Highway Safety Plan

(Revised)

FFY 2023

Iowa Department of Public Safety
Governor's Traffic Safety Bureau

Mission Statement of the Governor's Traffic Safety Bureau

To identify traffic safety problems and thereon develop and implement traffic safety programs designed to reduce death and serious injury on Iowa's streets and highways through partnerships with local, county, state and private sector agencies.

Table of Contents

GTSB Staff Page 5

Highway Safety Planning Process Page 6

Description of Highway Safety Problems Page 9

Problem Identification Page 9

Methods for Project Selection Page 9

List of Information and Data Sources Page 10

Description of Outcomes from the Coordination of the Highway Safety Plan (HSP), Data Collection, and Information Systems with the State Strategic Highway Safety Plan (SHSP) Page 11

Safe System Approach Page 12

Performance Report Page 13

Performance Plan Page 19

Performance Measures (C-1 through C-11 / Additional Performance Measures #1 and #2) Page 22

Performance Measure (B-1) Page 38

Grant Program Activity Reporting Page 39

Automated Traffic Enforcement – Biennial Survey Page 40

Program Areas Page 41

Awareness Survey Page 41

Communication (Media) Page 43

Community Traffic Safety Programs Page 47

Impaired Driving (Drug and Alcohol) Page 49

Speed Page 64

Motorcycle Safety Page 67

Non-Motorist (Pedestrian) Page 71

Non-Motorist (Bicyclist) Page 74

Occupant Protection (Adult and Child Passenger Safety) Page 77

Occupant Protection (Adult) Page 83

Occupant Protection (Child Passenger Safety) Page 85

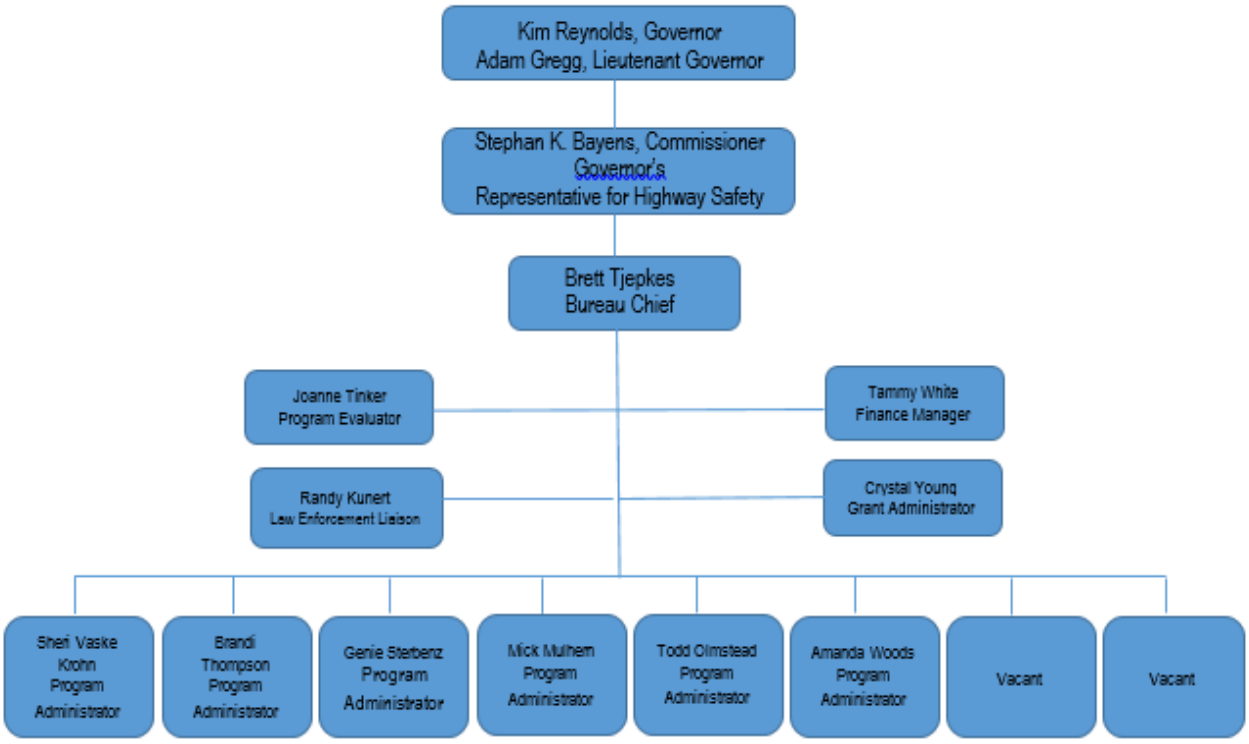
Planning and Administration Page 90

Program Management	Page 91
Police Traffic Services	Page 93
Roadway Safety/Traffic Engineering	Page 101
Rural Traffic Safety Program	Page 106
Teen Traffic Safety Program	Page 111
Distracted Driving	Page 115
Traffic Records	Page 117

GTSB Staff

Brett Tjepkes **Bureau Chief**	**Bureau Operations & Policies, Signatory Authority, Staff Supervision**	**515/725-6120** **tjepkes@dps.state.ia.us**
Randy Kunert Law Enforcement Liaison	High Visibility Enforcement Safety Projects and Activities, Promote and Enhance State and National Highway Safety Programs	515/725-6125 kunert@dps.state.ia.us
Mick Mulhern Program Administrator	Non-Law Enforcement Contracts, Motorcycle Safety, Mass Media Contracts, Social Media	515/725-0148 mulhern@dps.state.ia.us
Todd Olmstead Program Administrator	State DRE Coordinator, Advanced Roadside Impaired Driving Enforcement (A.R.I.D.E.), Impaired Driving	515/725-6122 olmstead@dps.state.ia.us
Genie Sterbenz Program Administrator	Youth Programs, Driving Simulator, sTEP Program, Rural Roads	515/725-6121 sterbenz@dps.state.ia.us
Brandi Thompson Program Administrator	Multi-Discipline Safety Teams (MDSTs), Speed, Checkpoint Trailer	515/725-6124 thompson@dps.state.ia.us
Joanne Tinker Program Evaluator & State Traffic Records Coord.	Traffic Data, Statewide Traffic Records Coordinating Committee (STRCC) Co-Chair, Problem Identification, Highway Safety Plan (HSP), Annual Evaluation Report	515/725-6134 jtinker@dps.state.ia.us
Sheri Vaske Krohn Program Administrator	Iowa Department of Public Health Program Member, State Corridor Planner, Bicycle/Pedestrian Injury Prevention	515/725-6128 krohn@dps.state.ia.us
Tammy White Finance Manager	Budget Preparation and Oversight, Claims Processing, Federal Grant Tracking System, Audit/Equipment Vendor Files	515/725-6130 twhite@dps.state.ia.us
Amanda Woods Program Administrator	Occupant Protection Coordinator, Distracted Driving, Older Drivers, sTEP Program	515/725-6127 woods@dps.state.ia.us
Crystal Young Grants Administrator	Grant Application/Contract Processing and Oversight, Web Grant Issues, Program Reporting/Deadlines, Travel Processing, Annual Conference Coordinator	515/725-6126 cyoung@dps.state.ia.us

GTSB Table of Organization



Highway Safety Planning Process

Data Sources and Processes/Data and Various Information Sources

Traffic safety stakeholders in Iowa understand data is a critical component to identify traffic safety problems. Data is considered the foundation for the development of performance measures and to evaluate programs. It is critical that data be timely and accurate. Efforts to improve state traffic records are on-going. The Statewide Traffic Records Coordinating Committee (STRCC) helps coordinate some of these activities. Since the inception of STRCC, the state has been successful in maintaining and expanding the STRCC committee which has strengthened communication, planning and coordination efforts.

Iowa's Traffic Records System

Iowa's traffic records system is one source of information used for highway safety planning. The system is made up of six core datasets: Crash, Roadway, Driver, Citation/Adjudication, Vehicle, and EMS/Injury Surveillance. Traffic Safety partners strive to improve the system through projects that focus on improving the performance attributes of accuracy, completeness, timeliness, uniformity, accessibility, and integration. Through the system, traffic records are captured, stored, analyzed and transmitted/disseminated for various traffic safety-related needs. The following provides a snapshot of each of the core datasets:

1. Crash

The custodial agency for the crash dataset is the Iowa Department of Transportation (DOT). Crash data is submitted to the DOT by law enforcement agencies throughout the state. As of March 31, 2022, 389 agencies were submitting crash data electronically through Iowa Traffic and Criminal Software (TraCS). The submittals by those agencies account for over 99% of all crash reports.

2. Driver

The DOT maintains driver records which include information on currently licensed drivers, records for identification only, expired licenses, suspended drivers, and licenses surrendered in other states.

3. Vehicle

The DOT maintains the vehicle data system. Vehicle registrations and title transactions are processed through the state's 99 county treasurer offices and are available in real-time. Vehicle registration and title information is linked with the state's driver license system.

4. Roadway

The DOT is the agency responsible to collect and maintain roadway system data. There are approximately 114,000 miles of roadways in Iowa. Data collected from all road jurisdictions include geographic information, geometric data, roadway configuration, pavement and bridge conditions, jurisdictional responsibilities and traffic levels.

5. Citation and Adjudication

The DOT is assigned statutory responsibility for the oversight of citations in the state. The majority of citations issued in Iowa are submitted electronically to the DOT using TraCS Electronic Citation Component (ECCO). As of March 31, 2022, there were 361 law enforcement agencies utilizing TraCS to submit citations, complaints and affidavits to the CJIS network and to the courts. For law enforcement agencies that do not utilize TraCS ECCO, a paper citation is issued. The goal of ECCO is to exchange citation data between law enforcement agencies and the courts. ECCO software creates electronic citation forms with each displaying a unique identifying number. Iowa data definitions meet national law enforcement and court standards including the National Crime Information Center, Uniform Crash Reporting, National Incident-Based System, National Law Enforcement Communication System, Law Enforcement Information Network and the Traffic Court Case Management System Functional

Requirement Standards. Data elements are defined for court records in the National Center for the State Courts (NCSC) guidelines.

6. EMS/Injury Surveillance
Iowa's injury surveillance system data repositories and human resources are located primarily with the Iowa Department of Public Health (IDPH) Divisions of Epidemiology, EMS and Disaster Response. The IDPH Bureau of Emergency and Trauma Services is the lead agency for the state trauma system which houses the EMS Patient Registry and Trauma Patient Registry.

State Survey Results

Annual Observational Seat Belt Usage Survey
Iowa's official seat belt usage is determined through an annual survey conducted in accordance with NHTSA's "Uniform Criteria for State Observational Surveys of Seat Belt Use". The methodology used for the survey was last approved by NHTSA in the early spring of 2022 after a required site re-selection process. Iowa's observational survey is conducted by Iowa State University, Center for Survey Statistics and Methodology.

Child Passenger Restraint Usage Survey
An annual child restraint usage survey is conducted annually by the University of Iowa, Injury Prevention Research Center. The focus of the survey is children under the age of 18.

Public Awareness Survey
A public awareness survey has been conducted annually since 2010. The purpose of the survey is to measure driver attitudes and behaviors regarding speed, safety belts, distracted driving, impaired driving and drowsy driving. The objective of the survey is to focus on driving patterns and the effectiveness of media campaigns which are centered on national mobilizations and high visibility enforcement efforts. The annual public awareness survey is conducted by Iowa State University, Center for Survey Statistics and Methodology.

Pre- and Post-Event Safety Belt Usage Survey
Throughout a program year, law enforcement partners receiving Section 402/PTS funding are required to conduct and publicize results of two observational occupant protection surveys during March and August. Agencies participating in sTEP (special Traffic Enforcement Program) are required to conduct a pre- and post- seat belt usage surveys as part of the "Click It or Ticket" national mobilization in May.

NHTSA Data, Reports and Publications

The National Center for Statistics and Analysis (NCSA) maintains numerous data sources. The following were utilized by the State of Iowa during the highway safety planning process:

> *Fatality Analysis and Reporting System (FARS)* – The FARS database provides data on highway fatalities resulting from all motor vehicle traffic crashes in the United States every year. All FARS data on fatal motor vehicle traffic crashes is gathered from the State's own source documents and is coded on standard FARS forms. FARS is utilized in the development of performance measures.
>
> *Data Visualization-Fatality Analysis Reporting System* – This portal presents interactive visualizations that focus on several highway safety topics of interest. These visualizations include multiple dashboards with information on fatal motor vehicle traffic crashes and fatalities based on data from NHTSA's FARS.
>
> *State Traffic Safety Information (STSI)* – STSI is an information portal with tables, charts and GIS crash location maps.
>
> *Fatality and Injury Reporting System Tool (FIRST)* – Allows users to build custom queries of fatal/injury crashes and generate the results in the form of tables, charts or GIS maps. It also lets you export into Excel or pdf.

NHTSA provides an abundance of reports and publications in a variety of topic areas. These reports summarize traffic safety issues from a national perspective but also provide state-specific information and rankings. NHTSA reports and publications used to formulate Iowa's FFY 2023 Highway Safety Plan included the following:

> *"Countermeasures That Work"* – NHTSA's "Countermeasures That Work: A Highway Safety Countermeasures Guide for State Highway Safety Offices", 10th Edition, 2020, provides information to assist State Highway Safety Offices in the selection of science-based traffic safety countermeasures. The guide describes major strategies relevant to highway safety offices, summarizes their use, effectiveness, costs, implementation time, and provides references to research summaries and individual studies. The effectiveness rating within "Countermeasures that Work" identify the maximum effect that can be realized with high-quality implementation. It is understood, however, that effectiveness can vary greatly from state to state.
>
> *NHTSA Traffic Safety Fact Sheets*
> Fact Sheets are available for all program areas.

NHTSA Facilitated Assessments

NHTSA's Assessment Program provides support to State Highway Safety Offices. A team of non-federal, subject matter experts conduct a comprehensive review of a highway safety program area using an organized, objective approach and well-defined procedures that provide an overview of the program's current status, note the program's strengths and weaknesses, and provide recommendations for improvement.[1]

Iowa has participated in the following assessments:

> *Traffic Records Assessment* – The most recent Traffic Records Assessment was conducted in the fall of 2020. Recommendations from the assessment are being addressed by the Statewide Traffic Records Coordinating Committee (STRCC) and the STRCC Guidance Team to help identify projects to improve Iowa's overall traffic records system.
>
> *Impaired Driving Assessment* – An Impaired Driving Assessment was held in April of 2022. Twelve priority recommendations resulted. The GTSB will be working with the Traffic Injury Research Foundation (TIRF), through the NHTSA cooperative agreement, to assist in implementing recommendations from the assessment.

Process Participants

The GTSB works with various traffic safety stakeholders including but not limited to the Iowa Department of Transportation, Iowa Department of Public Health, the Iowa State Patrol, the University of Iowa, Iowa State University, Federal Highway Administration, Federal Motor Carrier Safety Administration, and NHTSA on a regular basis. Many of these stakeholders are also involved in the development and implementation of the State Strategic Highway Safety Plan.

Members of the Statewide Traffic Records Coordinating Committee (STRCC) also serve a vital role in establishing project priorities through the availability, accuracy and linkage of Iowa traffic data. The membership of STRCC is diverse and represents several public agencies whose role is to capture, store, analyze and transmit/disseminate data.

[1] NHTSA Safety Program Assessments; https://www.nhtsa.gov/highway-safety-grants-program/safety-program-assessment.

Description of Highway Safety Problems

Problem Identification

The major objective of Iowa's problem identification is to determine the relative severity of traffic safety problems through Iowa's 99 counties. It is the responsibility of the GTSB, through an approved Highway Safety Plan, to provide for a data-driven traffic safety enforcement program to prevent traffic violations, crashes, and crash fatalities and injuries in areas most at risk for such incidents (23 U.S.C. Code §402). Performance targets contained in the Highway Safety Plan must be evidence based and supported by data.

A Problem Identification Analysis is conducted annually as an effort to identify problematic traffic safety issues throughout the state to include emerging issues and trends. The primary purpose of the Problem Identification Analysis is to:

1. Determine the magnitude of problematic issues. Identify how big the problem is.
2. Review trends. Are trends getting better or worse?
3. Identify characteristics of the traffic safety problem
4. Identify opportunities in which to develop traffic safety programs and projects

For FFY 2023 funding decisions, the GTSB further expanded their problem identification process to review conviction data from both a county and local jurisdiction level to identify disparities between the level of activity verses the funding being requested and awarded,

Methods for Project Selection

Once the Problem Identification Analysis is completed, Iowa agencies are identified for notification of funding eligibility. Sections 402 and 405d applications are completed on-line in the Iowa web grant system, Iowa Grants. Agencies are provided proposal guidelines and instructions on the web grant system with details on how to complete the on-line application.

All GTSB funding applications/proposals/continuation forms must include:

1. Problem statement/objective that describes the highway safety problem(s) to be addressed
2. Proposed activities and/or services to be provided that will positively impact the problem
3. Performance measures to assess the program's success in attaining its objectives (quantifiable if possible)
4. Budget including various program elements (personal services, commodities, equipment, contractual services) to be funded and the corresponding amount requested for each item as well as the overall requested amount of funding

All elements of the application are reviewed by the assigned Program Administrator. The Program Administrators provide input into which proposals they deem as worthy and what funding level is appropriate. The Financial Manager provides budget considerations and details on the applicant's prior funded equipment. The Bureau Chief, utilizing the information and input, makes the final decisions.

Once budget decisions are made, the applicants are notified by the Program Administrator of their grant award status. If, after deliberations with the applicants, anything in the approved overall budget changes, the Bureau Chief, Grants Administrator, Program Evaluator and Financial Manager are informed and the applications are updated (with Bureau Chief approval).

List of Information and Data Sources

Data Sources and Processes/Data and Various Information Sources

Traffic safety stakeholders in Iowa understand data is a critical component in identifying traffic safety problems. Data is considered the foundation for the development of performance measures and in program evaluation. It is critical the data be timely and accurate. Efforts to improve state traffic records are continuous. The Statewide Traffic Records Coordinating Committee (STRCC) helps coordinate some of those activities. Since the inception of STRCC, the state has been successful in maintaining and expanding the STRCC committee which has strengthened communication, planning and coordination efforts.

Iowa's Traffic Records System

Iowa's Traffic Records System is one source of information used for highway safety planning. The system is made up of six core datasets: Crash, Driver, Vehicle, Roadway, Citations/Adjudication, and EMS/Injury Surveillance. Traffic safety partners strive to improve the system through projects which focus on improving the performance attributes of accuracy, completeness, timeliness, uniformity, accessibility, and integration. Through the system, traffic records are captured, stored, analyzed and transmitted/disseminated for various traffic safety related needs. The following provides a snapshot of each of the core datasets.

1. **Crash**
   The custodial agency of the crash dataset is the Iowa Department of Transportation (DOT). Crash data is submitted to the DOT by law enforcement agencies throughout the state. As of March 31, 2022, 389 agencies were submitting crash data electronically through Iowa's Traffic and Criminal Software (TraCS). Over 99.78% of all crashes in Iowa are submitted electronically. For agencies who do not utilize TraCS, paper reports are submitted to the DOT.

2. **Driver**
   The DOT, Motor Vehicle Division maintains driver records which include information on currently licensed drivers, records for identification only, expired licenses, suspended drivers, and licenses surrendered in other states. As of December 31, 2021, there were 2,346,759 licensed drivers in Iowa.

