatalities and Serious Injuries	5 year	2017-2021	364.6	2017-2020 FARS, 2021 State 372	In progress Trending up

** To compute the 2021 FARS number(s) for the Safety Performance measures the difference between the FARS and State number(s) for each year of 2016-2020 was determined. The differences were then added together and divided by five for an average. This average was then added to the 2021 State number(s) to simulate the 2021 FARS number(s).

*** FARS numbers were used for 2017-2020 but due to unavailability, State numbers were used for 2021.

Highway Safety Planning Process

The highway safety planning process is circular and continuous. At any time during the year, the Bureau of Transportation Safety may be working on previous, current, and upcoming fiscal year plans.

The Strategic Highway Safety Plan (SHSP) serves as the principal planning document. The Highway Safety Plan (HSP) is developed to:

- maximize integration and use of data analysis resources
- represent driver behavior issues and strategies
- use any statewide safety committees to obtain input from state and local traffic safety partners

BOTS ensures that the goals and objectives contained in the SHSP are considered in the annual development of the HSP and fully incorporated possible.

BOTS reviews the SHSP and HSP to identify any gaps in addressing driver behavior issues and eliminate any redundancy for the maximum use of resources. The data source used by BOTS in identifying its highway safety problems is primarily the state's crash database, which is managed by BOTS. Other data sources include crash data from NHTSA's Fatality Analysis Reporting System (FARS). Wisconsin's highway safety planning process includes all of the components of 23 C.F.R. 1300.11(a) which are:

(1) Description of the data sources and processes used by the state to identify its highway safety problems, describe its highway safety performance measures, establish its performance targets, develop and select evidence-based countermeasure strategies and projects to address its problems and achieve its performance targets

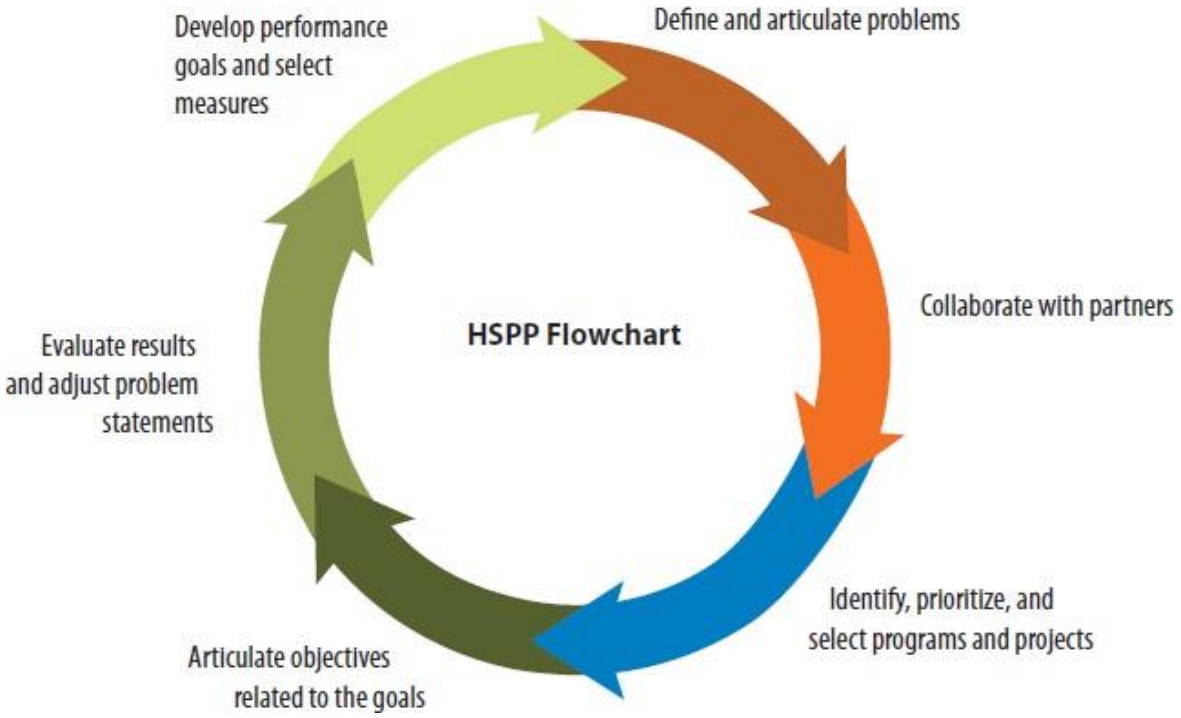
(2) Identification of the participants in the processes (e.g., highway safety committees, program stakeholders, community, and constituent groups)

(3) Description and analysis of the state's overall highway safety problems as identified through an analysis of data, including but not limited to fatality, injury, enforcement and judicial data, to be used as a basis for setting performance targets and developing countermeasure strategies

(4) Discussion of the methods for project selection (e.g., constituent outreach, public meetings, and solicitation of proposals)

(5) List of information and data sources consulted

(6) Description of the outcomes from the coordination of the HSP, data collection, and information systems with the SHSP.



HIGHWAY SAFETY PLANNING TIMELINE

NOVEMBER TO DECEMBER

Prepare the prior year's Annual Report. This document is the companion report to the same year's Highway Safety Plan (HSP). The report provides NHTSA and the public with a summary of how funds were spent in that fiscal year.

JANUARY AND CONTINUING

Wisconsin is unique in that it has a law (s. 83.013, Wis. Stat.) that requires all 72 of its counties to have a Traffic Safety Commission. The law further defines who should participate at the quarterly meetings. A commission is required to include:

- the chief county traffic law enforcement officer
- the county highway safety coordinator
- the county highway commissioner
- a WisDOT engineer from the region office
- a behavioral highway safety representative from BOTS
- a Wisconsin State Patrol trooper
- representatives from the education, medicine, and legal professions

We recognize what a valuable opportunity this requirement gives us to reach out and solicit ideas and input into our planning process and we use this opportunity.

In addition, each State Program Manager (SPM) obtains formal and informal recommendations, resources, and information from traditional and non-traditional partners and stakeholders including public health; emergency medical services; enforcement and adjudication; not-for-profit organizations; businesses; and community coalitions. This activity continues throughout the year (see Appendix 3: Safety: Partners, Committees, and Organizations).

During the first quarter of each year, BOTS program analysts and managers review the prior year's data and study the effectiveness of the prior year’s projects. They also perform literature reviews and review best practices from other states.

Another valuable committee is the WisDOT’s Traffic Safety Council. This is a multi-disciplinary group that meets on the first Thursday of each month. Representatives from FHWA, FMCSA, BOTS, Division of Motor Vehicles, Division of Transportation Investment Management, Division of Transportation System Development, WisDOT executive offices, and the University of Wisconsin-Madison serve on the committee. This group is responsible for authoring the Wisconsin Strategic Highway Safety Plan (SHSP) required by USDOT for federal Highway Safety Improvement Plan (HSIP) funds.

As a result of Wisconsin’s Traffic Safety Council, and in compliance with the FAST Act, a Statewide Impaired Driving Task Force was chartered. This task force has accomplished a great deal. The group assembled a broad variety of stakeholders, developed a formal charter, approved the Statewide Impaired Driving Plan by agreeing to work on five signature items going forward, helped Wisconsin to qualify for federal funding, assisted with the development of the federally required SHSP and began work on signature items. Similar work groups have been established for other key safety initiatives included in Wisconsin’s SHSP.

JANUARY TO JUNE

After the end of a calendar year, preliminary crash data are evaluated. Analysts may prepare preliminary reports of the previous year's fatality trends.

After finalized data are available, the most recent 10 years of crash data are used to determine the magnitude of the problem posed by each crash type and to develop trend lines. Goals are set using five-year rolling averages. In addition, conviction, medical, demographic, survey, program effectiveness, and other relevant data are analyzed and used as appropriate to generate rates and identify disproportionate representation of subgroups and trends for each program area.

BOTS identifies, describes, and analyzes the state's overall highway safety problems through an analysis of the data it maintains or has access to authorized to BOTS by the Governor's Representative for Highway Safety 23 C.F.R. 1300.4(b)(4). Including but not limited to fatality, injury, enforcement, and judicial data. BOTS uses this data as a basis for setting performance targets and developing countermeasure strategies. BOTS uses the data to generate targeting lists for enforcement grants. Grantees for the upcoming FFY are notified of their eligibility and the regional program managers assist grantees with identifying their agency capacity (see Appendix 1: Law Enforcement Grant Targeting).

APRIL TO JUNE

Analysts evaluate the nature and magnitude of each type of state-level and program area problem and each target location or group; establish the effectiveness of proposed program activities in addressing the problem; and determine the availability of resources to be applied to the problem and availability of data and information to be used to determine progress toward goals.

Where applicable, continuing activities that are determined to have been effective are funded at a progressively decreasing federal share. Recommendations from state program assessments are integrated into program objectives and funded activities.

Each program expert brings information from the processes described above to a BOTS committee to be included in the upcoming year's HSP.

At the project level, high risk target populations, jurisdictions and behaviors are identified as in the following example: All alcohol and speed-related crash data from the three previous years for every jurisdiction in Wisconsin are analyzed, from those involving property damage, through all ranges of injuries, and those that resulted in death. These data are scientifically weighted following established statistical protocol.

The annual HSP is coordinated with state and national strategic plans and related operational plans and guidelines, and especially with the WisDOT Strategic Highway Safety Plan. The 10 items of highest priority in the Department's 2017-2020 Strategic Highway Safety Plan are listed below (HSP-related goals bolded):

1. **Improve Safety Culture, Safety Data, Safety Technology**
2. **Reduce Driver Distraction/Improve Driver Alertness**

3. **Reduce Alcohol and Drug-Impaired Driving**
4. **Reduce the Incidence and Severity of Motorcycle Crashes**
5. **Improve Driver Performance (Teens, Older, Competent)**
6. **Improve Non-Motorist Safety**
7. Improve Safety of Intersections
8. **Increase Occupant Protection**
9. **Curb Aggressive Driving/ Reduce Speed-Related Crashes**
10. Reduce Lane Departure Crashes

Failure to be ranked in the high priority highway safety issue areas for the 2017-2020 SHSP does not mean the topic is unimportant - nor does it mean WisDOT will discontinue planned or on-going initiatives that have demonstrated results.

Initiatives such as making large truck travel safer, enhancing Emergency Medical Services (EMS) to increase survivability, reducing vehicle-train crashes, improving incident management, improving work zone safety, safe travel in bad weather and reducing deer/other animal crashes will still be pursued.

Discussion of Wisconsin's 2022-2025 Strategic Highway Safety Plan are under way. Priorities will be set as part of that process, but it is expected they will be similar to the priorities in our current plan. As with prior plans, performance measures will be reviewed and adjusted as participants see fit.

End of June

Internal approval of the plan is received and the HSP is submitted to NHTSA.

Ongoing

Feedback from NHTSA management reviews, including traffic records strategic plans and other reviews of program areas, is incorporated into the planning process as well. Priority is given to the NHTSA Administrator's Motor Vehicle and Highway Safety Priorities, as well as overlapping FHWA and FMCSA safety priorities and goals. The latest version of NHTSA's Countermeasures That Work is used as part of project development.

State-Level Problem Identification

The process of identifying problems is integral to the planning process. Information used in identifying problems includes:

- WisDOT state crash, conviction, vehicle, roadway, traffic, and survey data
- BOTS program effectiveness studies
- Demographic and other census data
- Emergency department, hospital discharge and death data from the state Department of Health Services
- National surveys
- Other relevant data

These data are used, as appropriate, in trend, factor, and other analyses of each program area. The ID process is located under the justification sections of each program plan. In the individual program areas, further program needs, and justification is identified.

Several program areas include plans for enforcement activities. It should be noted that law enforcement grants require individual grantees to set performance measures that consider all contacts (citations, warnings and stops with no formal action) with the motoring public.

Overall, BOTS' goal is to fund the programs that will have the biggest impact on traffic fatalities.

II Program Areas

Planning and Administration

The overall management and planning of Bureau of Transportation Safety (BOTS) activities are made possible through state and federal funds. Federal funds cover salaries and benefits of:

- the grants management supervisor
- the policy and program supervisor
- two full-time equivalent (FTE) operations program associates
- a 0.5 FTE office associate
- a 0.5 FTE office operations associate

Funds also cover out-of-state travel and training for each of these staff members.

State money for this program covers the salary and fringe of the director, the section chief, and two full-time analysts.

Staff categorized as Planning and Administration have a positive impact on the traffic safety of Wisconsin. They have the following responsibilities:

- Prioritize the state's most significant highway safety challenges
- Apply for all federal funding and write the state's Highway Safety Plan
- Act as a representative for the state of Wisconsin as the Highway Safety Coordinator
- Participate on committees and task forces
- Target effective law enforcement grants
- Promote highway safety in Wisconsin
- Develop internal controls, monitor and analyze policies
- Ensure grant shells have proper contract language
- Manage the process of grant reimbursement requests from grant partners, as well as reimbursement requests to the federal government
- Organize and host the Governor's Conference on Highway Safety
- Report on results of funding to NHTSA
- Prepare a report of grants subject to the Federal Funding Accountability and Transparency Act

Performance Measure: On-time submission of the Highway Safety Plan and the Annual Report:

Expenditures for planning and administration are specifically allowed under Appendix D to Part 1300 and as such are effective as a countermeasure strategy.

Table. Planning and Administration – Budget Summary

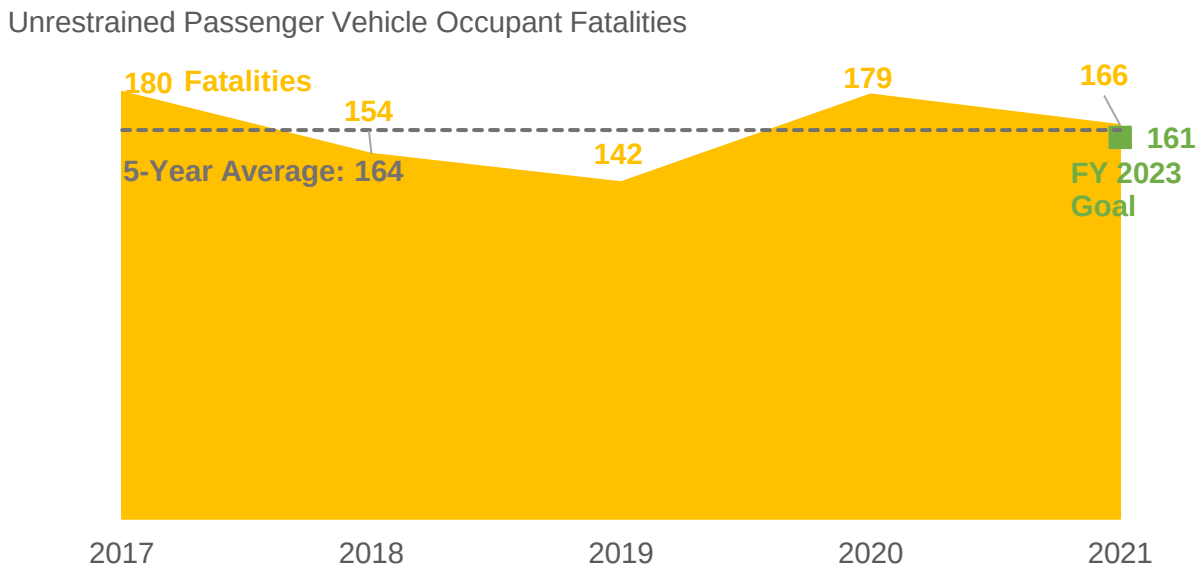
Fund	Account	2023 Planned
402	2023-10-01-PA	**$340,000**
State 562	2023-19-01-WI	**$530,000**
	Program Total	**$870,000**

Occupant Protection Program

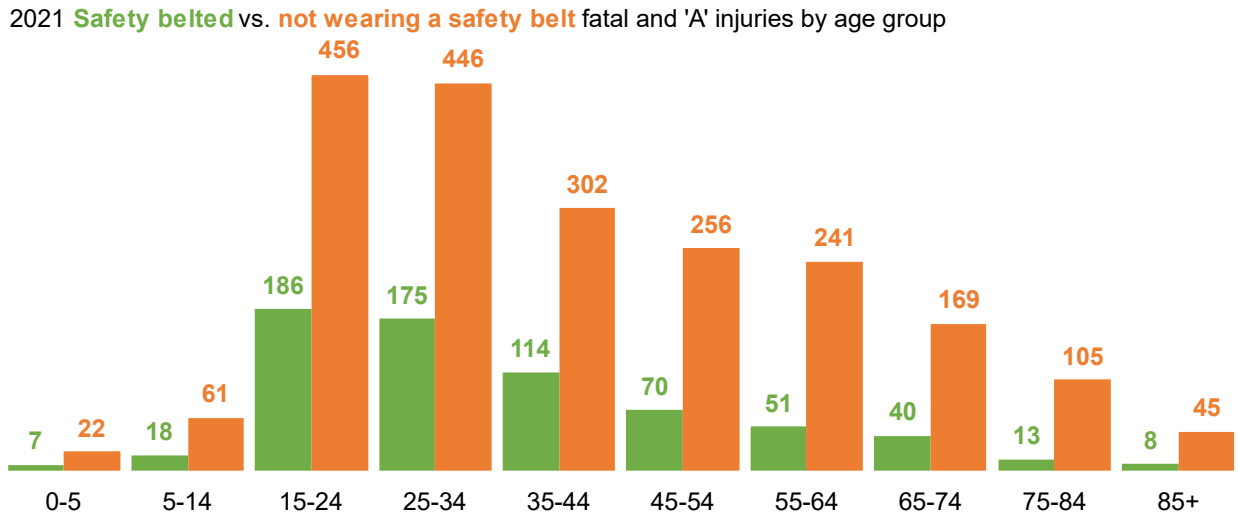
Justification

This section serves as Wisconsin's occupant protection program plan as required under the FAST Act. In 2000 (base year), Wisconsin's observed statewide seat belt use was very low at 65.4%. That year, 1,148 people were ejected or partially ejected in crashes and 40.5% of crash victims who were not belted were either killed or incapacitated.

In 2021, the state's observed average statewide seat belt use was 88.1%. Despite our progress over the last 20 years, Wisconsin still trails the national average usage rate of 90.4%. The 11.9% of our population that does not buckle up accounts for almost 41% of our vehicle occupant fatalities. Unrestrained passenger vehicle occupants is performance measure **C4**. Below is the graph of the prior five years and the goal for 2023.



Seat belt usage lags with our most inexperienced drivers: those between the ages of 15 and 34.

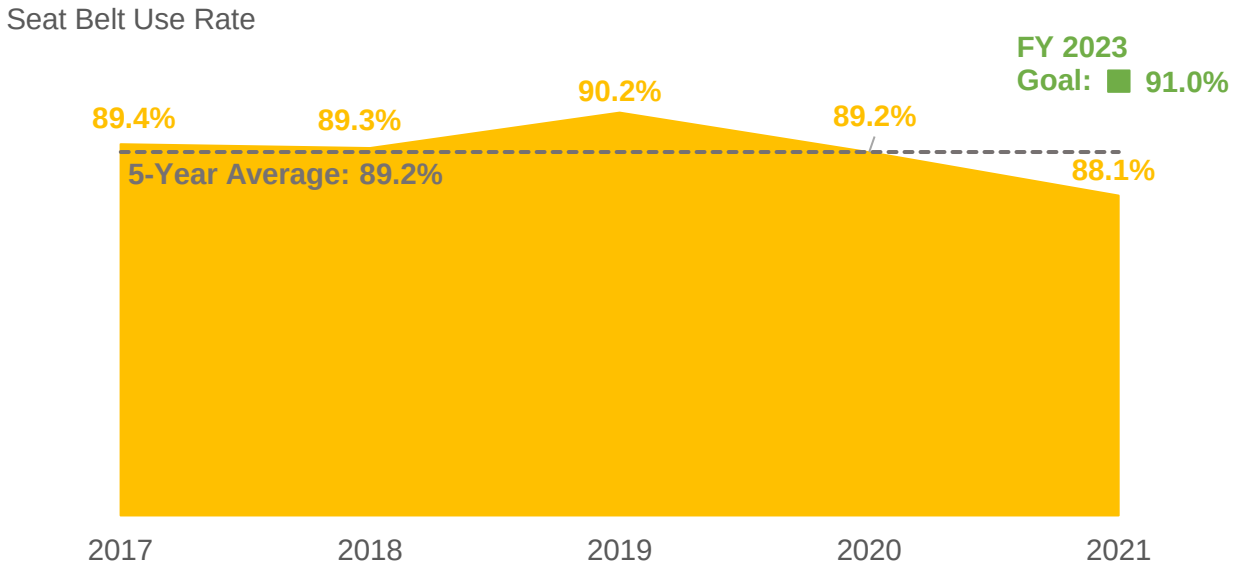


Under the criteria for funding:

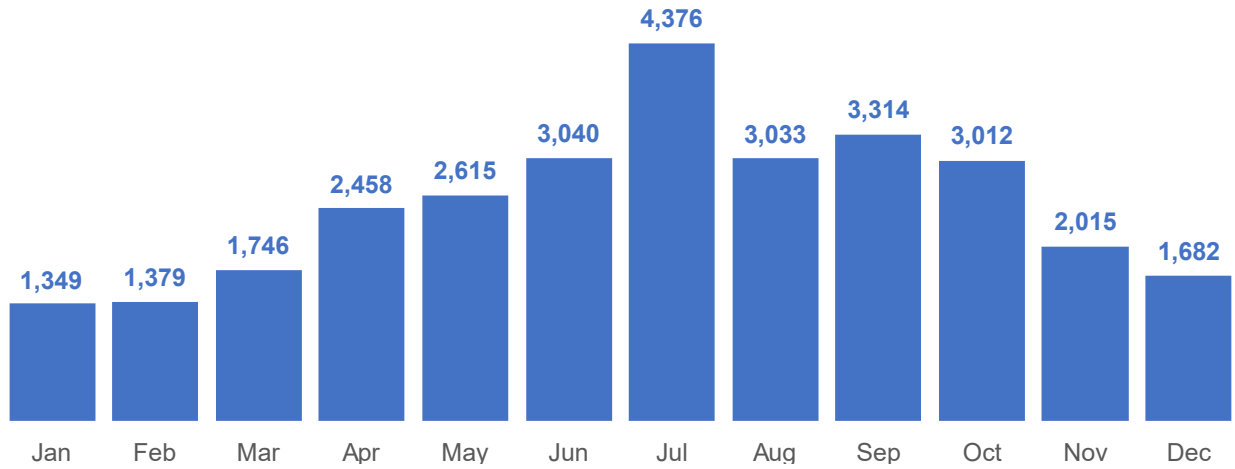
- Wisconsin is required to provide an occupant protection plan
- Participate in the Click-It-or-Ticket (CIOT) national mobilization
- Provide information on our child restraint inspection stations
- Have a program for recruiting, training, and maintaining technicians
- Maintain our state level of effort

More details about our enforcement program can be found in Appendix 1: Law Enforcement Grant Targeting Methodology, in the discussion on how grants are targeted.

Performance measure **B1** and our goal are in the chart below.



Wisconsin law enforcement agencies sustain their enforcement of seat belt and child restraint laws throughout the year. This graph reports the yearlong effort.



In 2021, there were 30,019 convictions for failure to fasten seat belts, a 9.5% increase from 2020; and there were 1,873 convictions for child restraint violations, a 6% increase over 2020.

For the period 1994 to 2021, individuals not wearing a seat belt were 55 times more likely to be ejected from their vehicle. In addition, they were 11 times more likely to be killed than someone wearing a shoulder and lap belt at the time of the crash. A 14.3% fatality rate equates to approximately a one in seven chance of being killed.

Highway Safety Office Program Management/Program Management and Strategic Planning

Assess Traffic Safety Impact

This state program manager position will positively impact traffic safety in Wisconsin by coordinating, planning, and managing the state occupant protection programs.

The manager will execute a strategy that will have a positive impact on traffic safety in Wisconsin including:

- Enhancing volunteer agency participation
- Increasing community involvement
- Working with community organizations and non-profit programs to expand occupant protection activities and efforts
- Encouraging state and local input into the HSP development process

Linkage

Funding program management and strategic planning for the occupant protection program will aid the state in reaching performance target **C1**.

Rationale for Selecting Countermeasure/Amount

Hiring a full-time occupant protection coordinator is specifically allowed under 402. Expenditures in 2021 were $73,272.35.

Description

This funding will provide wage, fringe, data processing, materials and supplies, training and travel, printing, and postage support for this position. This position will work with regional program managers, law enforcement liaisons, and law enforcement agencies of all sizes to coordinate occupant protection efforts, encourage safe and effective high-visibility enforcement and participation in mobilizations.

Wisconsin meets its requirements for match with traffic enforcement conducted on straight time by the Wisconsin State Patrol.

Intended Subrecipients	Funding Source	Unique Identifier	Funding Amount	Local Benefit
BOTS	402	2023-20-01-OP	$85,000	$0

High-Visibility and Saturation Patrols/Enforcement

Assess Traffic Safety Impact

Enforcement provides a deterrent effect impacting a person's decision to operate a motor vehicle without a seat belt. Enforcement increases the perception of the risk of being arrested. This strategy will decrease the incidence of fatalities and unbelted crashes.

Linkage

Enforcement of the law prohibiting the operation of a motor vehicle while not wearing a seat belt will provide support to the state in reaching performance target **C1**.

Rationale for Selecting Countermeasure/Amount

BOTS uses the high-visibility enforcement task force model for all its enforcement grants, which is a proven countermeasure strategy.

It is specifically allowed under 23 CFR § 1300.21(f)(1)(i). Enforcement of seat belt laws will lead to greater compliance with those laws. *Countermeasures that Work* 10th Ed; 2.1, 2.2, 2.3; pages 2-18 through 2-24.

Description

Encourage law enforcement agencies to make occupant protection a priority demonstrated by writing citations, sponsoring media events, and working overtime in geographical areas where low seat belt use is prevalent.

Plan statewide participation, encourage voluntary participation, and provide overtime funding for high-visibility and sustained enforcement task forces for occupant protection, including nighttime

enforcement, accompanied by media. These task forces will consist of multiple law enforcement agencies that coordinate their enforcement efforts during the same time frame.

Wisconsin meets its requirements for match with traffic enforcement conducted on straight time by the Wisconsin State Patrol.

Intended Subrecipients	Funding Source	Unique Identifier	Funding Amount	Local Benefit
Targeted Grantees	402	2023-20-05-OP	$1,577,000	$1,365,320
Targeted Grantees	405b	2023-25-05-M2	$400,000	N/A

***Should additional dollars become available, more occupant protection enforcement will occur.**

Child Passenger Safety (CPS) Equipment Grants

Digital Car Safety Check Form Tablets

Assess Traffic Safety Impact

The effect of this program will be increased awareness of occupant protection efforts. The anticipated impact of this countermeasure strategy is a decrease in child fatalities.

Linkage

Increased usage of the digital car safety check form will allow for a more rapid and accurate accounting of the car safety checks performed in the state of Wisconsin. This information will be used to better target areas where car safety distribution is lower. Linking to performance measure **C1** and **C4.**

Rationale for Selecting Countermeasure/Amount

The FAST Act under 23 CFR § 1300.21 (f)(3) allows states to participate in programs to educate the public concerning the proper use and installation of child restraints, including related equipment and information systems. Linked to *Countermeasures that Work* 10th Ed; 7.2 page 2-41.

Description

This will be used to provide tablets to agencies allowing them to perform car safety checks digitally. The effect of this project will be a greater ease of performing car safety checks by allowing the car safety check forms to be performed digitally. It also will allow for better tracking of car safety checks performed in Wisconsin through the National Digital Car Safety Check Form Dashboard. No equipment purchased with this activity will be major equipment since all equipment will have an acquisition cost of less than $5,000 in value.

Intended Subrecipients	Funding Source	Unique Identifier	Funding Amount	Local Benefit
Participants CPS	402	2023-20-06-OP	$40,000	$40,000

Child Passenger Safety (CPS) Programming

Assess Traffic Safety Impact

The effect of this program will be increased awareness of child occupant protection efforts. The anticipated impact of this countermeasure strategy is a decrease in unbelted fatalities.

Linkage

Training locals on CPS will support the state in attaining performance target **C1**.

Rationale for Selecting Countermeasure/Amount

It is specifically allowed under 23 CFR § 1300.21(f)(1)(ii), (iii), and (iv). *Countermeasures that* Works 10th Ed; 6.1,6.2, and 7.2; pages 2-38 through 2-41.

Description

Support and administrative costs for statewide Child Passenger Safety Advisory Committee. Enter a partnership with a contractor named through a state-sanctioned request for proposal to support and administer statewide CPS Technician Training including recruitment, training, education, and retention rates that will address the level of need in the state of Wisconsin.