3. **Vehicle**
   The DOT, Motor Vehicle Division maintains the vehicle data system. In 2021, there were 3,743,167 registered motor vehicles in Iowa. Vehicle registration and title transactions are processed through the state's 99 county treasurer's offices and are available in "real time". Vehicle registration and title information are linked with the state driver license systems.

4. **Roadway**
   The Iowa DOT is responsible for collecting and maintaining roadway system data. There are approximately 114,000 miles of roadways in Iowa. Data collected for all road jurisdictions include geographic information, geometric data, roadway configuration, pavement and bridge conditions, jurisdictional responsibilities and traffic levels.

5. **Citation/Adjudication**
   The DOT is assigned statutory responsibility for the oversight of citations in the state. The majority of citations issued in Iowa are submitted electronically to the DOT using the TraCS Electronic Citation Component (ECCO). As of March 31, 2022, 389 law enforcement agencies were using TraCS. For agencies that do not utilize TraCS ECCO, a paper citation is issued. The goal of ECCO is to exchange citation data between law enforcement agencies and the courts. ECCO software creates electronic citation forms with each displaying a unique identifying number. Iowa data definitions meet national enforcement and court standards including the National Crime Information Center, Uniform Crash Reporting National Incident-Based System, National Law Enforcement Communication System, Law Enforcement Information Network

and the Traffic Court Case Management System Functional Requirement Standards. Data elements are defined for court records in the National Center for the State Courts (NCSC) guidelines.

6. **EMS/Injury Surveillance**
   Iowa's injury surveillance system data repositories and human resources are located primarily with the Iowa Department of Public Health (IDPH), Divisions of Epidemiology, EMS and Disaster Response. The IDPH Bureau of Emergency Trauma Services is the lead agency for the state trauma system which houses the EMS Patient Registry and Trauma Patient Registry.

Description of Outcome from the Coordination of the Highway Safety Plan (HSP), Data Collection, and Information Systems with the State Strategic Highway Safety Plan (SHSP)

Iowa relies on its strong partnerships in developing the State Strategic Highway Safety Plan (SHSP). Due to current staffing issues with the Iowa Department of Transportation, the SHSP Implementation Team has not been meeting quarterly as planned. Conversations, however, continue among stakeholders as to the current SHSP identified countermeasures. It is anticipated quarterly meetings of the SHSP Implementation Team will commence again in the near future.

Establishing Numerical Targets/Safety Performance Targets

Establishing numerical targets is required by the FAST-Act. As traffic safety partners, the state is required to establish 5-year rolling average targets as part of the HSIP submission for the five areas listed below. Identical measures must be included as part of the HSP for the first three measures (Number of Fatalities, Rate of Fatalities per 100M VMT, and Number of Serious Injuries).

1. Number of Fatalities
2. Rate of Fatalities per 100 Million Vehicle Miles Traveled (VMT)
3. Number of Serious Injuries
4. Rate of Serious Injuries Per 100 Million Vehicle Miles Traveled (VMT)
5. Number of Non-Motorized Fatalities and Non-Motorized and Serious Injuries

Iowa traffic safety stakeholders have agreed upon the methodology used to develop the performance measures for the HSP, HSIP and SHSP.

Safe System Approach

Traffic safety must be comprehensive. The Safe System approach aims to eliminate fatal and serious injuries for all users by creating a transportation system that accommodates human mistakes and keeps impact on the human body at tolerable levels (FHWA, 2021). The six principles of a Safe System include:

- Death/Serious Injury is Unacceptable
- Humans Make Mistakes
- Humans are Vulnerable
- Responsibility is Shared
- Safety is Proactive
- Redundancy is Crucial

A Safe System promotes a holistic approach to safety across the entire transportation system. Safe System elements include:

- Safe Road Users
- Safe Vehicles
- Safe Speeds
- Safe Roads
- Post-Crash Care

A Safe System approach builds upon the four E's: Enforcement, Education, Engineering and Emergency Response/EMS. A Safe System Approach adds the additional E's of Equity and Evaluation.

Source: FHWA

Iowa's traffic safety initiatives identified in the FFY 2023 Highway Safety Plan will apply principles and elements of a Safe System Approach.

Performance Report

Progress towards meeting state performance targets.

Performance Measure Name	Progress
C-1) Number of traffic fatalities (FARS)	A 2.08% increase in traffic fatalities was recorded between 2019 (336) and 2020 (343).
C-2) Number of serious injuries in traffic crashes (State crash data files)	A 4.22% decrease in serious injuries was recorded between 2019 (1,348) and 2020 (1,291).
C-3) Fatalities/100M VMT (FARS & FHWA)	Fatalities per 100M VMT was 1.148 in 2020. This was a 15.03% increase from 0.998 in 2019. (Preliminary State data).
C-4) Number of unrestrained passenger vehicle occupant fatalities, all seat positions (FARS)	Between 2019 and 2020, there was a 2.15% decrease in the number of unrestrained passenger vehicle occupant fatalities.
C-5) Number of fatalities in crashes involving a driver or motorcycle operator with a BAC of .08 or above (FARS)	Between 2019 and 2020, there was a 10.78% increase in the number of alcohol-impaired driving fatalities.
C-6) Number of speeding-related fatalities (FARS)	There was an 11.59% decrease in speeding-related fatalities between 2019 and 2020.
C-7) Number of motorcycle fatalities (FARS)	Between 2019 and 2020, there was a 45.45% increase in the number of motorcyclist fatalities.
C-8) Number of unhelmeted motorcyclist fatalities (FARS)	Between 2019 and 2020, there was a 22.86% increase in the number of unhelmeted motorcyclist fatalities.
C-9) Number of drivers age 20 or younger involved in fatal crashes (FARS)	After several consecutive years of a downward trend in the number of drivers age 20 or younger involved in fatal crashes, Iowa recorded a 51.52% increase between 2019 and 2020.
C-10) Number of pedestrian fatalities (FARS)	Between 2019 and 2020, there was a 28.57% increase in the number of pedestrian fatalities.
C-11) Number of bicyclist fatalities (FARS)	Iowa is seeing a fairly significant upward trend in the number of bicyclist fatalities. Bicyclist fatalities have increased 100% from 5 in 2017 to 10 in 2020.
Additional Performance Measure - #1: Rural Traffic Safety/Rural Traffic Fatalities	In spite of slight downward 5-year linear and moving averages trend lines, Iowa remains well above the national average for the percentage of rural fatalities. FFY 2023 will be the first year that Iowa has set a target for rural traffic fatalities.
Additional Performance Measure - #2: Distracted Driving	There were 7 more distracted driving fatalities in 2021 than there were in 2020. These were fatalities as a result of a distraction by use of cell phone of other device. FFY 2023 will be the first year that Iowa has set a target for distracted driving.
B-1) Observed seat belt use for passenger vehicles, front seat outboard occupant (Annual Survey)	The statewide safety belt usage rate decreased 2.67% between 2020 and 2021. The 2021 survey recorded a usage rate of 92.66%.

Performance Measure: C-1) Number of Traffic Fatalities (FARS)
Progress: In Progress
Program Area Level Report: Iowa recorded a 2.08% increase in the number of traffic fatalities between 2019 and 2020. The target was set in cooperation with the Iowa Department of Transportation, Iowa Department of Public Safety/Governor's Traffic Safety Bureau and other traffic safety professionals including the Federal Highway Administration and the Federal Motor Carrier Safety Administration. The collaborative annual target was consistent with the Highway Safety Improvement Program (HSIP) target and was set using 5-year rolling averages as required in 23 CFR 490 and 1300.11. The GTSB will continue its partnership with state traffic safety stakeholders to establish the annual collaborative target.

Performance Measure: C-2) Number of Serious Injuries in Traffic Crashes (state crash data files)
Progress: In Progress
Program Area Level Report: The state recorded a 4.22% decrease in the number of serious injuries between 2019 and 2020. The target was set in cooperation with the Iowa Department of Transportation, Iowa Department of Public Safety/Governor's Traffic Safety Bureau and other traffic safety professionals including the Federal Highway Administration and the Federal Motor Carrier Safety Administration. The collaborative annual target was consistent with the Highway Safety Improvement Program (HSIP) target and was set using 5-year rolling averages as required in 23 CFR 490 and 1300.11. The GTSB will continue its partnership with state traffic safety stakeholders to establish the annual collaborative target.

Performance Measure: C-3) Number of Fatalities/100M VMT (FARS, FHWA)
Progress: In Progress
Program Area Level Report: Between 2019 and 2020, the state recorded a 15.03% increase in fatalities per 100M VMT. The target was set in cooperation with the Iowa Department of Transportation, Iowa Department of Public Safety/Governor's Traffic Safety Bureau and other traffic safety professionals including the Federal Highway Administration and the Federal Motor Carrier Safety Administration. The collaborative annual target was consistent with the Highway Safety Improvement Program (HSIP) target and was set using 5-year rolling averages as required in 23 CFR 490 and 1300.11. The GTSB will continue its partnership with state traffic safety stakeholders to establish the annual collaborative target.

Performance Measure: C-4) Number of Unrestrained Passenger Vehicle Occupant Fatalities (All Seat Positions) (FARS)
Progress: In Progress
Program Area Level Report: The FFY 2020 target to reduce unrestrained passenger vehicle occupant fatalities 3.00% from the 2013-2017 average of 100 to 97 was achieved. The 2016-2020 5-year moving average was 94. Iowa continues to see a slight downward linear trend in unrestrained passenger vehicle occupant fatalities; yet the 5-year moving average reflects a very small upward trend. Although at the time this plan was being developed, the number of fatalities for calendar year 2022 were higher than previous years. The state is still in line to potentially meet the 2022 target for unrestrained passenger vehicle occupant fatalities. In FFY 2023, the state plans to re-implement the High Five Rural Traffic Safety Program to target five rural counties with lower belt usage rates and/or a higher number of unbelted fatalities. This program was first implemented in Iowa in 2014 and was successful at that time. In addition to the seat belt focus, the program is intended to be multi-disciplinary and involve an engineering component with the inclusion of road safety audits.

Performance Measure: C-5) Number of Fatalities in Crashes Involving a Driver or Motorcycle Operator with a BAC of .08 or Above
Progress: In Progress
Program Area Level Report: The FFY 2020 target to reduce alcohol-impaired driving fatalities 2.36% from the 2013-2017 average of 93.2 to 91 was not achieved. The 2016-2020 5-year moving average was 101. Both linear and moving average trend lines are on the rise. The state does not anticipate meeting the FFY 2021 or 2022 target established for alcohol-impaired driving fatalities. Iowa currently qualifies for Section 405d funding as a “low-range state”, as the average impaired driving fatality rate is 0.30 or lower. Iowa’s official rate classification for FFY 2023 is 0.28. The 3-year average of alcohol-impaired fatalities per vehicle miles traveled is rising and it is anticipated that Iowa will slip into the “moderate” category in FFY 2024. As such, additional measures and activities may need to be implemented for eligibility requirement, including reinstating the Impaired Driving Task Force which was originally implemented in 2016. In April of 2022, Iowa hosted an NHTSA facilitated Impaired Driving Assessment. The goal of the assessment was to review all areas of the State’s impaired driving programs. The assessment recommendations will continue to be reviewed and implemented to enhance programming. The state will coordinate with Traffic Injury Research Foundation (TIRF) through NHTSA’s cooperative agreement to further analyze and implement recommendations. Although there are still come challenges from COVID-19 concerns and restrictions, enforcement, education and training efforts are normalizing. There still is a need in FFY 2023 to re-engage law enforcement. In 2022, Iowa hired a part-time Law Enforcement Liaison to assist in this effort. ARIDE and DRE trainings were greatly impacted by COVID-19 restrictions but the state has re-implemented these programs and training opportunities. In FFY 2022, Iowa significantly increased its funding for media messaging. The majority of the funding was allocated for impaired driving messaging. The state will continue to assess the impaired driving messaging needs throughout the remainder of FFY 2022 and into FFY 2023 and make adjustments if necessary.

Performance Measure: C-6) Number of Speeding-Related Fatalities (FARS)
Progress: In Progress
Program Area Level Report: The FFY 2020 target to maintain the 2017 annual number of speeding-related fatalities to no more than 70 was not achieved. Although the annual number of speeding-related fatalities for 2020 was 61, the year was considered an anomaly due to the COVID-19 pandemic. During mid-2020, Iowa, along with other states, saw an increase in speed issues amidst COVID-19. Therefore, the GTSB believes a more accurate assessment of the results would be the 5-year moving average (2016-2020), which was 71. Although at the time this plan was being developed, the number of fatalities for calendar year 2022 was higher than previous years, the state is still in line to potentially meet the 2022 target for speeding-related fatalities. Iowa plans to continue a speed corridor project. The state will use the assistance of Iowa State University to assist in data analysis to help identify road corridors with the highest crash frequency using the most current data available.

Performance Measure: C-7) Number of Motorcyclist Fatalities (FARS)
Progress: In Progress
Program Area Level Report: The FFY 2020 target to reduce motorcyclist fatalities 2.04% from the 2013-2017 average of 49 to 48 was not achieved. The 2016-2020 5-year moving average was 53. Between 2016 and 2018, Iowa recorded a strong decrease in motorcyclist fatalities; however, between 2019 and 2020, the state recorded a 45.45% increase in fatalities. Preliminary data indicates there were 69 motorcyclist-involved fatalities in 2021, and as such, it is unlikely the state will meet 2021 and 2022 targets established for motorcyclist fatalities. Iowa will continue funding to help support the State's Motorcycle Rider Education program coordinated through the Iowa Department of Transportation. Education efforts will continue to remind motorists to share the road and to be aware of motorcyclists on the roadway. Motorcycles are included in the 2019-2023 Strategic Highway Safety Plan, although not identified as a specific safety emphasis area.

Performance Measure: C-8) Number of Unhelmeted Motorcyclist Fatalities (FARS)
Progress: In Progress
Program Area Level Report: The FFY 2020 target to reduce unhelmeted motorcyclist fatalities 2.77% from the 2013-2017 average of 36 to 35 was not achieved. The 2016-2020 5-year moving average was 38. Iowa will continue funding to help support the State's Motorcycle Rider Education program coordinated through the Iowa Department of Transportation. Education efforts will continue to remind motorists to share the road and to be aware of motorcyclists on the roadway. Motorcycles are included in the 2019-2023 Strategic Highway Safety Plan, although not identified as a specific safety emphasis area. Iowa is eligible to flex up to 50% of grant funds awarded under 23 U.S.C. 405f for any eligible project under Section 402 as the State is in the lowest 25% of all states for motorcycle deaths per 10,000 motorcycle registrations based on the most recent calendar year for which FARS data are available. The State is considering using this rule to expand its messaging on proper outfitting, including helmet usage.

Performance Measure: C-9) Number of Drivers Age 20 or Younger Involved in Fatal Crashes (FARS)
Progress: In Progress
Program Area Level Report: The FFY 2020 target to reduce drivers age 20 or younger involved in fatal crashes 2.08% from the 2013-2017 average of 48 to 47 was achieved. The 2016-2020 5-year moving average was 46. FFY 2022 has afforded the opportunity for programming to return to the school setting after the impacts of the COVID-19 pandemic. Iowa initiated the Seatbelts are for Everyone (S.A.F.E.) program in FFY 2022. The state plans to further develop the teen driver program by reintroducing the "*Choices Matter*" program in 10 schools in FFY 2023.

Performance Measure: C-10) Number of Pedestrian Fatalities (FARS)
Progress: In Progress
Program Area Level Report: The FFY 2020 target to reduce pedestrian fatalities 4.55% from the 2013-2017 average of 22 to 21 was not achieved. The 2016-2020 5-year moving average was 24. Upon reviewing preliminary 2021 data, the state does not anticipate meeting the 2021 or 2022 targets for pedestrian fatalities. As in other states, Iowa is seeing a rise in pedestrian fatalities. The State implemented a speed-pedestrian project in FFY 2021 but, overall results have not shown the participation and outcomes that were projected. The State recognizes the continued need for specific pedestrian-related projects and will consider the development of an enhanced program in 2023 and beyond.

Performance Measure: C-11) Number of Bicyclist Fatalities (FARS)
Progress: In Progress
Program Area Level Report: The FFY 2020 target to reduce bicyclist fatalities 20% from the 2013-2017 average of 5-4 was not achieved. The 2016-2020 5-year moving average was 8. In 2020, bicyclist fatalities accounted for less than 3% of all traffic fatalities in the state. The state continues bicycle helmet programs but those are primarily focused on children. Data in Iowa identifies a need for the state to consider additional programming to target adult bicyclists.

Additional Performance Measure #1: Rural Traffic Safety/Rural Traffic Fatalities
Progress: In Progress (New)
Program Area Level Report: In FFY 2023, the State plans to re-implement the High Five Rural Traffic Safety Program to target five rural counties with lower belt usage rates and/or a higher number of unbelted fatalities. This program was first implemented in Iowa in 2014 and was successful at that time. In addition to the seat belt focus, the program is intended to be multi-disciplinary and involve an engineering component with the inclusion of road safety audits

Additional Performance Measure #2: Distracted Driving
Progress: In Progress (New)
Program Area Level Report: The GTSB does not currently fund any specific distracted driving programs except for some communication campaigns and social media posts. For the past several years, hands-free legislation was introduced in the state legislature but has not passed.

Performance Measure: B-1) Observational Seat Belt Use for Passenger Vehicles, Front Seat Outboard Occupants (Annual Survey)
Progress: In Progress
Program Area Level Report: Iowa continues to maintain a high seat belt usage rate (92.66% in 2021). In spite of the usage rate as calculated from the annual survey, the state recognized there is still ample room to continue our efforts especially in rural areas of the state where belt use is considerably lower. In FFY 2023, the State plans to re-implement the High Five Rural Traffic Safety Program to target five rural counties with lower belt usage rates and/or a higher number of unbelted fatalities. This program was first implemented in Iowa in 2014 and was successful at that time. In addition to the seat belt focus, the program is intended to be multi-disciplinary and involve an engineering component with the inclusion of road safety audits.

Performance Plan

		BASE YEARS				
PERFORMANCE PLAN CHART – 2023 Highway Safety Plan		2016	2017	2018	2019	2020
C-1 Traffic Fatalities	FARS	402	330	319	336	337
	5-Year Rolling Average	345 (2012-2016)	338 (2013-2017)	339 (2014-2018)	342 (2015-2019)	346 (2016-2020)
	Reduce total fatalities to 351.4 (2019-2023 rolling average).					
C-2 Serious Injuries in Traffic Crashes		2016	2017	2018	2019	2020
	State	1,513	1,480	1,312	1,349	1,308
	5-Year Rolling Average	1,536 (2012-2016)	1,506.2 (2013-2017)	1,459.6 (2014-2018)	1,425.0 (2015-2019)	1,392.4 (2016-2020)
	Reduce serious traffic injuries to 1,398.2 (2019-2023 rolling average).					
C-3 Fatalities/100M VMT		2016	2017	2018	2019	2020
	FARS	1.56	1.28	1.29	1.22	1.34
	5-Year Rolling Average	1.07 (2012-2016)	1.04 (2013-2017)	1.03 (2014-2018)	1.02 (2015-2019)	1.06 (2016-2020)
	Reduce fatalities per 100M VMT to 1.073 (2019-2023 rolling average).					
C-4 Unrestrained Passenger Vehicle Occupant Fatalities, All Seat Positions		2016	2017	2018	2019	2020
	FARS	109	97	78	93	91
	5-Year Rolling Average	103 (2012-2016)	100 (2013-2017)	95 (2014-2018)	96 (2015-2019)	94 (2016-2020)
	Reduce unrestrained passenger vehicle occupant fatalities 2.13% from the 2016-2020 average of 94 to 92 (2019-2023 average) by December 31, 2023.					
C-5 Alcohol-Impaired Driving Fatalities		2016	2017	2018	2019	2020
	FARS	108	90	90	102	113
	5-Year Rolling Average	95 (2012-2016)	94 (2013-2017)	91 (2014-2018)	94 (2015-2019)	101 (2016-2020)
	Reduce alcohol-impaired driving fatalities 1.98% from the 2016-2020 average of 101 to 99 (2019-2023 average) by December 31, 2023.					
C-6 Speeding-Related Fatalities		2016	2017	2018	2019	2020
	FARS	94	70	62	69	61
	5-Year Rolling Average	62 (2012-2016)	62 (2013-2017)	64 (2014-2018)	69 (2015-2019)	71 (2016-2020)
	Reduce speeding-related fatalities 4.17% from the 2016-2020 average of 72 to 69 (2019-2023 average) by December 31, 2023.					
C-7 Motorcyclist Fatalities		2016	2017	2018	2019	2020
	FARS	60	49	43	44	64
	5-Year Rolling Average	51 (2012-2016)	49 (2013-2017)	49 (2014-2018)	47 (2015-2019)	52 (2016-2020)

	Reduce motorcyclist fatalities 3.85% from the 2016-2020 average of 52 to 50 (2019-2023 average) by December 31, 2023.					
C-8 Unhelmeted Motorcyclist Fatalities		2016	2017	2018	2019	2020
	FARS	47	34	29	35	43
	5-Year Rolling Average	39 (2012-2016)	36 (2013-2017)	36 (2014-2018)	35 (2015-2019)	38 (2016-2020)
	Reduce unhelmeted motorcyclist fatalities 2.63% from the 2016-2020 average of 38 to 37 (2019-2023 average) by December 31, 2023.					
C-9 Drivers Age 20 or Younger Involved in Fatal Crashes		2016	2017	2018	2019	2020
	FARS	53	49	44	33	50
	5-Year Rolling Average	48 (2012-2016)	48 (2013-2017)	50 (2014-2018)	46 (2015-2019)	46 (2016-2020)
	Reduce the number of drivers age 20 or younger involved in fatal crashes 2.17% from the 2016-2020 average of 46 to 45 (2019-2023 average) by December 31, 2023.					
C-10 Pedestrian Fatalities		2016	2017	2018	2019	2020
	FARS	22	23	22	21	27
	5-Year Rolling Average	21 (2012-2016)	22 (2013-2017)	22 (2014-2018)	23 (2015-2019)	23 (2016-2020)
	Reduce pedestrian fatalities 4.35% from the 2016-2020 average of 23 to 22 (2019-2023 average) by December 31, 2023.					
C-11 Bicyclist Fatalities		2016	2017	2018	2019	2020
	FARS	8	5	7	9	10
	5-Year Rolling Average	5 (2012-2016)	5 (2013-2017)	6 (2014-2018)	7 (2015-2019)	8 (2016-2020)
	Reduce bicyclist fatalities 12.5% from the 2016-2020 average of 8 to 7 (2019-2023 average) by December 31, 2023.					
Additional Performance Measure #1: Rural Traffic Safety/Rural Traffic Fatalities		2016	2017	2018	2019	2020
	FARS	306	254	255	244	239
	5-Year Rolling Average	267 (2012-2016)	260 (2013-2017)	260 (2014-2018)	258 (2015-2019)	260 (2016-2020)
	Decrease the number of rural traffic fatalities 1.92% from the 2016-2020 average of 260 to 255 (2019-2-23 average) by December 31, 2023.					
Additional Performance Measure #2: Distracted Driving		2017	2018	2019	2020	2021
	State	10	9	3	4	11
	5-Year Rolling Average	9.4 (2013-2017)	10.6 (2014-2018)	9.8 (2015-2019)	7.8 (2016-2020)	7.4 (2017-2021)
	Decrease the number of distracted fatalities 18.92% from the 2017-2021 average of 7.4 to 6 (2019-2023 average) by December 31, 2023.					
B-1 Observed Seatbelt Use for Passenger Vehicle, Front Seat Outboard Occupants (State Survey)		2016	2017	2018	2019	2020
	State Annual	91.4	93.9	94.6	95.2	92.66

	Increase the observed seat belt use for passenger vehicles 0.09% from the 2021 observational survey rate of 92.66% to 92.75% by the 2023 survey.

*State HSP performance targets are identical to the State DOT targets for common performance measures (fatality, fatality rate, and serious injuries) reported in the HSIP Annual Report.

Performance Measure		Target Period	Target Start Year	Target End Year	Target Value
C-1	Number of traffic fatalities (FARS)*	5 Year	2019	2023	351.4
C-2	Number of serious injuries in traffic crashes (State crash data files)*	5 Year	2019	2023	1,398.2
C-3	Fatalities/100M VMT*	5 Year	2019	2023	1.073
C-4	Number of unrestrained passenger vehicle occupant fatalities, all seat positions (FARS)	5 Year	2019	2023	92
C-5	Number of fatalities in crashes involving a driver or motorcycle operator with a BAC of .08 and above (FARS)	5 Year	2019	2023	99
C-6	Number of speeding-related fatalities (FARS)	5 Year	2019	2023	69
C-7	Number of motorcyclist fatalities (FARS)	5 Year	2019	2023	50
C-8	Number of unhelmeted motorcyclist fatalities (FARS)	5 Year	2019	2023	37
C-9	Number of drivers age 20 or younger involved in fatal crashes (FARS)	5 Year	2019	2023	45
C-10	Number of pedestrian fatalities (FARS)	5 Year	2019	2023	22
C-11	Number of bicyclist fatalities (FARS)	5 Year	2019	2023	7
Additional Performance Measure #1: Rural Traffic Safety/Rural Traffic Fatalities		5-Year	2019	2023	255
Additional Performance Measure #2: Distracted Driving		5-Year	2019	2023	6
B-1	Observed seat belt use for passenger vehicles, front seat outboard occupants (Annual Survey)	Annual	2023	2023	92.75%

*State HSP performance targets are identical to the State DOT targets for common performance measures (fatality, fatality rate, and serious injuries) reported in the HSIP Annual Report.

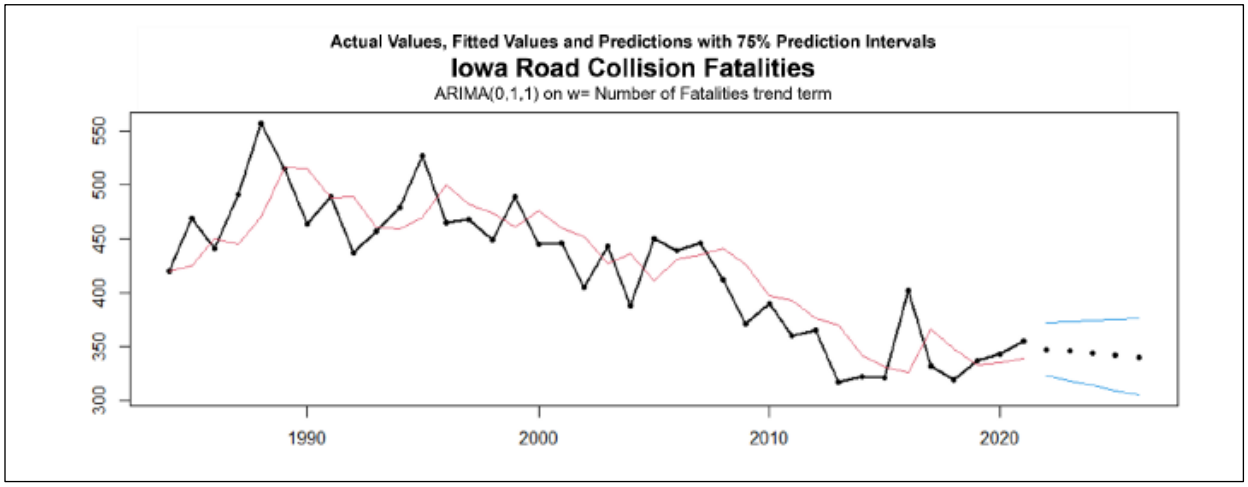
Performance Measures

C-1) Number of Traffic Fatalities

Performance Target Details

Performance Target	Target Metric Type	Target Value	Target Period	Target Start Year
C-1) Number of Traffic Fatalities (FARS)	Numeric	351.4	5 Year	2019

The graph below shows the historical serious (black line), the integrated moving average (IMA) model (red line), the model's forecast values (black dots), and a set of prediction interval (PI) bounds (blue lines). The blue lines shown in this figure correspond to the 75% confidence level used for targets. The table shows the model's forecast of fatalities for 2022 and 2023 and the upper prediction interval value at different confidence levels.



Forecast road fatalities and upper prediction values at selected probability levels

Year	Forecast	70%	75%	80%	85%	97.5%
2022	348	367	372	378	385	418
2023	346	368	374	380	388	426

To be 75% confident of the 2023 target value, the five-year rolling average target for 2019-2023 would be set averaging the forecast value of 348 fatalities for 2022 and the 75% PI value of 374 as the 2023 value along with the actual fatalities for 2019, 2020, and 2021.

In March 2022, the Iowa DOT began the process of reviewing data to set performance targets for the five safety performance measures required by FHWA in 23 CFR 490. The five required measures are: 1) Number of fatalities; 2) Rate of fatalities per 100 million vehicle miles traveled (VMT); 3) Number of serious injuries; 4) Rate of serious injuries per 100 million VMT; and 5) Number of non-motorized fatalities and non-motorized serious injuries. These targets must be set as five-year rolling averages for 2019-2023 and will be submitted as part of the State's Highway Safety Improvement Program (HSIP) annual report. The State HSP performance targets are identical to the State DOT targets for common performance measures (fatality, fatality rate, and serious injury) reported in the HSIP annual report as coordinated through the State SHSP. Because of the relatively short-term nature of the targets, the methodology being utilized focuses on historical information and creates a forecast based on trends. This approach relies on the prediction intervals around the trend model forecast to inform a "risk-based" target setting method.

A prediction interval is defined as: "In statistical inference, specifically predictive inference, a prediction interval is an estimate of an interval in which future observations will fall, with a certain probability, given what has already been observed."2 A prediction interval approach enables a focus of the acceptable risk of meeting, or failing to meet a target, which allows stakeholders at all levels of the organization to understand the targets in better context. Since 2017, the Safety Targets Working Group has annually evaluated several prediction intervals and continued to recommend a prediction interval of 75%, meaning that there would be 75% confidence that the actual number of fatalities and injuries would be lower than the targets. Management agreed with the use of a 75% confidence level, and it is being used again in 2022 for target setting.

For each measure, a times series model was developed. An integrated moving (IMA) model has been used since 2017. The prior graph helps illustrate the level of risk associated with various confidence levels, as well as the fact the higher confidence levels lead to more conservative targets.

The safety data used in the forecast can be obtained from the Iowa Crash Analysis Tool (ICAT) and daily fatality counts from the following websites:

ICAT: https://icat.iowadot.gov

Fatality Report: https://www.iowadot.gov/mvd/states/daily.pdf

The aforementioned target is statistically derived as required by statute, but Iowa's current overall aspirational goal is to reduce traffic fatalities to under 300 annually.

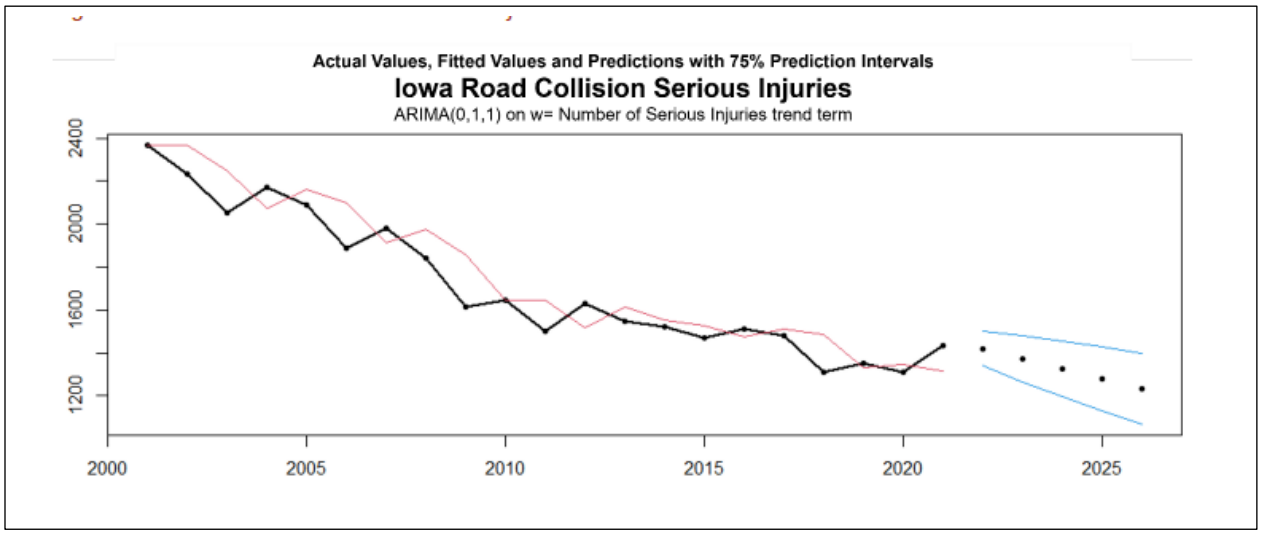
[2] http://en.wikipedia.org/wiki/Prediction Interval, 2019-May-02

C-2) Number of Serious Injuries in Traffic Crashes

Performance Target Details

Performance Target	Target Metric Type	Target Value	Target Period	Target Start Year
C-2) Number of Serious Injuries in Traffic Crashes	Numeric	1,398.2	5 Year	2019

The graph below shows the historical (black line), the model (red Line), the model's forecast values (black dots), and a set of prediction interval bounds (blue lines) for the number of serious injuries resulting from collisions. In this case, due to a discontinuity between 2000 and 2001, the model is contracted using only data from 2001 and later.



Year	Forecast	70%	75%	80%	85%	97.5%
2022	1,420	1,482	1,500	1,520	1,544	1,654
2023	1,373	1,457	1,481	1,508	1,539	1,686

To be 75% confident of the 2023 target value, the five-year rolling average target for 2019-2023 would be set by averaging the forecast value of 1,420 for 2022 and the 75% PI value of 1,481 for 2023 along with the actual serious injuries for 2019, 2020, and 2021.

In March 2022, the Iowa DOT began the process of reviewing data to set performance targets for the five safety performance measures required by FHWA in 23 CFR 490. The five required measures are: 1) Number of fatalities; 2) Rate of fatalities per 100 million vehicle miles traveled (VMT); 3) Number of serious injuries; 4) Rate of serious injuries per 100 million VMT; and 5) Number of non-motorized fatalities and non-motorized serious injuries. These targets must be set as five-year rolling averages for 2019-2023 and will be submitted as part of the State's Highway Safety Improvement Program (HSIP) annual report. The State HSP performance targets are identical to the State DOT targets for common performance measures (fatality, fatality rate, and serious injury) reported in the HSIP annual report as coordinated through the State SHSP. Because of the relatively short-term nature of the targets, the methodology being utilized focuses on historical information and creates a forecast based on trends. This approach relies on the prediction intervals around the trend model forecast to inform a "risk-based" target setting method.

A prediction interval is defined as: "In statistical inference, specifically predictive inference, a prediction interval is an estimate of an interval in which future observations will fall, with a certain probability, given what has already been observed."3 A prediction interval approach enables a focus of the acceptable risk of meeting, or failing to meet a target, which allows stakeholders at all levels of the organization to understand the targets in better context. Since 2017, the Safety Targets Working Group has annually evaluated several prediction intervals and continued to recommend a prediction interval of 75%, meaning that there would be 75% confidence that the actual number of fatalities and injuries would be lower than the targets. Management agreed with the use of a 75% confidence level, and is being used again in 2022 for target setting.

For each measure, a times series model was develop. An integrated moving (IMA) model has been used since 2017. The above diagram helps illustrate the level of risk associated with various confidence levels, as well as the fact the higher confidence levels lead to more conservative targets.

The safety data used in the forecast can be obtained from the Iowa Crash Analysis Tool (ICAT) and daily fatality counts from the following websites:

ICAT: https://icat.iowadot.gov

Fatality Report: https://www.iowadot.gov/mvd/states/daily.pdf

[3] http://en.wikipedia.org/wiki/Prediction Interval, 2019-May-02

C-3) Fatalities/100M VMT

Performance Target Details

Performance Target	Target Metric Type	Target Value	Target Period	Target Start Year
C-3) Fatalities/100M VMT	Numeric	1.073	5 Year	2019

Performance Target Justification

This measure is a rate conversion, using the forecast developed for fatalities and the estimated VMT for the forecast period. The forecast values of VMT were provided by the Iowa Department of Transportation System Planning Bureau using their preferred methodology, linear ETS, which is an exponential smoothing approach. The linear ETS method provides the most reasonable results and adjusts for seasonality or fluctuations in the data. In 2021, given the uncertainties about a rebound from the dip in VMT during 2020, a linear forecast was used that resulted in a more conservative VMT forecast. Since that time, traffic laws continue to rebound, and is currently slightly above the 2019 level. The linear ETS methodology is being used again for forecasting, but manual adjustments were made to forecast for 2022 and 2023 to show slight positive growth (0.25%) in those years. The annual VMT forecast by this method for 2023 is expected to be 33.6 billion (33,551,000,000).

Year	VMT Forecast (x1M)	Forecast Fatality Rate	70%	75%	80%	85%	97.5%
2022	33,4676.00	1.040	1.097	1.112	1.129	1.150	1.249
2023	33,551.00	1.031	1.097	1.115	1.133	1.156	1.270

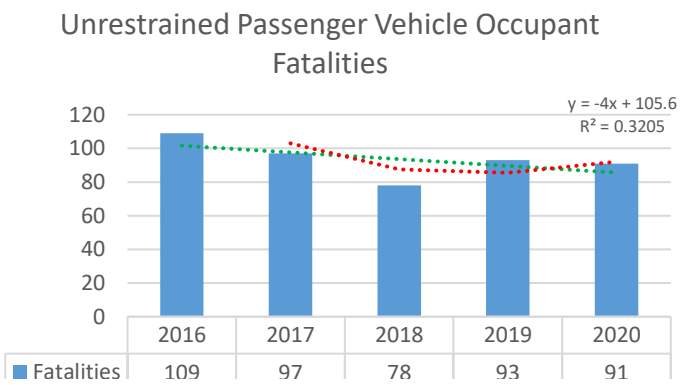
To be 75% confident on the 2023 target value, the five-year rolling average target for 2019-2023 would be set by averaging the forecast value of 1.040 fatalities per hundred million VMT for 2022 and the 75% PI value of 1.115 for 2023 along with the actual fatality rates for 2019, 2020, and 2021.

C-4) Occupant Protection/Unrestrained Passenger Vehicle Occupant Fatalities

Performance Target Details

Performance Target	Target Metric Type	Target Value	Target Period	Target Start Year
C-4) Number of Unrestrained Passenger/Vehicle Occupant Fatalities, All Seat Positions (FARS)	Percentage	92	5 Year	2019

FFY 2023 Target:
To reduce unrestrained passenger vehicle occupant fatalities 2.13% from the 2016-2020 average of 94 to 92 (2019-2023 average) by December 31, 2023.