BOTS will work with the contractor to provide additional CPS training materials to community partners for local events. Project will include CPS training for law enforcement agencies, judges, and other safety partners with community programs.

Youth and senior seat belt initiatives, including training opportunities for law enforcement, will be developed. Wisconsin meets its requirements for match with traffic enforcement conducted on straight time by the Wisconsin State Patrol. The second portion of this grant program as described below, will distribute car seats to underserved communities.

Intended Subrecipients	Funding Source	Unique Identifier	Funding Amount	Local Benefit
Children's Hospital	402	2023-20-03-OP	$230,000	$180,000

Rationale for Selecting Countermeasure/Amount

This project is in accordance with NHTSA's *Countermeasures that Work,* 10th Ed; 6.1,6.2, and 7.2; pages 2-38 through 2-41. It is specifically allowed under 23 CFR § 1300.21(f)(1)(vi). This project will lead to increased use of child safety restraints.

Description

This project will change the behavior of those that transport children, providing child safety seats, installation, and occupant protection education.

Intended Subrecipients	Funding Source	Unique Identifier	Funding Amount	Local Benefit
Various local health services	402	2023-20-06-OP	$188,000	$188,000
Various local health services	405b	2023-25-06-M2	$54,000	N/A

Contract for CIOT Mobilization Post Observational Surveys

Assess Traffic Safety Impact

The effect of this program will be increased awareness of occupant protection efforts. The anticipated impact of this countermeasure strategy is a decrease in unbelted fatalities.

Linkage

Assessing where the state is each year in terms of performance target **B1**.

Rationale for Selecting Countermeasure/Amount

This project is specifically allowed under 23 CFR § 1300.21(f)(1)(v).

Description

Contract for CIOT Mobilization Post Observational Surveys to include June Observational Surveys.

Participation in the Click It or Ticket national enforcement mobilization is a requirement for receiving federal funds, and the survey that is conducted as a result of this project will provide us with more information on the effectiveness of this mobilization that will inform future mobilizations.

Wisconsin meets its requirements for match with traffic enforcement conducted on straight time by the Wisconsin State Patrol.

Intended Subrecipients	Funding Source	Unique Identifier	Funding Amount	Local Benefit
UW-Whitewater	405b	2023-25-09-M2	$81,000	N/A

Occupant Protection Media

Media plans and public information and education for all issue areas are section 9 in the Community Traffic Safety Outreach and Media Programs section.

Table. Occupant Protection – Budget Summary

Fund	Program	Amount

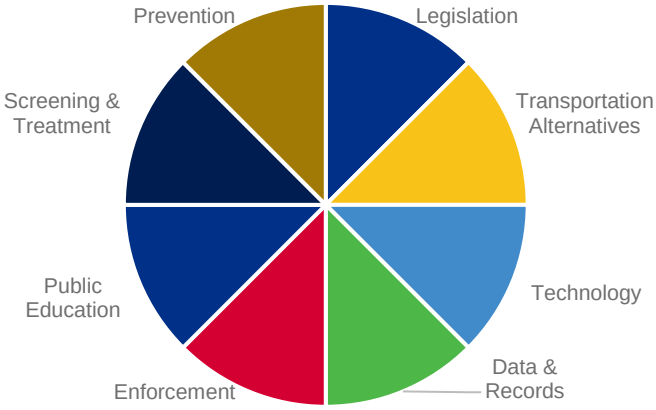
402	2023-20-01-OP	$85,000
402	2023-20-05-OP	$1,577,000
405b	2023-25-05-M2	$400,000
402	2023-20-06-OP	$228,000
402	2023-20-03-OP	$230,000
405b	2023-25-06-M2	$54,000
405b	2023-25-09-M2	$81,000
	Total	**$2,655,000**

Impaired Driving Program

Justification

Impaired driving remains a significant concern in Wisconsin.

Based on experience, WisDOT understands that no single solution for this problem exists. The pie chart below illustrates the comprehensive approach that needs to be considered in each community. The size of the pie pieces does not reflect their relative importance, which varies depending on where a community is located within the state.



Impaired driving has a high economic cost to the state, as determined using national cost estimates obtained from the National Safety Council. Applying this approach to 2021 crash statistics demonstrates the significant cost to the state. See performance measure **C5** in the introduction for a performance measure and goal for this program.

Table. Economic Loss from Traffic Crashes, 2021

Crash Severity	Total Persons	Cost per Person	Total Cost
Fatality (K)	166	$1,750,000	$290,500,000
Incapacitating (A)	964	$101,000	$97,364,000
Non-incapacitating (B)	1534	$29,200	$44,792,800
Possible C	735	$23,900	$17,566,500
Property Damage	7327	$4,700	$34,436,900
Total Economic Loss			**$484,660,200**

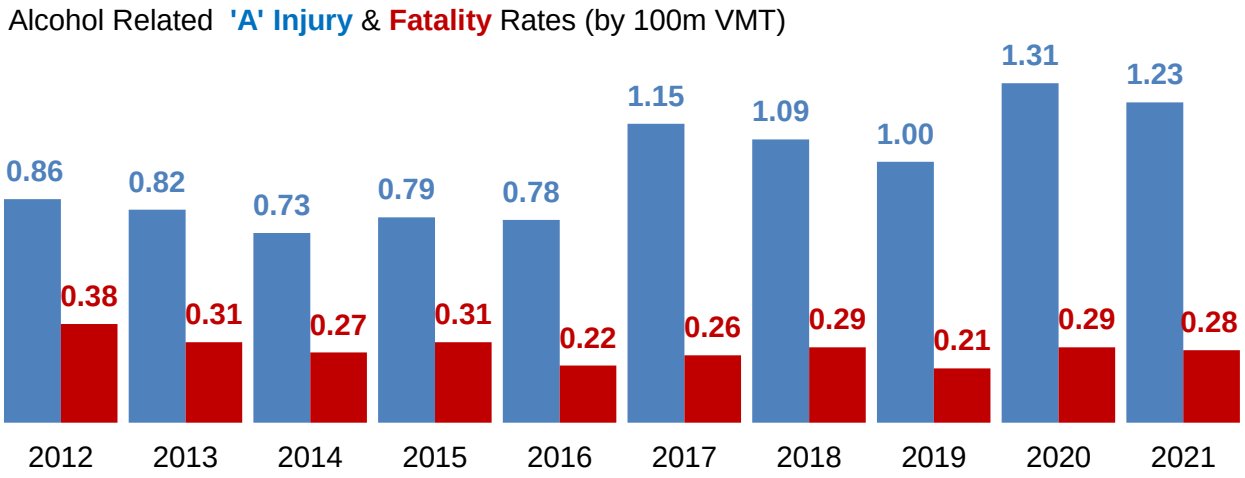
National Safety Council. “Estimating the Costs of Unintentional Injuries, 2020.” (adjusted for inflation)

**Note that the injury categories are actual people injured, unlike the property damage crashes, which are events. All crashes - injury or not - have a property damage element. For a more complete explanation of items included in per occurrence estimates, visit www.nsc.org*

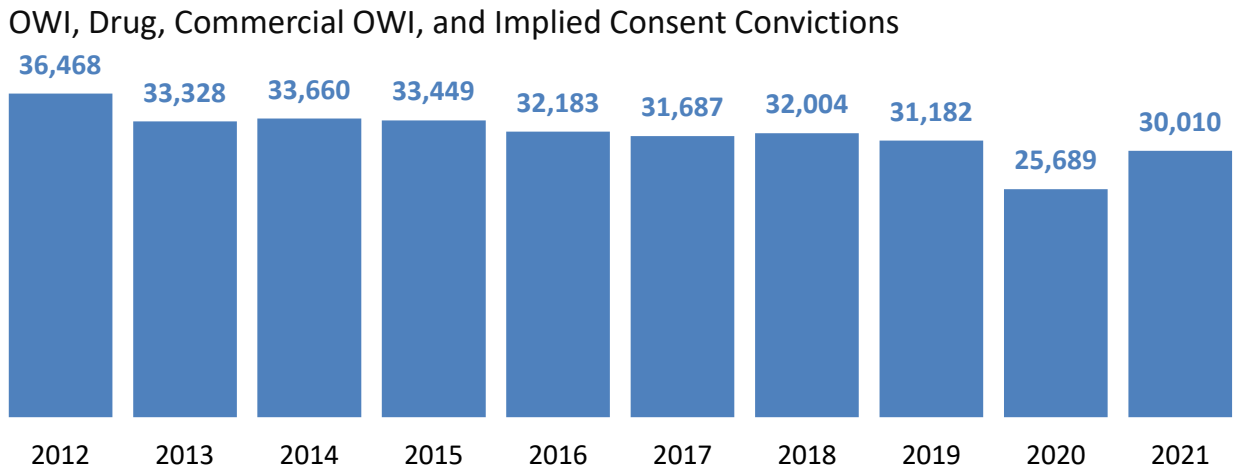
In 2003 (Wisconsin’s base year), 9,007 alcohol-related crashes resulted in 348 deaths (42% of all deaths) and 6,445 injuries. Since then, Wisconsin has seen significant improvement. In 2021,

6,365 alcohol-related crashes resulted in 166 deaths and 3,233 injuries—but alcohol remains a factor in 27.7% of all traffic-related deaths.

As the first graph illustrates, combined alcohol-related fatalities and incapacitating ('A') injuries have increased since 2012, with a significant decrease in fatalities between 2012 and 2021. In 2012, the alcohol fatality rate was 0.38 per 100 million VMT compared to 0.28 per 100M VMT in 2021, a 27 percent decrease.



In 2021, 30,010 convictions for operating a motor vehicle while intoxicated were entered into driver records, compared to 25,689 in 2020.



Under the FAST Act, Wisconsin is considered a low-range state with a 0.30 alcohol impaired driving fatality rate per 100 million VMT. Prior to becoming a low-range state, Wisconsin was a mid-range state and was required to convene a statewide impaired driving task force and develop a Statewide Impaired Driving Plan.

Wisconsin's task force convened on August 6, 2013, established a charter, set priorities, and submitted its first report by September 1, 2013. The task force approved a new Statewide Impaired Driving Plan, dated May 23, 2016, and has submitted in prior Highway Safety Plans.

This report identifies six signature initiatives:

- Reducing the Cultural Acceptance of Impaired Driving
- Reducing Drinking among Persons under Age 25
- Streamlining OWI Enforcement and Prosecution Processes
- Improving Drugged Driving Recognition
- Promoting Alternative Transportation Programs
- Improving Data Collection, Sharing and Distribution

While no longer required, the Bureau of Transportation Safety (BOTS) continues to convene this work group quarterly and it serves as the Impaired Driving Work Group for our state's Strategic Highway Safety Plan issue area.

Highway Safety Office Program Management / Program Management and Strategic Planning

Assess Traffic Safety Impact

The state program manager position will positively impact traffic safety in Wisconsin by coordinating, planning, and managing the state impaired driving programs. Goals that will have a positive impact on traffic safety in Wisconsin include:

- enhancing volunteer agency participation
- increasing community involvement
- working with community organizations and non-profit programs to expand impaired driving activities and efforts
- encouraging state and local input into the HSP development process

Linkage

Funding program management and strategic planning for the impaired driving program will aid the state in reaching performance targets **C1**, **C2**, and **C5**.

Rationale for Selecting Countermeasure/Amount

Hiring a full-time impaired driving coordinator is specifically allowed under 23 CFR §1300.23(j)(1)(ii).

Description

This activity will fund wage, fringe, data processing, materials and supplies, training and travel, printing, and postage for the work of this position.

The position will work with regional program managers, law enforcement liaisons, and law enforcement agencies of all sizes to coordinate impaired driving efforts, encourage safe and effective sustained enforcement and participation in mobilizations. It will also work directly with

the drug recognition expert (DRE) program coordinator to provide support of the Wisconsin Drug Evaluation and Classification program.

Wisconsin meets its requirements for match with traffic enforcement conducted on straight time by the Wisconsin State Patrol.

Intended Subrecipients	Funding Source	Unique Identifier	Funding Amount	Local Benefit
BOTS	405d	**2023-31-01-M5**	$92,000	N/A

Promotion of Transportation Alternatives

Assess Traffic Safety Impact

Promoting transportation alternatives for intoxicated persons from establishments licensed to sell alcohol beverages to their home will result in a decrease in alcohol-related crashes.

Linkage

Wisconsin's transportation alternatives programs provide support to the state in reaching performance target **C5**.

Rationale for Selecting Countermeasure/Amount

The Wisconsin Department of Transportation (WisDOT) administers a state-funded safe-ride grant program and supports other federally funded transportation alternative programs to bolster efforts to reduce the incidence of operating a motor vehicle while intoxicated in local communities.

Description

BOTS will continue to collaborate with the Tavern League of Wisconsin in administering WisDOT's safe-ride grant program throughout the state. The state funding also allows for the advertising of the SafeRide program. All advertising is reviewed and approved prior to placement.

This is a state funded program.

Intended Subrecipients	Funding Source	Unique Identifier	Funding Amount	Local Benefit
Tavern League of Wisconsin	State 531	**2023-39-04-WI**	$915,000	$915,000

Rationale for Selecting Countermeasure/Amount

Countermeasures That Work, 10 Ed; page 1-63.

Description

As an enhancement to law enforcement grants and efforts, additional funds will be provided to coordinate alternative transportation in communities that do not have access to sustained public transportation.

This also will fund grants to provide short-term alternative transportation (vans, buses, or vehicles) to transport community members from local events to their home. These festival grants are local in nature such as a beer tent or annual fundraiser where alcohol is legally served. The grant also covers limited marketing and advertising costs as it relates to responsible drinking. There must be sufficient evidence that a safe-ride program has the potential of reducing risk due to drinking and driving. The Alternative Ride Grants are targeted to communities that have demonstrated a need based on impaired driving crashes and known risks.

In 2023, a project program will be created to work with Uber and Lyft in Wisconsin to provide free rides home during major holidays and events known to include drinking. Wisconsin meets its requirements for match with traffic enforcement conducted on straight time by the Wisconsin State Patrol.

Intended Subrecipients	Funding Source	Unique Identifier	Funding Amount	Local Benefit
Baraboo, Lodi, Sauk Prairie, Spring Green, Reedsburg, Arlington, Crawford Co, Barron Co, Watertown, Seymour, Ashland, Darlington, Local Uber and Lyft Companies	402	**2023-30-04-AL**	$250,000	$250,000

High-Visibility and Saturation Patrols/Enforcement

Assess Traffic Safety Impact

The presences of law enforcement provides a deterrent effect on a person's decision to operate a motor vehicle while intoxicated. Enforcement increases the likelihood and increased perception of the risk of being cited and or arrested. This helps decrease the incidence of Operating While Intoxicated (OWI).

Linkage

Enforcement of the law prohibiting the operation of a motor vehicle while intoxicated will provide support to the state in reaching performance target **C5**.

Rationale for Selecting Countermeasure/Amount

BOTS uses the high-visibility and sustained enforcement task force model for all its enforcement grants, which is a proven countermeasure strategy and is allowable under 23 CFR §1300.23(j)(1)(i) *Countermeasures that Work* 10th Ed; page 1-29; 2.2.

Description

Encourage law enforcement agencies to make OWI enforcement a priority by writing citations, sponsoring media events, and working overtime in geographical areas where impaired driving is highest.

Plan statewide participation, encourage voluntary participation, and provide overtime funding for enforcement and task forces for impaired driving, including nighttime enforcement, accompanied by media. In most all cases, these task forces will consist of multiple law enforcement agencies that coordinate their enforcement efforts during the same time frame.

Enforcement provides a deterrent effect on a person's decision to operate a motor vehicle while intoxicated. The goal of this strategy is to decrease the incidence of OWI.

Wisconsin meets its requirements for match with traffic enforcement conducted on straight time by the Wisconsin State Patrol. Targeting methodology can be found in Appendix 1. In addition, a law enforcement agency that wants to gauge the size of the drugged driving population can include roadside collection in their impaired driving enforcement.

Intended Subrecipients	Funding Source	Unique Identifier	Funding Amount	Local Benefit
Targeted Grantees	405d	2023-31-05-M5	$1,750,000	N/A

Drug Recognition Expert (DRE) Training/Drug Evaluation and Classification Program

Assess Traffic Safety Impact

The education of law enforcement and education professionals will lead to the increased ability to identify Driving Under the Influence of Drugs (DUID). This strategy will help decrease the incidence of DUID.

Linkage

Funding the Drug Evaluation and Classification Program will aid the state in reaching performance target **C1**.

Rationale for Selecting Countermeasure/Amount

This countermeasure strategy aligns the state with national priorities and is allowable under 23 CFR §1300.23(j)(1)(vi) and will eventually lead to reduced incidence of DUID. *Countermeasures that Work*, 10th Ed.;7.1, page 1-80

Description

The education of law enforcement and other traffic safety professionals will lead to the increased ability to identify DUID.

This program supports a contracted coordinator position and includes costs to provide continuous training and re-certification for existing DREs. DRE expenses, including instructor wages, travel to conferences, supplies, printing, postage, lodging, and meals for students and instructors are covered.

BOTS also supports DRE callouts to assist other agencies where a DRE evaluation is needed. In the case of a DRE evaluation where synthetic cannabinoids are suspected, BOTS will pay for the cost of the test.

WisDOT will fund expenses and instructor costs related to programs including Advanced Roadside Impaired Driving Enforcement (ARIDE), Drugs That Impair Driving (eight-hour block), Drug Impairment Training for Educational Professionals (DITEP), and Standard Field Sobriety Testing (SFST).

BOTS will continue to expand the ARIDE program by increasing the number of classes to accommodate demand. Wisconsin meets its requirements for match with traffic enforcement conducted on straight time by the Wisconsin State Patrol.

Intended Subrecipients	Funding Source	Unique Identifier	Funding Amount	Local Benefit
BOTS	405d	2023-31-03-M5	$400,000	N/A

DESCRIPTION

This is the educational program supports expenses to train new Drug Recognition Experts (DREs) during two DRE schools. The costs covered include instructor wages, travel cost (such as lodging for instructors and students), supplies (including DRE kits and classroom supplies) and printing. In 2023, BOTS is planning to hold a third DRE School at the State Patrol Academy for troopers and inspectors.

By holding two schools, Wisconsin has been able to continue to increase the number of DREs, avoiding decreasing numbers due to retirements and/or attrition. All expenses and supplies will be purchased according to state contracts and follow purchasing guidelines for allowable costs.

In 2023, BOTS will provide a grant to agencies sending participants to ARIDE training or DRE School. The grant will cover the participants time and travel costs to lessen the burden on the agency.

Wisconsin meets its requirements for match with traffic enforcement conducted on straight time by the Wisconsin State Patrol.

Intended Subrecipients	Funding Source	Unique Identifier	Funding Amount	Local Benefit
BOTS	405d	2023-31-03-M5	$350,000	N/A

Traffic Safety Resource Prosecutors

Assess Traffic Safety Impact

Providing training, education, and technical support to those prosecuting offenders of the state's OWI laws will ensure that appropriate sanctions are delivered to offenders, which will reduce repeated incidence of impaired driving.

Linkage

Providing funding for the state's Traffic Safety Resource Prosecutors will help the state reach performance target **C5**.

Rationale for Selecting Countermeasure/Amount

Prosecutors around the state can learn from their strategies in complex or nuanced cases, and these cases help set solid precedent. This program is under *Countermeasures That Work*, 10th Ed; section 3.1, page 1-39.

Description

This planned activity includes salary and fringe for two statewide Traffic Safety Resource Prosecutors acting as a resource on legal issues surrounding OWI and the prosecution of those offenders. They will provide specialized training to prosecutors, judges, law enforcement, and others in the state. They will also conduct outreach at county traffic safety commissions.

These positions also provide technical assistance to a wide variety of professionals such as law enforcement officers, DREs, blood and alcohol testing staff, and policy development staff.

Wisconsin meets its requirements for match with traffic enforcement conducted on straight time by the Wisconsin State Patrol.

Intended Subrecipients	Funding Source	Unique Identifier	Funding Amount	Local Benefit
Wisconsin DOJ	402	2023-30-03-AL	$375,000	$0

OWI Courts/Adjudication

Assess Traffic Safety Impact

Ongoing training helps adjudicate OWI cases effectively.

Linkage

Providing funding for agencies to participate in training offered by the National Center for Driving While Intoxicated Courts (NCDC) will support the state in attaining performance target **C5**.

Rationale for Selecting Countermeasure/Amount

OWI Courts are a proven countermeasure. This countermeasure strategy is allowable under 23 CFR §1300.23(j)(1)(iii) and will allow specialists in Wisconsin to learn best practices from specialists in other jurisdictions. *Countermeasures that Works* 10th Ed; 3.1; page 1-37.

Description

This planned activity will provide funding for travel cost for agencies to participate in training offered by NCDC. These training sessions are partnerships between NCDC, NHTSA and the state highway safety offices. Wisconsin meets its requirements for match with traffic enforcement conducted on straight time by the Wisconsin State Patrol.

Intended Subrecipients	Funding Source	Unique Identifier	Funding Amount	Local Benefit
BOTS	405d	**2023-31-03-M5**	$20,000.00	N/A

Public Information and Education

All media plans and public information and education for all issue areas are in section 9 in the Community Traffic Safety Outreach and Media Programs.

Impaired Driving Safety Programs - Budget Summary

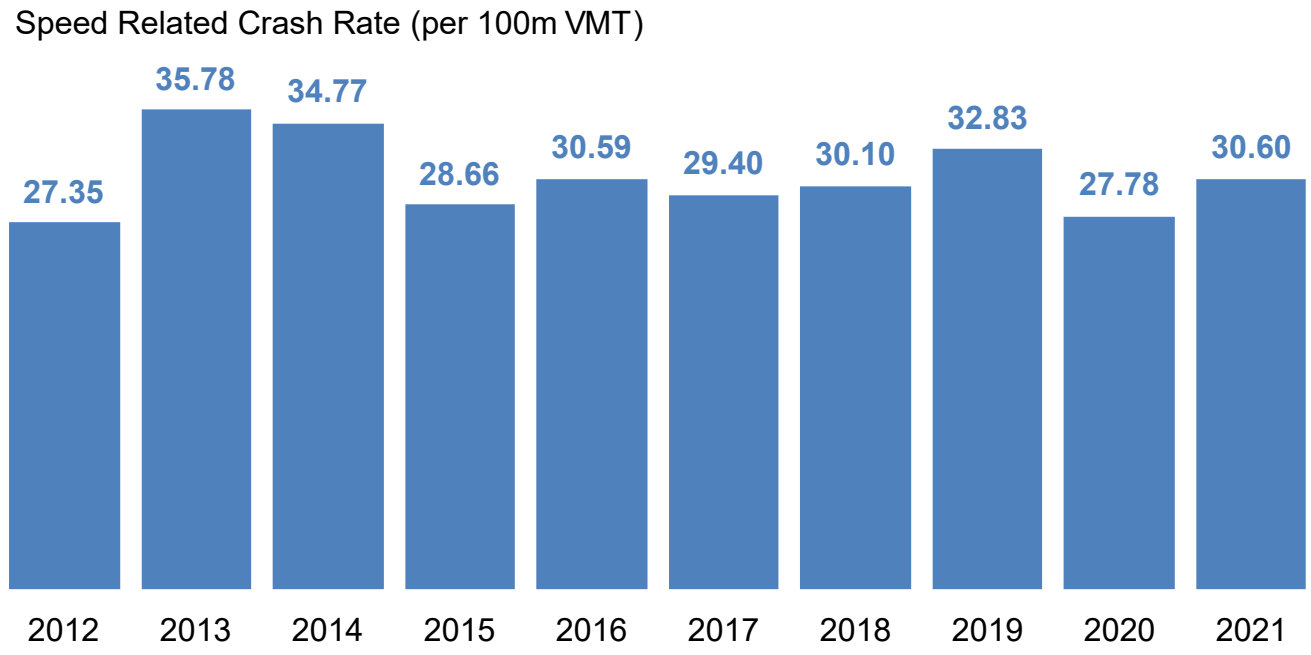
Fund	Program	Amount
405d	2023-31-01-M5	$92,000
State 531	2023-39-04-WI	$915,000
402	2023-30-03-AL	$375,000
402	2023-30-04-AL	$250,000
405d	2023-31-03-M5	$400,000
405d	2023-31-03-M5	$350,000
405d	2023-31-03-M5	$20,000
405d	2023-31-05-M5	$1,750,000
	Total	**$4,060,000**

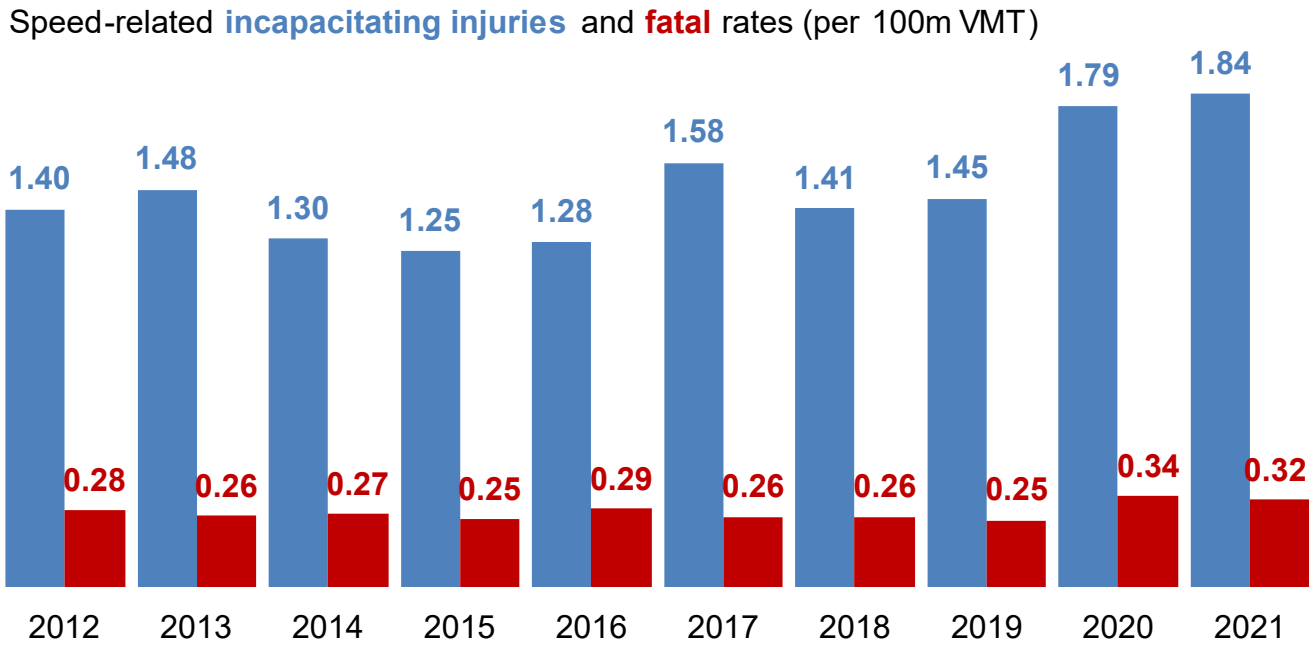
Police Traffic Program

Justification

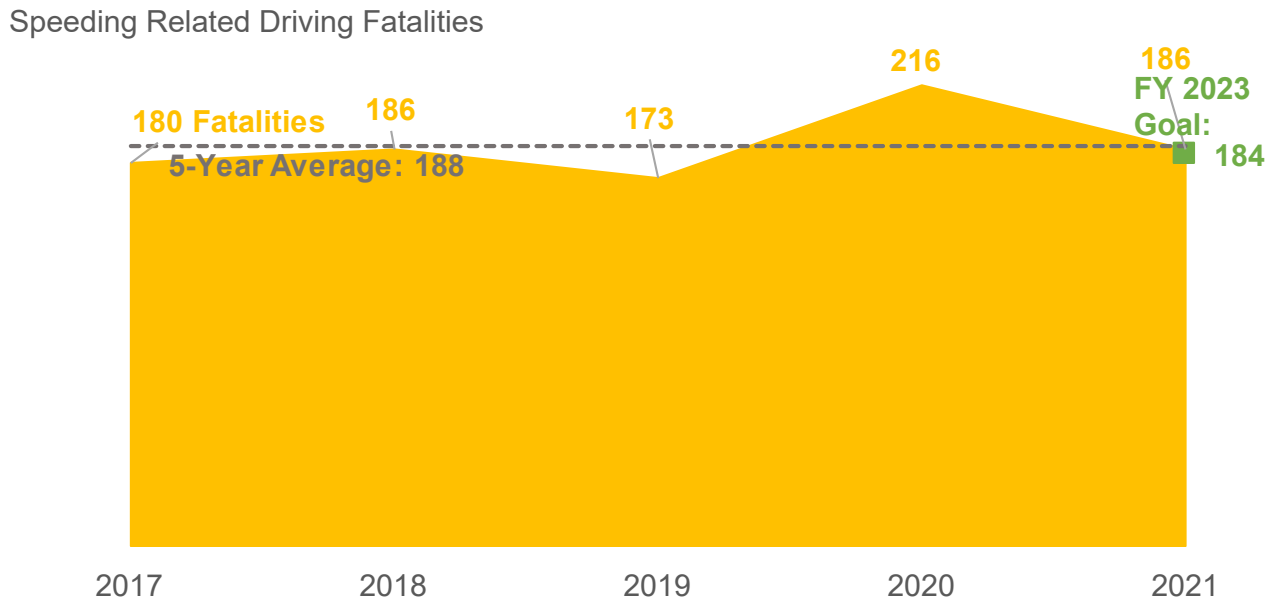
The number of crashes for which speed is a possible contributing circumstance (PCC) is assumed to be far fewer than the number of crashes for which speed played a factor. This assumption is based on data indicating that speeding is the most cited driver behavior.