Source: FARS

Baseline	Recent Year	% Change
2011-2015 Average = 105	2018 = 78	**-25.71%**
2012-2016 Average = 103	2019 = 93	**-9.71%**
2013-2017 Average = 100	2020 = 91	**-9.00%**
Average Percentage Change = -14.81%		

The average percent change from the most recent three years (2018-2020) in relation to a 5-year baseline period has been a decrease of 14.81%. If a decrease of this magnitude is realized through 2023, compared to a baseline of the average annual fatality count for 2016-2020 (94), the fatality count expected for 2023 would be approximately 81. The 2020 target to reduce unrestrained vehicle occupant fatalities 3.00% from the 2013-2017 of 100 to 97 was achieved.

The GTSB has set the FFY 2023 target to reduce unrestrained passenger vehicle occupant fatalities 2.13% from the 2016-2020 average of 94 to 92 (2019-2023 average) by December 31, 2023.

Performance Target Justification

In spite of continued enforcement and education efforts, Iowa's observational seat belt usage rate dropped 2.54% from 95.2% in 2020 to 92.66% in 2021. State preliminary data for 2021, as maintained by the Iowa Department of Transportation, indicates 39.66% of passenger vehicle occupant fatalities were unbelted in 2021. An additional 11.39% were recorded as "unknown" for belt usage by the reporting officer.

Despite the official seat belt usage rate of 92.66%, it is known there are still many areas throughout the state (primarily rural) where usage rates are significantly lower. Some results of surveys conducted by sTEP funded agencies in 2021 recorded usage rates in the 60 and 70% range.

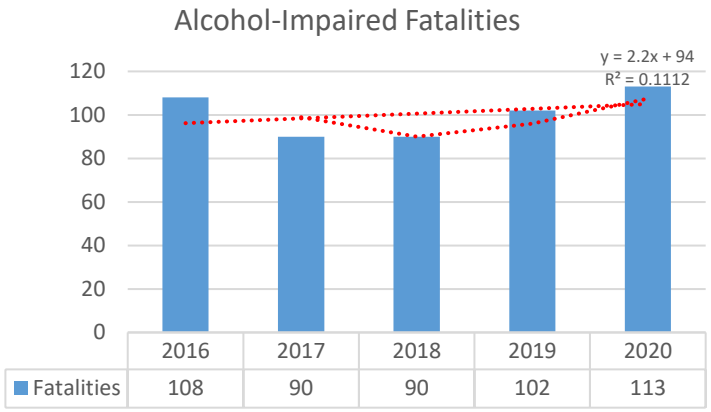
Iowa launched the High Five Rural Traffic Safety Project in 2014. The first 3 years of the project focused on increasing seat belt usage in rural counties with a high number of fatalities and lower observational belt usage. The last 2 years the focus was impaired driving. Iowa will be re-implementing the High 5 program in FFY 2023 with the emphasis on seat belt usage.

C-5) Alcohol-Impaired Driving Fatalities/Impaired Driving

Performance Target Details

Performance Target	Target Metric Type	Target Value	Target Period	Target Start Year
C-5) Alcohol-Impaired Driving Fatalities/Impaired Driving	Percentage	99	5 Year	2019

FFY 2023 Target:
Reduce alcohol-impaired driving fatalities 1.98% from the 2016-2020 average of 101 to 99 (2019-2023 average) by December 31, 2023.



Source: FARS

Baseline	Recent Year	% Change
2011-2015 Average = 90	2018 = 90	**0.00%**
2012-2016 Average = 95	2019 = 102	**7.37%**
2013-2017 Average = 94	2020 = 113	**20.21%**
Average Percentage Change = 9.19%		

The average percentage change from the most recent three years (2018-2020) in relation to a 5-year baseline period has been an increase of 9.19%. If an increase of this magnitude is realized through 2023, compared to a baseline of the average annual fatality count for 2016-2020 (101), the fatality count expected for 2023 would be approximately 110. The 2020 target to reduce alcohol-impaired driving fatalities 2.36% from the 2013-2017 average of 93.2 to 91 was not achieved.

The GTSB has set the FFY 2023 target to reduce alcohol-impaired driving fatalities 1.98% from the 2016-2020 average of 101 to 99 (2019-2023 average) by December 31, 2023.

Performance Target Justification

The State acknowledges that impaired fatalities and serious injuries are on the rise. In the spring of 2022, the GTSB hosted and NHTSA facilitated Impaired Driving Assessment. The assessment provided a thorough look at all aspects of the State's impaired driving program, including programs which the GTSB does not currently partner with. The recommendations will help foster additional partnerships as steps are taken to initiate and/or build upon current programs. The GTSB has made initial contact with Traffic Injury Research Foundation (TIRF) through NHTSA's cooperative agreement to further analyze and implement recommendations.

After data analysis and recognizing upward fatality trends, the GTSB greatly expanded their media exposure managed through ZLR Ignition during FFY 2022. This included expanding the age range of the target audience.

Approximately 50% of all media messaging planned for in FFY 2023 will provide for messaging in the area of impaired driving.

As a way to increase the number of DREs in the State, two DRE schools are being planned for FFY 2023.

In 2022, the Iowa State Patrol created a Traffic Enforcement Advisory Team consisting of a Sergeant and Trooper from each district. The team reviews data and implements programs in their respective districts. Multi-agency events are encouraged. It is anticipated these advisory teams will continue into 2023 and will focus on impairment issues.

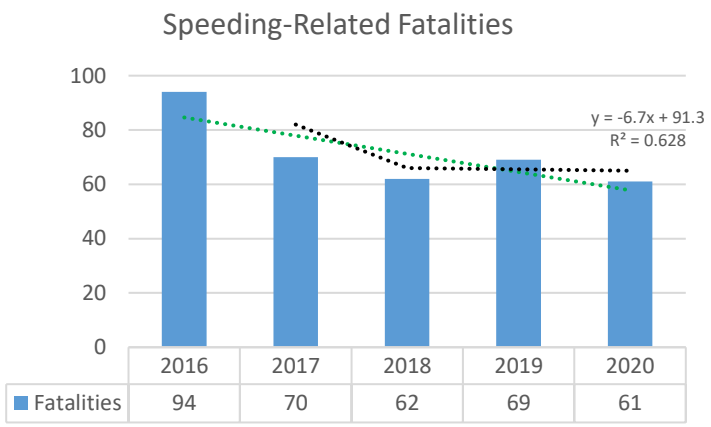
During FFY 2023, Iowa plans to participate in NHTSA Region 7 activities focused on 420. 420-related enforcement has been identified as one of the specific sTEP waves.

C-6) Speeding-Related Fatalities

Performance Target Details

Performance Target	Target Metric Type	Target Value	Target Period	Target Start Year
C-6) Number of Speeding-Related Fatalities (FARS)	Percentage	69	5 Year	2019

FFY 2023 Target
Reduce speeding-related fatalities 4.17% from the 2016-2020 average of 72 to 69 (2019-2023 average) by December 31, 2023.



Source: FARS

Baseline	Recent Year	% Change
2011-2015 Average = 56	2018 = 62	10.71%
2012-2016 Average = 62	2019 = 69	11.29%
2013-2017 Average = 62	2020 = 61	-1.61%
Average Percentage Change = 6.80%		

The average percent change from the most recent three years (2018-2020) in relation to a 5-year baseline period has been an increase of 6.80%. If an increase of this magnitude is realized through 2023, compared to a baseline of the average annual fatality count for 2016-2020 (72), the fatality count expected for 2023 would be approximately 76. The 2020 target was to maintain the 2017 annual number of speeding-related fatalities to no more than 70. Although the annual number of speeding-related fatalities for 2020 was 61, the year is considered an anomaly due to the COVID-19 pandemic. During mid-2020, Iowa, along with other states saw an increase in speed issues amidst COVID-19. Therefore, the GTSB believes a more accurate assessment of results would be the 5-year moving average (2016-2020) which was 71.

The GTSB has set the FFY 2023 target to reduce speeding-related fatalities 4.17% from the 2016-2020 average of 72 to 69 (2019-2023) average by December 31, 2023.

Performance Target Justification

Although the 5-year linear trend line is in a downward trajectory, addressing speed remains a priority in the State. In FFY 2023, the State will identify corridors with the highest crash frequency due to speed and apply targeted enforcement efforts on those roadways.

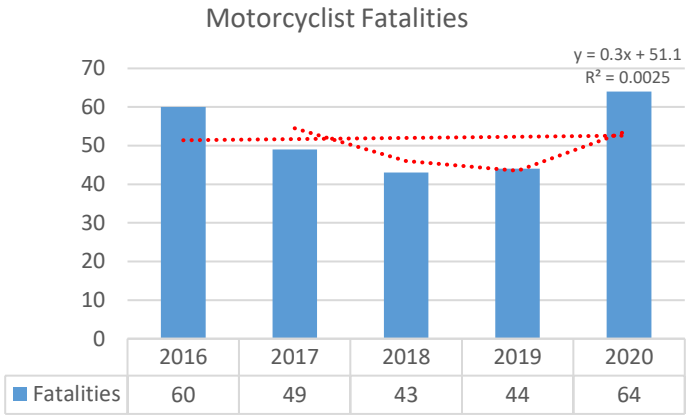
In 2022, the Iowa State Patrol created a Traffic Enforcement Advisory Team consisting of a Sergeant and Trooper from each district. The team reviews data and implements programs in their respective districts. Multi-agency events are encouraged. It is anticipated these advisory teams will continue into 2023 and will focus on speeding related issues.

C-7) Number of Motorcyclist Fatalities

Performance Target Details

Performance Target	Target Metric Type	Target Value	Target Period	Target Start Year
C-7) Number of Motorcyclist Fatalities (FARS)	Percentage	50	5-Year	2019

FFY 2023 Target
Reduce motorcyclist fatalities 3.85% from the 2016-2020 average of 52 to 50 (2019-2023 average) by December 31, 2023.



Source: FARS

Baseline	Recent Year	% Change
2011-2015 Average = 46	2018 = 43	-6.52%
2012-2016 Average = 51	2019 = 44	-13.73%
2013-2017 Average = 49	2020 = 64	30.61%
Average Percentage Change = 3.45%		

The average percentage change from the most recent three years (2018-2020) in relation to a 5-year baseline period has been an increase of 3.45%. If an increase of this magnitude is realized through 2023, compared to a baseline of the average annual fatality count for 2016-2020 (52), the fatality count expected for 2023 would be approximately 53. The 2020 target to reduce motorcyclist fatalities 2.04% from the 2013-2017 average of 49 to 48 was not achieved.

The GTSB has set the FFY 2023 target to reduce motorcyclist fatalities 3.85% from the 2016-2020 average of 52 to 50 (2019-2023 average) by December 31, 2023.

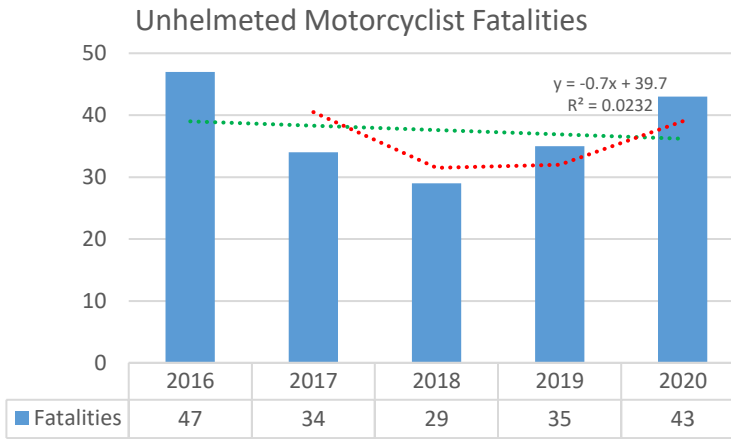
Performance Target Justification.
In FFY 2023, funding will support Motorcycle Rider Education programs coordinated by the Iowa Department of Transportation. Funding will also support media and awareness efforts to remind motorists to be cognizant of motorcyclists on the roadways. Research also continues at the University of Iowa, Injury Prevention Research Center in the area of vulnerable road users.

C-8) Number of Unhelmeted Motorcyclist Fatalities

Performance Target Details

Performance Target	Target Metric Type	Target Value	Target Period	Target Start Year
C-8) Number of Unhelmeted Motorcyclist Fatalities (FARS)	Percentage	37	5 Year	2019

FFY 2023 Target
Reduce unhelmeted motorcyclist fatalities 2.63% from the 2016-2020 average of 38 to 37 (2019-2023 average) by December 31, 2023.



Source: FARS

Baseline	Recent Year	% Change
2011-2015 Average = 36	2018 = 29	-19.44%
2012-2016 Average = 39	2019 = 35	-10.26%
2013-2017 Average = 36	2020 = 43	19.44%
Average Percentage Change = -3.42%		

The average percentage change from the most recent three years (2018-2020) in relation to a 5-year baseline period has been a decrease of 3.42%. If a decrease of this magnitude is realized through 2023, compared to a baseline of the average annual fatality count for 2016-2020 (38), the fatality count expected for 2023 would be approximately 37. The 2020 target to reduce unhelmeted motorcyclist fatalities 2.04% from the 2013-2017 average of 49 to 48 was not achieved.

The GTSB has set the FFY 2023 target to reduce unhelmeted motorcyclist fatalities 2.63% from the 2016-2020 average of 38 to 37 (2019-2023 average) by December 31, 2023.

Performance Target Justification

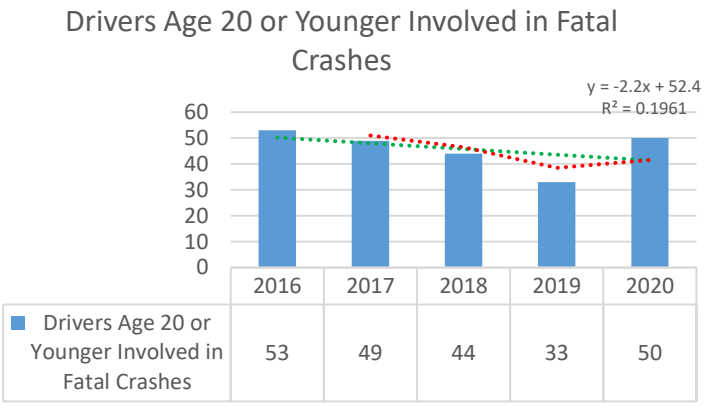
In FFY 2023, funding will support Motorcycle Rider Education programs coordinated by the Iowa Department of Transportation. Funding will also support media and awareness efforts to remind motorists to be cognizant of motorcyclists on the roadways. Research also continues at the University of Iowa, Injury Prevention Research Center in the area of vulnerable road users.

C-9) Number of Drivers Age 20 or Younger Involved in Fatal Crashes

Performance Target Details

Performance Target	Target Metric Type	Target Value	Target Period	Target Start Year
C-9) Number of Drivers Age 20 or Younger Involved in Fatal Crashes	Percentage	45	5 Year	2019

FFY 2023 Target
Reduce the number of drivers age 20 or younger involved in fatal crashes 2.17% from the 2016-2020 average of 46 to 45 (2019-2023 average) by December 31, 2023.



Source: FARS

Baseline	Recent Year	% Change
2011-2015 Average = 48	2018 = 44	-8.33%
2012-2016 Average = 48	2019 = 33	-31.25%
2013-2017 Average = 48	2020 = 50	4.17%
Average Percentage Change =-11.80%		

The average percentage change from the most recent three years (2018-2020) in relation to a 5-year baseline period has been a decrease of 11.80%. If a decrease of this magnitude is realized through 2023, compared to a baseline of the average annual fatality count for 2016-2020 (46), the fatality count expected for 2023 would be approximately 41. The 2020 target to reduce drivers age 20 or younger involved in fatal crashes 4.00% from the 2013-2017 average of 50 to 48 by December 31, 2021 was achieved.

The GTSB has set the FFY 2023 target to reduce the number of drivers age 20 or younger involved in fatal crashes 2.17% from the 2016-2020 average of 46 to 45 (2019-2023 average) by December 31, 2023.

Performance Target Justification

In FFY 2022, Iowa introduced the Seatbelts are for Everyone (S.A.F.E.) program. The GTSB will continue with S.A.F.E. in FFY 2023 and hopes to capitalize additional partnerships with law enforcement, regional coalitions, communities, schools and other traffic safety advocates through programming efforts.

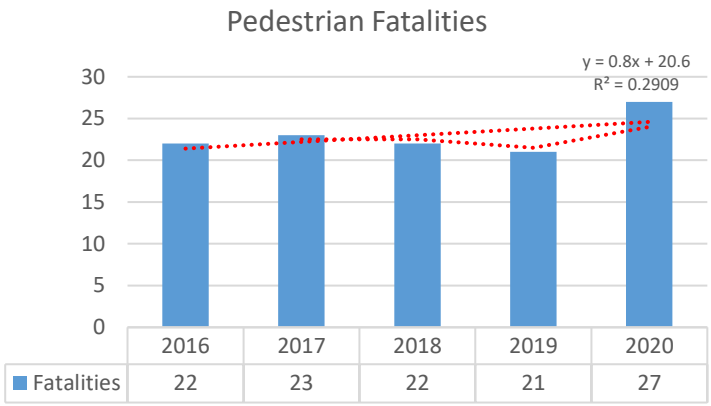
Iowa will also be re-implementing the "*Choices Matter*" program in 10 high schools throughout the state. All programs conducted through "*Choices Matter*" will be specific to impaired driving.

C-10) Number of Pedestrian Fatalities

Performance Target Details

Performance Target	Target Metric Type	Target Value	Target Period	Target Start Year
C-10) Number of Pedestrian Fatalities (FARS)	Percentage	22	5 Year	2019

FFY 2023 Target
Reduce pedestrian fatalities 4.35% from the 2016-2020 average of 23 to 22 (2019-2023 average) by December 31, 2023.



Source: FARS

Baseline	Recent Year	% Change
2011-2015 Average = 22	2018 = 22	0.00%
2012-2016 Average = 21	2019 = 21	0.00%
2013-2017 Average = 22	2020 = 27	22.73%
Average Percentage Change = 7.58%		

The average percentage change from the most recent three years (2018-2020) in relation to a 5 year baseline period has been an increase of 7.58%. If an increase of this magnitude is realized through 2023, compared to a baseline of the average annual fatality count for 2016-2020 (23), the fatality count expected for 2023 would be approximately 24. The 2020 target to reduce pedestrian fatalities 4.55% from the 2013-2017 average of 22 to 21 was not achieved.

The GTSB has set the FFY 2023 target to reduce pedestrian fatalities 4.35% from the 2016-2020 average of 23 to 22 (2019-2023 average) by December 31, 2023.

Performance Target Justification

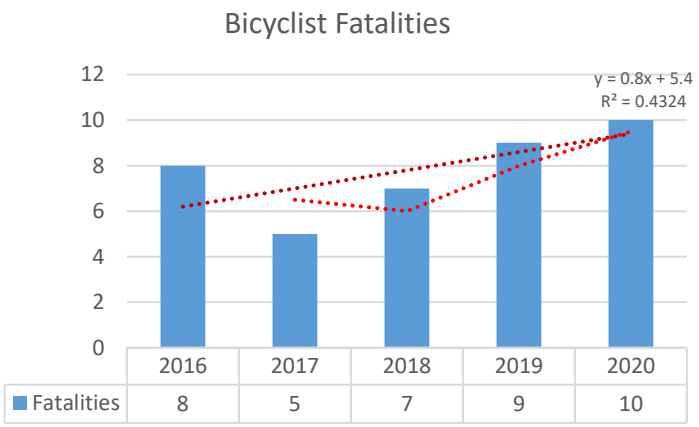
The State does not anticipate achieving the 2021 or 2022 performance targets for pedestrian fatalities. As seen in other states, Iowa is seeing a rise in pedestrian fatalities. The State implemented a speed-pedestrian project in 2021. The overall results, however have not shown the participation and outcomes that were projected. The State recognizes the continued need for pedestrian-related projects and will consider the development of an enhanced program in 2023 and beyond.

C-11) Number of Bicyclist Fatalities

Performance Target Details

Performance Target	Target Metric Type	Target Value	Target Period	Target Start Year
C-11) Number of Bicyclist Fatalities (FARS)	Percentage	7	5 Year	2019

FFY 2023 Target
Reduce bicyclist fatalities 12.5% from the 2016-2020 average of 8 to 7 (2019-2023 average) by December 31, 2023.



Source: FARS

Baseline	Recent Year	% Change
2011-2015 Average = 4	2018 = 7	75%
2012-2016 Average = 5	2019 = 9	80%
2013-2017 Average = 5	2020 = 10	100%
Average Percentage Change = 85%		

The average percentage change from the most recent three years (2018-2020) in relation to a 5-year baseline period has been an increase of 85%. If an increase of this magnitude is realized through 2023, compared to a baseline of the average fatality count for 2016-2020 (8), the fatality count expected for 2023 would be approximately 14. The 2020 target to reduce bicyclist fatalities 20% from the 2013-2017 average of 5 to 4 was not achieved.

The GTSB has set the FFY 2023 target to reduce bicyclist fatalities 12.5% from the 2016-2020 average of 8 to 7 by December 31, 2023.

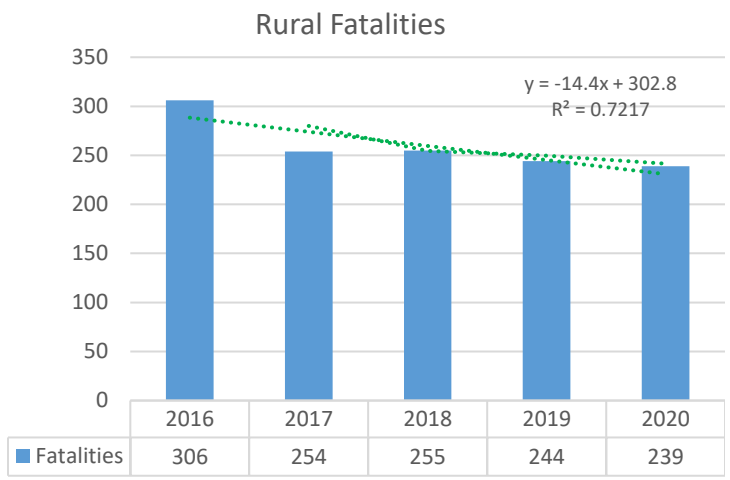
Performance Target Justification
Research will continue at the University of Iowa, Injury Prevention Research Center in the area of vulnerable road users.

Additional Performance Measure #1: Rural Traffic Safety/Rural Traffic Fatalities

Performance Target Details

Performance Target	Target Metric Type	Target Value	Target Period	Target Start Year
Additional Performance Measure #1: Rural Traffic Safety/Rural Traffic Fatalities	Percentage	255	5 Year	2019

2023 Target
Reduce the number of rural traffic fatalities 1.92% from the 2016-2020 average of 260 to 255 (2019-2023 average) by December 31, 2023.



Source: FARS

Baseline	Recent Year	% Change
2011-2015 Average = 265	2018 = 255	-3.77%
2012-2016 Average = 267	2019 = 244	-8.61%
2013-2017 Average = 260	2020 = 239	-8.07%
Average Percentage Change = -6.82%		

The average percentage from the most recent three years (2018-2020) in relation to a 5-year baseline period has been a decrease of 6.82%. If a decrease of this magnitude is realized through 2023, compared to a baseline of the average fatality count for 2016-2020 (260), the fatality count expected for 2023 would be approximately 243. FFY 2023 will be the first year the state has established a specific performance measure for rural fatalities.

Performance Target Justification

Although Iowa is starting to see a very slight decrease in the number of rural fatalities, the state has reconsidered the benefits of the High-Five Rural Traffic Safety Program that was originally implemented in 2014 and will be reinstating the program in FFY 2023.

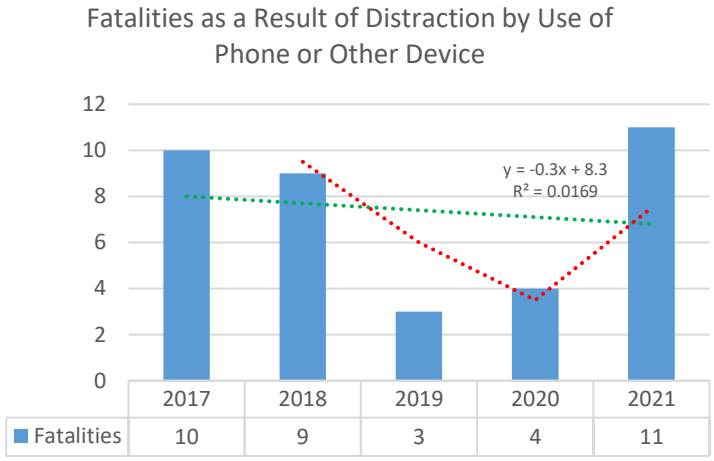
Rural driving awareness efforts will continue through the state. Messaging will be delivered primarily during Iowa's planting and harvesting seasons.

Additional Performance Measure #2: Distracted Driving

Performance Target Details

Performance Target	Target Metric Type	Target Value	Target Period	Target Start Year
Additional Performance Measure #1: Distracted Driving	Percentage	6	5 Year	2019

2023 Target
Reduce the number of distracted fatalities 18.92% from the 2017-2021 average of 7.4 to 6 (2019-2023 average) by December 31, 2023.



Source: FARS

Baseline	Recent Year	% Change
2012-2016 Average = 7.6	2019 = 3	-60.52%
2013-2017 Average = 9.4	2020 = 4	-57.45%
2014-2018 Average = 10.6	2021 = 11	3.77%
Average Percentage Change = -38.07%		

The average percentage from the most recent three years (2019-2021) in relation to a 5-year baseline has been a decrease of 38.07%. If a decrease of this magnitude is realized through 2023, compared to a baseline of the average fatality county for 2017-2021 (7.4), the fatality count expected for 2023 would be approximately 5.

FFY 2023 will be the first year the state has established a specific performance measure for distracted driving.

The GTSB has set the FFY 2023 target to reduce the number of distracted fatalities 18.92% from the 2017-2021 average of 7.4 to 6 (2019-2023 average) by December 31, 2023.

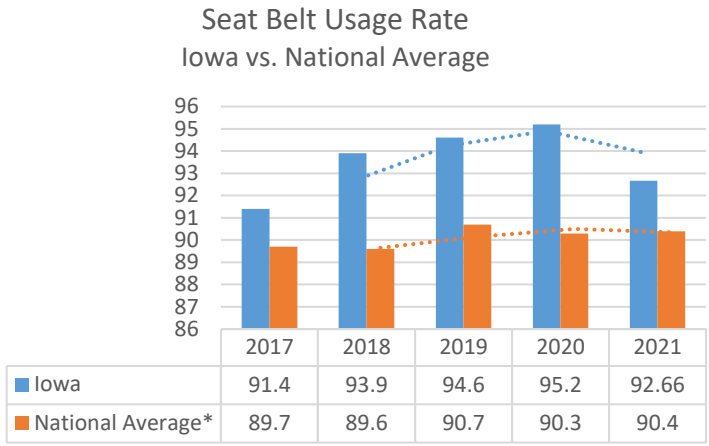
Performance Target Justification
The GTSB will work closely with ZLR Ignition for media and awareness campaigns specific to distracted driving.

B-1) Observed Seat Belt Use for Passenger Vehicles

Performance Target Details

Performance Target	Target Metric Type	Target Value	Target Period	Target Start Year
B-1) Observed Seat Belt Use for Passenger Vehicle, Front Seat Outboard Occupants (Annual Survey	Percentage	92.75%	5 year	2023

2023 Target
Increase the observed seat belt use rate for passenger vehicles 0.09% from the 2021 observational survey rate of 92.66% to 92.75% for the 2023 survey.



Source: 2021 Iowa Seat Belt Usage Survey, Iowa State University, Center for Survey Statistics & Methodology and NHTSA/National Center for Statistics and Analysis.

*In 2020 only 21 states and U.S. territories conducted seat belt use surveys due to the COVID-19 pandemic and the issued waiver of the Coronavirus Aid, Relief, and Economic Security (CARES) Act. Iowa conducted a 2020 survey and did not pursue a waiver.

Baseline	Recent Year	% Change
2012-2016 Average = 92.76%	2019 = 94.6%	1.98%
2013-2017 Average = 92.58%	2020 = 95.2%	2.83%
2014-2018 Average = 92.98%	2021 = 92.66%	-0.34%
Average Percentage Change = 1.49%		

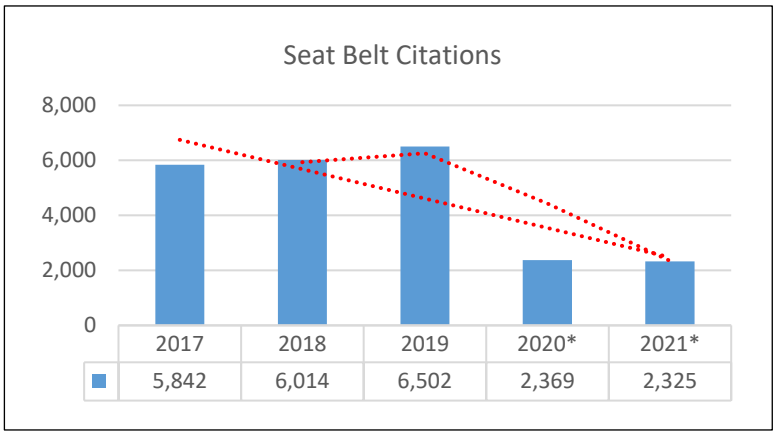
The average percent change from the most recent three years (2019-2021) in relation to a 5-year baseline period has been an increase of 1.49%. If an increase of this magnitude is realized through 2023 compared to a baseline of the average annual belt use rate for 2017-2021 (93.55%), the use rate expected for 2023 would be approximately 94.9%. The 2022 target was to increase the observed seat belt use for passenger vehicle .42% from the 2020 observational rate of 95.2% to 95.6%. The 2021 target was not met. The state's overall seat belt use rate decreased 2.05% from the 2020 observational survey rate of 95.2% to 92.66%.

The GTSB has set a goal to increase the observed seat bel use for passenger vehicles 0.09% from the 2021 observational survey rate of 92.66 to 92.75% for the 2023 survey.

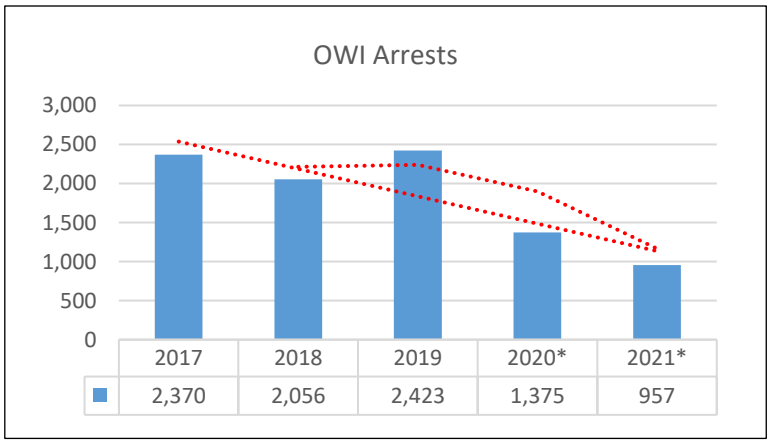
Performance Target Justification
Although Iowa has a high observed seat belt usage rate based upon the annual survey, the State still has significant work to do. In FFY 2023, the Iowa will be re-implement the High Five Rural Traffic Safety Program with an emphasis occupant protection in counties with low seat belt usage rates.

Grant Program Activity Reporting (FFY 2021 Annual Report)

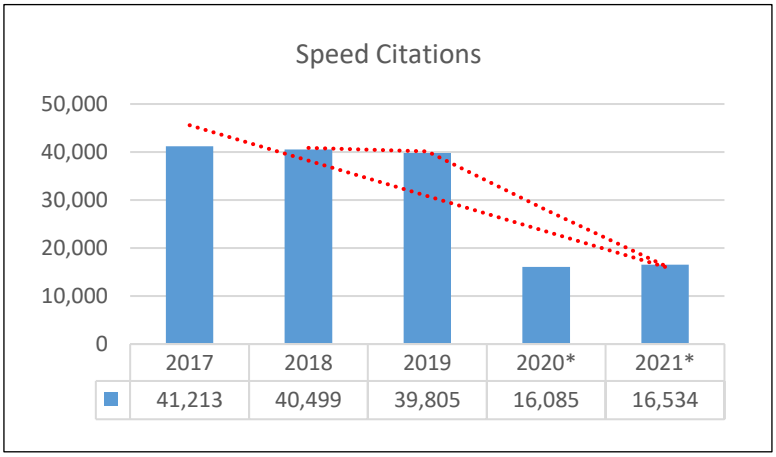
A-1) Number of seat belt citations issued during grant-funded enforcement activities.



A-2) Number of impaired driving arrests made during grant-funded enforcement activities.



A-3) Number of speeding citations issued during grant-funded activities.



Automated Traffic Enforcement – Biennial Survey

Beginning with Fiscal Year 2018, and biennially thereafter, the State of Iowa has conducted a survey and submitted results to the NHTSA Region 7 office. The survey has included information about all automated traffic enforcement systems installed in the state, including systems installed in political subdivisions.

As specified in FAST Act, the survey shall include:

1. A list of automated traffic enforcement systems in the state;
2. Adequate data to measure the transparency, accountability, and safety attributes of each automated traffic enforcement system, and
3. Comparison of each automated traffic enforcement system with the "Speed Enforcement Camera System Operational Guidelines" (DOT HS 810 916) and "Red Light Camera Systems Operational Guidelines" (FHWA-SA-05-002).

The most recent survey was submitted to the NHTSA Region 7 office on February 9, 2022.

Program Areas

Program Area: Awareness Survey

Description of Highway Safety Problems

Traffic safety surveys seek to obtain information from licensed drivers on their knowledge and opinions. Patterns of driver behavior are ongoing highway safety issues in Iowa and in every state. Iowa's awareness/attitude survey was formulated around the guidelines and recommendations set for by the NHTSA-GHSA Working Group.[4] The GTSB uses traffic safety survey data to guide its programs and efforts to increase safe driving behaviors among Iowa drivers.

Associated Performance Measures

Fiscal Year	Performance Measure Name	Target End Year	Target Period	Target Value
2023	C-1) Number of traffic fatalities	2023	5 Year	351.4
2023	C-2) Number of serious injuries in traffic crashes	2023	5 Year	1,398.2
2023	C-3) Fatalities/100M VMT	2023	5 Year	1.073
2023	C-4) Number of unrestrained passenger vehicle occupant fatalities (all seat positions)	2023	5 Year	92
2023	C-5) Number of fatalities in crashes involving a driver or motorcycle operator with a BAC of .08 and above	2023	5 Year	99
2023	C-6) Number of speeding-related fatalities	2023	5 Year	69
2023	B-1) Observed seat belt use for passenger vehicles, front set outboard occupants	2023	5 Year	92.75%

Countermeasure Strategies in Program Area

Annual Public Awareness Survey

Countermeasure Strategy: Annual Public Awareness Survey

Project Safety Impacts

A survey is a method for obtaining information from a group of people representing the population of interest and provides for an opportunity to obtain information from a fairly small sample of a population. Traffic safety surveys seek to obtain information on the public's knowledge, opinions and self-reported driving behavior. The GTSB will use the results to guide programs and efforts to increase safe driving among Iowa drivers.

Linkage Between Program Areas

The information is used to help assess current programs and to help guide modifications to existing programs in both enforcement and education/awareness.

The survey includes questions in the area of occupant protection, speed, impaired driving, distracted driving and drowsy driving.

Rationale

This survey has been conducted since 2010 except in FFY 2020 due to concerns around the COVID-19 pandemic. The GTSB has considered the results of this survey from a historical perspective and looked at how awareness has

[4] Traffic Tech-Technology, Transfer Series, "Public Awareness Survey Recommendations of the NHTSA-GHSA Working Group", No. 397, October 2010.

changed over time. The data collected will continue to be used to assess the public's awareness of traffic safety issues and identify opportunities to improve current traffic safety programs.

The methodology of the data collection ensures broad demographic diversity.

Planned Activities in Countermeasure Strategy

Unique Identifier	Planned Activity Name
23-402-M0OP, Task 00-00-10	Annual Public Awareness Survey

Planned Activity Name: Annual Public Awareness Survey					
Unique Identifier/Planned Activity Number: 23-402-M0OP, Task 00-00-10					
Intended Subrecipient: Iowa State University, Center for Survey Statistics and Methodology (CSSM)					
Primary Countermeasure Strategy ID: Annual Public Awareness					
Planned Description: Iowa State University, CSSM, will partner with the GTSB to conduct an Annual Public Awareness Survey. CSSM activities will include: • Confirm the availability of DMV drivers licensing offices in a minimum of five (5) communities and schedule survey dates in July or August • Verify survey questions with GTSB • Print paper surveys, print/procure other project materials • Train field interviewers • Travel to driver licensing offices and administer paper surveys to licensed drivers in the waiting areas • Records, code and key enter survey data from an estimated 600 to 900 surveys • Check data for accuracy, prepare response data tables and prepare project report • Deliver project data files and report to GTSB before September 30, 2023					
Funding Sources:					
Source Fiscal Year	**Funding Source ID**	**Eligible Use of Funds**	**Estimated Funding Amount**	**Match Amount**	**Local Benefit**
2020	FAST Act NHTSA 402	Occupant Protection	$11,047	$0.00	$0.00

Program Area: Communication (Media)

Description of Highway Safety Problems

The use of media and public outreach raise awareness and support for traffic safety initiatives. Media relations are invaluable toward the overall objectives to educate the public and to change driving behaviors and the overall traffic safety culture. The GTSB and other traffic safety partners through Iowa utilize various media/marketing strategies to disseminate traffic safety information including educational messages. "Education" is included as one of the five Es within the State Strategic Highway Safety Plan. Education plays a key role in helping the public determine what they should and should not do when driving. When educational efforts are effective, they can spur change by reinforcing positive driving behaviors

Since 2012, the GTSB has conducted a public awareness/attitude survey of licensed drivers with the objective and goal to focus on driving patterns and the effectiveness of media campaigns which are center on national mobilizations and high visibility efforts.