Speed-related crashes resulted in 31% of all deaths and 19% of all injuries in 2021 (preliminary). In addition, 186 people died and 7,057 were injured in 17,595 speed-related crashes. In total, there were 162,755 convictions for speeding violations in 2021.





Performance measure C6 and the goal are illustrated in the graph below.



In 2021, there were 40 fatalities and 313 incapacitating injuries because of distracted driving. Distracted driving results in an economic cost of over $301 million to the state annually.

According to Wisconsin State Statutes, writing or sending emails or text messages while driving is illegal - “No person may drive… any motor vehicle while composing or sending an electronic text message or an electronic mail message,” Wis. Stats. §346.89(3)(a). In November 2012, a state law went into effect that prohibits drivers with an instruction permit or probationary license, which includes many teenagers, from “using a cellular or other wireless telephone except to report an emergency” while driving.

Additionally, inattentive driving is also illegal according to Wisconsin law - “No person while driving a motor vehicle may be engaged or occupied with an activity, other than driving the vehicle, that interferes or reasonably appears to interfere with the person’s ability to drive the vehicle safely,” §346.89(1), Wis. Stats. Furthermore, using a cellular telephone that is not hands-free or voice-operated is prohibited “where persons engaged in work in a highway maintenance or construction area or in a utility work area are at risk from traffic, except to report an emergency,” §346.89 (4m), Wis. Stats.

Table. Economic Loss from Traffic Crashes, 2021

Crash Severity	Total Persons	Cost per Person	Total Cost
Fatality (K)	40	$1,750,000	$70,000,000
Incapacitating (A)	313	$101,000	$31,613,000
Non-incapacitating (B)	1,932	$29,200	$56,414,400
Possible C	2,127	$23,900	$50,835,300
Property Damage	19,743	$4,700	$92,792,100
Total Economic Loss			**$301,654,800**

National Safety Council. “Estimating the Costs of Unintentional Injuries, 2020.” (Adjusted for inflation)

Law Enforcement

High-Visibility and Saturation Patrols/Enforcement

Assess Traffic Safety Impact

The presences of law enforcement provides a deterrent effect upon a person's decision to break the law. Enforcement provides a deterrent effect upon a person's decision to break the law. Enforcement increases the perception of the risk of being ticketed. This strategy will decrease the incidence of fatalities.

Linkage

Enforcement of the law prohibiting speeding and inattentive driving will provide support to the state in reaching performance target **C1, C2** and **C6**.

Rationale for Selecting Countermeasure/Amount

The Bureau of Transportation Safety (BOTS) uses the high-visibility and sustained enforcement task force model for all its enforcement grants, which is a proven countermeasure strategy as indicated in *Countermeasures That Work*, 10th Ed; 2.2, page 3-28.

Description

Encourage law enforcement agencies to make speeding and inattentive driving enforcement a priority by writing citations, sponsoring media events, and working overtime in geographical areas where speed and inattentive driving related crashes are prevalent.

Plan statewide participation, encourage voluntary participation, and provide overtime funding for high-visibility enforcement task forces for these behaviors accompanied by media for a demographic. These task forces will consist of multiple law enforcement agencies that coordinate their enforcement efforts during the same time frame. Enforcement increases the perception of the risk of being ticketed.

Wisconsin meets its requirements for match with traffic enforcement conducted on straight time by the Wisconsin State Patrol.

Intended Subrecipients	Funding Source	Unique Identifier	Funding Amount	Local Benefit
Targeted Grantees	**402**	**2023-40-05-PT**	**$1,000,000**	**$800,000**

*If additional dollars become available, more enforcement will occur.

Predictive Crash Research and Development; Predictive Analytics and Community Outreach

Project Justification

Recent advances in crash data collection and management in Wisconsin have afforded the opportunity to improve the effectiveness of traffic safety enforcement activities through data driven resource allocation. Initial “predictive analytics” decision support capabilities were developed and rolled out statewide during the 2017 project year in the form of a new heat map enabled crash analysis interface in the Community Maps system and as user selectable crash map layers in the Wisconsin State Patrol MACH system. Building on this initial set of tools, an automated hot spot detection algorithm was developed during 2018 and rolled into the Community Maps crash analysis interface in early 2019 to complement the heat map capability. The hot spot detection capability has been continually improved since the initial rollout to provide a highly scalable and accessible tool that now serves as an integral component of Wisconsin’s strategy for law enforcement traffic safety resource allocation.

BOTS has identified 12 counties to pilot the Predictive Analytics process. The process will use heat mapping analytics, collaboration meetings, planned enforcement and public outreach. As part of the process, BOTS will work with the agencies and/or Traffic Safety Commissions to identify solutions that shall only serve the purposes to enhance transportation safety efforts; up to and including such items as; enhanced enforcement, education and education materials, mobile dynamic message boards, speed boards with counters, lidar’s, PBT’s, and printing of educational materials.

Strategy

BOTS will identify counties for a full Predictive Analytics Pilot, using community maps and the predictive analytics elements. The pilot counties will use that information and data to:

- Inform the county Traffic Safety Commission of areas of concern and collaboratively develop local strategies to address the areas.
- Plan law enforcement details in the recommended hot spot target areas. Coordinating deployments with local, county and state patrol assets.
- Use Traffic Safety Commissions membership to conduct outreach, and education.
- Use local traffic safety engineers to assess areas that enforcement and traffic safety commission identify for proposing low-cost/high impact traffic safety mitigations.

Linkage

Enforcement of the law prohibiting speeding and inattentive driving will provide support to the state in reaching performance target **C1**.

Rationale for Selecting Countermeasure/Amount

The Bureau of Transportation Safety (BOTS) uses the high-visibility and sustained enforcement task force model for all its enforcement grants, which is a proven countermeasure strategy as indicated in Countermeasures That Work, 10th Ed; 2.2 page 3-28 and 4.1 page 3-32.

Evaluation

- Assess changes in citations in pilot counties based on citation history. Assess changes in fatal, injury and property damage only crashes
- Track location and type of outreach conducted
- Assess Predictive Analytics system for future enhancements

Expectation

Improve traffic safety in the pilot counties and develop a sustainable model that can be delivered to other counties. Identify needs, gaps of information, equipment, systems, and stakeholders. Use the information to improve the performance of the process to increase outcomes.

Intended Subrecipients	Funding Source	Unique Identifier	Funding Amount	Local Benefit
Targeted Grantees	**402**	**2023-40-05-PT**	$200,000	$200,000

Table. Police Traffic Services – Budget Summary

Fund/Source	ID	Amount
402	2023-40-05-PT	$1,200,000
	Total	**$1,200,000**

Traffic Records Improvement Plan

Justification

The federal FAST Act requires states to have a Traffic Records Coordinating Committee (TRCC) and a Traffic Records Coordinator to administer the Traffic Records Program.

Members of the TRCC include owners, operators, collectors, and users of traffic records and public health and injury control data systems. The TRCC also includes representatives from organizations related to highway safety, highway infrastructure, law enforcement, the court system, public health, EMS, and others. The TRCC meets at least quarterly (and sometimes more often, such as when plans are being formulated).

The members of the TRCC have review and approval authority with respect to state highway safety data and systems. The TRCC members make decisions concerning membership, leadership, and changes to the state's multi-year Strategic Plan and interim performance measures used to demonstrate progress.

A list of TRCC members with their names, titles, home organizations, and the core safety databases represented is in Appendix 3, which is included in the State Traffic Records Strategic Plan. Appendix 3 provides a written description of the performance measures, and all supporting data, to show quantitative improvement within the preceding 12 months of the application's due date in relation to one or more of the significant data program attributes.

States can use grant funds for making data program improvements to core highway safety databases related to quantifiable, measurable progress in any of the significant data program attributes of accuracy, completeness, timeliness, uniformity, accessibility, or integration.

What follows is a list of the project concepts that the TRCC has approved for grant funding for FFY 2023. Performance measures and targets for this program are listed within the project matrix below. Full descriptions of the projects can be found in Appendix 3b.

Table. Traffic Records Projects 2023

Project Title	Database	Attribute	Budget	Status	Improvement and Measure
CODES-Crash Outcomes and Data Evaluation System	EMS	Completeness	$140,000	0 records are currently linked in the crash database to the medical records database.	Link 25% of hospital records for injury area, diagnosis, and MAIS injury severity.
Estimating Bicycle Volumes in Wisconsin Using Crowdsource Data	Roadway	Completeness	$75,000	There is not a scalable system to count bicycle volumes, nor a statewide database. Zero data exists at this time, will establish dataset.	Create database and method of modeling data to inform programs by risk analysis. 10% of roadway segments will have bicycle volume.

Community Maps	Crash	Accessibility	$65,000	Continued improvements for reporting and accessibility	Increase annual average usage rate by 15%.
WisTransPortal Safety Data Warehouse	Crash	Integration	$120,000	No linkages exist between crash, citation, and adjudication.	Establish linkage with 10 agencies and additional agencies as resources permit.
WisTransPortal Predictive Crash and Research & Development	Crash	Accessibility	$65,000	Current monthly average users are at 55	Increase monthly users by 15% annually.
Mitigating Crash Outcomes through Automatic Crash Reconstruction	Crash	Accuracy	$75,000	Build on TRCC project "Using data from DT4000 to Enhance Crash Analysis". Zero elements of the Safe System approach have been identified and associate to the crash database.	Improve accuracy of narrative by using the "Swiss Cheese" crash causation model to inform safety interventions. 5% of a year of records identified.
Statewide Pedestrian and Bicycle Count Database for Model Validation and Risk Exposure Assessment	Roadway	Completeness	$50,000	Establish data set and expand the number of intersections with pedestrian and bicycle counts. Zero data exists at this time.	Increase pedestrian count intersections to 500 and bicycle counts to 400.
DOJ E-Citations	Citation and Adjudication	Timeliness	$282,000	Non-standard technologies that don't scale	Increase transmission from 7 citations/minute to 14.
State-to-State Driver History Record (DHR) Project	Citation and Adjudication	Timeliness	$297,550	Currently all non- CDL convictions, withdrawals, and negated convictions for out-of-state drivers throughout the U.S. and its territories are sent via "snail mail"	95% of convictions and suspensions transmitted between Wisconsin and other participating states will be transmitted electronically
		Total	**$1,169,550**		

Highway Safety Analysts

Assess Traffic Safety Impact

Highway safety analysts are an essential component to improve traffic safety in the state of Wisconsin. This position functions within the Bureau of Transportation Safety (BOTS) to work with partner agencies including but not limited to law enforcement, technical colleges, private business, advocacy groups and other BOTS staff to coordinate traffic safety awareness efforts to reduce fatalities and injuries as indicated by crash and injury data.

Linkage

Spending funds on management of the community traffic safety program will be of service to the state of Wisconsin to help achieve performance target **C1**, to decrease traffic fatalities 2% from the 2015-2019 calendar year rolling average of 585 to 573 by December 31, 2021.

Rationale for Selecting Countermeasure/Amount

These positions are essential for continuing coordination of Wisconsin's strong programs, associated grants, and outreach efforts.

Description

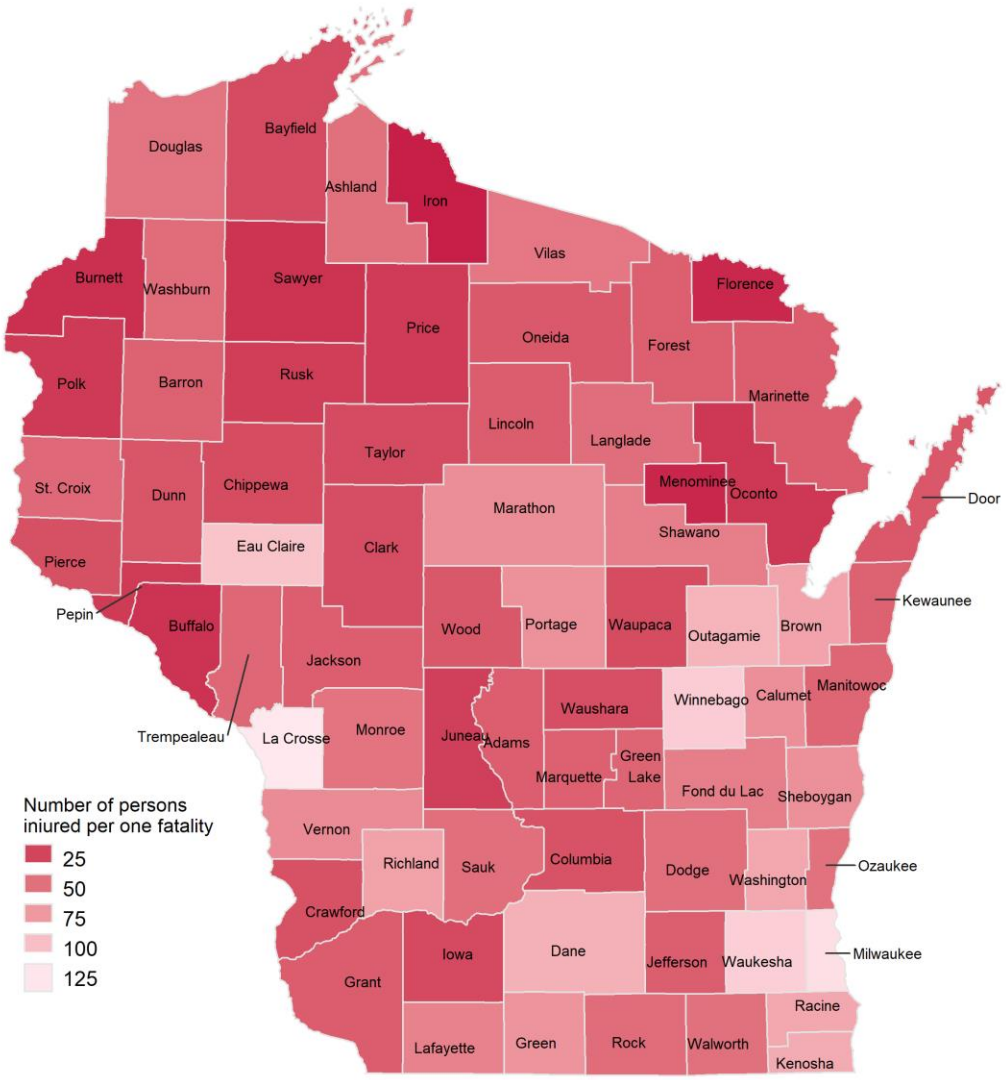
There are three 402-funded analysts and two state-funded analysts that work to improve highway safety by providing statistics to local Traffic Safety Commissions, the wider population, federal, state, and local partners. This activity includes wage and fringe, data processing costs, materials and supplies, training, travel, printing, and postage.

Intended Subrecipients	Funding Source	Unique Identifier	Funding Amount	Local Benefit
BOTS	**402**	**2023-50-01-TR**	**$265,200**	**$0**

Table. Traffic Records Improvements -- Budget Summary

Fund	Program	Amount
402	2023-50-01-TR	$265,200
405c	2023-58-03-M3	$1,169,550
	Total	**$1,434,750**

Injury to Death Ratios



Publicity and Outreach – Emergency Response

Assess Traffic Safety Impact

Emergency response coordination and training will mean improved outcomes for occupants and persons involved in crashes.

Linkage

Funding publicity and outreach will aid the state in reaching all performance targets.

Rationale for Selecting Countermeasure/Amount

A willing and able emergency response program is important for timely and expedient healthcare. The Department of Health Services (DHS) will collaborate with the Bureau of Transportation Safety (BOTS) on this project and expects to spend $50,000 on the effort.

Description

BOTS will partner with DHS and the Wisconsin Division of the American Trauma Society to develop an EMS plan with a focus on recruitment and retention of first responders. Other goals include:

- educating the general population and emergency responders about the state Trauma System
- producing highway safety materials for distribution locally by EMS/trauma care personnel

Distance to trauma centers is proven to have a significant role affecting the outcome of injuries after a crash. This project will focus on areas with fewer ambulance services and will focus on recruitment and retention of EMTs in those areas. This will impact traffic safety by providing better EMS services in remote areas and increase response times, which will help reduce the risk that a relatively minor traffic incident would result in a fatality.

Intended Subrecipients	Funding Source	Unique Identifier	Funding Amount	Local Benefit
BOTS	402	**2023-60-02-EM**	$50,000	$0

Rural Emergency Response Programs, Equipment and Training

Rationale for Selecting Countermeasure/Amount

A willing and able emergency response program is important for timely and expedient healthcare. There is no recommended countermeasure from NHTSA. Wisconsin's strategy is to increase community outreach and education.

Description

Fund equipment and training for initial or first-time first responder groups in targeted high-risk areas. Connect returning military service personnel with local EMS providers. We planned to expend this amount in the HSPs of previous years and we plan to expend this amount in fiscal year 2023.

Intended Subrecipients	Funding Source	Unique Identifier	Funding Amount	Local Benefit
BOTS	402	**2023-60-03-EM**	$50,000	$0

Lights and Sirens Safety Pilot Project

Rationale for Selecting Countermeasure/Amount

A willing and able emergency response program is important for timely and expedient healthcare. There is no recommended countermeasure from NHTSA. Wisconsin's strategy is to increase community outreach and education.

Description

This project is for rural EMS support. The Lights and Sirens pilot is based on a program in Arizona and Texas to reduce the number of emergency runs with warning lights and siren on in order to reduce the number of crashes. The impact is improving patient and traffic safety outcomes.

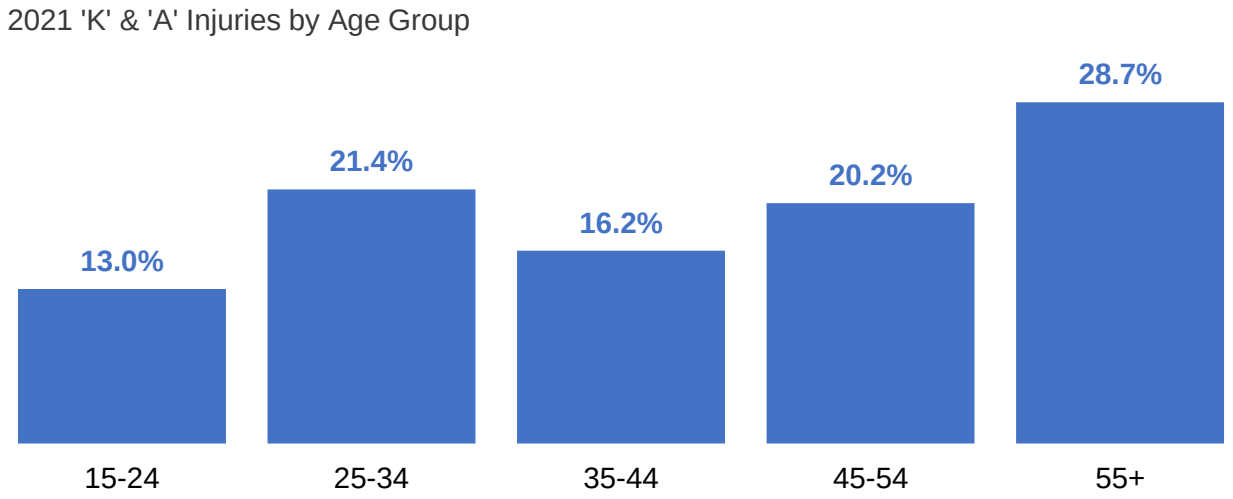
Intended Subrecipients	Funding Source	Unique Identifier	Funding Amount	Local Benefit
BOTS	402	**2023-60-03-EM**	$50,000	$0

EMERGENCY MEDICAL SERVICES – BUDGET SUMMARY		
402	2023-60-02-EM	$50,000
402	2023-60-03-EM	$50,000
402	2023-60-03-EM	$50,000
	Total	**$150,000**

Motorcyclist Safety Program

Program Justification

In 2021, 655 motorcyclists or moped users were seriously injured and 121 were killed in 2,121 reported traffic crashes. Over the prior five years, 83% of motorcycle/moped crashes resulted in a fatality or injury. In 2021, if you were a rider in a reportable motorcycle or moped crash, you were most likely injured—only 340 motorcycle and moped crashes did not result in injury. Most of these injuries are to people over 35 years old. The chart below shows that 65% of the motorcyclist and moped user fatalities and incapacitating injuries occur to individuals 35 years old and older. See performance measures **C7** and **C8** in the introduction for performance measures and targets for this program.



Riding motorcycles and mopeds for most riders is a seasonal endeavor. Rarely does Wisconsin have a warm enough winter for even the most avid rider to continue around-the-year use. Motorcyclist fatalities nonetheless accounted for 20.2% of total fatalities on Wisconsin roads in 2021. The following graph illustrates when those fatalities occurred and that a large share of motorcyclist fatalities typically occur during summer months.

Motorcycle crashes involving another vehicle (2021)

County	Total Crashes	Share of Crashes
Milwaukee	199	23.4%
Dane	49	5.8%
Waukesha	47	5.5%
Kenosha	37	4.4%
Rock	35	4.1%
Brown	27	3.2%
Winnebago	27	3.2%
Outagamie	27	3.2%
Racine	25	2.9%
Washington	24	2.8%
La Crosse	22	2.6%
Marathon	21	2.5%
Fond du Lac	19	2.2%
Sheboygan	19	2.2%
Walworth	18	2.1%
Jefferson	17	2.0%
Sauk	15	1.8%
Eau Claire	14	1.6%
St. Croix	14	1.6%
Manitowoc	12	1.4%
Chippewa	10	1.2%
Ozaukee	9	1.1%
Polk	9	1.1%
Dodge	8	0.9%
Pierce	8	0.9%
Wood	7	0.8%
Monroe	7	0.8%
Columbia	6	0.7%
Barron	6	0.7%
Waushara	6	0.7%
Adams	6	0.7%
Door	6	0.7%
Douglas	6	0.7%

Motorcycle crashes involving another vehicle (2021)

County	Total Crashes	Share of Crashes
Milwaukee	199	23.4%
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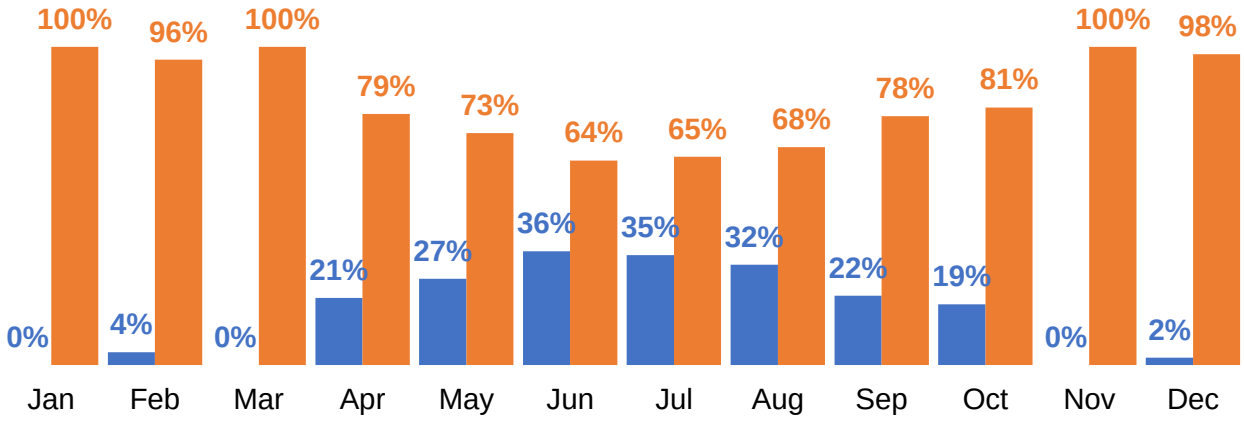
La Crosse	22	2.6%
Marathon	21	2.5%
Fond du Lac	19	2.2%
Sheboygan	19	2.2%
Walworth	18	2.1%
Jefferson	17	2.0%
Sauk	15	1.8%
Eau Claire	14	1.6%
St. Croix	14	1.6%
Manitowoc	12	1.4%
Chippewa	10	1.2%
Ozaukee	9	1.1%
Polk	9	1.1%
Dodge	8	0.9%
Pierce	8	0.9%
Wood	7	0.8%
Monroe	7	0.8%
Columbia	6	0.7%
Barron	6	0.7%
Waushara	6	0.7%
Adams	6	0.7%
Door	6	0.7%
Douglas	6	0.7%

2021 **motorcycle/moped fatalities** compared to **other fatalities** by each month



Riders in Fatal Crashes Not Wearing a Helmet										
2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
92%	78%	76%	71%	83%	79%	65%	64%	65%	70%	69%

The chart above indicates that the percentage of riders in fatal crashes that were not wearing a helmet remains high.

Highway Safety Office Program Management

Assess Traffic Safety Impact

Program management is an essential component to improve traffic safety in the state of Wisconsin. This position functions within the Bureau of Transportation Safety (BOTS) to work with partner agencies including but not limited to law enforcement agencies, technical colleges, motorcycle dealerships, private business, advocacy groups and other BOTS staff to coordinate traffic safety and rider education grants, impairment enforcement and awareness efforts to reduce fatalities and injuries among motorcycle riders as indicated by crash and injury data.

Linkage

State transportation safety funds are used to support the management of the Wisconsin Motorcyclist Safety funds, which will benefit the state in reaching performance measure **C7**.

Rationale for Selecting Countermeasure/Amount

This position is essential for continuing coordination of Wisconsin's strong rider education program, associated grants, and outreach efforts. This countermeasure strategy will help Wisconsin increase use of rider education resources and motorist awareness of motorcyclists. This will in turn decrease fatalities, including those of un-helmeted motorcyclists.

Description

This state program manager position will coordinate, plan, and manage the Wisconsin Motorcyclist Safety Program (WMSP) to include assisting the Wisconsin rider education

program and WMSP through continued clerical support to training sites. This activity will include wage and fringe, data processing costs, materials and supplies, training and travel, printing and postage, and National Association of State Motorcycle Safety administrator membership dues.

Intended Subrecipients	Funding Source	Unique Identifier	Funding Amount	Local Benefit
BOTS	State	2023-79-01-WI	$85,000	$0

Motorcycle Rider Training/Motorcycle Rider Education and Training – Federal and State Funded

Assess Traffic Safety Impact

Licensing requires motorcyclists to have basic knowledge of the safe operation of a motorcycle along with demonstrating basic knowledge of traffic laws. With the additional knowledge received in rider education classes, rider education students gain awareness of potential traffic hazards, and gain the physical skills necessary for safe operation of a motorcycle. Students also gain knowledge of how to mitigate risks of riding through use of proper safety gear and the effects of impairment which can lead to fatal crashes. Rider education programs aim to teach motorcycle control skills, recognize potential road hazards, encourage use of conspicuous safety gear, and encourage in-depth self-assessment of rider risk and limitations.

Linkage

Providing funding for motorcycle rider education and training will aid the state in attaining performance targets **C7** and **C8.**

Rationale for Selecting Countermeasure/Amount

This countermeasure is specifically allowed under 23 CFR 1300.25(l)(1)(i), (ii), and (iii) and will help Wisconsin increase use of the latest rider education resources to increase licensing among riders. *Countermeasures that Works* 10th Ed; 3.2; page 5-20.

Description

The Wisconsin Motorcyclist Safety Program/Rider Education Program will provide classroom or online as well as hands-on rider training programs. This will be accomplished through the Wisconsin Technical College System (WTCS)/funded training sites as well as private/non-funded training sites, including the Harley-Davidson Riding Academy. These sites meet the Motorcycle Safety Foundation and Wisconsin Motorcycle Safety Program (WMSP) requirements for basic motorcycle/scooter, new, seasoned, and advanced motorcycle riders. The Wisconsin Motorcyclist Safety Program will continue rider education courses to address novice, intermediate and seasoned motorcyclists. It will also fund the Motorcycle Safety Foundation (MSF) Basic RiderCourse curriculum and the MSF Basic Rider Course2. In addition to providing valuable safety information to students, these courses allow participants to receive their Class M license without being required to take the on-road test with the Division of Motor Vehicles. This project also includes professional development of RiderCoach Trainers and train-the-trainer staff including curriculum updates, motorcyclist safety conferences and workshops. Wisconsin

meets its requirements for match with traffic enforcement conducted on straight time by the Wisconsin State Patrol.

Intended Subrecipients	Funding Source	Unique Identifier	Funding Amount	Local Benefit
BOTS	405f	2023-72-04-M9	$30,000	$30,000
BOTS	State	2023-79-04-WI	$463,000	$463,000

Alcohol Impairment: Detection, Enforcement, and Sanctions/Motorcycle Operation under the Influence of Alcohol or Other Drugs Law Enforcement

Assess Traffic Safety Impact

Impairment has been a significant contributing factor to fatal crashes among motorcyclists. Enforcement will occur to reduce the number of impaired motorcyclists on the roadways.

Linkage

Providing highway safety funds to address impaired operation of a motorcycle will help the state to reach performance target **C7**.

Rationale for Selecting Countermeasure/Amount

Enforcement of the state's OWI laws among the motorcycling community will help Wisconsin decrease the number of fatal crashes among motorcyclists.

Description

BOTS will encourage participation in impaired driving high-visibility enforcement and deterrence activities where there is the highest occurrence of motorcyclist crashes and fatalities involving motorcyclists impaired by drugs or alcohol. Wisconsin meets its requirements for match with traffic enforcement conducted on straight time by the Wisconsin State Patrol.

Intended Subrecipients	Funding Source	Unique Identifier	Funding Amount	Local Benefit
BOTS	402	2022-70-05-MC	$70,000	$35,000

Motorcyclist Awareness Program

Assess Traffic Safety Impact

The ability to communicate directly with individual constituents allows for targeted discussions related to misconceptions and challenges related to motorcycles on the roadway. This includes topics such as right of way collisions, conspicuity, appropriate safety gear, rider education opportunities, and mechanical issues related to motorcycles that can present safety hazards to all roadway users. Increasing motorist awareness of motorcyclists with "Share the Road" and "Watch for Motorcyclists" messaging at key times during the riding season, along with the

consistent messaging that the specialty license plates provide, will result in a safer riding environment for motorcyclists, leading to fewer motorcycle crashes.

Linkage

Providing federal highway safety funding for outreach to the motorcyclist community about safe riding, as well as spending state revenue generated from the sale of specialized Harley-Davidson license plates for automobiles and trucks, will help the state reach performance target C7.

Rationale for Selecting Countermeasure/Amount

This countermeasure strategy will help Wisconsin increase use of rider education resources, awareness of motorcyclist responsibilities for safe riding strategies, and motorist awareness of motorcyclists to decrease fatalities, including un-helmeted motorcyclists. *Countermeasures that Works* 10th Ed; 4.2; page 5-22.

Description

Continue expansion of the mobile outreach program and the number of activities it participates in to promote all aspects of motorcyclist awareness, safety, and rider education. Offer a variety of motorist and motorcyclist-related training and awareness activities, promote appropriate Class M license for owners of all on-road motorcycles, placement, and promotion of SMARTrainers. Wisconsin meets its requirements for match with traffic enforcement conducted on straight time by the Wisconsin State Patrol. The state also will pay for media with revenue generated from the Harley-Davidson plate as indicated.

Intended Subrecipients	Funding Source	Unique Identifier	Funding Amount	Local Benefit
BOTS	402	2023-70-04-MC	$150,000	$0
BOTS	State 535	2023-79-07-WI	$180,000	$0

Program Evaluation

Assess Traffic Safety Impact

Proper delivery of the approved curriculum materials will ensure that students gain additional knowledge of awareness of potential traffic hazards and gain the physical skills necessary for safe operation of a motorcycle.

Linkage

Spending motorcyclist safety funds on program evaluation will help the state in reaching performance target **C7**, to decrease motorcyclist fatalities 2%.

Rationale for Selecting Countermeasure/Amount

This countermeasure strategy will help Wisconsin increase proper use of rider education resources, motorist awareness of motorcyclists to decrease fatalities, including un-helmeted motorcyclists. *Countermeasures that Works* 10th Ed; 3.2; page 5-20.

Description

BOTS will evaluate the effectiveness of grant funding provided as well as ensure accurate curriculum implementation and adherence to all policies and procedures at all rider education sites across the state. WMSP plans to train additional Quality Assurance Specialists through a formal certification program provided by MSF. Wisconsin meets its requirements for match with traffic enforcement conducted on straight time by the Wisconsin State Patrol.

Intended Subrecipients	Funding Source	Unique Identifier	Funding Amount	Local Benefit
BOTS	402	**2023-70-09-MC**	$45,000	$0

Communications and Outreach Plan

The WMSP improves motorist awareness of the presence of motorcyclists on or near its roadways and promotes safe driving practices that avoid injuries to motorcyclists.

In 2021, the most recent year finalized crash data are available and the year required per 23 C.F.R. §1300.25(f)(2), Wisconsin experienced 964 crashes involving a motorcycle and another motor vehicle. The highest number of motorcycle crashes happened in the heavily populated southeastern portion of the state. This area is being targeted in 2023 for numerous activities intended to reduce crashes and fatalities. Although the southeast region is being targeted for programming, events and activities of the WMSP will happen throughout the state. Activities will include:

- Promoting motorcycle awareness and provide information regarding motorcycles and motorcyclists to the general motoring public
- Meeting members of the motorcycling community face-to-face to promote motorcycle safety, motorcycle training opportunities, licensing, and motorcyclist risk reduction techniques

Wisconsin has a long history of promoting motorcyclist awareness. In 1990, Wisconsin Department of Transportation (WisDOT) and the WMSP established the Wisconsin Motorcycle Safety Advisory Council (MoSAC), which reports to the WisDOT Secretary. The council is comprised of key members of the motorcycling community as well as law enforcement, highway engineering, rider education and others. The council typically meets on a quarterly basis, or more often when needed. In recent years the primary focus of the council has been reducing motorcyclist fatalities and promoting motorist awareness.

Since early spring 2009, WMSP and BOTS staff members have been conducting an in-depth analysis of all Wisconsin motorcyclist fatalities to establish an accurate profile of those motorcyclists involved in fatalities and establish appropriate countermeasures to reduce motorcyclist crashes and fatalities. To that end, BOTS staff members study and analyze DT4000 Crash Reports, corresponding narratives, coroner reports, as well as crash reconstruction documents. Performing this analysis over many years provides critical information regarding where these crashes and fatalities most often occur.

To reduce motorcyclist crashes and fatalities, beginning in 2010 and continuing through 2022, the WMSP built a partnership with the Motorcycle Safety Foundation in a concerted effort to

provide a variety of appropriate levels of rider education to address all members of the motorcycling community. The overall function of the rider education program is to not only improve the skill level of all participating motorcyclists, but to influence motorcyclists' attitudes, behaviors, choices, and decision making in a positive manner to reduce crashes and fatalities.

Continuing in 2023, and in partnership with A Brotherhood Against Totalitarian Enactments (ABATE) of Wisconsin and the Wisconsin Department of Tourism, an expanded campaign is in place to further promote motorcycle awareness to the general motoring public and motorcycle safety for motorcyclists using radio and television public service announcements in high fatality rate target areas and throughout the state. In addition, motorcycle awareness promotional materials are being posted in highly traveled areas, information centers, rest areas and businesses that cater to motorcyclists. Further, numerous electronic billboards have been selected in strategic locations and are being employed to remind the general motoring public of the presence of motorcyclists on Wisconsin roadways.

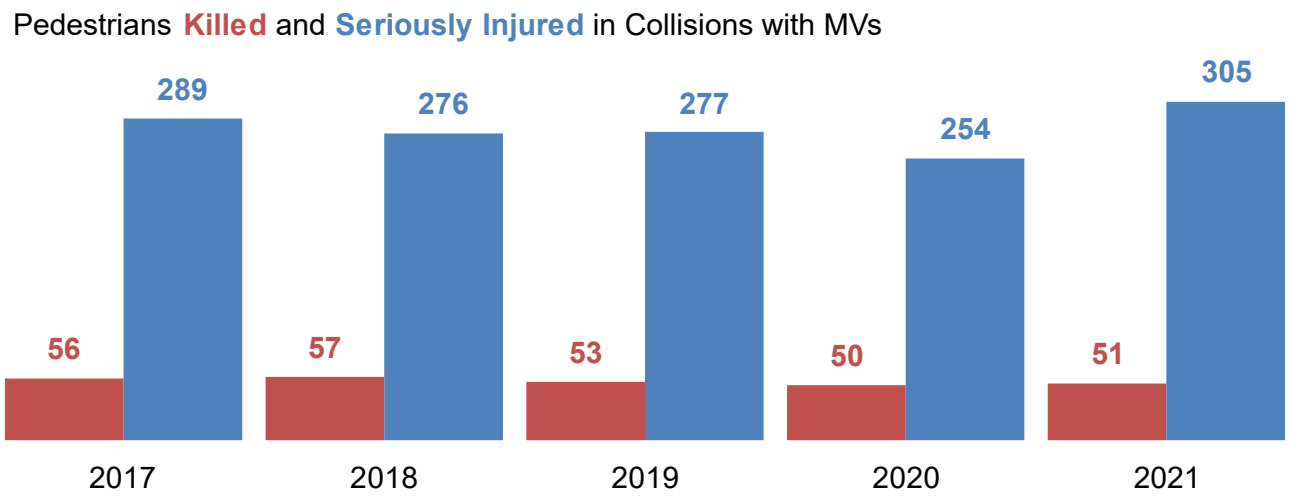
Through analysis of motorcycle crashes, it is evident that motorcycle awareness on the part of the general motoring public is a key component to reducing crashes and fatalities. A key issue that continues to be a contributing factor to multiple vehicle crashes is the fact that motorists claim to have not seen the motorcyclist. As a result, and via an ongoing campaign through WisDOT media efforts, motorists are encouraged to "look twice" for motorcyclists as they enter the driver's field of vision, change lanes, or approach intersections. In addition, motorists are also continually encouraged to "share the road" with motorcyclists.

Fund	Program	Amount
State 562	2023-79-01-WI	$85,000
405f	2023-72-04-M9	$30,000
State 562	2023-79-01-WI	$463,000
402	2023-70-05-MC	$70,000
402	2023-70-04-MC	$150,000
State 535	2023-79-07-WI	$180,000
402	2023-70-09-MC	$45,000
	Total	**$1,023,000**

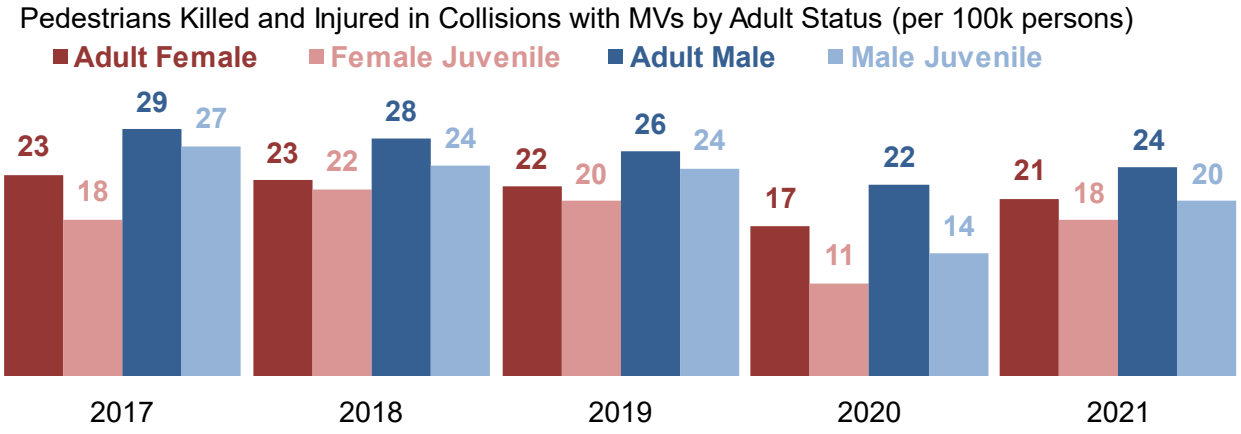
Pedestrian and Bicyclist Safety Program

Program Justification, Performance Goals and Measures

In 2021, 51 pedestrians died in pedestrian-motor vehicle crashes. As illustrated in the graph, pedestrians killed or seriously injured in 2021, totaled 304. This represents a 3% increase from the 245 pedestrians killed or seriously injured in 2017.

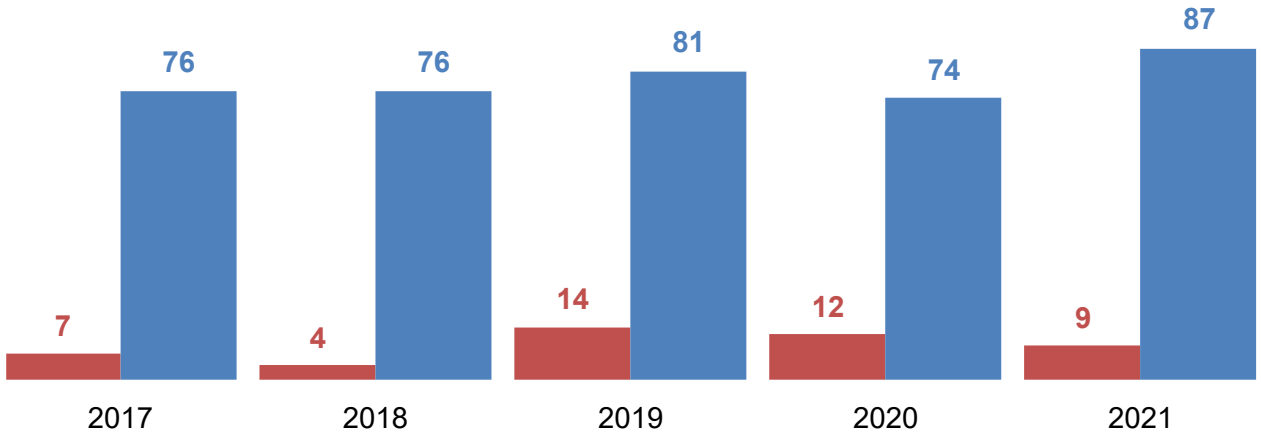


There were 1,321 pedestrian injuries reported in 2021, a 12% decrease from the 1,500 pedestrian injuries reported in 2017. Adult men and women make up the largest number of pedestrians injured in collisions.



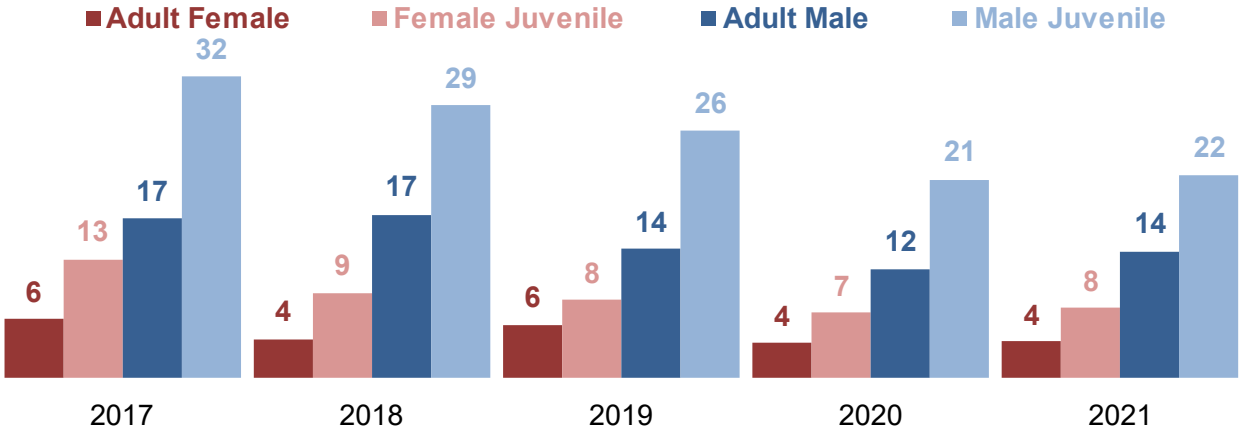
In 2021, 9 bicyclists died in bicycle-motor vehicle crashes. As illustrated in the graph below, bicyclists killed or seriously injured in 2021 totaled 96. This represents a 6% decrease from the most recent five-year average.

Bicyclists **Killed** and **Seriously Injured** in Collisions with MVs



There were 609 total bicyclist injuries and fatalities reported in 2021, which is a 17% decrease from the most recent five-year average. Adult and juvenile males make up the largest number of bicyclists injured in collisions. Male juveniles are clearly overrepresented in injuries across all years in the chart below.

Bicyclists Killed and Injured in Collisions with MVs by Adult Status (per 100k persons)



Performance measures and targets for this program include measure **C10** and measure **C11** in the introduction.

State Funded Bicyclist and Pedestrian Program Manager

Assess Traffic Safety Impact

This state program manager position will positively impact traffic safety in Wisconsin by coordinating, planning, and managing the bicycle and pedestrian program. Goals that will have a positive impact on traffic safety in Wisconsin are:

- Enhancing volunteer agency participation
- Increasing community involvement
- Working with community organizations and non-profit programs to expand activities and efforts
- Encouraging state and local input into the HSP development process.

Linkage

Funding program management and strategic planning for the program will aid the state in reaching performance targets **C10** and **C11**.

Rationale for Selecting Countermeasure/Amount

Hiring a full-time pedestrian and bicyclist coordinator with state funds illustrates our commitment to non-motorist safety.

Description

This activity will fund wage, fringe, data processing, materials and supplies, training and travel, printing, and postage for the work of this position. This position will work with regional program managers, law enforcement liaisons, and law enforcement agencies of all sizes to coordinate efforts, encourage safe and effective high-visibility enforcement and participation in mobilizations.

Intended Subrecipients	Funding Source	Unique Identifier	Funding Amount	Local Benefit
BOTS	562	**2023-89-01-WI**	$87,000	$0

NHTSA Bicycle and Pedestrian Safety Program Assessment

Assess Traffic Safety Impact

The impact of this project will increase knowledge of the bicycle and pedestrian safety community. The assessment will provide necessary feedback for the program to develop and improve outcomes. The anticipated impact of this countermeasure strategy is a decrease in non-motorized traffic fatalities.

Linkage

Assist the state in attaining performance targets **C10** and **C11**.

Rationale for Selecting Countermeasure/Amount

We are seeking to assess the program due to a new coordinator on staff and the last bicycle and pedestrian assessment was conducted in 2016.

DESCRIPTION

Provide a peer exchange forum for the safety community in Wisconsin. Specifically focused on opportunities to improve the program through a peer lead analysis of the data, programming, partnerships, and communication being used.

Intended Subrecipients	Funding Source	Unique Identifier	Funding Amount	Local Benefit
BOTS	**402**	**2023-80-03-PS**	**$25,000**	

TEACHING SAFE BICYCLING

ASSESS TRAFFIC SAFETY IMPACT

The impact of this project will increase knowledge of safe bicycling behaviors among children. The anticipated impact of this countermeasure strategy is a decrease in non-motorized traffic fatalities.

LINKAGE

Assist the state in attaining performance targets **C10** and **C11**.

RATIONALE FOR SELECTING COUNTERMEASURE/AMOUNT

This is listed in *Countermeasures That Work*, 10th Ed; 2.2, page 9-26; 1.3, page 9-21.

DESCRIPTION

Provide teaching safe bicycling (train-the-trainer) style workshops for participants interested in providing youth cycling instructions. Attendees frequently include teachers, non-profit organizations, law enforcement, and youth groups. The goal is to host five in-person training sessions in communities across Wisconsin and to partner with two communities to install DIY QR code stations for video-based programs.

In addition, 10 classes will be hosed around the state. Classes include Savvy City Cycling, Smart Cycling by LAB, and Bicycle Friendly Driver depending on community needs and requests. Workshop instruction and course administration is led by the Wisconsin Bicycle Federation. Wisconsin meets its requirements for match with traffic enforcement conducted on straight time by the Wisconsin State Patrol.

Intended Subrecipients	Funding Source	Unique Identifier	Funding Amount	Local Benefit
Various local governments	402	**2023-80-03-PS**	$16,000	$16,000

MilWALKee WALKS

Rationale for Selecting Countermeasure/Amount

This project will impact traffic safety with a reduction in crashes and injuries among pedestrians in the target area. Due to no recommended NHTSA countermeasure, Wisconsin is educating pedestrians and drivers of the crash risks and prevention.

Linkage

Assist the state in attaining performance targets **C10**.

Description

MilWALKee Walks is a safety coalition that aims to increase yielding to pedestrians at marked and unmarked crosswalks in Milwaukee. Milwaukee leads the state in the number of pedestrian crashes and the number of fatal pedestrian crashes. This grant will allow for outreach to minority communities and organizing around intersections where there are the highest pedestrian crash numbers. Materials developed for this project will be posted electronically and made publicly available. MilWALKee Walks is managed and developed by the Wisconsin Bike Federation.

Intended Subrecipients	Funding Source	Unique Identifier	Funding Amount	Local Benefit
Milwaukee	402	**2023-80-04-PS**	$78,000	$78,000

UW-Milwaukee Implementation of Exposure Data Pilot Study

Rationale for Selecting Countermeasure/Amount

There is little information on exposure for pedestrians and bicyclists and to calculate risk and assess the effectiveness of a treatment there needs to be both exposure and crash data. The lack of exposure data makes it difficult to prioritize site selection for safety treatments based on volume of users, but also eliminates the ability to calculate risk by looking at crashes in the context of exposure.

Linkage

Assist the state in attaining performance targets **C10** and **C11**.

Description

Implement and pilot the results of the “Pedestrian Exposure Data for the Wisconsin State Highway System: WisDOT Southeast Region Pilot Study,” which is being completed by the University of Wisconsin-Milwaukee for the Bureau of Transportation Safety in 2021. The goal of this follow-up project is to assist WisDOT with incorporating the Southeast Region results into statewide WisDOT processes for scoping roadway projects and prioritizing locations for safety improvements.

Intended Subrecipients	Funding Source	Unique Identifier	Funding Amount	Local Benefit

UW Milwaukee	**402**	**2023-80-09-PS**	**$20,000**	**$5,000**

Designing for Pedestrian Safety

Rationale for Selecting Countermeasure/Amount

FHWA is currently retooling the curriculum, and with probable changes to the Manual of Uniform Traffic Control Devices, there will likely be interest in this class. Currently, one online course costs approximately $9,000. One in-person course costs approximately $15,000. This is a continuing project that has demonstrated success in the past. This project will have a positive impact on highway safety by reducing exposure through environmental countermeasures. *Countermeasures that Works 10th Ed*; 4.1; page 8-32.

Linkage

Assist the state in attaining performance targets **C10** and **C11**.

Description

Provide two (one in-person and one virtual) Designing for Pedestrian Safety or Designing for Pedestrian Safety Accessibility workshops in Wisconsin. The workshops provide engineers, planners, designers, advocates from WisDOT, and employees from local government with the knowledge to improve safety of the pedestrian environment.

Intended Subrecipients	Funding Source	Unique Identifier	Funding Amount	Local Benefit
Various	**402**	**2023-80-03-PS**	**$24,000**	**$24,000**

Bike and Pedestrian Sustained Enforcement

Assess Traffic Safety Impact

This project will have a positive impact on highway safety by increasing compliance with traffic laws that affect pedestrians, bicyclists, and motorists.

Linkage

Assist the state in attaining performance targets **C10** and **C11**.

Rationale for Selecting Countermeasure/Amount

This project is in *Countermeasures That Work*, 10th Ed; 4.2, page 8-34 and 3.3; page 9-31.

Description

Collaborate with law enforcement agencies to increase the number and improve the quality of enforcement initiatives that impact pedestrians and bicyclists. Enforcement should focus on behaviors that lead to crashes:

- failure to yield
- red light violations
- speeding in advance of marked and unmarked crosswalks
- sudden pedestrian movement
- bicyclist violation of stop signs and stop lights

These grants should only be used to supplement existing enforcement related to pedestrian and bicyclist safety. Additionally, agencies targeted for this enforcement should complete specific training related to pedestrian/bicyclist law enforcement. Wisconsin meets its requirements for match with traffic enforcement conducted on straight time by the Wisconsin State Patrol.

Intended Subrecipients	Funding Source	Unique Identifier	Funding Amount	Local Benefit
LEAs	402	**2023-80-05-PS**	$260,000	$260,000

2023 Media Campaign for Bike/Pedestrian Safety

Rationale for Selecting Countermeasure/Amount

The Wisconsin Bike Fed cultivates, motivates, and unites a strong community of citizens as well as business and political leaders to move bicycling forward in Wisconsin through education, legislation, and involvement. An effective media campaign will use traditional media resources as well as social media, and target at risk and/or minority communities. *Countermeasures that Works* 10th Ed; 4.7, page 8-44 and 4.2, page 9-34.

Linkage

Assist the state in attaining performance targets **C10** and **C11**.

Description

Wisconsin Bike Fed will conduct three major media initiatives for 2023: promotion of Bike Week, promotion of MilWALKee Walks, and promotion of bike safety and awareness in the fall. For Bike Week, in addition to signs and social media posts, Bike Fed staff and volunteers will be hosting events in communities across the state during this time to promote bike safety and encourage bike usage. MilWALKee Walks promotions will include billboard buys, yard signs and social media messages. The fall visibility efforts will include billboard buys, targeted social media messages and yard signs.

Intended Subrecipients	Funding Source	Unique Identifier	Funding Amount	Local Benefit
Various	402	2023-80-02-PS	$50,000	**50,000**

Table. Pedestrian and Bicyclist Safety Program – Budget Summary

Fund	Account	Planned budget
State 562	2023-89-01-WI	$87,000

402	2022-80-03-PS	$16,000
402	2023-80-03-PS	$25,000
402	2023-80-04-PS	$78,000
402	2023-80-09-PS	$20,000
402	2023-80-03-PS	$24,000
402	2023-80-05-PS	$260,000
	Total	**$590,000**

Community Traffic Safety Outreach and Media Programs

Assess Traffic Safety Impact

Law enforcement liaisons (LELs) are a proven measure to improve traffic safety by supporting law enforcement agencies and conducting outreach to them. The Wisconsin LEL program is modeled after the recommendations of the national LEL program. The LELs, along with the regional program managers (RPMs) will coordinate the community traffic safety program by conducting outreach with local partners. The RPMs and LELs develop safety initiatives to reduce fatalities and injuries among high-risk groups as indicated by crash and injury data trends and they lead the Wisconsin Department of Transportation (WisDOT) efforts to increase participation of law enforcement agencies in quarterly Traffic Safety Commissions (TSC) in each county in Wisconsin. In addition, the RPMs assist grantees in completing grant applications, activity reports, reimbursement requests, and ultimately monitor federal grants. LEL's will attend TSC meetings in their regions and assist with the facilitation. Predictive analytics activity will also be supported by this grant.

Linkage

Spending funds on management of the Community Traffic Safety Program will be of service to the state of Wisconsin to help it achieve performance target **C1**.

Rationale for Selecting Countermeasure/Amount

Participation in TSCs is essential for outreach to law enforcement agencies for WisDOT policy and programs and is key to the state implementation of the Wisconsin Strategic Highway Safety Plan. Participation by law enforcement agencies also allows WisDOT to have a better understanding of the traffic safety issues in local communities. Costs are explicitly allowed under 402 and are an effective countermeasure strategy. Funding will be increased in 2023 and evaluated annually due to the operating costs

Description

The Bureau of Transportation Safety (BOTS) has two RPMs and four contracted LELs that coordinate, plan, and manage the state Community Traffic Safety Program. Wage and fringe, data processing costs, materials and supplies, training, travel, printing, and postage. The LELs and RPMs will continue to provide leadership, training, information, and technical assistance as liaisons between law enforcement agencies, organizations, and non-profit programs involved in community traffic safety and WisDOT.

Intended Subrecipients	Funding Source	Unique Identifier	Funding Amount	Local Benefit
BOTS	**402**	**2023-90-01-CP**	$477,450	

Grant Management System

Assess Traffic Safety Impact

An electronic grant management system allows BOTS to efficiently manage its programs and it provides for better subrecipient monitoring. Increased efficiencies in program management allows BOTS to focus a greater number of resources on activities that promote traffic safety in local communities.