It is sometime hard to measure the effectiveness of media campaigns, despite the reporting of exposure, reach, etc. Reach is defined as the percentage of people seeing or hearing the message within a defined target audience. Frequency is the number of times each person saw or heard the message. Engagement describes the number of people who interacted with the campaign through behaviors such as clicking the "Like" button, leaving a comment or visiting the campaign's website.

Measuring campaigns by the metrics of reach, frequency, and engagement, however, does not determine if the messaging indeed changed the public's driving behavior or had any impact. Another mechanism the state utilizes to measure the impact of messaging are surveys. Since 2012, the GTSB has conducted a public awareness/attitude survey of licensed drivers focused on driving patterns and the effectiveness of media campaigns which are centered on national mobilizations and high visibility efforts. In the fall of 2021, the GTSB started to analyze the results of the awareness survey through a trend analysis; not just on an annual basis.

After data analysis and recognizing upward fatality trends, the GTSB greatly expanded their media exposure managed through ZLR Ignition during FFY 2022. This included expanding the age range of the target audience. The majority of the messaging was in the area of impaired driving.

Associated Performance Measures

Fiscal Year	Performance Measure Name	Target End Year	Target Period	Target Value
2023	C-1) Number of traffic fatalities	2023	5 Year	351.4
2023	C-3) Fatalities/100M VMT	2023	5 Year	1.073
2023	C-4) Number of unrestrained passenger vehicle occupant fatalities, all seat positions	2023	5 Year	92
2023	C-5) Number of fatalities in crashes involving a driver or motorcycle operator with a BAC of .08 and above	2023	5 Year	99
2023	C-6) Number of speeding-related fatalities	2023	5 Year	69
2023	C-7) Number of motorcyclist fatalities	2023	5 Year	50
2023	C-8) Number of unhelmeted motorcyclist fatalities	2023	5 Year	37
2023	C-9) Number of drivers age 20 or younger involved in fatal crashes	2023	5 Year	45
2023	C-10) Number of pedestrian fatalities	2023	5 Year	22
2023	C-11) Number of bicyclist fatalities	2023	5 Year	7
2023	Additional Performance Measure #1: Rural Traffic Safety/Rural Traffic Fatalities	2023	5 Year	255

2023	Additional Performance Measure #2: Distracted Driving	2023	5 Year	6
2023	B-1) Observed seat belt use for passenger vehicles, front seat outboard occupants	2023	Annual	92.75%

Countermeasure Strategies in Program Area

Communication Campaign

Countermeasure Strategy: Communication Campaign

Project Safety Impacts

Media relations are invaluable toward the overall objectives to educate the public and to change driving behaviors. The State of Iowa utilizes communication campaigns by delivering traffic safety messages at different venues. This approach allows for various audiences to see and hear messaging. A wide media mix provides public awareness to traffic safety issues with the ultimate goal of changing driving behaviors which in turn will reduce fatalities and serious injuries on Iowa roadways.

Different strategies will be used to deliver traffic safety messages and to educate the general public. A variety of venues will provide signage, web banners, radio spots, and other media throughout the state to provide awareness primarily in the areas of safety belt usage, impaired driving, distracted driving, motorcycles, and speed. Facebook and Twitter postings will also be used to raise awareness and change driving behaviors. Social media allows for the integration of technology, social interaction and communication in real time. Social media also allows for the "sharing" and reposting of messages, thus having the reach be virtually endless.

Previously developed public service announcements (PSAs) and print materials are available for easy download from the GTSB microsite, www.drivesmartiowa.com and the current Iowa Zero Fatalities website, https://zerofatalitiesiowa.com.

Education is one of the 5 Es identified in the State Strategic Highway Safety Plan (2019-2023).

Paid media will be secured to support the "Click It or Ticket" and "Drive Sober or Get Pulled Over" national mobilizations.

Linkage Between Program Areas

Through educational and awareness efforts, traffic safety partners will continue to provide information designed to discourage unsafe driving behaviors. The state will utilize a wide variety of venues and platforms to expand messaging to reach target audiences while keeping in mind issues such as diversity.

To help formulate communication campaigns, the GTSB uses traffic records data and results of surveys. Survey results considered in the development of the Highway Safety Plan included:

- Annual Observational Safety Belt Usage Survey
- Safety belt usage surveys conducted by GTSB law enforcement partners (Pre- and Post-Event Surveys)
- Annual Child Passenger Restraint Usage Survey
- Annual Public Awareness/Attitude Survey.

In the spring of 2022, Iowa also conducted a NHTSA facilitated Impaired Driving Assessment. "Communications Program" was one of the assessment areas. Two recommendations were provided after the assessment:

- Establish a Public Information Officer/Social Media Specialist staff position within the Governor's Traffic Safety Bureau that can develop creative materials for a variety of media platforms to

communicate impaired driving messages in a data-driven targeted fashion supporting education, enforcement, and legal issues regarding impaired driving.

- Establish a public information network to coordinate media plans and the distribution of impaired driving information and media materials to strengthen the reach of messaging to all areas of the state.

The effectiveness of awareness, educational programs and messaging can be difficult to measure; however, grantees will report on a quarterly basis as to the estimated exposure, the number of impressions, reach, frequency, CPR (cost per 100 users reached), CPM (cost per 1,000 impressions), etc. that yield exposure value.

Education/messaging is a strategy specifically mentioned in the State Strategic Highway Safety Plan (2019-2023) in the safety emphasis areas of speed, occupant protection, young drivers, intersections, impaired involved, older drivers and distracted or inattentive drivers.

Rationale

Road safety campaigns are defined as purposeful attempts to inform, persuade, or motivate people to change their beliefs and behavior in order to improve road safety.[5]

Education, messaging and campaigns are in line with the State Strategic Highway Safety Plan (2019-2023). Communication and Outreach is also included as an effective countermeasure in NHTSA's "Countermeasures That Work: A Highway Safety Countermeasures Guide for State Highway Safety Offices", 10th Edition, 2020.

Planned Activities in Countermeasure Strategy

Unique Identifier	Planned Activity Name
23-402-M0PM, Task 01-00-00 23-405b-M1*PM, Task 01-00-00 23-405d-FDLPEM, Task 01-00-00	ZLR Ignition

Planned Activity Name: ZLR Ignition
Unique Identifier/Planned Activity Numbers: 23-402-M0PM, Task 01-00-00, 23-405b-M1*PM, Task 01-00-00, and 23-405d-FDLPEM, Task 01-00-00
Intended Subrecipient: ZLR Ignition
Primary Countermeasure Strategy ID: Communication Campaign
Planned Description: ZLR Ignition's campaign objectives include supporting national NHTSA media initiatives across Iowa and responding to GTSB's requests to address current and emerging traffic safety issues across the state. The targeted campaigns include distracted driving, impaired driving (to include drugged driving) seatbelts, bicycle and motorcycle safety. Periodic initiatives will include pedestrian, youth and rural driving. ZLR's strategies for delivery include developing new materials that can be used for digital placements, thus making them easier and more cost effective to update or change out; Continue to use a proven mix of mediums which are relevant and have the capability to target the audience on a more niche level (i.e., geo-fence banners, etc.); Adjust GTSB media to align with NHTSA 2023 campaign calendar; and negotiate added value to drive efficiencies, expand reach and lengthen media flights to cover before and beyond national campaign dates. ZLR will incorporate the use of digital media through social media platforms (i.e. Facebook, YouTube, Pandora, Connected Television, Geo-fence banners, social listening videos, spot radio (terrestrial), digital billboards and outdoor billboards).

[5] Road Safety Communication Campaigns Manual for Design, Implementation, and Evaluation, http://op.europa.eu/en/publication-detail.-/pubication/cf

To ensure ads continue to perform at or above expectations, ZLR monitors creative KPIs including CTR, completion rate and engagement rate. ZLR additionally utilizes surveys, focus groups, etc. to ensure the messaging remains relevant and on-point.

Funding Sources:

Source Fiscal Year	Funding Source ID	Eligible Use of Funds	Estimated Funding Amount	Match Amount	Local Benefit
2020	FAST Act NHTSA 402	Paid Advertising	$41,700	$0.00	$0.00
2019	FAST Act 405b OP High	405b High Paid Advertising	$477,000	$0.00	$0.00
2019	FAST Act 405d Impaired Driving Low	405d Low Paid/Earned Media	$981,300	$0.00	$0.00

Program Area: Community Traffic Safety Programs

Description of Highway Safety Problems

The Central Iowa Traffic Safety Task Force (CITSTF) is made up of law enforcement agencies from nine central Iowa counties. This consortium of law enforcement agencies/organizations partner their efforts to reduce traffic fatalities and injuries in addition to providing traffic safety education. Funding allocated to CITSTF is not used for enforcement efforts. Funding is awarded to support a one-day traffic safety-related conference for task force member agencies. Conference topics focus on traffic safety and enforcement issues.

Associated Performance Measures

Fiscal Year	Performance Measure Name	Target End Year	Target Period	Target Value
2023	C-1) Number of traffic fatalities	2023	5 Year	351.4
2023	C-2) Number of serious injuries in traffic crashes	2023	5 Year	1,398.2
2023	C-3) Fatalities/100M VMT	2023	5 Year	1.073
2023	C-4) Number of unrestrained passenger vehicle occupant fatalities	2023	5 Year	92
2023	C-5) Number of fatalities in crashes involving a driver or motorcycle operator with a BAC of .08 and above	2023	5 Year	99
2023	C-6) Number of speeding-related fatalities	2023	5 Year	69
2023	Additional Performance Measure #2: Distracted Driving	2023	5 Year	6
2023	B-1) Observed seat belt use for passenger vehicles, front seat outboard occupants	2023	Annual	92.75%

Countermeasure Strategies in Program Area

Supporting Enforcement

Countermeasure Strategy: Supporting Enforcement

Project Safety Impacts

The Central Iowa Traffic Safety Task Force (CITSTF) realizes that motor vehicle safety is imperative to keeping Iowa roadways safe and educating the public is essential to the reduction of fatalities. CITSTF takes a strong multi-agency approach to enforce traffic safety laws and educate drivers. In addition to high visibility enforcement events, the task force also takes a proactive approach with local media to publicize task force activities. Several multi-agency, high visibility enforcement projects will be planned throughout the year. The funding allocated to CITSTF is not used for the enforcement efforts. Funding is awarded to CITSTF to support a one-day traffic safety-related conference for task force agencies. Conference topics will focus on traffic safety and enforcement issues.

Linkage Between Program Areas

Funding for CITSTF supports a one-day traffic safety conference for task force agency members and prosecutors. Training supports he statewide efforts and countermeasure strategies for law enforcement training.

Rationale

It is imperative enforcement officers receive adequate training to enhance their effectiveness. Funding allocated to the CITSTF mission will support a one-day traffic safety conference to task force member agencies.

Planned Activities in Countermeasure Strategy

Unique Identifier	Planned Activity Name
23-402-M0PT, Task 00-00-10	Central Iowa Traffic Safety Task Force (CITSTF)

Planned Activity Name: Central Iowa Traffic Safety Task Force (CITSTF)

Unique Identifier/Planned Activity Number: 23-402-M0PT, Task 00-00-10

Intended Subrecipient: West Des Moines Police Department

Primary Countermeasure Strategy ID: Supporting Enforcement

Planned Description:

CITSTF is a multi-disciplinary collaboration with area state, county and municipal organizations and law enforcement agencies. The mission of CITSTF is to reduce speeding, increase utilization of seat belts, reduce traffic collisions, distracted driving, impaired driving and other traffic safety violations through education and enforcement. CITSTF is comprised of law enforcement agencies from nine central Iowa counties. Funding awarded to CITSTF will support a one-day traffic safety related conference for task force agency members. Conference topics will focus on traffic safety and enforcement issues. Funding will also support the purchase of blood alcohol kits.

Funding Sources:

Source Fiscal Year	Funding Source ID	Eligible Use of Funds	Estimated Funding Amount	Match Amount	Local Benefit
2020	FAST Act NHTSA 402	Community Traffic Safety Project (FAST)	$3,500	$0.00	$0.00

Program Area: Impaired Driving (Drug and Alcohol)

Alcohol-impaired fatalities represented 33.53% of all traffic fatalities in the state of Iowa in 2020.

Source: NHTSA/STSI

Description of Highway Safety Problems

Although impaired driving issues have always been a concern in Iowa, additional programming efforts need to be enacted in the state to mitigate the upward trends being seen. Come of the mitigation efforts will be to re-engage law enforcement in high-visibility enforcement countermeasures with an impaired driving emphasis.

Although driving under the influence of alcohol is highly recognized, it is imperative to remember that drugs, either legal or illegal, can also impair judgement while driving. As a means to increase the number of DREs, the GTSB is planning to hold two DRE schools in FFY 2023.

The GTSB hosted a week-long Impaired Driving Assessment in April 2022. Twelve (12) priority recommendations were provided:

- Reestablish a statewide impaired driving task force or commission that will provide strong leadership, commitment, and coordination for impaired driving efforts across the state.
- Establish a dedicated staff position within the Governor's Traffic Safety Bureau to serve as the Impaired Driving Program Coordinator with assigned duties to oversee and coordinate Iowa's statewide impaired driving program
- Procure the Traffic and Criminal Software (TraCS) electronic crash reporting for law enforcement academies to uniformly train law enforcement on how to properly complete the electronic crash report.
- Increase the age for social host law violations from under 18 to 21.
- Adopt statewide use of electronic search warrants.
- Eliminate unsupervised agricultural and education-related driver license eligibility for 14.5 year olds.
- Develop and create more problem-solving OWI Courts.
- Develop and implement a year-round impaired driving law enforcement plan that is supported by a strategic communication plan.
- Hire additional Law Enforcement Liaisons with law enforcement experience and use them strategically to promote traffic safety enforcement throughout the state.
- Make Iowa's ignition interlock law compliance-based, only allowing for removal of an ignition interlock device after successful completion of a required term without test failures.

NHTSA Facilitated Impaired Driving Assessment

The Highway Safety Program Assessment process is an assistance tool that allows management to review various highway safety programs.

Iowa acknowledges the increase in the number of alcohol-impaired driving fatalities recorded in the state. As such, the state requested a NHTSA facilitated Impaired Driving Assessment in April 2022.

The assessment provided the GTSB with recommendations to add or enhance existing countermeasure strategies to assist in reversing the upward trends the state is currently experiencing in the area of impaired driving.

- Adopt the use of screening and assessment tools designed specifically to access risk and needs of impaired Drivers
- Develop a functioning impaired driving tracking system using data from the Traffic and Criminal Software (TraCS), Archon Registration and Title Solution, and the Behavioral Health Reporting System.

Impaired-impaired driving is listed as a safety emphasis area in the State Strategic Highway Safety Plan (2019-2023).

Associated Performance Measures

Fiscal Year	Performance Measure Name	Target End Year	Target Period	Target Value
2023	C-1) Number of traffic fatalities	2023	5 Year	351.4
2023	C-2) Number of serious injuries in traffic crashes	2023	5 Year	1,398.2
2023	C-3) Fatalities/100M VMT	2023	5 Year	1.073
2023	C-5) Number of fatalities in crashes involving a driver or motorcycle operator with a BAC of .08 and above	2023	5 Year	99

Countermeasure Strategies in Program Area

Drug Recognition Expert Training (DRE)
High Visibility Enforcement
Judicial Education
Laboratory Drug Testing Equipment
Law Enforcement Training
Prosecutor Training
Communication Campaign
Highway Safety Program Management
School and Community Programs Focusing on Teen Driving - Alliance *"Choices Matter"*

Countermeasure Strategy: Drug Recognition Expert Training (DRE)

Project Safety Impacts

A drug recognition expert (DRE) is a police officer trained to recognize impairment in drivers under the influence of drugs other than, or in addition to, alcohol. As in other states, Iowa is seeing an increase in drug-related fatalities throughout the state. It is critical that law enforcement officers have the opportunity to receive specialized training in order to recognize the signs and symptoms of drug usage. Law enforcement training is on-going and DRE-certified officers must maintain their current certifications.

Linkage Between Program Areas

Iowa continues to see an up-tick in the number of drug-related crashes and fatalities. With the ever changing drug culture, opportunities for drug-related training is critical. To maintain a strong DRE program, it is imperative that other criminal justice partners, including but not limited to judicial/prosecution, laboratory personnel, etc. are also on the forefront of trainings.

Rationale

The DRE training and certifications are nationally recognized and supported through the International Association of Chief of Police (IACP) and NHTSA. With the general overall increase of drug-related incidents, the state strongly supports the need for this specialized training.

"Impairment-involved" is a safety emphasis area within the 2019-2023 Strategic Highway Safety Plan. Specific strategies listed within the plan which have a connection to the primary countermeasure strategy of law enforcement training include:

1. Support trainings for 60 new drug recognition expert (DRE) officers and 500 new advanced roadside impaired driving enforcement (ARIDE) officers.
2. Develop and implement a standardized approach for law enforcement to identify impaired drivers.

"Enforcement of Drug-Impaired Driving" is listed within the Alcohol- and Drug-Impaired Driving chapter of NHTSA's "Countermeasures that Work: A Highway Safety Countermeasure Guide for State Highway Safety Offices", 10th Edition, 2020.

Planned Activities in Countermeasure Strategy

Unique Identifier	Planned Activity Name
23-405d-M6OT, Task 00-00-06	DRE Program Expenses

Planned Activity Name: DRE Program Expenses					
Unique Identifier/Planned Activity Number: 23-405d-M6OT, Task 00-00-06					
Intended Subrecipient: GTSB - Internal					
Primary Countermeasure Strategy ID: Drug Recognition Expert (DRE) Training					
Planned Description: Funding in FFY 2022 is allocated to support the DRE program to include DRE training/certification, supplies, and out-of-state travel expenses to conduct hands-on training for officer certification requirements. Funding is also allocated for travel to the DRE National Conference and/or other specific training opportunities which may arise during the funding period.					
Funding Sources:					
Source Fiscal Year	**Funding Source ID**	**Eligible Use of Funds**	**Estimated Funding Amount**	**Match Amount**	**Local Benefit**
2019	FAST Act 405d Impaired Driving Low	405d Low Drug and Alcohol Training	$150,000	$0.00	$0.00

Countermeasure Strategy: High Visibility Enforcement (HVE)

Project Safety Impacts

High visibility enforcement (HVE) is recognized as a universal strategy to deter and change unsafe and unlawful behaviors. It is suggested that enforcement efforts take place at times and locations where impaired-driving crashes commonly occur. The increased presence of law enforcement is intended to increase the perceived risk of arrest due to unlawful behaviors and also as a preventative measure to deter individuals from driving while impaired. Enforcement efforts are stronger when coupled with media efforts. Grant funded agencies are given latitude to tailor efforts to meet their community's needs.

Linkage Between Program Areas

Enforcement is a strategy used throughout the state. Accurate and timely crash data helps identify problematic areas in which to deploy enforcement efforts. Enforcement also requires necessity to have properly trained officers and appropriate equipment to support efforts.

HVE combines enforcement, visibility elements, and a publicity strategy.

Rationale

HVE combines enforcement, visibility elements, and a publicity strategy to educate the public and promote voluntary compliance with the law. HVE is designed to make enforcement efforts obvious to the public. HVE can be a very impactful countermeasure. According to NHTSA's "Countermeasures that Work: A Highway Safety Countermeasure Guide for State Highway Safety Offices", 10th Edition, 2020, high visibility saturation patrols have been proven as an effective countermeasure against impaired driving with integrated enforcement.

"Impaired-involved" is a safety emphasis area within the 2019-2023 Strategic Highway Safety Plan. Specific strategies listed within the plan that have a connection with the primary countermeasure strategy of high visibility enforcement include the following:

1. Develop and implement a standardized approach for law enforcement to identify impaired driving
2. Enhance detection through special OWI patrol and related traffic enforcement.

Planned Activities in Countermeasure Strategy

Unique Identifier	Planned Activity Name
23-405d-M6OT HVE	Law Enforcement/HVE – 405d

Planned Activity Name: Law Enforcement/HVE – 405d

Unique Identifier/Planned Activity Number: 23-405d-M6OT HVE

Intended Subrecipients: Law Enforcement Agencies

Primary Countermeasure Strategy ID: High Visibility Enforcement

Planned Description:

High visibility enforcement is included in NHTSA's "Countermeasures That Work: A Highway Safety Countermeasure Guide for State Highway Safety Offices, 10th Edition, 2020, as an effective strategy to combat impaired driving. Section 405d funding will be allocated to support overtime enforcement, educational efforts and/or equipment purchases. Enforcement efforts will be directed at impaired driving during times and at locations identified by each respective agency, the Iowa DOT, or the DPS/GTSB as high risk. Section 405d funded agencies will be required to conduct two targeted traffic enforcement projects; one of which is to be conducted at night and one a multi-jurisdictional project. Agencies will also be required to conduct at least 12 public information/education activities aimed at improving driver safety behaviors to reduce impaired driving. Funding in FFY 2023 will support efforts of 90 law enforcement agencies.

Funding Sources:

Source Fiscal Year	Funding Source ID	Eligible Use of Funds	Estimated Funding Amount	Match Amount	Local Benefit
2019	FAST Act 405d Impaired Driving Low	405d Low Alcohol	$1,082,160	$0.00	$871,560
			AMENDMENT #1		
			After outreach conducted by our LEL at local law enforcement leadership meetings, the Belle Plaine Police Department and the Warren County Sheriff's Office wish to partner with the GTSB in FFY 2023. The increased funding for this amendment request will come from 23-402-PT-2023-00-00-06 FAST Act NHTSA 402 and 23-405d-M6OT2023-00-00-01, FAST Act 405d Impaired Driving Low. This amendment was approved by NHTSA Region 7 Administrator Susan DeCourcy on October 17, 2022. *Planned Activity #'s:*		

			Belle Plaine PD 23-405d-M6OT, Task 00-91-00 *Warren Co SO 23-405d-M6OT, Task 00-92-00*
			AMENDMENT #2
			After outreach conducted by our LEL at local law enforcement leadership meetings, the Hiawatha Police Department wishes to partner with the GTSB in FFY 2023. The increased funding ($4,200.00) for this amendment request will come from 23-405d-M6OT-2023-00-00-01, FAST Act 405d Impaired Driving Low. This amendment was approved by NHTSA Region 7 Administrator Susan DeCourcy on October 28, 2022. *Planned Activity #: 23-405d-M6OT, Task 00-95-00*
			AMENDMENT #3
			After outreach conducted by our LEL and other GTSB staff, the Boone County Sheriff's Office and the Van Meter Police Department wish to partner with the GTSB in FFY 2023. The increased funding ($6,000.00) for this amendment request will come from 23-405d-M6OT-2023-00-00-01, FACT Act 405d Impaired Driving Low. This amendment was approved by NHTSA Region 7 Administrator Susan DeCourcy on November 1, 2022. *Planned Activity #'s:* *Boone Co SO 23-405d-M6OT, Task 00-93-00* *VanMeter PD 23-405d-M6OT, Task 00-94-00*
			AMENDMENT #4
			After outreach conducted by our LEL and other GTSB staff, the Toledo Police Department wishes to partner with the GTSB in FFY 2023 for impaired driving focused overtime enforcement. The increased funding ($4,000.00) for this amendment request will come from 23-405d-M6OT-2023-00-00-01, FAST Act 405d Impaired Driving Low. This amendment was approved by NHTSA Region 7 Administrator Susan DeCourcy on December 28, 2022. *Planned Activity # 23-405d-M6OT, Task 00-96-00*

Countermeasure Strategy: Judicial Education

Project Safety Impacts

This partnership involving judicial education will provide for the expansion, continuous development and maintenance of the Judges Traffic Law Bench book to ensure the safety administration of municipal infractions and criminal infractions related to traffic safety. Funding will also be allocated to provide speakers on traffic safety

topics to judges, magistrates, and judicial officers to provide continuing legal education on the safety administration of traffic-related infractions.

Linkage Between Program Areas
This program began as an effort to give judicial officers digital access to a suite of written legal materials on traffic and other topics to assist them in administering judicial proceedings. The bench book is constantly evolving, both to improve accessibility and relevant content.

Rationale
Judges and magistrates lack user friendly materials that can be easily accessed to answer questions that may arise. The lack of information has led to improve actions on the part of judges and magistrates. This has been an on-going project for several years. The bench book is constantly evolving, both to improve accessibility and relevant content. As Iowa's court system transitions to a paperless system, information for judges should follow this trend and be immediately available through the Judicial Branch computer system.

Planned Activities in Countermeasure Strategy

Unique Identifier	Planned Activity Name
23-405d-FDL*TC, Task 01-00-00	Traffic Bench Book

Planned Activity Name: Traffic Bench Book					
Unique Identifier/Planned Activity Number: 23-405d-FDL*TC, Task 01-00-00					
Intended Subrecipient: State Court Administrator's Office					
Primary Countermeasure Strategy ID: Judicial Education					
Planned Description: Funding in FFY 2023 will be used to continually develop and maintain the Traffic Law Bench Book to ensure the safe administration of municipal infractions and criminal infractions related to traffic safety. Funds will also help provide speakers on traffic safety topics to judges, magistrates and judicial officers to provide continuing legal education on the safe administration of traffic-related infractions.					
Funding Sources:					
Source Fiscal Year	**Funding Source ID**	**Eligible Use of Funds**	**Estimated Funding Amount**	**Match Amount**	**Local Benefit**
2019	FAST Act 405d Impaired Driving Low	405d Low Traffic Courts	$21,500	$0.00	$0.00

Countermeasure Strategy: Laboratory Drug Testing Equipment

Project Safety Impacts
The Iowa Division of Criminal Investigation (DCI) Laboratory is the only publicly funded toxicology service available to law enforcement in the state. The laboratory provides certification and training on the evidentiary breath alcohol testing instrument (DataMaster DMT) and performs forensic testing of blood alcohol and urine samples for alcohol concentration along with drug analysis in both matrices. In the past several years, blood drug analysis has also been added.

Linkage Between Program Areas
The DCI Laboratory plays an essential role in Iowa's overall impaired driving efforts. Being the only state crime laboratory, services provided are critical for the state in the area of impairment. Such efforts support enforcement, judicial proceedings and legislative interests.

Rationale

The DCI Laboratory plays an essential role in Iowa's overall impaired driving efforts. Being the only state crime laboratory, services provided are critical for the state in the area of impairment. Such efforts support enforcement, judicial proceedings and legislative interests.

Planned Activities in Countermeasure Strategy

Unique Identifier	Planned Activity Name
23-405d-FDLIS, Task 01-00-00	**Iowa Division of Criminal Investigation Criminalistics Laboratory**

Planned Activity Name: Iowa Division of Criminal Investigation Criminalistics Laboratory

Unique Identifier/Planned Activity Number: 23-405d-FDLIS, Task 01-00-00

Intended Subrecipient: Iowa Division of Criminal Investigation Criminalistics Laboratory

Primary Countermeasure Strategy ID: Laboratory Drug Testing Equipment

Planned Description:

The toxicology section of the Division of Criminal Investigation Criminalistics Laboratory is responsible for analyzing bloods and urine for alcohol and drugs. The laboratory offers a comprehensive list of drugs and related metabolites for identification and quantitation in blood samples and qualitative analysis for urine samples. Proposed contracted activities for FFY 2023 include:

- Funding for one-full Forensic Science Technician to assist in conducting alcohol and drug tests
- Funding for staff for overtime to set up, install, certify and repair DataMaster DMT units
- Conduct testing for alcohol and drugs of abuse in both blood and urine matrices and report the number of tests conducted and test results including details on the drug levels per test
- Decrease the number of samples sent outside the lab for drug testing
- Provide expert testimony in operating while impaired (OWI) court cases
- Purchase, receive and distribute DataMaster DMT unites, simulators, thermometers and barometers as needed
- Purchase consumable forensic toxicology supplies, DataMaster replacement parts, dry gas tanks, simulator parts, and DMT operational software and manuals as needed
- Participate in contract-related training and travel that improves the laboratory's knowledge and abilities relating to toxicology testing, breath alcohol program operations and expert testimony on these subjects

Funding Sources:

Source Fiscal Year	Funding Source ID	Eligible Use of Funds	Estimated Funding Amount	Match Amount	Local Benefit
2019	FAST Act 405d Impaired Driving Low	405d Low BAC Information System	$182,000	$0.00	$0.00

Countermeasure Strategy: Law Enforcement Training

Project Safety Impacts

It is critical that law enforcement officers continue to receive training throughout their career. Beyond the basic training received at the Iowa Law Enforcement Academy (ILEA), specialized trainings and certification programs offered in the state focusing on impairment include Advanced Roadside Impaired Driving Enforcement (ARIDE) and Drug Recognition Expert (DRE). The ARIDE program was developed by the National Highway Traffic Safety Administration (NHTSA) with input from the International Association of Chiefs of Police (IACP). The Standardized Field Sobriety Test (SFST) is the basic mechanism for a law enforcement officer to assess drivers suspected of being under the influence of alcohol, while the DRE program provides more advanced training to evaluate suspected drug impairment. ARIDE is designed to bridge the gap between the SFST and DRE programs by providing officers with general knowledge related to drug impairment and by promoting the use of DREs. One of the more

significant aspects of ARIDE is the required student demonstration of the SFST proficiency requirement. The ARIDE program stresses the importance of the signs and symptoms of the seven drug categories: Central Nervous System (CNS) Depressants, CNS Stimulants, Hallucinogens, Dissociative Anesthetics, Narcotic Analgesics, Inhalants, and Cannabis. ARIDE will train officers to observe, identify and articulate the signs of impairment related to drugs, alcohol, or a combination of both in order to reduce the number of impaired driving incidents which result in serious injuries and fatalities.

Drugs are being identified in more traffic incidents every year. The following three drugs were the most frequently identified in fatal crashes in 2021 according to Iowa DOT preliminary data:

1. Cannabis
2. CNS Stimulant – Amphetamine
3. Narcotic analgesic - Opioid

Linkage Between Program Areas

It is imperative for law enforcement officers to have proper training to recognize signs and symptoms of suspected drug impairment. Section 405d funding will help support impaired driving training at the Iowa Law Enforcement Academy. There are direct linkages between of officer's initial observation of a suspected impaired person, to the toxicological report from the Iowa Division of Criminal Investigation Criminalistics Laboratory and to the judicial proceedings.

Rationale

Training for law enforcement officers is essential and should be on-going. Iowa recognizes the importance of uniform training for proficiency in SFST and specialized trainings/certification such as Advanced Roadside Impaired Driving Enforcement (ARIDE) and Drug Recognition Expert (DRE). The ARIDE program was developed by the National Highway Traffic Safety Administration with input from the International Association of Chiefs of Police (IACP). The SFST program trains officers to assess drivers suspected of being under the influence of alcohol, while the DRE program provides more advanced training to evaluate suspected drug impairment. ARIDE is intended to bridge the gap between the SFST and DRE programs by providing officers with general knowledge related to drug impairment and by promoting the use of DREs. One of the more significant aspects of ARIDE is the required student demonstration of the SFST proficiency requirement. The ARIDE program stresses the importance of the signs and symptoms of the seven drug categories.

Planned Activities in Countermeasure Strategy

Unique Identifier	Planned Activity Name
23-405d-M6OT, Task 00-00-07	ARIDE Program Expenses
23-405d-FDL*PT, Task 01-00-00	Iowa Law Enforcement Academy

Planned Activity Name: ARIDE Program Expenses					
Unique Identifier/Planned Activity Number: 23-405d-M6OT, Task 00-00-07					
Intended Subrecipient: GTSB- Internal					
Primary Countermeasure Strategy ID: Law Enforcement Training					
Planned Description: Funding will support travel, supplies, training sites, and printing associated with the ARIDE program. The goal is to train 250-350 officers statewide during FFY 2023.					
Funding Sources:					
Source Fiscal Year	**Funding Source ID**	**Eligible Use of Funds**	**Estimated Funding Amount**	**Match Amount**	**Local Benefit**
2019	FAST Act 405d Impaired Driving Low	Other Based on Problem ID	$30,000	$0.00	$0.00

Planned Activity Name: Iowa Law Enforcement Academy (ILEA)
Unique Identifier/Planned Activity Number: 23-405d-FDL*PT, Task 01-00-00
Intended Subrecipient: Iowa Law Enforcement Academy (ILEA)
Primary Countermeasure Strategy ID: Law Enforcement Training

Planned Description:

Through the Iowa Law Enforcement Academy, officers are trained to become proficient in recognizing and testing drivers who are suspected to be impaired. Funding in FFY 2023 will support the academy to provide training for Standardized Field Sobriety/Horizontal Gaze Nystagmus (SFS-HGN) and Standardized Field Sobriety Testing (SFST), including instructor courses for local and state law enforcement officers. Funding will also be used for miscellaneous supplies and expenses related to contracted activities.

Specific activities in FFY 2023 will include:

- Coordinate traffic-safety related training statewide and, where possible, conduct or supervise in-service training
- Where possible and applicable, provide training sites throughout Iowa
- Provide two (2) Standardized Field Sobriety Horizontal Gaze Nystagmus courses (SFST-HGN) for the basic academy training cycle and, when possible, for local and state law enforcement officers.
- Provide for two, four-day Standardized Field Sobriety Testing (SFST) Instructor Courses for local and state law enforcement personnel. Provide honorarium and travel expenses for instructors.
- Coordinate with the DEC/DRE program to offer SFST/drug update schools and ARIDE for the basic academy training cycle and, when possible, for local and state law enforcement officers
- Provide courses on traffic safety for the basic academy training cycle and, when possible, for local and state law enforcement officers
- Provide an occupant protection usage and enforcement course for the basic academy training cycle and, when possible for local and state law enforcement officers
- Coordinate, schedule and provide a two-hour introduction to a drug-impaired recognition course for the basic academy training cycle and GTE courses
- Purchase necessary materials, supplies, postage, telephone calls, travel and other DPS/GTSB approved expense in support of contract activities
- Purchase traffic safety training media approved by DPS/GTSB to update library in areas like occupant restraint use and enforcement
- Provide appropriate initial and update training in traffic safety for staff instructors and/or others who would be available to be used as instructions with DPS/GTSB approval.

Funding Sources:

Source Fiscal Year	Funding Source ID	Eligible Use of Funds	Estimated Funding Amount	Match Amount	Local Benefit
2019	FAST Act 405d Impaired Driving Low	405d Low Police Traffic Services	$170,385	$0.00	$0.00

Countermeasure Strategy: Prosecutor Training

Project Safety Impacts

The GTSB partners with the Prosecuting Attorney's Training Council to develop and improve overall safety capabilities through training of law enforcement, prosecutors, and other professionals/stakeholders involved in the enforcement of traffic laws. The emphasis on prosecutor training as a countermeasure strategy includes training to address special problems and/or opportunities, and to provide a coordination mechanism for the purpose of reducing traffic-related property damage, personal injury and fatal crashes. The attorney identified in this project will serve as Iowa's Traffic Safety Resource Prosecutor (TSRP).

Linkage Between Program Areas
It is imperative to have coordinated efforts in the area of impairment to support enforcement, judicial proceedings and legislative issues. Making proper arrests, gathering evidence correctly, and ensuring effective prosecution are essential to reduce impaired driving. A TSRP is the nexus for this coordination.

Rationale
TSRPs are typically current or former prosecutors who provide training, education and technical support to traffic crimes prosecutors and law enforcement personnel throughout their states. Each TSRP assesses the needs and demands unique to the state and works in conjunction with many agencies and partners to meet their needs.

Planned Activities in Countermeasure Strategy

Unique Identifier	Planned Activity Name
23-405d-FDL*PT, Task 02-00-00 & 23-405d-M6X, Task 02-00-00	TSRP/Prosecuting Attorney Training Coordinator

Planned Activity Name: TSRP/Prosecuting Attorney Training Coordinator

Unique Identifier/Planned Activity Number: 23-405d-FDL*PT, Task 02-00-00 & 23-405d-M6X, Task 02-00-00

Intended Subrecipient: Prosecuting Attorneys Training Coordinator

Primary Countermeasure Strategy ID: Prosecutor Training

Planned Description:
In FFY 2023, funding will be used to support Iowa's Traffic Safety Resource Prosecutor (TSRP). As a liaison between prosecutors, law enforcement officers, and other governmental agencies and personnel, Iowa's TSRP will facilitate better working relationships and promote uniform enforcement and prosecution of Iowa's impaired driving laws, provide skills training workshops for prosecutors in OWI and drug-impaired driving offenses, provide law enforcement workshops on impaired driver detection, apprehension, implied consent, report writing and testimony preparation. In addition, the TSRP will provide impaired driving training at SFST, ARIDE, DRE and other specialized courses. Research assistance, consultation and advice for prosecutors, law enforcement officers, hearing officers and other governmental personnel will be provided in the area of detection, apprehension, charging, trial and punishment or treatment of impaired drivers, and Iowa implied consent laws. The TSRP will also assist the Iowa Law Enforcement Academy with the identification and design of training for OWI, drug-impaired driving offenses and implied consent laws. The TSRP will present a case law update at the Annual Governor's Highway Traffic Safety Conference and will prepare and distribute quarterly advisory bulletins with information on court decisions or legislation impacting OWI or implied consent laws. The TSRP will also participated in safety trainings as it relates to the role.

Funding Sources:

Source Fiscal Year	Funding Source ID	Eligible Use of Funds	Estimated Funding Amount	Match Amount	Local Benefit
2019	FAST Act 405d Impaired Driving Low	Police Traffic Services	$50,000	$0.00	$0.00
2019	FAST Act 405d Impaired Driving Low	Impaired Driving Low	$149,500	$0.00	$0.00

Countermeasure Strategy: Communication Campaign

Project Safety Impacts
Through educational and awareness efforts, ZLR Ignition will provide messaging to discourage impaired driving. A variety of venues and platforms will be utilized to expand messaging to reach target audiences.

ZLR's efforts will include paid media during the impaired driving national mobilization periods.

Linkage Between Program Areas

Statewide traffic data will be analyzed (specific to impaired driving) to help identify target areas of the state for messaging. Specific impaired driving messaging will be a component of Iowa's overall communication campaign countermeasure strategies to address all program areas with the over-arching goal to discourage unsafe driving behaviors.

Rationale

Road safety campaigns are defined as purposeful attempts to inform, persuade, or motivate people to change their beliefs and behavior in order to improve road safety.[6]

Education, messaging and campaigns are in line with the State Strategic Highway Safety Plan (2019-2023). Mass Media Campaigns are included as an effective countermeasure in the Alcohol- and Drug-Impaired chapter of NHTSA's "Countermeasures That Work: A Highway Safety Countermeasures Guide for State Highway Safety Offices", 10th Edition, 2020.