Linkage

Allocating funds to an electronic grant management system allows BOTS to direct resources to all grantees, which will aid the state in reaching performance target **C1**.

Rationale for Selecting Countermeasure/Amount

An electronic grant management system is necessary to support BOTS's traffic safety programs throughout the state.

Description

This project funds the electronic grants management system, IGX Wise Grants, which manages the grants distributed by BOTS. This system previously received a commendation from NHTSA after a management review. Wise Grants has continuously improved processing and reporting. Those changes are expected to increase costs, but, when coupled with the state's new business and accounting system, will better track expenditures and file management.

Intended Subrecipients	Funding Source	Unique Identifier	Funding Amount	Local Benefit
BOTS	**402**	**2023-90-04-CP**	$135,000	$30,000

Governor's Annual Conference on Highway Safety

Assess Traffic Safety Impact

The Governor's Conference on Highway Safety is an opportunity to network with law enforcement and other transportation safety stakeholders and partners. Sharing best practices, discussing progress, new and emerging initiatives, and coordination of efforts is the top priority. Input from local partners for the state's programs and plans are key to implementing the Strategic Highway Safety Plan and formulating the Wisconsin Highway Safety Plan application.

Linkage

Providing funding for the conference and the luncheon enables transportation safety stakeholders around Wisconsin to meet and learn from each other, which will aid the state in reaching performance target **C1**.

Rationale for Selecting Countermeasure/Amount

The conference is a culmination of the entire outreach program. When groups outside of WisDOT support the messaging that aims to decrease traffic fatalities on our roads, it benefits the department's program. The amount of funding for this countermeasure strategy is the same as it was in 2021.

Description

This planned activity funds the conference as well as the recognition luncheon for law enforcement. The conference is a meeting of current and future partners. The conference has improved and will continue to improve inter-agency cooperation and collaboration. It will help the development of multi-jurisdictional high visibility enforcement (HVE) task forces across the state. No equipment purchased with this activity will be major since all equipment will have an acquisition cost of less than $5,000. Wisconsin meets its match with traffic enforcement conducted on straight time by the Wisconsin State Patrol.

Intended Subrecipients	Funding Source	Unique Identifier	Funding Amount	Local Benefit
BOTS	**402**	**2023-90-06-CP**	$125,000	$125,000

Communications Plan

BOTS will employ a media plan that supports HVE messaging during key deployments during the fiscal year and maintain a sustained behavioral messaging effort. The bureau will reference *Countermeasures that Work*, 10th edition, Traffic Safety Marketing, and develop local media to customize targeted behavioral messages.

BOTS will work in partnership with other agencies, organizations, and affiliates to deliver coordinated comprehensive media messages to address both statewide highway safety and in minority communities. This will be done through print, radio, social media, digital streaming and television.

Occupant Protection Media

Assess Traffic Safety Impact

Promoting occupant protection will help to increase seat belt usage among low use groups.

Linkage

Wisconsin's occupant protection outreach plan will assist the state in reaching a usage rate of 91% by December 31, 2023. Will aid the state in reaching performance targets **B1** and **C4**.

Rationale for Selecting Countermeasure/Amount

The support of HVE through public information is specifically allowed under 23 CFR §1300.21(f)(1)(i) and it is also listed in *Countermeasures that Work*, 10th Ed; 4.1, page 3-32.

Description

BOTS will review and update information regarding child passenger safety, seat belt materials, and other items in both Spanish and English. We will create state-specific occupant protection message using Click it or Ticket (CIOT), Zero in Wisconsin, and messages targeted at the unbelted motor vehicle occupant.

BOTS will partner with teen safe driving programs to promote young adult driver seat belt use. We will review and update web-based information and materials for accuracy and to reduce printing and duplication costs. This will also encompass the rollover convincer project.

Intended Subrecipients	Funding Source	Unique Identifier	Funding Amount	Local Benefit
BOTS	**405b**	**2023-25-07-M2**	$535,000	
	402	**2023-20-07-OP**	$393,000	

Impaired Driving Media

Assess Traffic Safety Impact

Promoting impaired driving programs will help to decrease impaired driving among the traveling public.

Linkage

Wisconsin's impaired driving outreach plan will assist the state in decreasing alcohol impaired driving fatalities by 2% from the 2017-2021 calendar year rolling average of 194 to 190 by December 31, 2023. Will assist in meeting performance measure **C1** and **C5**.

Rationale for Selecting Countermeasure/Amount

The support of HVE through public information is specifically allowed under 23 CFR §1300.23(j)(1)(vi) and it is also listed in *Countermeasures that Work*, 10th edition, Ed, 5.2; page 1-60.

Description

BOTS will continue to develop statewide public information and education campaigns to reduce impaired driving injuries and fatalities based on the National Highway Traffic Safety Administration's (NHTSA) goals and objectives by:

- Using various methods such as the web, print, and television
- Obtaining services for product and placement, printing, and postage
- Collaborating with partners, revise, and update all information, identify specific needs, and target information to various audiences including Spanish speaking customers.

- Using the website more to reduce production costs
- Developing and disseminate best practices information.
- Collaborating with community prevention organizations to assist them in developing successful evidence-based prevention programs

Intended Subrecipients	Funding Source	Unique Identifier	Funding Amount	Local Benefit
BOTS	**405d**	**2023-31-07-M5**	$815,000	
	402	**2023-30-07-AL**	$160,000	

Motorist Awareness and Motorcyclist Safety Media

Assess Traffic Safety Impact

Promoting awareness will help to decrease motorcyclist crashes among the traveling public.

Linkage

Wisconsin's motorcyclist and motorists outreach plan will assist the state in decreasing motorcyclist fatalities by 2% from 96 (2017-2021 calendar year rolling average) to 94 by 2023. Will assist in meeting performance measure **C-7** and **C-8**.

Rationale for Selecting Countermeasure/Amount

The support of public information for motorists and motorcyclists is listed in *Countermeasures that Work*, 10th Ed; 4.2, page 5-22.

Description

This will fund media campaigns during "May is National Motorcycle Safety Awareness Month" and in Wisconsin "May is Motorcycle Awareness Month." These campaigns will promote motorist awareness of motorcyclists in a campaign to "look twice for motorcycles" via radio and television Public Service Announcements, posters, and other means.

Intended Subrecipients	Funding Source	Unique Identifier	Funding Amount	Local Benefit
BOTS	405f	**2023-72-07-M5**	$120,000	
	402	**2023-70-07-MC**	$55,000	
	535	**2023-72-07-WI**	$80,000	

Pedestrian and Bicyclist Media

Assess Traffic Safety Impact

Promoting awareness will help to decrease non-motorist crashes among the traveling public.

Linkage

Wisconsin's bicycle and pedestrian outreach plan will assist the state in reducing pedestrian fatalities 2% from 54 (2017-2021 calendar year rolling average) to 53 by 2023. Will assist in meeting performance measure **C-10** and **C-11**.

Rationale for Selecting Countermeasure/Amount

The support of HVE through public information is listed in *Countermeasures that Work,* 10th Ed; 4.7, page 9-21; and 4.2; page 9-34.

Description

Work with partners to keep information up-to-date and add information to WisDOT website. Continue to work with the variety of Drivers Education Programs to ensure beginning drivers receive the correct pedestrian/bicycle training. The impact of this project will help to ensure that young drivers receive the necessary information to share the road with pedestrians and bicyclists. Continue to develop and educate all people involved in pedestrian/bicyclist safety. Work in cooperation with Share and Be Aware to develop new training/educational materials. This project will help to ensure that bicyclists get up to date information regarding rules of the road.

Intended Subrecipients	Funding Source	Unique Identifier	Funding Amount	Local Benefit
BOTS	**402**	**2023-80-07-PS**	$20,000	

General Media– Campaign Development

Assess Traffic Safety Impact

Promoting awareness will help to decrease motorist crashes among the traveling public.

Linkage

Wisconsin's outreach plan will assist the state in reducing traffic fatalities 2%. This will impact performance measure **C-1**.

Rationale for Selecting Countermeasure/Amount

The support of HVE through public information is listed in *Countermeasures that Work*, 10th Ed; 5.2, page 1-60; 4.1, page 3-32; 3.1, page 2-25; 2.1, page 4-17; 4.2, page 5-22. 4.7, page 8-44; and 4.2, page 9-34.

Description

Continue to develop a statewide public information and education campaign on distracted driving, speed, and other campaigns to reduce injuries and fatalities based on NHTSA's goals and objectives using various methods such as the web, print, and television. Obtain services for product, placement, printing, and postage. Collaborate with partners, revise, and update all information, identify specific needs, and target information to various audiences including Spanish and Hmong customers. Provide up-to-date information and current data to the public. Collaborate with community prevention organizations to assist them in developing successful evidence-based prevention programs and successful program information outreach.

Intended Subrecipients	Funding Source	Unique Identifier	Funding Amount	Local Benefit
BOTS	**402**	**2023-90-07-CP**	$150,000	
	405B	**2023-90-07-M3**	$45,000	
	405D	**2023-90-07-M5**	$45,000	

Paid Media

Assess Traffic Safety Impact

Promoting awareness will help to decrease motorist crashes among the traveling public.

Linkage

Wisconsin's outreach plan will assist the state in reducing traffic fatalities 2%. This will impact performance measure **C-1.**

Rationale for Selecting Countermeasure/Amount

The support of HVE through public information is listed in *Countermeasures that Work*, 10th Ed; 5.2, page 1-60; 4.1, page 3-32; 3.1, page 2-25; 2.1, page 4-17; 4.2, page 5-22. 4.7, page 8-44; and 4.2, page 9-34. It is also allowable under 23 CFR §1300.23(j)(1)(vi).

Description

Contract for paid media for all major behavioral areas, with an emphasis on impaired driving. These projects will help to support all communication and outreach countermeasures that work described in each section of the HSP. The impact of the project is to help raise awareness among drivers of the importance of highway safety rules and regulations.

Intended Subrecipients	Funding Source	Unique Identifier	Funding Amount	Local Benefit
BOTS	**402**	2023-90-07-CP	**$484,950**	

Table. Community Traffic Safety and Media

Fund	Account	2023 Planned
402	2023-90-01-CP	$477,450
402	2023-90-04-CP	$135,000
402	2023-90-06-CP	$125,000
405b	2023-25-07-M2	$535,000
402	2023-20-07-OP	$393,000
405d	2023-31-07-M5	$815,000
402	2023-30-07-AL	$160,000
405f	2023-72-07-M5	$120,000
535	2023-70-07-WI	$80,000
402	2023-80-07-PS	$20,000
402	2023-90-07-CP	$484,950
	Total	**$3,345,400**

2023		OP PM 405B	402 OP PM	ID PM 405D	402 ID PM	MC 405F PM	MC 535 HD	BP PM 402	Gen PM 402	Total
	Funding									
	State						$80,000			$80,000
Campaigns	Federal	$535,000	$393,000	$815,000	$160,000	$120,000		$20,000	$484,950	$2,527,950
										$2,607,950
National HVE	Range									
Click It or Ticket	May (Memorial Day)	$300,000								$300,000
DSOGPO	Aug-Sep (Labor Day)			$250,000						$250,000
Occupant Protection										

Wisconsin Broadcaster Association	CIOT	$100,000								$100,000
Donald Driver	Year round	$90,000								$90,000
Sports Marketing										
University of Wisconsin Badger Sports	Year round				$150,000					$150,000
Green Bay Packers	August-February			$125,000						$125,000
Milwaukee Bucks	Oct-June			$125,000						$125,000
University of Marquette	Oct-Mar			$50,000						$50,000
Milwaukee Brewers	Mar-Oct			$125,000						$125,000
Northwoods League	Apr - Sep			$80,000						$80,000
Madison Forward	May-Oct			$15,000						$15,000
MC Safety										
MC Outdoor Advertising	June-Sept								$55,000	$55,000
Twins MC Safety	Year round				$10,000					$10,000
Awareness	May					$50,000				$50,000
MC Summer Awareness	July /August					$40,000				$40,000
Share the Road	April						$50,000			$50,000
Wisconsin Broadcaster Association	May/October MC Awareness					$30,000	$30,000			$60,000
Teen Driving										
VNN ~ Fall	Fall Regional High School Sports		$6,200							$6,200

VNN~ Spring	Spring Regional High School Sports		$5,800							$5,800
Channel 47 MSG2TEENS	Oct - Mar		$45,000							$45,000
Wisconsin Interscholastic Athletic Association	State Highschool Championship Sports		$90,000							$90,000
Parents against Distracted Driving; Milwaukee	April		$6,000							$6,000
Bike and Ped										
Wisconsin Bike Fed	Limited							$20,000	$4,750	$24,750
Division BMX	Year round								$10,000	$10,000
Distracted Driving										$0
Bucks Player spokesperson	Year round								$125,000	$125,000
Un-Distractable	April								$60,000	$60,000
Buckle Up, Phone Down	Fall		$120,000							$120,000
Buckle Up, Phone Down	Spring		$120,000							$120,000
Sustained BOTS										
Madison Capital	Sep -Mar								$6,200	$6,200
UMOJA; AA	Year round								$4,000	$4,000
Milwaukee Journal Times	Year round								$10,000	$10,000
Spanish News Journal; HA	Year round								$10,000	$10,000

State Fair DSP/DOT	August								$6,000	$6,000
Right Brain Digital Media for Affirm. CC service & TV editing	Year round								$5,000	$5,000
Affirm Mthly Svc Fee	Monthly SVC								$39,000	$39,000
Campaign Development		$45,000		$45,000					$150,000	$240,000

III Appendices

Appendix 1: Law Enforcement Grant Targeting Methodology

As It Relates to Alcohol, Speed, and Occupant Protection Grants

Introduction

The following is documentation for the methodology on how the targeting lists of political entities and their respective law enforcement agencies were selected for alcohol, speed, and occupant protection law enforcement grants.

This methodology includes the minimum three requirements under 23 CFR 1300.11(d)(5)(i) and (ii), the evidence-based traffic safety enforcement program to prevent traffic violations, crashes, and crash fatalities and injuries in areas most at risk for such incidents. At a minimum, the state shall provide for:

1. An analysis of crashes, crash fatalities, and injuries in areas of highest risk
2. Deployment of resources based on that analysis
3. Continuous follow-up and adjustment of the enforcement plan

Continuous follow-up is provided by monthly reviews of grants by the State Program Managers, grant monitoring by the Regional Program Managers, and through attendance at the quarterly Traffic Safety Commissions in each county.

This appendix also covers requirements under 23 CFR 1300.21 (e)(4) for high-risk population countermeasure programs. Agencies/municipalities that meet the criteria are encouraged to participate in enforcement efforts either through funded overtime grants (which require participation in national mobilizations) or through our non-overtime grant program which runs during the national mobilization periods. New targeting lists are created each year using the most recent three years of data.

Initially Wisconsin counties were grouped by descending degree of apparent crash problem (alcohol, speed, and occupant protection), within the respective grant types (alcohol, speed, and occupant protection). The following summarizes the larger steps taken for all three types of law enforcement grants in generating the overall list.

Initial Scoring

The Bureau of Transportation Safety's Traffic Crash files were queried for instances of alcohol, speed, and occupant protection related crashes, by crash type (fatal, injury, and property damage), as noted on the DT4000 crash report form, in Wisconsin cities, villages and townships and grouped together by county for the calendar years 2018, 2019, and 2020. Three years of data were collected to disguise some of the natural fluctuations from year to year. Not all locations in Wisconsin have recorded each of the three types of crashes during the 2018- 2020 three-year period; those locations were immediately excluded from further investigation, within their respective targeting list grant type (alcohol, speed, and occupant protection).

Reported crashes on public roads were matched with the people involved in the crashes, assigning numeric weights to reported injuries (and non-injuries). The numeric weights assigned were:

- Fatal injury = 20
- Suspected Serious injury = 20
- Suspected Minor injury=10
- Possible injury = 5
- Unknown or no injury = 1

Numeric weights of the injuries (and non-injuries) were summed by counties and cities, villages, or townships, within a county. That value was named *Calculated Score for Injuries*.

A *Normalized Score* for injuries was calculated by matching the *Calculated Score for Injuries* with the final January 1, 2020, population estimates (per 1,000), as released by the Wisconsin Department of Administration's Demographic Services Center (Ex. Calculated Score * (1000/Population Number)) for counties, cities, villages, and towns. Population estimates are based on the 2010 census and an analysis of more current data such as housing units and automobile registrations. 2019 population data was used because it is the most recent available. An example of the formula to be used for each of the respective 72 counties in the state is the following:

- Calculated Score * (1,000/ (2020 County Population))

Each county is evaluated regarding its *Calculated Score for Injuries* and its *Normalized Score* to see if it meets the criteria for selection. The county-level criteria varies by grant type (alcohol, speed, and occupant protection) and can be found in one of the three respective subsections for grant types below. The exception to this scoring are all counties with a population of 500,000 or greater, where counties meeting this criterion will automatically be included in the three law enforcement grant types (Alcohol, Speed, and Occupant Protection).

I. Full-year Law Enforcement Grants (Alcohol and Occupant Protection Only)
   Municipalities located in multiple counties have been combined, thus only appear once in the listings. The county containing the largest percentage of the municipality's population has been designated the county of record for the listings. If counties in which a municipality exists are needed, please reference the worksheet named "2020MuniInMultiCounties", in the MS Excel files named "2020MuniAlcWeightedTrgtNormal.xlsx".

Criteria at County Level

Select counties with the criteria of Weight >= 3,000 for alcohol and speed and 1,800 for occupant protection OR Normal Score >= 50.00 OR (Weight >= 2,000 AND Normal Score >= 30.00).

Select the next four counties, from those counties that are still unselected who have a Rural-Urban Continuum Code of one through six and have the next highest Normal Score scores from ALL counties per RPM Region.

Criteria at Municipal Level

A list of municipalities for each of the counties selected as a possible grant candidate will be generated, showing the Normal Score and Weight for each of the municipalities within a county. Municipalities within each of these counties will be selected for potential grants using the following criteria:

- Weight >= 300
- Normal Score >= 50.00

Each of these municipalities will be highlighted in blue. Please note that municipalities that have a law enforcement agency presence, besides the county sheriff, will also be highlighted using **bold** text.

Each county NOT having a Rural-Urban Continuum Code of seven through nine is evaluated with regard to its *Calculated Score for Injuries* and its *Normalized Score* for each of the four quarters to see if it meets the criteria for selection. The county-level criteria varies by grant type (alcohol, speed, and occupant protection) and can be found in one of the three respective subsections for grant types below.

Counties with normalized scores that fall outside one or more standard deviations but less than two standard deviations from the population group's average and whose normalized score is at least 15% above the group mean are displayed against a lightly red shaded background and will be selected as grant candidates. Counties with normalized scores that fall outside two or more standard deviations from one of the six population group means are displayed against a more darkly shaded background and are automatically eligible as a grant candidate.

II. Occupant Protection Grants by County, Based Upon the Number of Unbelted Youth Drivers Aged 16-19 Years of Age in Crashes.

The selection process will also make counties eligible for Occupant Protection Grants, based upon the calculated score for injuries of unbelted youth drivers aged 16-19 in crashes in a particular county, for the years 2018 through 2020, relative to the population per county, for the state as a whole, where the county has not been previously targeted for Occupant Protection grant(s).

Counties, which have the largest normalized score of unbelted 16-19 year old drivers statewide, will be considered for occupant protection grants. The local county sheriff's office will be the first enforcement agency contacted, for each county, given they have county-wide jurisdiction.

III. All Grant Types (Alcohol, Speed, and Occupant Protection) by County, Based Upon Population.

Counties with a population greater than or equal to 500,000 will be targeted for all three categories of law enforcement grant types (Alcohol, Speed, and Occupant Protection), regardless of the grant distribution methodology selected for a given targeting year.

Please note population was used as the metric, instead of VMT, because of the ongoing regularity and timeliness of annual population estimates (both state and federal) versus the unpredictability of when VMT data will become available for a given year.

After each county that has been selected for a particular type of grant (Alcohol, Speed, and Occupant Protection) we then drilled down to the municipal (City, Village, or Town) level to indicate the specific municipal entities that qualified the county for a grant. This will be achieved by measuring the *Normalized Score* for injuries and the *Calculated Score for Injuries*, for each of the municipalities against the criteria set for municipalities, in each of the grant types (Alcohol, Speed, and Occupant Protection) as described in Section I above. Please note that the County Sheriff of a selected county, regardless of grant type will always be considered for a grant, otherwise the local law enforcement agency that has a selected municipality within its jurisdiction will be considered to implement a grant on behalf of the selected municipality.

APPENDIX 2: 405(B) REQUIREMENTS

PARTICIPATION IN CLICK IT OR TICKET NATIONAL MOBILIZATION

Wisconsin will participate in the Click It or Ticket high-visibility national enforcement mobilization in 2022. The mobilization will have an enforcement, paid media, and earned media component. Wisconsin has had good participation from law enforcement agencies throughout the state.

As required under 23 CFR § 1300.11(d)(6) and 23 CFR § 1300.21 (d)(2), participating agencies include:

Adams County Sheriff's Office	Black River Falls Police Department	Colby Abbotsford Police Department
ALBANY Police Department	Bloomfield Township Police Department	Colfax Police Department
Altoona Police Department	Boscobel Police Department	Coloma Police Department
Amery Police Department	Brandon Fairwater Police Department	Columbia County Sheriff's Office
Antigo Police Department	Brillion Police Dept.	Columbus Police Department
Appleton Police Department	Brodhead Police Department	Cornell Police Department
Arcadia Police Department	Brooklyn Police Dept.	Cottage Grove Police Department
Arena Police Department	Brown County Sheriff's Office	Crawford County Sheriff's Office
Ashwaubenon Public Safety	Brown Deer Police Department	Cudahy Police Department
Athens Police Department	Brownsville Police Department - Village Of	Cumberland Police Department
Augusta Police Department	Buffalo County Sheriff's Office	Dane County Sheriff's Office
Baldwin Police Department	Burnett County Sheriff's Office	De Pere Police Department
Baraboo Police Department	Butler Police Department	DeForest Police Department
Barneveld Police Department	Caledonia Police Department - Village Of	Dickeyville Police Dept.
Barron County Sheriff's Office	Campbell Police Department	Dodge County Sheriff's Office
Bayfield County Sheriff's Office	Campbellsport Police Department	Dodgeville Police Department
Bayfield Police Department	Cascade Police Department	Door County Sheriff's Office
Bayside Police Department	Cedarburg Police Department	Douglas County Sheriff's Office
Beaver Dam Police Department	Chetek Police Department	Dunn County Sheriff's Office
Belleville Police Department	Chilton Police Department	Durand Police Department
Beloit Police Department	Chippewa County Sheriff's Office	East Troy Police Department - Village of
Birchwood Police Dept.	Clark County Sheriff's Office	Edgar Police Department

Black Creek Police Department	Clintonville Police Department	Edgerton Police Department
Elk Mound Police Dept.	Horicon Police Dept.	Marathon County Sheriff's Office
Elkhart Lake Police Department	Hortonville Police Department	Marinette County Sheriff's Office
Elkhorn Police Department	Hudson Police Department	Marinette Police Department
Ellsworth Police Department	Hurley Police Department	Markesan Police Department
Elm Grove Police Department	Iowa County Sheriff's Office	Marquette County Sheriff's Office
Elmwood Police Department	Iron County Sheriff's Department	Marquette University Police Department
Evansville Police Department	Iron River Police Department – Town of	Marshall Police Department
Everest Metropolitan Police Department	Jackson County Sheriff's Office	Marshfield Police Department
Fairchild Police Department	Jackson Police Department	Mayville Police Department
Fennimore Police Department	Janesville Police Department	McFarland Police Department
Fitchburg Police Department	Jefferson County Sheriff's Office	Mellen Police Department
Florence County Sheriff's Office	Jefferson Police Department	Melrose Police Department
Fond du Lac Police Department	Johnson Creek Police Department	Menasha Police Department
Fond du Lac Sheriff's Office	Juneau Police Department	Mequon Police Department
Fort Atkinson Police Department	Kenosha Police Department	Merrill Police Department
Fox Lake Police Department	Kewaskum Police Department	Merrillan Police Department
Fox Point Police Department	Kiel Police Department	Middleton Police Department
Fox Valley Metro Police Department	Kohler Police Department	Milton Police Department - City Of
Franklin Police Department	Kronenwetter Police Department	Milton Police Department - Town Of
Fredonia Marshal	La Crosse County Sheriff's Office	Milwaukee County Sheriff's Office
Fulton Town of Police Department	La Pointe Police Department	Milwaukee Police Department
Geneva Police Department - Town Of	Lafayette County Sheriff's Office	Mineral Point Police Department
Glendale Police Department	Lake Delton Police Department	Minocqua Police Department
Grand Chute Police Department	Lake Geneva Police Department	Minong Police Dept.
Grand Rapids Police Department	Lake Hallie Police Department, Village of	Mishicot Police Dept.
Grant County Sheriff's Office	Lake Mills Police Department	Mondovi Police Department
Grantsburg Police Department	Lancaster Police Department	Monona Police Department
Green Bay Police Department	Lannon Police Department	Monroe County Sheriff's

		Office
Greendale Police Department	Linden Police Department	Montello Police Department
Greenfield Police Department	Linn Police Department – Town of	Monticello Police Department
Hales Corners Police Department	Lodi Police Department	Mosinee Police Department
Hammond Police Department	Lomira Police Department	Mount Pleasant Police Department – Village of
Hancock Police Department	Luck Police Department	Mukwonago Police Department - Village of
Hartland Police Department	Madison Police Department	Muscoda Police Department
Hazel Green Police Dept.	Madison Police Department - Town Of	Muskego Police Department
Highland Police Department	Manitowoc Police Department	Neillsville Police Department
Hillsboro Police Department	Maple Bluff Police Department - Village of	Nekoosa Police Department
Hobart/Lawrence Police Department	Marathon City Police Department	Neosho Rubicon Ashippun Police Dept
New Berlin Police Department	Pulaski Police Department	Sturgeon Bay Police Department
New Glarus Police Department	Racine County Sheriff's Office	Sturtevant Police Department
New Holstein Police Department	Randolph Police Department	Summit Police Department - Village of
New Richmond Police Department	Red Cliff Police Department	SUN PRAIRIE POLICE DEPARTMENT
Newburg Police Department	Rock County Sheriff's Office	UW - Whitewater Police Services
Nicolet Area Technical College	Rome Police Department - Town Of	UW Green Bay Police Department
North Fond du Lac Police Department	Rosendale Police Department	Vernon County Sheriff's Office
North Hudson Police Department	Rothschild Police Department	Verona Police Department
Oak Creek Police Department	Sauk County Sheriff's Office	Village of Fox Crossing Police Department
Oakland Township Police Department	Sauk Prairie Police Department	Walworth County Sheriff's Office
Oconomowoc Lake Police Department	Sawyer County Sheriff's Office	Walworth Police Department - Village of
Oconomowoc Police Department	Seymour Police Department	Washburn County Sheriff’s Office
Oconto Falls Police Department	Sharon Police Department - Village Of	Washburn Police Department

Onalaska Police Department
Oneida Police Department
Oregon Police Department
Orfordville Police Department
Osseo Police Department
Outagamie County Sheriff's Office
Owen-Withee Police Department
Ozaukee County Sheriff's Office
Palmyra Police Department
Pepin County Sheriff's Office
Pepin Police Department
Pewaukee Police Department - Village Of
Pierce County Sheriff's Office
Pittsville Police Department
Plain Police Department
Platteville Police Department
Pleasant Prairie Police Department - Village Of
Plover Police Department
Plymouth Police Department
Port Edward Police Department
Port Washington Police Department
Portage County Sheriff's Office
Portage Police Department
Poynette Police Department
Prairie du Chien Police
Shawano County Sheriff's Office
Shawano Police Department
Sheboygan County Sheriff's Office
Sheboygan Falls Police Department
Shell Lake Police Department
Shiocton Police Department
Shorewood Hills Police Department
Siren Village of Police Department
Slinger Police Department
Somerset Police Department
Sparta Police Department
Spring Green Police Department
Spring Valley Police Department
St. Francis Police Department
St. Nazianz Police Department
Stanley Police Department
Star Prairie Police Department
Stevens Point Police Department
Stoughton Police Department
Superior Police Department
Thorp Police Department
Tomah Police Department
Tomahawk Police Department
Town of Hayward Police Department
Trempealeau County Sheriff's
Washington Island Police Department
Waterford Police Department – Town of
Waterloo Police Department
Watertown Police Department
Waukesha County Sheriff's Office
Waunakee Police Department
Waupaca County Sheriff's Office
Waupun Police Department
Wausau Police Department
Waushara County Sheriff's Office
West Allis Police Department
Weyauwega Police Department
Whitefish Bay Police Department
Wild Rose Police Department
Winneconne Police Department
Wisconsin Dells Police Department
Wisconsin Rapids Police Department
Wood County Sheriff's Office
Woodville Police Department
Wrightstown Police Department - Village of

Department	Office
Princeton Police Department	Turtle Lake Police Department
Rice Lake Police Department	UW - Platteville Police Department
Richland Center Police Department	UW - Eau Claire Police Department
Richland County Sheriff's Office	UW - Madison Police Department
Ripon Police Department	UW - Milwaukee Police Department
Ripon Police Department - Town Of	UW - Oshkosh Police Department
River Hills Police Department	UW - Parkside Police Department
Roberts Police Department	UW - Stout Police Department

CHILD RESTRAINT INSPECTION STATIONS

County	Number of Inspection Stations	Number of Inspection Events	Stations/Events Serving an Urban Population	Stations/Events Serving a Rural Population	Stations/Events Serving an At-Risk (Low Income)
Brown	1		1		
Dane	1		1		1
Fond du Lac	1		1		
Iron	1			1	1
La Crosse	2	2	4		4
Langlade	1			1	1
Marinette	2			2	2
Milwaukee	13		13		13
Ozaukee	3		3		
Portage	2			2	2
Racine	1		1		1
Sauk	1			1	
Sheboygan	1		1		
Washington	3		3		
Waukesha	5		5		
Wood	2			2	
Totals	40	42	33	9	25
	Inspection Stations	Inspection Stations or Events	Stations/Events Serving Urban Areas	Stations/Events Serving Rural Areas	Serving an At-Risk (Low Income)
			USDA rural-urban continuum code 1-3	USDA rural-urban continuum code 4-9	

CERTIFICATION

The inspection stations/events are staffed with at least one current nationally Certified Child Passenger Safety Technician.

CHILD PASSENGER SAFETY TECHNICIANS

Enter an estimate of the total number of classes and the estimated total number of technicians to be trained in the upcoming fiscal year to ensure coverage of child passenger safety inspection stations and inspection events by nationally Certified Child Passenger Safety Technicians.

Estimated total number of classes	**8**
Estimated number of technicians	**80**

MAINTENANCE OF EFFORT

ASSURANCE

The lead state agency responsible for occupant protection programs shall maintain its aggregate expenditures for occupant protection programs at or above the level of such expenditures in fiscal year 2014 and 2015. This plan could be affected by the ongoing pandemic.

APPENDIX 3: 405(C) REQUIREMENTS

TRAFFIC RECORDS COORDINATING COMMITTEE (TRCC)

Submit at least three meeting dates of the TRCC during the 12 months immediately preceding the application due date.

Meeting Date

November, 2021

March 30, 2022

April 27, 2022

Enter the name and title of the state's Traffic Records Coordinator

Name of state's Traffic Records Coordinator	Andrea Bill; UW TOPS Robert Tyllo; BOTS
Title of state's Traffic Records Coordinator	Traffic Safety Engineer Research Program Manager; UW TOPS Data Analyst, BOTS

Enter a list of TRCC members by name, title, home organization and the core safety database represented, provided that at a minimum, at least one member represents each of the following core safety databases: (A) Crash; (B) Citation or adjudication; (C) Driver; (D) Emergency medical services or injury surveillance system; (E) Roadway; and (F) Vehicle.

Table. TRCC Members

First Name	Last Name	Agency - Bureau	Agency
Bob	Tyllo	WisDOT WSP BOTS – Data Analyst	WisDOT
Larry	Corsi	WisDOT WSP BOTS – State Programs	WisDOT
Michael	Schwendau	WisDOT WSP BOTS – Programs Chief	WisDOT
VACANT		WisDOT WSP BOTS – NHTSA Programs	WisDOT
Wayne	Bigelow	UW CHSRA	UW CHSRA
Erica	Garcia-Lago	DHS	DHS
Amy	Miles	UW School of Medicine and Public Health	UW Hygiene Lab
David	Harvey	WisDOT WSP Technical Services	WisDOT
VACANT		WisDOT WSP TraCS Unit - Supervisor	WisDOT
Kelly	Schieldt	WisDOT DTIM BSHP Highway Data	WisDOT
Brian	Porter	WisDOT DTIM BPED Traffic Forecasting	WisDOT
Angela	Adams	WisDOT DTSD SW Region - LAX Office	WisDOT
Andrea	Bill	UW TOPS Lab	UW TOPS Lab

Steven	Parker	UW TOPS Lab	UW TOPS Lab
Mark	Oesterle	Federal Motor Carriers	FMCSA
Mark	Gessler	Federal Motor Carriers	FMCSA
Ashley	Bergeron	DHS-OPEHC	DHS
David	Jolicoeur	FHWA	FHWA
Tara	Jenswold	DOJ	DOJ
Andrea	Olson	COURTS	COURTS
Reed	McGinn	WisDOT	WisDOT
Reginald	Paradowski	WisDOT	WisDOT
Bradley	Rollo	DOJ	DOJ
Michael	Satteson	WisDOT	WisDOT
Corey	Kleist	DMV	WisDOT
Kimberly	Hicks	COURTS	COURTS
Warren	Warrington	Menominee Indian Tribe	MITW
Tim	Berk	Onalaska Police Department	Onalaska
Dale	Halloway	Medical College of Wisconsin	MCW
Melissa	Kimball	WisDOT	WisDOT
Jeffrey	Murkve	WisDOT	WisDOT
Jacquelyn	Irving	WisDOT	WisDOT
Stephanie	Arduini	WisDOT	WisDOT
Tejal	Thakkar	WisDOT	WisDOT
Jan	Grebel	WisDOT	WisDOT
Bob	Tyllo	WisDOT	WisDOT
Jacci	Ziebert	WisDOT	WisDOT
Bob	Schneider	UW-Milwaukee Urban Planning	UWM
Xiao	Qin	UW-Milwaukee Urban Planning	UWM
Randy	Wiessinger	WisDOT WSP BOTS	WisDOT
Kaci	Wray	NHTSA	NHTSA
Mike	Finkenbinder	WisDOT DTIM BSHP HSIP	WisDOT
Naveen	Sharma	DOJ -Division of Management Services	WisDOJ
Peacock	Ann	WisDOJ	WisDOJ

STATE TRAFFIC RECORDS STRATEGIC PLAN

Upload a Strategic Plan, approved by the TRCC, that (i) Describes specific, quantifiable and measurable improvements, as described in paragraph (b)(3) of this section, that are anticipated in the state's core safety databases, including crash, citation or adjudication, driver, emergency medical services or injury surveillance system, roadway, and vehicle databases; (ii) Includes a list of all recommendations from its most recent highway safety data and traffic records system assessment; (iii) Identifies which recommendations identified under paragraph (b)(2)(ii) of this section the state intends to address in the fiscal year, the countermeasure strategies and planned activities, at the level of detail required under § 1300.11(d), that implement each recommendation, and the performance measures to be used to demonstrate quantifiable and

measurable progress; and (iv) Identifies which recommendations identified under paragraph (b)(2)(ii) of this section that the state does not intend to address in the fiscal year and explains the reason for not implementing the recommendations.

Appendix 3b contains our TSIS with detailed descriptions of the projects below.

Project Title	Database	Attribute	Budget	Status	Improvement and Measure
CODES-Crash Outcomes and Data Evaluation System	EMS	Completeness	$140,000	0 records are currently linked in the crash database to the medical records database.	Link 25% of hospital records for injury area, diagnosis, and MAIS injury severity.
Estimating Bicycle Volumes in Wisconsin Using Crowdsource Data	Roadway	Completeness	$75,000	There is not a scalable system to count bicycle volumes, nor a statewide database. Zero data exists at this time, will establish dataset.	Create database and method of modeling data to inform programs by risk analysis. 10% of roadway segments will have bicycle volume.
Community Maps	Crash	Accessibility	$65,000	Continued improvements for reporting and accessibility	Increase annual average usage rate by 15%.
WisTransPortal Safety Data Warehouse	Crash	Integration	$120,000	No linkages exist between crash, citation, and adjudication.	Establish linkage with 10 agencies and additional agencies as resources permit.
WisTransPortal Predictive Crash and Research & Development	Crash	Accessibility	$65,000	Current monthly average users are at 55.	Increase monthly users by 15% annually.
Mitigating Crash Outcomes through Automatic Crash Reconstruction	Crash	Accuracy	$75,000	Build on TRCC project "Using data from DT4000 to Enhance Crash Analysis". Zero elements of the Safe System approach have	Improve accuracy of narrative by using the "Swiss Cheese" crash causation model to inform safety interventions. 5% of a year of records identified.

				been identified, and associate to the crash database.	
Statewide Pedestrian and Bicycle Count Database for Model Validation and Risk Exposure Assessment	Roadway	Completeness	$50,000	Expand the number of intersections with pedestrian and bicycle counts. Zero data exists at this time, will establish dataset.	Increase pedestrian count intersection to 500 and bicycle counts to 400.
DOJ E-Citations	Citation and Adjudication	Timeliness	$282,000	Non-standard technologies that don't scale	Increase transmission from 7 citations/minute to 14.
State-to-State Driver History Record (DHR) Project	Citation and Adjudication	Timeliness	$297,550	Currently all non-CDL convictions, withdrawals, and negated convictions for out-of-state drivers throughout the U.S. and its territories are sent via "snail mail"	95% of convictions and suspensions transmitted between Wisconsin and other participating states will be transmitted electronically
		Total	**$1,169,550**		

QUANTITATIVE IMPROVEMENT

Appendix 3a

STATE HIGHWAY SAFETY DATA AND TRAFFIC RECORDS SYSTEM ASSESSMENT

Enter the date of the assessment of the state's highway safety data and traffic records system that was conducted or updated within the five years prior to the application due date and that complies with the procedures and methodologies outlined in NHTSA's "Traffic Records Highway Safety Program Advisory" (DOT HS 811 644), as updated.

- Date of Self-Assessment: 2/3/2020
- Date of full Assessment: 6/8/2015

REQUIREMENT FOR MAINTENANCE OF EFFORT

ASSURANCE

The lead state agency responsible for state traffic safety information system improvements programs shall maintain its aggregate expenditures for state traffic safety information system improvements programs at or above the average level of such expenditures in fiscal years 2014 and 2015.

APPENDIX 3A: QUANTITATIVE IMPROVEMENT

INTERIM PROGRESS REPORT

State: Wisconsin Report Date: _2021-06-04 Submitted by: _Laura Vande Hey _ Regional Reviewer:

System to be Impacted	_X_CRASH _DRIVER _VEHICLE _ROADWAY __CITATION/ADJUDICATION _EMS/INJURY OTHER specify:
Performance Area(s) to be Impacted	_ACCURACY _TIMELINESS __X_ __X__ACCESSIBILITY COMPLETENESS UNIFORMITY INTEGRATION OTHER specify:
Performance Measure used to track Improvement(s)	Crash data accessibility for state and local traffic safety review.
Specification of how the Measure is calculated / estimated	Crash data is available for online mapping and analysis through the Community Maps application, which is updated on a nightly basis from the Wisconsin Crash Database. The primary use of Community Maps is to support the quarterly review of crashes by Wisconsin's 72 county Traffic Safety Commissions (TSCs), however the system is also increasingly used by other safety professionals and by the general public. This measure examines the number of distinct users per month who access the Advanced Search capability, which is the primary interface used by the TSC's. It also includes the average number of page hits per day along with the percentage of crashes displayed on the crash map. Taken together, these values are intended to provide an overall baseline and measure for crash data accessibility improvements.
Date and Baseline Value for the Measure	2019-04-01 to 2020-03-31 (inclusive) Total Users 544 Number of Distinct Users Per Month 120 Number of Average Page Hits Per Day 129 % of Crashes Displayed on the Map 98%

Date and Current Value for the Measure	2020-04-01 to 2021-03-31 (inclusive) Total Users 423 Number of Distinct Users Per Month 108 Number of Average Page Hits Per Day 142 % of Crashes Displayed on the Map 98% NOTE: these measures represent a downturn from the Covid-19 impact on TSC and traffic law enforcement activities. We have already begun to return to pre-existing levels and expect to continue to show quantitative improvements as the state continues to reopen.
Regional Reviewer's Conclusion	Check one __Quantitative performance improvement *has* been documented __Quantitative performance improvement has *not* been documented Not sure

APPENDIX 3B: TRAFFIC SAFETY INFORMATION SYSTEMS PLAN

Content

Introduction

Background

I. Strategic Planning Process
   a. Participants
   b. Identification of “Deficiencies” in State Records Data
   c. Process for Establishing Improvement Objectives
   d. Process for Selecting Projects for 405c Funding
   e. Steps for Monitoring and Reporting Progress in Achieving Objectives
   f. Process for Modifying or Replacing Objectives

II. Strategic Planning Vision, Mission, Principles, and Goals
   a. Vision
   b. Mission
   c. Principles
   d. Traffic Safety Information System Strategic Plan Goals
   e. State Data System Recommendations from the Traffic Records Assessment (TRA)
   f. Identified Deficiencies in the State’s Traffic Records

III. 2022 Traffic Safety Information System Strategic Plan Projects (Description of Projects; TRCC Goals Fulfilled; TRA Recommendations Addressed; Existing Data Deficiencies Addressed; Performance Measures)

IV. Signature

V. Traffic Records Coordination Contact Information

Appendices

INTRODUCTION

On December 4th, 2015, President Obama signed into law P.L. No. 114-94, the new surface transportation reauthorization bill known as the “Fixing America’s Surface Transportation Act” (otherwise known as the “FAST Act.” The bill replaces the “Moving Ahead for Progress in the 21st Century Act” (otherwise known as “MAP-21”), which was signed into law on July 6th, 2012. The FAST Act contains sections that require the collection, management, distribution, and analysis of transportation safety data by local, state, or federal agencies.

23 U.S.C. §405(c), provides the basis for Section 405(c) State Traffic Safety Information System Improvements Grants. Such grants are the vehicle by which the federal government assists states with the crucial task of improving identified deficiencies in their various data systems.

To assure that the required data are properly, efficiently, and effectively collected, as well as well- managed and available to support increasingly data-driven traffic safety programs, 23 U.S.C. §405(c)(3)(C) requires each state to craft and update comprehensive Traffic Safety Information Systems (TSIS) strategic plans for the improvement of all the safety data systems in the state.

Wisconsin's TSIS Strategic Plan, developed with input from data collectors, program managers, and users, can guide the most cost-effective use of resources to result in the greatest quality improvements to the state's data in terms of accessibility, completeness, timeliness, uniformity, accessibility, and integration.

Background

In the past, Wisconsin has met the criteria for participation in the 23 U.S.C. 405(c) State Traffic Safety Information Systems Improvements Grant Program under the 2012 surface transportation reauthorization bill, called "MAP-21." The FAST Act of 2015 has now superseded MAP-21, and Wisconsin must follow the FAST Act regulations for fiscal year 2022 grants.

The committee that organizes this Traffic Safety Information System Improvement Plan (TSISP) is the Traffic Records Coordinating Committee (TRCC). This committee dates to 2005 when the state underwent a traffic records assessment (TRA). It was decided that a TRCC could most efficiently spearhead traffic records projects and serve as a vehicle for promoting digital excellence. The TRCC is composed of a diverse group of individuals from government, academia, law enforcement, the private sector, the insurance industry, and the healthcare and EMS fields. The TRCC has been led by the state highway safety office (in Wisconsin's case, the Bureau of Transportation Safety, or BOTS). The group endeavors to meet at least every quarter for approximately three hours, though the COVID pandemic prevented that this past year. While this plan has existed in an independent manner for well over a decade, it has always been created in concert with other plans, and its content has informed related plans. For example, Wisconsin's strategic highway safety plans (SHSPs) have been updated under the leadership of the Wisconsin Department of Transportation's Traffic Safety Council. Members of the TRCC have been involved in drafting the SHSP section addressing data and information improvements for decision making, and many SHSP contributors are also TRCC members.

This plan is broadly consistent with earlier plans, including the 2010-2014 plan, the 2015-2019 plan, and last year's plan. The primary objectives of the 2010-2014 Strategic Plan for Traffic Records Improvement were automation of crash data, improved incident location, development of a state ambulance run reporting system, and increased access to safety data. The TRCC recommended that funds be used primarily for the adoption of the national model TraCS law enforcement data collection. Such a system allows officers all throughout the state to enter crash information into a centralized portal.

The 2015-2019 TSISP diverged from the 2010-2014 plan in that it more closely matched the data projects called for by the 2014-2016 Strategic Highway Safety Plan (SHSP). It broadly continued, however, in its

funding priorities: significant monies were used to support TraCS expansion and training, as well as the introduction of a new crash form and data warehouse (the data warehouse mandated only internet submissions from law enforcement agencies as of Jan 1st, 2017). There were several projects which also strengthened the connections between crash data on one hand, and hospital and EMS data on the other, and smaller projects that focused on improving the access and visualization of safety data for traffic safety professionals. This 2022 plan focuses on similar priorities and projects.

It is important to note that, in past years, such plans have had multi-year scales. Since the 2018 Highway Safety Plan, following NHTSA guidelines, a one-year time scale was adopted. This will allow BOTS to develop a more focused plan that can be more responsive to the rapidly changing technologies and shifting needs of TRCC members. As such, a new 2022 plan will be developed near the end of FFY 2021.

I. STRATEGIC PLANNING PROCESS

A. Participants

- TRCC Policy Group. This group is responsible for oversight of the state's highway safety data systems. The policy-level group is composed of agency heads or division administrators who have authority and charge of overseeing the planning and improvement of safety data systems and/or who are collectors or users of these data. This group can meet on an ad-hoc basis to review the work of the TRCC Technical Group, and to set state policy to result in a statewide data improvement program that assures coordination of efforts and sharing of data. Members represent the Departments of Administration, Transportation (Highways, Motor Vehicles, and State Patrol, including its Bureau of Transportation Safety that is the state highway safety office for the State of Wisconsin), Health Services, Justice as well as the Office of State Courts. Members and affiliations are listed in Appendix 1, "TRCC Policy Group." The Members are customarily presented with a draft Charter for review and adoption during the plan approval process.
- TRCC Technical Group. This group is comprised of a core group of members who have met quarterly since the TRCC was organized under TEA-21 in 1999 and additional members who represent new users and/or collectors of these data. The TRCC Technical Group comprises the main group that plans the state's data projects and management systems. The group is quite large, with representatives who are managers of crash, exposure, roadway, citation/adjudication, driver, vehicle, and injury control/EMS data. Furthermore, data users and analysts in the fields of public health, highway safety, and roadway engineering also contribute to this group. Members and affiliations are listed in Appendix 2, "TRCC Technical Group."

- TRCC Technical Group Subcommittees or Workgroups, as required. The purpose of these sub- groups is to provide more specific attention to the sub-groups of: crash data, exposure data, roadway data, citation/adjudication data, driver data, vehicle data, and injury control/EMS data. Time was given for members of these subgroups to meet during TRCC Technical Group meetings, but members were also encouraged to meet at other times when possible.

B. Identification of "Deficiencies" in State Traffic Records Data
Generally, BOTS analysts and TRCC Technical Group members used processes that had been used the previous years to identify state data deficiencies. In late 2019 and early 2020, the co-chairs of the TRCC Technical group coordinated a self-assessment of the state's data-systems by interviewing each of the database's owners, stewards, and users and completing NHTSA's self-assessment tool. Databases were analyzed for:
   - Accuracy
   - Completeness
   - Timeliness
   - Uniformity
   - Accessibility
   - Integration

C. Process for Establishing Improvement Objectives
After determining what would be beneficial for state data systems, the TRCC Technical Group used the following information for establishing objectives that could reasonably be accomplished in FFY 2022.
   - Requirements and priorities from the most recent Strategic Highway Safety Plan Issue Areas.
   - 2022 Highway Safety Plan (HSP) priorities and planned expenditures.
   - TRCC member knowledge of the data files they manage and/or use, and feedback that they receive from users.

   Such knowledge was then balanced against the 2021 405(c) funds and the projected 2022 405(c) funds to create TRCC-specific goals and goals corresponding to TRA recommendations.

D. Process for Selecting Specific Projects for 405(c) Funding
   1. Before the March 2021 meeting of the TRCC, BOTS staff requested that individuals or groups proposing projects describe how their project would help improve the accuracy, completeness, timeliness, uniformity, accessibility, and integration of the state's traffic records data systems. In their proposal, BOTS asked individuals to reference past plans and the Traffic Records Assessment. Appendix ("Sample Worksheet").
   2. Each project was related to the data deficiencies noted in Section (B) above. Timelines will be approved for project objectives that can reasonably be accomplished in FFY 2022, given existing resources plus 405(c) funds. Accountability will be clearly identified in each project application.

E. Steps for Monitoring and Reporting Progress in Achieving Project Objectives
   1. Each 405(c)-funded project plan will include performance indicators to measure the success or failure of the project in terms of progress from baselines to quality improvement objectives. Project sponsors will be required to provide monthly

reports reviewed at the TRCC quarterly meetings, and, when requested, at subcommittee meetings.

2. Matrices for measuring progress will be produced by the state highway safety office (SHSO) based upon project reports and will be reviewed by the technical group at its quarterly meetings.
3. The highway safety plan annual report is prepared near the end of the FFY and then forwarded to the TRCC policy group for review.
4. The signed report will be forwarded to NHTSA.

F. Process for Modifying or Replacing Objectives

- The Wisconsin TSIS Plan is intended to be an active document that will reflect new issues, new technologies and changing environments. As such, the TRCC technical group will review the existing objectives and will begin gathering information about changes in the technology and strategic resources.
- As soon as information is available about the progress of funded projects and this information will be reviewed by the Technical Group. Significant changes in the environment and/or progress of projects will form the basis for proposed changes in objectives. Historically, this has resulted in annual updates to Wisconsin's Traffic Records Strategic Plan. Going forward, a new plan will be created each year.
- Any proposed changes in the TSIS will be forwarded to the TRCC Policy Group for signoff and subsequently will be included in the annual report and annual update of the Strategic Plan. Changes in the measurement methodologies of existing plans will be incorporated into subsequent TSIS plans when projects span multiple years.

II. STRATEGIC PLANNING VISION, MISSION, PRINCIPLES, AND GOALS

A. Vision

Integrated planning for Wisconsin's public health, safety and security information systems results in traffic safety information that is timely, accurate, and complete, and thus meets the needs of many types of users; this information is readily accessible in formats that meet the needs of these users, is consistent between organizations and with national standards, and can be integrated with other types of data and with information from other jurisdictions.

B. Mission

The State of Wisconsin provides for the safety and welfare of its citizens through development and implementation of science-based and periodically reviewed public health, safety and security regulations, programs and activities, and promotes the use of technology to support agency missions and make government more accessible, responsive, and accountable.

The State of Wisconsin Traffic Records Coordinating Committee (TRCC), a group consisting of collectors, managers, and users of all components of Wisconsin's Traffic Safety Information System (TSIS), serves as a forum for discussion of records issues, reviews proposed changes in state TSIS improvement activities before they are

implemented, reviews new technology and annually plans, monitors, and analyzes safety information improvement projects.

C. Principles

Data components of Wisconsin's traffic safety information systems are collected by many organizations and agencies for their individual business purposes. The usefulness of these many types of data for highway safety programming and analysis depends upon their availability and quality. Decisions made about changes to any one component of the system may have many down-stream consequences. The following principles guide this group and this specific plan:

- Issues of cost of collection and storage should be discussed and decided on a state-level basis.
- Data should be entered and stored once but used many times.
- Data should be linked and shared between systems.
- Data should meet national standards (MMUCC, NEMSIS, MIRE, etc.)
- Data quality is defined by the user; business needs of the collector and/or manager should not be paramount in making quality determinations.

D. Traffic Safety Information System Strategic Plan Goals

- **Goal 1**: Maintain and continue to improve the now-updated DT4000 crash data warehouse in areas of timeliness, completeness, accuracy, consistency, accessibility, and data integration. Ensure that this data source conforms as much as possible to MMUCC (Model Minimum Uniform Crash Criteria) and to MIRE (Model Inventory of Roadway Elements). Furthermore, BOTS's Crash Records Unit (CRU) should continue to improve the data quality and integration possibilities of the DT4002 (the self-reported crash used for minor crashes). The Crash Records Unit of BOTS should be supported in their attempts to automate the data input for both forms—and associated linkages—as much as possible.
- **Goal 2:** Link, as comprehensively as possible, citation and crash data; this will particularly help DSP's innovative Predictive Analytics Project in determining resource allocation.
- **Goal 3:** Organize and assist law enforcement training to improve the completeness and accuracy of the new DT4000 crash data form (as well as citation and adjudication forms). Such training should include periodic field training by CRU. Keep the system up-to-date over the coming years by promoting strategic and planned upgrades to the system. Continue to assist law enforcement agencies (LEAs) with any questions they have.
- **Goal 4**: Coordinate traffic safety information with related public health, safety, and security information to minimize duplication of effort and inefficient use of resources, and to enable multi-factorial analyses. To this end, the DOT should expand and deepen outreach to the Department of Health Services (DHS) and the Department of Children and Families (DCF).
- **Goal 5:** Improve the link between crash data and EMS data/hospital records. This will help state analysts quantify and study the health impacts of crashes, the importance of rapid and effective EMS service in determining positive health outcomes, and the relationship between proximate hospitals and health outcomes. Furthermore, this will allow researchers to understand the unique health risks from certain types of crashes (thus improving health outcomes).

- **Goal 6**: Improve the interoperability, data completeness, data timeliness, and ease of use of WisTransPortal, the querying and visualization tool that was built by the Transportation Operations and Safety Laboratory (TOPS) for use in traffic safety commissions (TSCs). All of these improvements will increase the use of this tool by TSCs, thereby boosting the effectiveness of these bodies and the local analysis of traffic crashes that they bring.
- **Goal 7:** Focus on improving the data sources that users can bring into WisTransPortal's Community Maps system (which is used at TSCs by BOTS staff, law enforcement liaisons (LELs), and law enforcement agencies (LEAs). Moreover, linkages between the DT4000 crash reports and Community Maps should be made automatically.
- **Goal 8**: Continue strategic investments in data gathering regarding risky driving behaviors in Wisconsin, such as the use of alcohol, opioids, and cell phones while driving. Such data will be helpful in the analyzing of such behaviors over the coming years (and the impacts of interventions and policy changes).
- **Goal 9**: Ensure TRCC involvement at all stages in future strategic planning efforts, by establishing a forum for discussion, by the TRCC of all issues and initiatives to be addressed in the new Plan including the findings of the Traffic Records Assessment. TRCC members should consider the TRA a living document and should measure projected projects against its goals.
- **Goal 10:** Support efforts to collect high-quality bicycle and pedestrian exposure data, which can include latent demand factors. Such data is as of yet unavailable, and this data limitation hinders effective safety analysis.
- **Goal 11**: Implement predictive crash analytics programs (advanced computer statistics and mapping programs that allow users to predict where and when different types of crashes are most likely to occur). Such programs can improve law enforcement visibility (to prevent crashes) and decrease law enforcement response times when such crashes occur.
- **Goal 12:** Support efforts within DOT divisions that are focused on connecting roadway and crash data. Such efforts will bolster traffic safety analysis being conducted by DOT engineers.
- **Goal 13**: Strive to present information as visually as possible; this will allow research to be more widely adopted within and outside the DOT.
- **Goal 14**: Create simple data architecture and linkages (as much as possible). If datasets and systems are already in existence, strive to adopt strategies to simplify the structure of the database.

E. State Data System Recommendations from the Traffic Records Assessment
    a. Traffic Records Management Recommendations
        i. Strengthen the capacity of the Traffic Records Coordinating Committee that reflect best practices identified in the Traffic Records Program Assessment Advisory.
    b. Strategic Planning Recommendations
        i. Strengthen the TRCC's abilities for strategic planning that reflect best practices identified in the Traffic Records Program Assessment Advisory.
    c. Crash Recommendations

i. Improve the interfaces with the crash data system that reflect best practices identified in the Traffic Records Program Assessment Advisory.
ii. Improve the data quality control program for the crash data system that reflect best practices identified in the Traffic Records Program Assessment Advisory.

d. Driver Recommendations
    i. Improve the data quality control program for the driver data system that reflect best practices identified in the Traffic Records Program Assessment Advisory.
e. Vehicle Recommendations
    i. Improve the interfaces with the vehicle data system that reflect best practices identified in the Traffic Records Program Assessment Advisory.
    ii. Improve the data quality control program for the vehicle data system that reflect best practices identified in the Traffic Records Program Assessment Advisory.
f. Roadway Recommendations
    i. Improve the applicable guidelines for the roadway data system that reflect best practices identified in the Traffic Records Program Assessment Advisory.
    ii. Improve the data dictionary for the roadway data system that reflect best practices identified in the Traffic Records Program Assessment Advisory.
    iii. Improve the data quality control program for the Roadway data system that reflect best practices identified in the Traffic Records Program Assessment Advisory.
g. Citation and Adjudication Recommendations
    i. Improve the description and contents of the Citation and Adjudication systems that reflect best practices identified in the Traffic Records Program Assessment Advisory.
    ii. Improve the data dictionary for the Citation and Adjudication systems that reflect best practices identified in the Traffic Records Program Assessment Advisory.
    iii. Improve the interfaces with the Citation and Adjudication systems that reflect best practices identified in the Traffic Records Program Assessment Advisory.
    iv. Improve the data quality control program for the Citation and Adjudication systems that reflect best practices identified in the Traffic Records Program Assessment Advisory.
h. Injury Surveillance Recommendations
    i. Improve the interfaces with the Injury Surveillance systems that reflect best practices identified in the Traffic Records Program Assessment Advisory.
    ii. Improve the data quality control program for the Injury Surveillance systems that reflect best practices identified in the Traffic Records Program Assessment Advisory.
i. Data Usage and Integration Recommendations

i. Improve the traffic records systems capacity to integrate data that reflect best practices identified in the Traffic Records Program Assessment Advisory.

III. TRAFFIC SAFETY INFORMATION SYSTEM STRATEGIC PLAN PROJECTS

Project Title: Crash Outcomes and Data Evaluation System

Organization Name: University of Wisconsin Traffic Operations and Safety Lab

Project Coordinator and Contact Information:

Andi Bill bill@wisc.edu 608-890-3425

Adam Francour

Jennifer Broad

Core State Safety Database to Improve (choose only one, unless selecting integration below):

Crash	XXX EMS or Injury Surveillance System
Citation or Adjudication	Roadway
Driver	Vehicle

Proposed Attribute of Data to Improve (choose only one):

Accuracy	Uniformity
XXX Completeness	XXX Accessibility
Timeliness	XXX Integration

Problem Identification (Reference the Traffic Records Assessment, if applicable.):

The availability of data which combines crash related information with health outcomes data is critical for the evaluation of the traffic safety related efforts by Federal and State transportation agencies, as well as for State and local public health and law enforcement officials. Without linked traffic/health outcomes data it is difficult, if not impossible, to fully evaluate the impact of motor vehicle crashes on the health and safety of communities, and the success of traffic safety projects and demonstrations.

Provide a baseline measure for this specific and quantitative improvement:

There are 0 records that are included in the crash database. We will move to 25% records linked to the hospital records.

- Injury Area
- Injury Diagnosis
- MAIS Injury Severity

Project Objectives:

To add 3 (linked) MMUCC data elements (injury area, injury diagnosis and injury severity (MAIS)), as well as estimated costs, to the information available to the public through TOPS and on Community Maps for 2017-2019.

Derive medical and other injury specific cost information for CODES data.

Organize a steering committee to best determine how to utilize linked crash/health care data for use by TSCs. It is envisioned that the committee would include BOTS policy analysts, law enforcement liasons and TSC members.

Objective 1: (170 hours) Update the CODES data series by matching 2021 Wisconsin Traffic Crash records to Wisconsin Hospital Inpatient records and Wisconsin Hospital Emergency Department Visit (ED Visit) records.

Objective 1 Evaluation: Linkage of 2021 Wisconsin Traffic Crash, Wisconsin Hospital Inpatient, Wisconsin ED Visit records is completed and the final project report documents the quality of the record linking results.

Objective 2: (170 hours) Update the CODES data series by matching 2020 Wisconsin Traffic Crash records to Minnesota hospitals' Inpatient and ED visit records.

Objective 2 Evaluation: Linkage of 2021 Wisconsin Traffic Crash, Minnesota Hospital Inpatient, and Minnesota ED Visit records is completed and documented with statistics on the quality of the record linking results in the final project report.

Objective 3: (170 hours) Update the CODES data series by matching 2021 Wisconsin Traffic Crash records to Iowa hospitals' Inpatient and ED visit records.

Objective 3 Evaluation: **Linkage** of 2021 Wisconsin Traffic Crash, Iowa Hospital Inpatient, and Iowa ED Visit records is completed and documented with statistics on the quality of the record linking results in the final project report.

Objective 4: (150 hours plus 50 hours matching) Explore the possibility of creating reciprocal data exchange relationships with Michigan and Illinois hospitals and Emergency Departments, thus enhancing the completeness of data for Wisconsin counties bordering these states.

Objective 4 Evaluation: A report will be created which includes documentation of conversations, agreements reached, required steps and processes, policies and statutes to consider, and/or legal guidance on pursuing a reciprocal data exchange relationship with Michigan and Illinois hospitals and Emergency Departments.

Objective 5: **(**85 hours) Improve data completeness and uniformity by extending record linkages to include the matching of Hospital Inpatient and Emergency Department records to Death records over the 2020 period. These matches capture the long-term effects of injuries on mortality rates.

Objective 5 Evaluation: A project status report will describe progress towards extending record linkages to include the matching of 2020 hospital inpatient and ED Visit records to Death records during the same period.

Objective 6: Advise and participate in the Wisconsin Traffic Records Coordinating Committee on behalf of the Division of Public Health, Department of Health Services.

Objective 6 Evaluation: Participation in the Wisconsin Traffic Records Coordinating Committee will be evident from the attendance and contributions of OHI staff.

Itemized Budget: $140,000

Project Title: Estimating Bicycle Volumes in Wisconsin Using Crowdsourced Data

Organization Name: University of Wisconsin-Milwaukee

Project Coordinator and Contact Information: Dr. Xiao Qin, qinx@uwm.edu; Dr. Robert Schneider, rjschnei@uwm.edu

Core State Safety Database to Improve (choose only one, unless selecting integration below):

- Crash
- Citation or Adjudication
- Driver
- EMS or Injury Surveillance System
- **Roadway**
- Vehicle

Proposed Attribute of Data to Improve (*choose only one*):

- Accuracy
- **Completeness**
- Timeliness
- Uniformity
- Accessibility
- Integration

Problem Identification (Reference the Traffic Records Assessment, if applicable.):

In Wisconsin, cycling has gained popularity among residents, especially in bike friendly cities where planners and policy makers promote active transportation modes. With the increasing use of bicycles, there are safety concerns for people who ride on public roadways or shared paths because of high-speed traffic and/or reckless drivers. Wisconsin crash statistics from 2017-2021 show that 1.29% of bicycle crashes are fatal and 10.58% produce serious injuries. By comparison, only 0.45% of motor vehicle occupants are killed and 2.23% are seriously injured in crashes. To promote a safe cycling environment, it is important for us to identify reliable data sources and develop methods for measuring, estimating, and analyzing the injury risk to vulnerable road users such as bicyclists. This project is within the scope of “Improve Non-Motorist Safety”, one of the ten “Highest Priority Issue Areas” in the Wisconsin Strategic Highway Safety Plan (SHSP), 2017-2020.

Annual average daily bicycle volume (AADB), bicycle network characteristics (e.g., bike trails, shared paths, public roads), motor vehicle traffic speed and volume, and sociodemographic factors are key considerations for planning and designing bike facilities. The traditional bike data collection methods include count stations and travel surveys which are expensive, labor intensive and time-consuming. In recent years, the crowdsourced data collected from mobile apps has emerged as a reliable source for supplementing and filling the gaps for the existing traffic count program. Such data sources can significantly improve the completeness of Wisconsin’s roadway attribute database, since only a few bicyclist counts have been taken at specific roadway locations to document the number of bicyclists who pass this location during a given time period. The few counts that do exist are not in a centralized state repository, so there is not currently a way to estimate the extent of bicyclist activity on different roadways in Wisconsin.

Crowdsourced data may have the potential to cost-effectively provide broad geographic coverage of bicyclist activity. They have already been used by many, including Colorado DOT,

Florida DOT, North Carolina DOT, Oregon DOT, and Texas DOT[1], to analyze bicyclists' route choice behavior, bicycle count distributions, and bicycle safety. Among all the crowdsourced bike data, data collected from smartphone apps like Strava, CycleTracks, ORcycle, and others such as StreetLight Data are most prevalent. In particular, Strava metro now provides their data to "urban planners, city governments and safe-infrastructure advocates" "all completely free of charge" (https://blog.strava.com/zi/press/metro/), which makes it the most appealing crowdsourced bike data among public agencies. A preliminary investigation by the UWM researchers shows that in Strava, Madison, Milwaukee, Appleton and Green Bay are considered hotspots for cycling activities; while the four cities account for 31.06% of statewide crashes involving bicyclists in 2017-2021.

Grantees should expect to provide documentation that the grant has improved a core state safety database. Describe one specific and quantitative improvement to a core state traffic safety database that can be expected within one calendar year of grant approval:

This study will collect data from crowdsources (e.g., Strava) and complement it with land use and socio-economic data to develop a link-level bicycle volume prediction model and create a bicycle ridership map. Furthermore, bicyclist injury risk will be analyzed and mapped after integrating bike data with crash data. Identifying high bicycle volume roadway segments and high injury risk locations for bike safety planning and improvement is of great importance to facilities investment decisions.

Provide a baseline measure for this specific and quantitative improvement:

We are not aware of existing methods for bicycle volume prediction in Wisconsin. Nor is there a statewide database of bicyclist counts. Counts have been collected on several trail systems, including trails in Southeastern Wisconsin[2], but counts of bicyclists at roadway intersections and along roadway segments are sporadic and isolated. This will be the first attempt to create state-wide bike count prediction models based on crowdsourced bicycle counts and other supporting data. The cyclist injury risk analysis will be conducted and used to support decision-making in bike facility planning and safety improvements.

Project Objectives:

With the increasing availability and large coverage, crowdsourced data has been proven to be an efficient and cost-effective way to bridge the data gap for decision making and performance measures. The anticipated objectives of this project are to: (1) collect crowdsourced bike data,

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[1] CDOT: https://www.codot.gov/programs/bikeped/documents/strava-analysis-summary_06-25-18.pdf FDOT: https://rosap.ntl.bts.gov/view/dot/42275/dot_42275_DS1.pdf; NCDOT: https://connect.ncdot.gov/projects/research/RNAProjDocs/RP2020-43%20-%20Final%20Report.pdf Oregon DOT: https://www.oregon.gov/ODOT/Programs/ResearchDocuments/304-761%20Bicycle%20Counts%20Travel%20Safety%20Health.pdf; TxDOT: https://ftp.txdot.gov/pub/txdot/get-involved/dal/bike-hearing/102418-ptn-presentation.pdf

[2] Southeastern Wisconsin Regional Planning Commission. Regional Nonmotorized Count Program, https://www.sewrpc.org/SEWRPC/Transportation/nmcounts.htm#:~:text=The%20regional%20count%20program%20currently,using%20the%20passive%20infrared%20counters.

land use, and relevant socio-economic data for Wisconsin, (2) compute bicycle link-level volumes based on the input variables for on-street bike facilities (e.g., streets, bike lanes, shared path, shoulders), and off-street bike facilities such as trails, (3) analyze the cyclist injury risk, and generate bike ridership maps and bike crash maps, and (4) provide policy recommendations based on bike risk analysis. Comparisons of the model outputs with actual bicycle counts will be conducted as a part of a separate project.

Itemized Budget: $75,000

Project Title: Community Maps

Organization Name: UW-Madison TOPS Lab

Project Coordinator and Contact Information: Dr. Steven Parker sparker@engr.wisc.edu

Core State Safety Database to Improve (choose only one, unless selecting integration below):

- **Crash**
- Citation or Adjudication
- Driver
- EMS or Injury Surveillance System
- Roadway
- Vehicle

Proposed Attribute of Data to Improve (*choose only one*):

- Accuracy
- Completeness
- Timeliness
- Uniformity
- **Accessibility**
- Integration

Problem Identification (Reference the Traffic Records Assessment, if applicable.):

Each year, thousands of Wisconsin residents are injured and killed in traffic crashes. In an effort to prevent these tragedies, the legislature has established a Traffic Safety Commission (TSC) in every county. These commissions are charged, per Wisconsin statute 83.013 (1), to maintain a map of traffic crashes within their county and to review those crashes on a quarterly basis for general awareness and to provide recommendations for corrective action, as appropriate. Because of the complexity of traffic crashes, the legislature required a breadth of expertise to serve on these commissions. TSC membership creates a collaboration of stakeholders dedicated to reducing injuries and death on their roadways locally, regionally and statewide.

In support of the TSC mission, the Community Maps system was developed by the Wisconsin Department of Transportation (WisDOT) Bureau of Transportation Safety (BOTS) in partnership with the Wisconsin Traffic Operations and Safety (TOPS) Laboratory at the University of Wisconsin-Madison to provide an accessible and timely map of traffic crashes for each county. Community Maps is updated on a nightly basis from the WisDOT crash database management system and includes a record of all police reported crashes in Wisconsin for which geo-coded locations are available. Crash records that have not been geo-coded are included in the total number of crashes for a given jurisdiction but are not displayed on the map. The Community Maps system serves as an integral component of the County TSC quarterly meetings and as a vital information resource for ongoing collaborative efforts at all levels of government and within local communities to address traffic safety needs.

Provide a baseline measure for this specific and quantitative improvement:

Logins

- Baseline: The table below provides the monthly average number of distinct users that logged into Community Maps from 2018 to 2021. This value decreased in 2020, we

believe due to the Covid-19 impact, and has only recently begun to return to pre-pandemic levels.

Year	Average Monthly Users	Percent Change
2018	99	
2019	132	33%
2020	108	-18%
2021	146	35%

- Target: A 15% annual increase in the average monthly users for 2022.

Project Objectives:

A major update to the Community Maps system was rolled out in January 2018 to integrate the WisTransPortal DT4000 crash data as the primary data source in Community Maps. This roll out was coordinated with a significant outreach effort to the County TSCs and Wisconsin State Patrol regional dispatch centers. Community Maps is now updated on a nightly basis and includes crash records for all crash severity levels. The DT4000 data source integration represented a significant update to Community Maps in terms of the quantity of crash data available through the system, as well as the size, frequency, and complexity of queries that were subsequently required by stakeholders. Prior project years have been focused on improvements to the Basic and Advanced Search interfaces to sustain overall performance and further enhance the analysis capabilities of Community Maps to meet stakeholder needs. Specific objectives for FY23 will include continued outreach activities and modernization of the Community Maps system to support new analysis capabilities and target accessibility objectives.

Budget: $65,000

Project Title: WisTransPortal Safety Data Warehouse

Organization Name: UW-Madison TOPS Lab

Project Coordinator and Contact Information: Dr. Steven Parker & Andrea Bill

Core State Safety Database to Improve (choose only one, unless selecting integration below):

- **Crash**
- **Citation or Adjudication**
- Driver
- EMS or Injury Surveillance System
- Roadway
- Vehicle

Proposed Attribute of Data to Improve (*choose only one*):

- Accuracy
- Completeness
- Timeliness
- Uniformity
- Accessibility
- **Integration**

Problem Identification (Reference the Traffic Records Assessment, if applicable.):

Recent improvements to crash data collection and management in Wisconsin have afforded the opportunity to develop linkages from the Wisconsin crash database to external data sources in order to enhance overall safety analysis capabilities. The underlying conceptual model for these linkages forms the basis for an idealized Traffic Records System whereby crash data is at the center of a "honeycomb" of integrated or linked core datasets consisting of vehicle, driver, roadway, citation/adjudication, and EMS/injury surveillance data.

Realizing the full potential of this opportunity is a multiyear undertaking that will require planning, agency coordination, and iterative development. This project will build upon the 2020 technical planning process by linking citation/adjudication data, which represents an important first step towards building longer term traffic records data warehouse capabilities to support traffic safety analysis and research in Wisconsin.

Provide a baseline measure for this specific and quantitative improvement:

Currently citations are managed largely at the local agency level - there is no statewide capability to link crashes with citations. Moreover, warnings are rarely managed even at the local level. Since realization of a statewide linkage is a large, potentially multiyear effort, the quantitative measure of data integration for this project will consider the total number of agencies linked. This will allow the project team to focus on a pilot geographic area with overlapping jurisdictional boundaries (e.g., State Patrol, county sheriff, and municipal law enforcement), which will serve as a model for a larger, statewide linkage in subsequent project years.

Success will be measured in terms of the total number of agencies included in the integration.

- Baseline: No linkages have been established at this time; however initial pilot linkages are expected by the end of the FY22 project year.
- Target: The project will implement linkages for ten (10) additional agencies to be determined in coordination with the WisDOT Bureau of Transportation Safety, with the possibility of additional local police departments as resources permit.

Project Objectives:

This project will link crash and citation data, two of the core state safety datasets, within the WisTransPortal system at the University of Wisconsin-Madison. This linkage will support proactive traffic safety planning and research across all levels of government in Wisconsin. The 2021 project laid the groundwork for this effort by implementing a new statewide crash data archiving system and deploying a secure database server platform for safety data warehouse research and development. The 2022 project is focused on linking three datasets - citations, warnings, and contact summaries from the Wisconsin Badger TraCS system – within the new safety data warehouse. The objective is to finalize the data security requirements and test capabilities with a small set of law enforcement agency partners. The FY23 project will build upon the FY22 pilot test to expand capabilities of the system to include additional agencies, leading to a future buildout of a complete, statewide linkage of crash and citation data in subsequent years. This project will also purchase two virtual host servers to run the web services and data integration processes.

Budget: $120,000

Project Title: WisTransPortal Predictive Crash Research & Development

Organization Name: UW-Madison TOPS Lab

Project Coordinator and Contact Information: Dr. Steven Parker sparker@engr.wisc.edu

Core State Safety Database to Improve (choose only one, unless selecting integration below):

- **Crash**
- Citation or Adjudication
- Driver
- EMS or Injury Surveillance System
- Roadway
- Vehicle

Proposed Attribute of Data to Improve (*choose only one*):

- Accuracy
- Completeness
- Timeliness
- Uniformity
- **Accessibility**
- Integration

Problem Identification (Reference the Traffic Records Assessment, if applicable.):

Recent advances in crash data collection and management in Wisconsin have afforded the opportunity to improve the effectiveness of traffic safety enforcement activities through data driven resource allocation. Initial "predictive analytics" decision support capabilities were developed and rolled out statewide during the 2017 project year in the form of a new heat map enabled crash analysis interface in the Community Maps system and as user selectable crash map layers in the Wisconsin State Patrol MACH system. Building upon this initial set of tools, an automated hot spot detection algorithm was developed during the 2018 project year and rolled into the Community Maps crash analysis interface in early 2019 to complement the heat map capability. The hot spot detection capability has been continually improved since the initial rollout to provide a highly scalable and accessible tool that now serves as an integral component of Wisconsin's strategy for law enforcement traffic safety resource allocation.

The heat map and hot spot detection algorithms are now available to all law enforcement agencies statewide and have been used to generate targeted enforcement areas for several predictive analytics pilots conducted by the Wisconsin State Patrol and local law enforcement agencies. Important objectives going forward are to refine the detection algorithm and reporting capabilities based on further experience and user feedback from law enforcement and traffic safety stakeholders. Additionally, there is a need to demonstrate the effectiveness of the Predictive Analytics tools and program through quantitative and qualitative measures. When completed, this project will establish a critical feedback loop between crash reporting and LEAs. It will also allow LEAs to act more proactively to prevent crashes, rather than by responding to them.

Provide a baseline measure for this specific and quantitative improvement:

Usage access patterns, derived from the Community Maps system logs, will serve as quantitative measure of improvement in data accessibility:

Methodology:

- The monthly average number of distinct users that log into Community Maps "Predictive Analytics" interface represents the overall utilization of the predictive analytics features statewide within law enforcement agencies and among safety stakeholders.

Measure:

- Baseline: The table below provides the monthly average number of distinct users that logged into the Community Maps "Predictive Analytics" interface from 2018 to 2021. This value decreased in 2020, we believe due to the Covid-19 impact, and has only recently begun to return to pre-pandemic levels.

Year	Average Monthly Users	Percent Change
2018	46	
2019	59	28%
2020	42	-29%
2021	56	33%

- Target: A 15% annual increase in the average monthly users for 2022.

The Wisconsin plan to meet this goal includes the following:

- System enhancements to the predictive algorithm and reporting capabilities will improve how the analysis results are presented and will make it easier for local law enforcement agencies to incorporate the results into their business processes.
- Provide training on use of the Community Maps "Predictive Analytics" tools for traffic safety high visibility enforcement through the county Traffic Safety Commissions and Wisconsin State Patrol regional posts.
- Promote the use of the Community Maps "Predictive Analytics" tools through conferences, meetings, and other training opportunities, such as the Wisconsin Governor's Conference on Highway Safety.

Project Objectives:

This project will allow the UW TOPS Lab to continue researching and developing best practices for predicting where and under what conditions crashes occur. This would allow LEAs—and the State Patrol in particular—to expend resources in the most efficient manner possible by being in place where and when crashes are most likely to occur. This visibility will lessen risky driver behaviors and may also allow for better crash outcomes by lessening response times. Specific objectives will include algorithmic improvements based on predictive research and feedback from law enforcement, enhancements to align the analysis capabilities to the Wisconsin Strategic Highway Safety Plan emphasis areas, and continued evaluation support for predictive analytics high visibility enforcement activities.

Budget: $65,000

Project Title: Estimating Cycling Activities in Wisconsin Using Crowdsourced Bicycle Data

Organization Name: University of Wisconsin-Milwaukee

Project Coordinator and Contact Information: Dr. Xiao Qin, qinx@uwm.edu

Core State Safety Database to Improve (choose only one, unless selecting integration below):

- **Crash**
- Citation or Adjudication
- Driver
- EMS or Injury Surveillance System
- Roadway
- Vehicle

Proposed Attribute of Data to Improve (*choose only one*):

- Accuracy
- **Completeness**
- Timeliness
- Uniformity
- Accessibility
- Integration

Problem Identification (Reference the Traffic Records Assessment, if applicable.):

Cycling has gained popularity among residents, especially in bike friendly cities in Wisconsin where planners and policy makers promote active transportation modes. With the increasing use of bicycles, there are safety concerns for people who ride on public roadways or shared paths because of high-speed traffic and/or reckless drivers. As a vulnerable road user, the proportions of fatal injury and suspected serious injury for crashes involving bicyclists are 1.29% and 10.58%, respectively; as compared to 0.45 % and 2.23% of the occupants of motor vehicles (WisTransportal, 2017-2021 crash statistics). To promote a safe cycling environment, it is important for us to identify appropriate data sources and develop methods for measuring, estimating and analyzing the injury risk to cyclists in Wisconsin. This project is within the scope of “Improve Non-Motorist Safety”, one of the ten “Highest Priority Issue Areas” in the Wisconsin Strategic Highway Safety Plan (SHSP), 2017-2020.

Annual average daily bicycle volume (AADB), bicycle network characteristics (e.g., bike trails, shared paths, public roads), motor vehicle traffic speed and volume, sociodemographic factors are key considerations during the planning and design bike facilities. The most common bike data collection methods are count stations, travel surveys, and crowdsourced data from the third party. However, Wisconsin does not have a statewide non-motorized counting program, which leads to the fundamental problem of not having sufficient data on bicyclist exposure (e.g., the number of bicyclists who cycle at a specific location during a given time period). In addition, deploying count stations and conducting travel survey are expensive and time-consuming.

On the other hand, crowdsourced data are cost effective and timesaving. and have already been widely used by public agencies (e.g., CDOT, FDOT, NCDOT, Oregon DOT, TxDOT3) and

[3] CDOT: https://www.codot.gov/programs/bikeped/documents/strava-analysis-summary_06-25-18.pdf

private sectors, especially in analyzing bicyclists' route choice behavior, bicycle volume estimation, and bicyclists' injury risk. Among all the crowdsourced data, data collected from smartphone applications including Strava, CycleTracks, ORcycle have become more prevalent and cost effective. According to Strava “"We work with urban planners, city governments and safe-infrastructure advocates to understand mobility patterns, identify opportunities for investment and evaluate the impact of infrastructure changes – all completely free of charge. (2020, Sep)" (https://blog.strava.com/zi/press/metro/). A preliminary investigation shows that in Strava, Madison, Milwaukee, Appleton and Green Bay are considered hotspots for cycling activities. In 2017-2021, the four cities account for 31.06% of statewide crashes involving bicyclist, or 1,127.

Grantees should expect to provide documentation that the grant has improved a core state safety database. Describe one specific and quantitative improvement to a core state traffic safety database that can be expected within one calendar year of grant approval:

This study will collect data from both the available count station data and the crowdsourced bicycle data (e.g., Strava) to develop bicycle volume prediction model and generate associated bicycle ridership map. Furthermore, by combing bicycle volume data (both crowdsourcing data and cunt station data) and bicyclist crash data, bicyclist injury risk can be analyzed. The identification of high bicycle volume and high injury risk locations for infrastructure construction and improvement is of great importance during bicycle infrastructure investment decision making process.

Provide a baseline measure for this specific and quantitative improvement:

We are not aware of existing methods for bicycle volume prediction and cyclist injury risk calculation at WisDOT. Based on count station data, the available crowdsourced bicycle data, and other supporting data, the bicycle volume can be potentially estimated and forecasted via this project. The cyclist injury risk analysis will be conducted and used as the guidance for making recommendations on the bicycle infrastructure investment/improvement.

Project Objectives:

Crowdsourcing has increased the availability of data collection and provided an efficient way to bridge the data gap for decision making and performance measures. The anticipated objectives of this project are to: (1) Compute the bicycle volumes based on crowdsourced bicycle data and bicycle manual counts, (2) identify the impacting factors on available crowdsourced data, (3) analyze the cyclist injury risk, and (4) provide policy recommendations based on the risk analysis.

FDOT: https://rosap.ntl.bts.gov/view/dot/42275/dot_42275_DS1.pdf; NCDOT: https://connect.ncdot.gov/projects/research/RNAProjDocs/RP2020-43%20-%20Final%20Report.pdf Oregon DOT: https://www.oregon.gov/ODOT/Programs/ResearchDocuments/304-761%20Bicycle%20Counts%20Travel%20Safety%20Health.pdf; TxDOT: https://ftp.txdot.gov/pub/txdot/get-involved/dal/bike-hearing/102418-ptn-presentation.pdf

Itemized Budget: $75,000

Project Title: Mitigating crash outcome through automatic crash reconstruction

Organization Name: University of Wisconsin-Milwaukee

Project Coordinator and Contact Information: Dr. Xiao Qin, qinx@uwm.edu

Core State Safety Database to Improve (choose only one, unless selecting integration below):

- **Crash**
- Citation or Adjudication
- Driver
- EMS or Injury Surveillance System
- Roadway
- Vehicle

Proposed Attribute of Data to Improve (*choose only one*):

- **Accuracy**
- Completeness
- Timeliness
- Uniformity
- Accessibility
- Integration

Problem Identification (Reference the Traffic Records Assessment, if applicable.):

Significant efforts have been made to determine effective countermeasures for traffic crashes using motor vehicle crash reports where crash factors are derived recorded either in structured data (also known as tabular data) or crash narrative (unstructured text data). Although in DT4000, SEQEVT[1,2][A,B,C,D] provides the first four events (A-D) in the sequence of events related to this motor vehicle, the attributes are only about non-collision (e.g., fire/explosion, immersion, overturn/rollover, jackknife), collision with person, motor vehicle, or non-fixed object and collision with fixed objects. Structured data is limited in the provision of sufficient information about the sequence of driver actions and vehicle movements that leads to the most harmful event. As a result, a crash analysis that relies on structured data alone is inadequate for determining effective countermeasures.

Apart from structured data in motor vehicle crash reports, a substantial amount of information is stored in unstructured text, such as crash narratives. Crash narrative describes the sequence of driver actions and vehicle movements preceding, during, and following the crash in detail, including how, when, and what occurs during a crash. Such details shed light on one or more possible interventions to mitigate the consequence of a crash. This is inspired by the Swiss Cheese Model where slices of cheese are defenses against failure. As shown in Figure 1, although each layer of defense can be flawed (with holes); together, they can stop the failure from occurring. Therefore, the sequence of crash events of the crashes can be used to better connect crash contributing factors to potential countermeasures and to determine when and how a safety intervention is plausible.

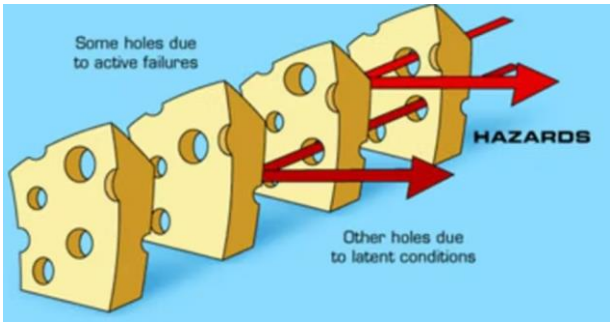

Figure 1. the Swiss Cheese Model

(Source: Richard Kline, Overcoming the Barriers that Prevent Near-Miss Reporting, June 24, 2016, SAFETY & HEALTH)

A previous TRCC project "*Using Text Data from The DT4000 to Enhance Crash Analysis*" evidenced how police-reported crash narratives can be used for the completeness of the existing data through use of several machine learning and natural language processing techniques. The information extracted from the crash narratives were discrete and were used to classify crashes. For this particular purpose, we propose to automatically extract sequences of driver actions, vehicle movements and resulting events on a sequential basis to create opportunities for effective safety intervention.

Grantees should expect to provide documentation that the grant has improved a core state safety database. Describe one specific and quantitative improvement to a core state traffic safety database that can be expected within one calendar year of grant approval:

This study will develop a novel algorithm to generate sequence of actions and events automatically from crash narratives. Using pattern recognition algorithms, this project will quantify the number of most common patterns in crash sequences to help prioritize safety investments in various countermeasure.

Provide a baseline measure for this specific and quantitative improvement:

In the previous TRCC project "*Using Text Data from The DT4000 to Enhance Crash Analysis*", discrepancies between the structured data and crash narratives were found. Although existing structured data of WisDOT also contains the information about the sequence of events, our initial investigation revealed discrepancies as well. As a result, the outcome of this project will assist in the evaluation of existing data and the identification of the source of problems.

Project Objectives: This project will develop a crash analysis approach based on the Swiss cheese crash causation model for identifying latent conditions (such as improper curve design) and active failures (such as a drunken driver). This project will specifically aim to achieve the following objectives: a) Extract the sequence of actions and events for a crash from narratives (in particular, the event preceding to the most harmful event); b) examine the patterns in the sequence of actions and events and identity factors related to these actions and events; and c) Create a Swiss cheese crash causation model for developing safety interventions.

Itemized Budget: $75,000

Project Title: Statewide Pedestrian and Bicycle Count Database for Model Validation and Risk Exposure Assessment

Organization Name: University of Wisconsin-Milwaukee, Institute for Physical Infrastructure and Transportation

Project Coordinator and Contact Information:

Robert J. Schneider, PhD, Associate Professor, UW-Milwaukee Department of Urban Planning (PI)

Xiao Qin, PhD, Professor, UW-Milwaukee Department of Civil & Environmental Engineering (co-PI)

Core State Safety Database to Improve (choose only one, unless selecting integration below):

- o Crash
- o Citation or Adjudication
- o Driver
- o EMS or Injury Surveillance System
- o XXX Roadway
- o Vehicle

Proposed Attribute of Data to Improve (choose only one):

o	Accuracy	o	Uniformity
o	XXX Completeness	o	Accessibility
o	Timeliness	o	Integration

Problem Identification (Reference the Traffic Records Assessment, if applicable.):

"Improve non-motorized safety," including pedestrian and bicyclist safety, is one of the ten highest-priority areas within the 2017-2020 Wisconsin State Highway Safety Plan. However, pedestrian and bicycle volumes, which represent exposure to possible traffic crashes, have only been collected in a few locations throughout Wisconsin. Further, existing pedestrian and bicyclist counts are not contained in a single, consistently-formatted database across the state. The pedestrian and bicyclist counts compiled through this project could potentially be added to correspond with the Model Inventory of Roadway Elements (MIRE), Version 2.0.[4]

The pedestrian and bicycle counts compiled through this project from across Wisconsin are essential for being able to validate and refine preliminary methods of pedestrian and bicycle volume estimation. For example, several pedestrian and bicyclist volume modeling efforts include 1) a preliminary pedestrian intersection volume model developed by the UWM research

[4] Federal Highway Administration. 2017. Model Inventory of Roadway Elements, Version 2.0, FHWA Safety Program, https://safety.fhwa.dot.gov/rsdp/downloads/fhwasa17048.pdf.
Two example roadway elements in MIRE are: "87. Total Daily Two-Way Pedestrian Count/Exposure" and "88. Bicycle Count/Exposure."

team in the Southeast Region, 2) an application of the WALC TRIPS XL method from NCHRP Report 770 being explored internally by WisDOT to estimate pedestrian and bicyclist trips, and 3) a proposed statewide bicycle exposure model based on crowdsourced data. The counts from this statewide database can show where model-estimated volumes are accurate and where they may need to be reexamined.

The counts compiled through this project can be used by safety analysts to prioritize intersections that have experienced the highest crash rates (e.g., pedestrian crashes per million crossings) and identify types of intersection designs that have higher levels of underlying risk for pedestrians and bicyclists. This information can be used to evaluate traffic safety grant applications, scope roadway safety projects, and prioritize locations for pedestrian and bicyclist safety improvements.

A final component of this project involves developing better expansion factors to estimate annual pedestrian and bicyclist volumes from short-duration counts. This is important because pedestrian and

bicycle crashes are often reported annually, so corresponding exposure data should also cover a full-year period. Ideally, WisDOT will participate actively in this part of the project, since they would be

an appropriate agency to develop and manage an automated counting system to collect long-term data at a set of sidewalk and bike lane locations throughout the state. However, for this project, we can work with local jurisdictions to gather previously-collected continuous count data and develop preliminary pedestrian and bicyclist count expansion factors. In the past, continuous counters, such as infrared sensors and in-pavement inductive loops, have been installed sporadically in communities such as Madison and the Southeast Region. So we could reach out to local and regional agencies to

obtain these data. UWM developed a proof of concept for collecting pedestrian expansion factors through its previous work in the Southeast Region[5].

Provide a baseline measure for this specific and quantitative improvement:

There are more than 7,000 intersections on the State Highway System, but only 348 intersections in the Southeast Region have pedestrian and bicycle counts that have been compiled into a well-organized database. These 348 intersection counts are only from the Southeast Region and are currently housed at UWM. They are not maintained at WisDOT and are not compiled at the state level. This project would expand the number of intersections with pedestrian counts to more than 500 and intersections with bicycle counts to more than 400 and also expand the geographic representation of these counts to more regions of Wisconsin. Ideally, it would create a database structure that could be housed within WisDOT.

[5] Schneider, R.J., Schmitz, A., and Qin X. (2021). Pedestrian Exposure Data for the Wisconsin State Highway System: WisDOT Southeast Region Pilot Study, Prepared for Wisconsin Department of Transportation, Bureau of Transportation Safety, https://wisconsindot.gov/Documents/safety/education/pedestrian/wistudy-pedcount.pdf,

Project Objectives:

UWM will help WisDOT develop a database for pedestrian and bicycle counts. This will include conducting outreach to local and regional stakeholders and showing examples of how the data can be used.

Objective 1) Reach out to local and regional agencies throughout Wisconsin to gather short-term pedestrian and bicycle counts and compile them in the pedestrian and bicycle count database.

Objective 2) Gather existing continuous, long-term pedestrian and bicycle count data from automated count sites from local and regional agencies. Use these data to develop preliminary pedestrian and bicycle count expansion factors.

Objective 3) Review pedestrian and bicycle count database formats established by FHWA and other transportation organizations. Use this information to recommend a specific structure for the database, including clearly-described data fields.

Objective 4) Work with WisDOT staff to identify an appropriate place to house the pedestrian and bicycle count database.

Objective 5) Demonstrate how the data from the pedestrian and bicycle count database can be used to create, validate, and refine existing and new pedestrian and bicycle models. This objective would include validation testing and would suggest ideas for how models could be refined in the future, but it would not actually create new models (that would be a much larger task).

Itemized Budget:

BOTS Grant Budget

$40,000

UW-Milwaukee Match Budget

$10,000

SIGNATURE

The undersigned individual acknowledges that the Traffic Records Coordinating Committee has approved the State of Wisconsin's Traffic Safety Information System Improvements Strategic Plan, 2020, which supports the State's application for federal funds. The members of the committee will commit the resources of their organizations to its success, as witnessed by the signature on this document as of this date: _ July 2021.

State of Wisconsin Traffic Safety Information System Improvements Strategic Plan, 2022.

DAVID PABST, DIRECTOR

Bureau of Transportation Safety Wisconsin Department of Transportation State Highway Safety Coordinator

TRAFFIC RECORDS COORDINATION CONTACT INFORMATION

Robert Tyllo
4822 Madison Yards Way, 9th Floor South Madison, WI 53705-9100
608.709.0088
robert.tyllo@dot.wi.gov

Andi Bill
UW-TOPS Lab
Engineering Hall 1415 Engineering Dr
Madison, WI 53706
608.354.4010
bill@wisc.edu

APPENDICES

1. TRCC Policy Group Members and Affiliation
2. TRCC Technical Group Members, File, Function and Affiliation
3. Wisconsin's Existing Data Sources and Questionnaire (Filled out by TRCC Members on 3-2-2017
4. Sample Worksheet (Filled out by TRCC Members on 4-5-2017)

APPENDIX 1

TRCC POLICY GROUP MEMBERS AND AFFILIATION

Craig Thompson
Secretary of the Department of Transportation Governor's Representative for Highway Safety (Roadway, Crash, Driver, Citation/Conviction, Vehicle Files)

David Pabst, Director

WisDOT Bureau of Transportation Safety State Highway Safety Coordinator

Karen Timberlake
Secretary of the Department of Health Services State Health Officer and Administrator
(Injury Files – Ambulance Run, Emergency Department, Hospital Discharge, Trauma Registry)

Tina Virgil
Department of Justice, Division of Criminal Investigation

Randy R. Koschnick
Director of State Courts Office

Trina Zanow
Chief Information Officer, Administrator
Department of Administration, Division of Enterprise Technology

Major General Paul E. Knapp, Administrator
Department of Military Affairs, Division of Emergency Government

APPENDIX 2

2021 TRCC MEMBERS

Member Organizations	Representative		Database Representation
	DOT		
SHSO Co-Chair	Tyllo	Robert	**Crash**
UW TOPS Lab Co-Chair	Bill	Andrea	**Crash**
OPFI	Gilchrist	John	
WSP	Harvey	Dave	**Citation or Adjudication**
WSP - TraCS (alt)			**Citation or Adjudication**
WSP BDS	Schwartz	Darlene	**Driver**
DMV/BVS (alt)	Galbraith	Timothy	**Vehicle**
DTIM/BSHP (alt)	Schieldt	Kelly	**Roadway**
DBM/BITS - GIS	Moline	Mitch	**Crash**
DTSD/BHO	Adams	Angela	**Roadway**
DTSD/BHO	Szymkowski	Rebecca	**Roadway**
DTSD/BHO (alt)	Porter	Brian	**Roadway**
BOTS	Corsi	Larry	**Crash**
DSPS	Satteson	Mike	**Crash**
BOTS	Barkholtz	Heather	**Citation or Adjudication**
DOT	Murkve	Jeff	**Vehicle**
	State Agencies and Organizations		
DOJ/CIB TIME	Doberstein	Courtney	**Citation or Adjudication**
DOJ	Fortunato	Dennis	**Citation or Adjudication**
OSC-CCAP	Olson	Andrea	**Citation or Adjudication**
OSC-CCAP (alt)	Hicks	Kim	**Citation or Adjudication**
DHS/DPH-EMS			**EMS/Injury Surveillance**
DHS/DPH/BHIP	Garcia-Lago	Erica	**EMS/Injury Surveillance**
DOJ	Jenswold	Tara	**Citation or Adjudication**
Menominee Tribal PD	Warrington	Warren	
DPI	Dean	Brian	**Driver**
	UW		
UW CHSRA-CODES	Bigelow	Wayne	**EMS/Injury Surveillance**
UW TOPS Lab (alt)	Parker	Steven	**Crash**

CIREN Center Milwaukee	Halloway	Dale	**EMS/Injury Surveillance**
	Local Agencies & Organizations		
AAA	Jarmusz	Nick	
Jefferson County	Udovich	Brian	
Onalaska PD	Berg	Tim	
Dane County SO	Larsh	Chris	
Madison PD	Fiore	Tony	afiore@cityofmadison.com
Madison PD (Alt)	Reilly	Deanna	
	Federal Partners		
NHTSA	Wray	Kaci	
FHWA/WI Division	Jolicoeur	David	
FMCSA/WI Division	Oesterle	Mark	
FMCSA/WI Division	**Gessler**	**Mark**	

APPENDIX 3

Wisconsin's Existing Data Sources and Questionnaire (Filled out by TRCC Members on 3-2-2017)

CRASHES	• DT4000 (either in the DB2 or w/in TransPortal) • Large Truck and Bus Crash File (within the DSP Motor Carrier and Inspection Section) • Motor Carrier Management Information System (within the DSP Motor Carrier and Inspection Section) • SafetyNet (commercial vehicle crashes) (stored at DTIM)
EXPOSURE	• TRADAS (DTIM/Bureau of State Highway Programs) • Statewide Traffic Operations Center Volume, Speed, and Occupancy Data/VSPOC (stored at DTSD Southeast Region) • VMT data from the Forecasting Division
ROADWAY	• Highway Performance Monitoring System (HPMS) • State Trunk Network (GIS database of centerline files) (DTIM) • Local Control Management Database • State Deficiency File • Bridge Information System • TRADAS (DTIM) • Wisconsin Information System for Local Roads (WISLR) (stored at DTIM)
CITATION OR ADJUDICATION	• State Citation File (stored at DMV) • Alcohol and Drug Tests (DOT and State Hygiene Lab) • Alcohol Breath Test Data (DSP/BOTS Chemical Test Section) • Wisconsin Incident-Based Reporting System (WIBRS) (stored at Office of Justice Assistance Statistical Analysis Center) • WI District Attorney's Information Technology and Prosecutor Technology for Case Tracking (PROTECT) (Department of Administration) • Consolidated Court Automation Project (CCAP) (State Courts Office) • Court-Ordered Withdrawal System (COWS) (DMV/Bureau of Driver Services) • Wisconsin Law Enforcement Network (WILENET) (DOJ) • Transaction Information for Management of Enforcement (TIME) system (located at the WI DOJ/Crime Information Bureau)
VEHICLE	• Vehicle Registration Information (DMV/Bureau of Vehicle Services) • Commercial Registration Information (International Registration Program) (DMV) • International Fuel Tax Association (DMV)
DRIVER	• State Driver Record File • Problem Driver Pointer System (DMV/Bureau of Driver Services) • Motor Carrier Management Information Systems (WSP/Motor Carrier and Inspection Section) • SAFETYNET (WSP/Motor Carrier and Inspection Section)

INJURY CONTROL/EMS	• Wisconsin Ambulance Run Data System (WARDS) (DHS) • Wisconsin Emergency Department Visit Data (through Richard Miller DHS/DPH) • Wisconsin Hospital Inpatient Discharge Data (Richard Miller Department of Health Service /Department of Public Health) • State Trauma Care System Registry • CasePoint Coroner Data System(Department of Health Services, Division of Public Health, Bureau of Community Health Promotion) • Crash Outcome Data Evaluation System (CODES) (housed at Center for Health Systems Research and Analysis, College of Engineering at UW-Madison)

ACCESSIBILITY

1.) Are the above data sources as accessible as they can be for the following recipients? Some of the records are confidential, and not intended for certain groups. Place names of data sources next to the recipients below:

a. Staff at DOT

_____

_____

b. Outside government entities (including UW)

_____

_____

c. The public

_____

_____

d. The media

_____

_____

e. Other relevant groups?

_____

2.) Are there certain limitations on the data access i.e (for reasons of privacy), that are no longer necessary? Conversely, are there fields within the data that are open to certain groups (i.e. the public) that should be restricted?

3.) For each of the data sources and each of the recipients, think of the procedures for accessing the data. Is the data pull done manually or is it automatic? If done manually, are there strategies that could be utilized to make this process more automatic? Think of the people/groups you would need to talk to in order to make this happen.

4.) Think of the web portals used to access the data. What are some examples of portals that are unclear/confusing and which could be simplified? List below.

INTEGRATION

1.) Is each data source linkable with others (think specifically about specific data sets as much as possible)? Have you recently tried to link data sheets together, but lacked a common field? Please write down specific examples here.

2.) If the data *is* linked, how is it linked (automatic or manually)? Is it time-intensive to perform these linkages? What are ways that you and your group can think of to ease and improve linkages?

3.) Is the data geo-coded or inherently geographic? This could help with GIS analysis. Think of databases you have looked at that were not geo-coded but which could have been. Please list below.

TIMELINESS

1.) How current is the data (after an event)? If digital or oral requests for data need to be made, what is the lag time for this and does this seriously impede analysis?

_____
_____
_____

2.) How often is relevant data updated? Is this done automatically or an ad-hoc basis?

_____
_____
_____

3.) If the data needs to be changed, who is responsible for changing it, how long does that process take, and is there a lag time to when that data is updated for all users? How many approvals are required to change data and are there ways to reduce the number of necessary approvals, while still maintaining data accuracy?

_____
_____
_____

4.) Are there ways to speed up the timeliness of your work group's data? What resources would be needed to accomplish this? Think specifically of bottlenecks in the reporting process here.

_____
_____
_____

COMPLETENESS

1) Are data sources complete internally (i.e: Are data sheets containing all the fields and rows that they should be)? Think of specific data sheets that have impeded your analysis by missing certain fields/columns/rows.

_____
_____
_____

2) Are data sources externally complete (i.e: Are data sources missing entire sheets that may be helpful to your group)? Pinpoint, as much as possible, the individual, or at least general office division that you would need to talk to about this.
3) Does the data geographically cover the necessary area? If sampling is done, is it representative of the sampling frame? Is the data temporally complete?

_____
_____

CONSISTENCY/UNIFORMITY

1) Is relevant data adhering to national and state standards? How often do staff review possible changes in standards?

ACCURACY/LACK OF ERRORS

1) Is relevant data entered manually or automatically? If entered manually, what steps must your group have in place to validate the accuracy of data internally (within your division, for example)? How often is this done and do you think that this frequency is adequate? If done automatically, are there automatic validation procedures in place?

2) What validation processes do you have to verify the accuracy of data sources that arrive from outside divisions or even outside the DOT? If no validation procedures are currently being used, think about simple validation procedures that could efficiently put in place. How you could make other relevant members of your division aware of these best practices?

3) Are data sources generally precise enough (either for your own usage or to hit Federal/State/internal requirements)?

APPENDIX 4: MOTORCYCLES REGISTERED BY COUNTY 2021

County Name	AUCY	CYCL	Training Sites	Classes Sched
ADAMS	5	1,883		
ASHLAND	1	812	1	3
BARRON	5	3,094	1	27
BAYFIELD	3	1,213		
BROWN	15	13,814	5	93
BUFFALO	5	1,118		
BURNETT		1,289		
CALUMET	8	3,339		
CHIPPEWA	9	4,437		
CLARK	3	1,965		
COLUMBIA	13	3,969	1	8
CRAWFORD	4	1,000		
DANE	51	19,502	3	69
DODGE	22	6245		
DOOR	3	3,409	1	1
DOUGLAS	4	2,399	1	4
DUNN	9	2,634		
EAU CLAIRE	12	4,732	1	20
FLORENCE		325		
FOND DU LAC	13	6,697	1	19
FOREST	1	652		
GRANT	5	3,345	1	18
GREEN	11	2,885		
GREEN LAKE	3	1,253		
IOWA	2	1,516		
IRON	1	499		
JACKSON	4	1,512	1	25
JEFFERSON	12	6,039	1	4
JUNEAU	13	2,050		
KENOSHA	17	8,596	3	26
KEWAUNEE	3	1,879		
LA CROSSE	18	5,508		
LAFAYETTE	4	964		
LANGLADE	2	1,313	1	4
LINCOLN	5	2,279		
MANITOWOC	12	6,815	1	14
MARATHON	21	8,444	3	36
MARINETTE	4	3,341		
MARQUETTE	2	1,358		
MENOMINEE		75		
MILWAUKEE	58	24,890	6	114
MONROE	10	3,118		
OCONTO	4	3,746		
ONEIDA	6	2,951	1	14
OUTAGAMIE	20	11,925	2	60
OZAUKEE	6	5,438	1	13
PEPIN		553		
PIERCE	4	2,873		
POLK	8	3,242		
PORTAGE	3	3,609		
PRICE	3	1,131	1	1
RACINE	22	10,341		
RICHLAND	1	1,188		
ROCK	20	8,699	1	15
RUSK	2	831		
SAUK	16	4,106		
SAWYER	1	955		
SHAWANO	4	2,861	1	11
SHEBOYGAN	9	9,107	2	13
ST. CROIX	13	6,122	1	14
TAYLOR	4	1,381	1	9
TREMPEALEAU	3	2,142		
VERNON	4	1,725		
VILAS	4	1,884		
WALWORTH	21	7,990		
WASHBURN	1	1,043		
WASHINGTON	19	9,547		
WAUKESHA	47	22,186	4	107
WAUPACA	20	4,017		
WAUSHARA	5	2,015		
WINNEBAGO	18	9,632	1	61
WOOD	7	5,212	1	18
UNKNOWN	4	1,213		
TOTAL	**692**	**321,872**	**49**	**821**

APPENDIX 5: PARTNERS, COMMITTEES, AND ORGANIZATIONS

(not an exhaustive list)

AAA https://www.aaafoundation.org/
AARP www.aarp.org

AT&T-It Can Wait Program
http://www.itcanwait.com/appsan d-tools

Alcohol and Other Drug Abuse Program
http://dpi.wi.gov/sspw/aodaprog. html

Children's Hospital of Wisconsin
http://www.chw.org/

Federal Highway Administration
www.fhwa.dot.gov

Ford Driving Skills for Life
www.drivingskillsforlife.com

Fox47 – MSG2TEENS
http://fox47.com/sections/contests/msg2teens/

Green Bay Packers
http://www.packers.com/

Governors Highway Safety Association
http://www.ghsa.org/

Governor's Bicycle Coordinating Council

Governor's Council on Highway Safety

HSP stakeholder input: May 2016

La Crosse OWI Treatment Court

Law Enforcement Agencies MADD
www.madd.org

Marshfield Clinic – Center for Community Outreach
www.marshfieldclinic.org/patient

Medical College of Wisconsin – Injury Research Center
http://www.mcw.edu/Injury- Research-Center.htm

National Highway Traffic Safety Administration
www.nhtsa.dot.gov

Office of Juvenile Justice and Delinquency Prevention
http://ojjdp.ncjrs.org

Operation Click http://operationclick.com/

Operation Lifesaver http://oli.org/

Pacific Institute for Research and Evaluation
www.pire.org

Rural Mutual Insurance
http://www.ruralins.com/

Safe Kids-Southeast Wisconsin

Safe Routes to School

State Council on Alcohol and other Drug Abuse *www.scaoda.state.wi.us*

Statewide Impaired Driving Work Group

Substance Abuse and Mental Health Services Administration www.samhsa.gov/

Tavern League of Wisconsin
www.tlw.org

Traffic Records Coordinating Committee

Traffic Safety Commissions (72 county organizations)

University of Wisconsin System Administration

WE Bike, etc. www.webike.org

Wisconsin Association of Women

Highway Safety Leaders Wisconsin Badgers http://www.uwbadgers.com/

Wisconsin Bike Fed http://www.bfw.org/

Wisconsin Chiefs of Police Association (WCPA) *http://www.wichiefs.org/*

Wisconsin Department of Health Services *http://dhs.wisconsin.gov*

Wisconsin Department of Children and Families *http://dcf.wi.gov/*

Wisconsin Department of Justice *http://www.doj.state.wi.us/*

Wisconsin Department of Natural Resources *http://dnr.wi.gov/*

Wisconsin Department of Tourism *www.travelwisconsin.com*

WisDOT- Division of Motor Vehicles

WisDOT- Planning

Wisconsin Interscholastic Athletic Association http://www.wiaawi.org/

Wisconsin Juvenile Officers Association *www.wjoa.com.*

Wisconsin Highway Safety Coordinators Association
Wisconsin Partnership for Activity and Nutrition (WI PAN)

Wisconsin Safety Patrol Congress

Wisconsin Safety Patrols, Inc. *http://www.wisconsinsafetypatrol*

APPENDIX 6: DETAILED BUDGET

Program Area	Fund	Account	2023 Planned	Projects
Planning and Administration	402	2023-10-01-PA	$340,000	Program and Policy Unit Supervisor, Grants Management Supervisor, 2 Program Associates. Travel and Training.
	State 562	2023-19-01-WI	$530,000	Director, Program and Policy Chief, 2 Analyst in the Program and Policy Unit
Community Traffic Safety and Media Programs	402	2023-90-01-CP	$477,450	4 Law Enforcement Liaisons and 2 Region Program Managers; Program Analysis and Policy Unit
	402	2023-90-04-CP	$135,000	IGX Grant System
	402	2023-90-06-CP	$125,000	Annual Conference
	405b	2023-25-07-M2	$535,000	405B OP Media
	402	2023-20-07-OP	$393,000	402 OP Media
	405d	2023-31-07-M5	$815,000	405D ID Media
	402	2023-30-07-AL	$160,000	402 ID Media
	405f	2023-72-07-M5	$120,000	405F MC Media
	State 535	2023-70-07-WI	$80,000	WI MC Media
	402	2023-80-07-PS	$20,000	Bike Ped Media
	402	2023-90-07-CP	$484,950	402 General Paid Media
Pedestrian and Bicycle Safety Programs	State 562	2023-89-01-WI	$87,000	Bicycle and Pedestrian Program Manager
	402	2023-80-03-PS	$25,000	Bicycle and Pedestrain Assessment
	402	2022-80-03-PS	$16,000	Teaching Safe Bicycling
	402	2023-80-04-PS	$78,000	Mil-walk-ee Walks
	402	2023-80-09-PS	$20,000	UWM Exposure Project
	402	2023-80-03-PS	$24,000	Designing for Pedestrian Safety
	402	2023-80-05-PS	$260,000	Bicycle and Pedestrian; Share the Road Enforcement
	402	2023-80-07-PS	$80,000	Wisconsin Bike Federation Media

Impaired Driving Safety Programs	405d	2023-31-01-M5	$92,000	405D ID Program Manager
	State 531	2023-39-04-WI	$915,000	Tavern League of Wisconsin; Safe Rides
	402	2023-30-03-AL	$375,000	Traffic Safety Resource Prosecutors
	402	2023-30-04-AL	$250,000	Promotion of Transportation Alternatives
	405d	2023-31-03-M5	$400,000	Drug Recognition Expert and DECCA program
	405d	2023-31-03-M5	$350,000	3 planned DRE Schools
	405d	2023-31-03-M5	$20,000	OWI Courts and Adjudication
	405d	2023-31-05-M5	$1,750,000	Sustained and HVE ID enforcement
Occupant Protection Safety Programs	402	2023-20-01-OP	$85,000	Occupant Protection Program Manager
	402	2023-20-05-OP	$1,577,000	Sustained and HVE OP enforcement Grants
	405b	2023-25-05-M2	$400,000	Targeted OP Grants
	402	2023-20-06-OP	$188,000	Health Department CPS Grants
	402	2023-20-06-OP	$40,000	iPads for Safe Kids Digital forms and database
	402	2023-20-03-OP	$230,000	Health Department CPS Grants
	405b	2023-25-06-M2	$54,000	Health Department Grants
	405b	2023-25-09-M2	$81,000	OP Annual Usage Survey
Police Traffic Programs	402	2023-40-05-PT	$1,000,000	Sustained and HVE PT enforcement
	402	2023-40-05-PT	$200,000	Predictive Analytic TSC Safety Programs
Traffic Records Improvement Plan Programs	402	2023-50-01-TR	$265,200	4 Data analysts Program Analysis and Policy Unit
	405c	2023-58-03-M3	$1,169,550	9 Projects

EMS Improvement Plan				
	402	2023-60-02-EM	$50,000	Public Outreach
	402	2023-60-03-EM	$50,000	Rural Emergency Response Training and Equipment
	402	2023-60-03-EM	$50,000	Lights and Sirens Safety Pilot Project
Motorcycle Safety Programs	State 562	2023-79-01-WI	$85,000	Motorcycle Safety Program Manager
	405f	2023-72-04-M9	$30,000	Motorcycle Safety Rider Education
	State 562	2023-79-01-WI	$463,000	Motorcycle Safety Rider Education
	402	2023-70-05-MC	$70,000	OWI Motorcycle Rider Enforcement
	402	2023-70-04-MC	$150,000	Motorcycle Awareness
	State 535	2023-79-07-WI	$180,000	Motorcycle Awareness
	402	2023-70-09-MC	$45,000	Program Evaluation

APPENDIX A: NHTSA APPENDIX A TO PART 1300

APPENDIX B: NHTSA APPENDIX B TO PART 130