Planned Activity Name: ZLR Ignition / Impaired Driving Communication Campaign					
Unique Identifier/Planned Activity Number: 23-405d-FDLPEM, Task 01-00-00					
Intended Subrecipent: ZLR Ignition					
Primary Countermeasure Strategy ID: Communication Campaign					
Planned Description: ZLR Ignition's impaired driving campaign objectives will include supporting NHTSA national mobilization periods through paid media. State specific data will be analyzed to address current and emerging traffic safety issues specific to impaired driving to help direct the rollout of other media-related activities. ZLR's strategies for delivery may include the development of new materials for digital placements in addition to a mix of proven mediums, such as geo-fence banners, social listening venues, spot radio, and/or billboard.					
Funding Sources:					
Source Fiscal Year	**Funding Source ID**	**Eligible Use of Funds**	**Estimated Funding Amount**	**Match Amount**	**Local Benefit**
2019	FAST Act 405d Impaired Driving Low	405d Low Paid/Earned Media	$981,300	$0.00	$0.00

[6] Road Safety Communication Campaigns Manual for Design, Implementation, and Evaluation, http://op.europa.eu/en.publication-detail.-/publication/cf

Countermeasure Strategy: Highway Safety Office Program Management

Project Safety Impacts

Adequate staff, resources and training are necessary to effectively manage the state highway safety office and programs which support NHTSA initiatives and the mission of the Governor's Traffic Safety Bureau.

Linkage Between Program Areas

Adequate staff, resources and training are necessary to effectively manage the state highway safety office and programs which support NHTSA initiatives and the mission of the Governor's Traffic Safety Bureau.

Rationale

Program management involves ensuring the federal highway safety program for the State of Iowa is run effectively. GTSB Program Administrators are involved in program oversight through the evaluation of risk, monitoring, evaluation and technical support. Program Administrators ensure timely and accurate submission and processing of sub-grantee claims and ensures expenditures conform to the approved budget. Throughout the program year, projects are monitored. If a problem arises, it can be detected and addressed. At the end of the funded year, the project is evaluated to determine if goals were achieved.

In order to stay conversant with traffic safety issues and federal legislation, members of the GTSB staff participate in meetings, conferences, webinars and various in-person trainings. Such activities also strengthen the professional relationships between traffic safety stakeholders.

Planned Activities in Countermeasure Strategy

Unique Identifier	Planned Activity Name
23-405d-M6OT, Task 00-00-03	GTSB – Travel (405d)
23-402-M0AL, Task 00-00-03	GTSB – Travel (AL)
23-402-M0AL, Task 00-00-04	GTSB – Printing (AL)
23-405d-M6OT, Task 00-00-02	GTSB Program Management (405d)
23-402-M0AL, Task 00-00-02	GTSB Program Management (AL)

Planned Activity Name: GTSB – Travel (405d)

Unique Identifier/Planned Activity Number: 23-405d-M6OT, Task 00-00-03

Intended Subrecipient: GTSB-Internal

Primary Countermeasure Strategy ID: Highway Safety Office Program Management

Planned Description:
Funding in FFY 2023 is allocated for impaired driving-related travel and training for GTSB staff.

Funding Sources:

Source Fiscal Year	Funding Source ID	Eligible Use of Funds	Estimated Funding Amount	Match Amount	Local Benefit
2019	FAST Act 405d Impaired Driving Low	405d Low Other Based on Problem Identification	$6,000	$0.00	$0.00

Planned Activity Name: GTSB – Travel (AL)					
Unique Identifier/Planned Activity Number: 23-402-M0AL, Task 00-00-03					
Intended Subrecipient: GTSB-Internal					
Primary Countermeasure Strategy ID: Highway Safety Office Program Management					
Planned Description: Funding in FFY 2023 is allocated for impaired driving-related travel/trainings for GTSB staff.					
Funding Sources:					
Source Fiscal Year	**Funding Source ID**	**Eligible Use of Funds**	**Estimated Funding Amount**	**Match Amount**	**Local Benefit**
2020	FAST Act NHTSA 402	Alcohol	$2,500	$0.00	$0.00

Planned Activity Name: GTSB-Printing (AL)					
Unique Identifier/Planned Activity Number: 23-402-M0AL, Task 00-00-04					
Intended Subrecipient: GTSB-Internal					
Primary Countermeasure Strategy ID: Highway Safety Office Program Management					
Planned Description: Funding in FFY 2023 is allocated for impaired-related printing.					
Funding Sources:					
Source Fiscal Year	**Funding Source ID**	**Eligible Use of Funds**	**Estimated Funding Amount**	**Match Amount**	**Local Benefit**
2020	FAST Act NHTSA 402	Alcohol	$5,000	$0.00	$0.00

Planned Activity Name: GTSB Program Management (405d)					
Unique Identifier/Planned Activity Number: 23-405d-M6OT, Task 00-00-02					
Intended Subrecipient: GTSB-Internal					
Primary Countermeasure Strategy ID: Highway Safety Plan Office Program Management					
Planned Description: Program Administrator's salary for impaired driving program management.					
Funding Sources:					
Source Fiscal Year	**Funding Source ID**	**Eligible Use of Funds**	**Estimated Funding Amount**	**Match Amount**	**Local Benefit**
2020	FAST Act 405d Impaired Driving Low	405d Low Other Based on Problem Identification	$150,000	$0.00	$0.00

Planned Activity Name: GTSB Program Management (AL)
Unique Identifier/Planned Activity Number: 23-402-M0AL, Task 00-00-02
Intended Subrecipient: GTSB-Internal
Primary Countermeasure Strategy ID: Highway Safety Plan Office Program Management
Planned Description: Split proportions of GTSB staff salaries for activities focused on impaired driving. This project will provide for technical assistance with on-going public information and educational activities supporting impaired driving issues and to coordinate, monitor, and audit impaired driving grants and activities.
Funding Sources:

Source Fiscal Year	Funding Source ID	Eligible Use of Funds	Estimated Funding Amount	Match Amount	Local Benefit
2020	FAST Act NHTSA 402	Alcohol	$392,000	$0.00	$0.00

Countermeasure Strategy: School and Community Programs Focusing on Teen Driving – Alliance "Choices Matter"

See page 101.

Program Area: Speed

Speeding-related fatalities represented 18.10% of all traffic fatalities in the state of Iowa in 2020.

Source: NHTSA/STSI

Description of Highway Safety Problems

In the past, the GTSB had relied only on overall high visibility enforcement projects to address speeding. In FFY 2021, the GTSB developed and implemented specific speed projects.

The National Highway Traffic Safety Administration considers a crash to be speeding-related if any driver in the crash was charged with a speeding-related offense or if a police officer indicated that racing, driving too fast for conditions, or exceeding the posted speed limit was a contributing factor in the crash. A speeding-related fatality is any fatality that occurs in a speeding-related crash. In 2020, speeding-related fatalities represented 18.10% of Iowa's fatalities.

In reviewing the results of the 2021 Awareness Survey, the majority of respondents (a total of 90.46%) indicated they thought one's chances of getting a ticket for driving over the speed limit was "very likely" or "somewhat likely".

Associated Performance Measures

Fiscal Year	Performance Measure Name	Target End Year	Target Period	Target Value
2023	C-1) Number of traffic fatalities	2023	5 Year	351.4
2023	C-2) Number of serious injuries in traffic crashes	2023	5 Year	1,398.2
2023	C-3) Fatalities/100M VMT	2023	5 Year	1.073
2023	C-6) Speeding-related fatalities	2023	5 Year	69
2023	C-10) Pedestrian fatalities	2023	5 Year	22

Countermeasure Strategies in Program Area

Speed Corridors
Communication Campaign

Countermeasure Strategy: Speed Corridors

Project Safety Impacts

Through the analysis of crash data, corridors will be identified in which to conduct specific overtime efforts focused on speed. The goal of the countermeasure is to reduce speeding-related fatalities and injuries across the state of Iowa.

Linkage Between Program Areas

With the assistance of Iowa State University In-Trans, data dashboards will be updated to identify corridors with the highest crash frequencies due to speed.

Rationale
"Speed-Related" is a Safety Emphasis are within the 2019-2023 Strategic Highway Safety Plan. The following is a specific strategy listed within the plan which has a connection with the primary countermeasure strategy of speed corridor:

1. Identify corridors with a high frequency of speed-related crashes and implement high visibility enforcement campaigns

Planned Activities in Countermeasure Strategy

Unique Identifier	Planned Activity Name
23-402-M0SE Speed Corridors	Speed Corridors

Planned Activity Name: Speed Corridors					
Unique Identifier/Planned Activity Number: 23-402-M0SE Speed Corridors					
Intended Subrecipient: To Be Determined					
Primary Countermeasure Strategy ID: Speed Corridors					
Planned Description: Speed data will be analyzed to identify road segments with the highest crash frequency area for speeding-related crashes. Corridors will be identified in which to partner with local agencies and the Iowa State Patrol to conduct overtime ships focused on speed enforcement. Multi-agency events will be encouraged.					
Funding Sources:					
Source Fiscal Year	**Funding Source ID**	**Eligible Use of Funds**	**Estimated Funding Amount**	**Match Amount**	**Local Benefit**
2020	FAST Act NHTSA 402	Speed Enforcement	$50,000	$0.00	$0.00

Countermeasure Strategy: Communication Campaign

Project Safety Impacts
Through educational and awareness efforts, ZLR Ignition will provide messaging to discourage speeding. A variety of venues and platforms will be utilized to expand messaging to reach target audiences.

Linkage Between Program Areas
Statewide traffic data will be analyzed (specific to speeding) to help identify target areas of the state for messaging. Speeding messaging will be a component of Iowa's overall communication campaign countermeasure strategies to address all program areas with the over-arching goal to discourage unsafe driving behaviors.

Rationale
Road safety campaigns are defined as purposeful attempts to inform, persuade, or motivate people to change their beliefs and behavior in order to improve road safety.[7]

Education, messaging and campaigns are in line with the State Strategic Highway Safety Plan (2019-2023).

[7] Road Safety Communication Campaigns Manual for Design, Implementation, and Evaluation, http://op.europa.eu/en.publication-detail.-/publication/cf

Planned Activity Name: ZLR Ignition / Speed Campaign					
Unique Identifier/Planned Activity Number: 23-405b-M1*PM, Task 01-00-00					
Intended Subrecipent: ZLR Ignition					
Primary Countermeasure Strategy ID: Communication Campaign					
Planned Description: ZLR Ignition's speeding campaigns will be developed through the analysis of state specific data. Current and emerging traffic safety issues specific to speed will help direct the media-related activities. ZLR's strategies for delivery may include the development of new materials for digital placements in addition to a mix of proven mediums, such as geo-fence banners, social listening venues, spot radio, and/or billboard.					
Funding Sources:					
Source Fiscal Year	**Funding Source ID**	**Eligible Use of Funds**	**Estimated Funding Amount**	**Match Amount**	**Local Benefit**
2019	FAST Act 405b OP High	405b High Paid Advertising	$176,358	$0.00	$0.00

Program Area: Motorcycle Safety

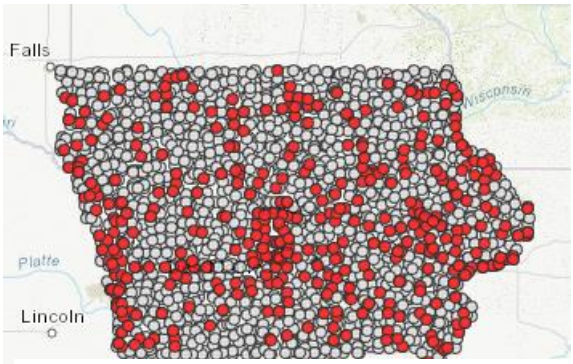
Motorcyclist fatalities represented 18.99% of all traffic fatalities in the State of Iowa in 2020. 67.19% of all motorcyclist fatalities were unhelmeted.

Source: NHTSA/STSI

Description of Highway Safety Problems

Research shows that motorcyclists are significantly overrepresented in traffic crashes and fatalities each year. In 2021, motorcycles accounted for <1% of the total miles travel but nearly 19% of total deaths on Iowa roadways. Iowa does not have a helmet law. Motorcyclists were unhelmeted in 79% of all fatality crashes over the past five year.

Preliminary 2021 data, as maintained by the Iowa Department of Transportation, indicates there were 1,051 motorcycle-involved crashes resulting in 67 fatalities, 265 serious injuries and 493 minor injuries. See map to the right.



Location of motorcycle-involved crashes - 2021

Motorcycle safety is two-fold. First, motor vehicle drivers need to be looking for motorcyclists and leave a gap, check blind spots and give sufficient distance when passing. Second, motorcyclists must stay visible, ride sober and wear appropriate gear.

Iowa Motorcyclist Fatalities by Age							
Year	Age						Total
	<20	20-29	30-39	40-49	50-59	>59	
2016	2	15	9	7	20	7	60
2017	2	14	6	6	13	8	49
2018	2	8	5	8	14	6	43
2019	2	9	5	4	18	6	44
2020	2	11	10	10	16	15	64

Iowa Motorcyclist Fatalities Per 100,000 Registered Motorcycles			
Year	Motorcyclist Fatalities	Total Motorcycle Registrations*	Motorcyclist Fatalities Per 100,000 Motorcycle Registrations
2016	60	192,434	31.18
2017	49	194,603	25.18
2018	43	194,606	22.10
2019	44	192,617	22.84
2020	64	191,804	33.37

Source: NHTSA/STSI
*Data Source: FHWA

Associated Performance Measures

Fiscal Year	Performance Measure Name	Target End Year	Target Period	Target Value
2023	C-1) Number of traffic fatalities	2023	5 Year	351.4
2023	C-2) Number of serious injuries in traffic crashes	2023	5 Year	1398.2
2023	C-3) Fatalities/100M VMT	2023	5 Year	1.073
2023	C-7) Number of motorcyclist fatalities	2023	5 Year	50
2023	C-8) Number of unhelmeted motorcyclist fatalities	2023	5 Year	37

Countermeasure Strategies in Program Area

Motorcycle Rider Training
Communication Campaign

Countermeasure Strategy: Motorcycle Rider Training

Project Safety Impacts

The Iowa Department of Transportation's (DOT) Office of Driver & Identification Services administers a quality Motorcycle Rider Education (MRE) program. An essential part of the program includes instruction for Basic Rider Courses provided by Iowa Licensed Rider Coach Trainers (RCTs) certified by the Motorcycle Safety Foundation (MSF). RCTs provide training to new rider coach candidates to help with training needs at sponsor sites across the state. RCTs also participate in training offered by the MSF. A quality Assurance Program is needed to monitor both quality and consistency of Iowa's motorcycle riding public. Additionally, Iowa DOT staff have a need to attend annual conferences and training to stay current on administration of the motorcycle rider education program.

Linkage Between Program Areas

Motorcycles were not identified as a priority safety emphasis area within the State Strategic Highway Safety Plan (2019-2023); however, was included as important as it relates to traffic safety within Iowa.

Rationale

Iowa Code Section 321.180B requires any person under the age of 18 who wants a motorcycle license - valid for the operation of a motorcycle - to successfully complete the motorcycle rider education course before the motorcycle license will be issued. The licensing skills test may be waived upon successful completion of the course.

Planned Activities in Countermeasure Strategy

Unique Identifier	Planned Activity Name
23-405f-M9MT, Task 01-00-00	Motorcycle Rider Training

Planned Activity Name: Motorcycle Rider Training
Unique Identifier/Planned Activity Number: 23-405f-M9MT, Task 01-00-00
Intended Subrecipient: Iowa Department of Transportation
Primary Countermeasure Strategy ID: Motorcycle Rider Training
Planned Description: The Iowa Department of Transportation Office administers a quality Motorcycle Rider Education (MRE) program. Specific activities associated with the project during FFY 2023 will include the following: • Implement MRE Quality Assurance Program - Continue to expand the program to move from having site specific observation requirements toward getting every RiderCoach reviewed

• Educate new motorcycle riders about the benefits of taking the Beginner Rider Course(s) prior to receiving their motorcycle endorsement • Promote participation in all MRE courses including the Basic Rider course, BRCII, Returning Rider course and Advanced Rider course • Improve access to 3-wheel motorcycle course offerings • Endure an adequate number of MSF MRE RiderCoaches • Professional development for RiderCoach trainers and Iowa DOT MRE staff members
Funding Sources:

Source Fiscal Year	Funding Source ID	Eligible Use of Funds	Estimated Funding Amount	Match Amount	Local Benefit
2020	FAST Act 405f Motorcycle Programs	405f Motorcyclist Training (FAST)	$64,000	$0.00	$0.00

Countermeasure Strategy: Communication Campaign

Project Safety Impacts

Through educational and awareness efforts, ZLR Ignition will provide messaging focusing on motorcycle safety. Messaging will be focused on drivers to be on alert for motorcyclists on the roadways and for riders to wear proper gear.

Linkage Between Program Areas

Statewide traffic data will be analyzed (specific to motorcycles) to help identify target areas of the state for messaging. Specific motorcyclist-related messing will be a component of Iowa's overall communication campaign countermeasure strategies to address all program areas with the over-arching goal to discourage unsafe driving behaviors.

Rationale

Road safety campaigns are defined as purposeful attempts to inform, persuade, or motivate people to change their beliefs and behavior in order to improve roadway safety.[8]

Education, messaging and campaigns are in line with the State Strategic Highway Safety Plan (2019-2023). Communication and Outreach are included in the Motorcycle Safety chapter of NHTSA's "Countermeasures That Work: A Highway Safety Countermeasures Guide for State Highway Safety Offices", 10th Edition, 2020. The guide, however, indicates the effectiveness of motorcycle campaigns has not been determined.

Planned Activity Name: ZLR Ignition / Motorcycle Campaigns
Unique Identifier/Planned Activity Number: 23-405b-M1*PM, Task 01-00-00
Intended Subrecipent: ZLR Ignition
Primary Countermeasure Strategy ID: Communication Campaign
Planned Description: ZLR Ignition's motorcycle campaign objectives will be developed through the analysis of state specific data. Current and emerging trends will be considered. ZLR's strategies for delivery may include the development of new materials for digital placement in addition to a mix of proven mediums, such as geo-fence banners, social listening venues, spot radio, and/or billboard.
Funding Sources:

[8] Road Safety Communication Campaign Manual for Design, Implementation, and Evaluation, http://op.euroa.eu/en.publication-detail.-/publication/cf

Source Fiscal Year	Funding Source ID	Eligible Use of Funds	Estimated Funding Amount	Match Amount	Local Benefit
2019	FAST Act 405b OP High	405b High Paid Advertising	$66,134.25	$0.00	$0.00

Program Area: Non-Motorized (Pedestrian)

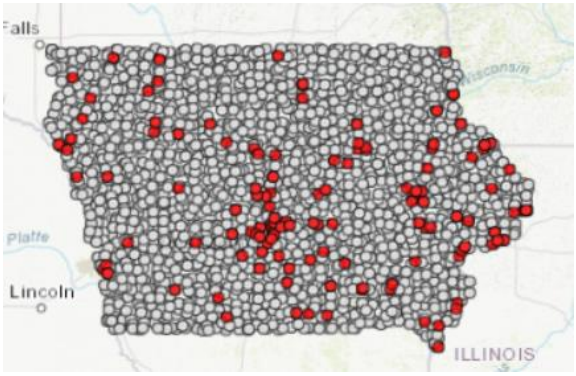
Pedestrian fatalities represented 8% of all traffic fatalities in the State of Iowa in 2020.

Source: NHTSA/STSI

Description of Highway Safety Problems

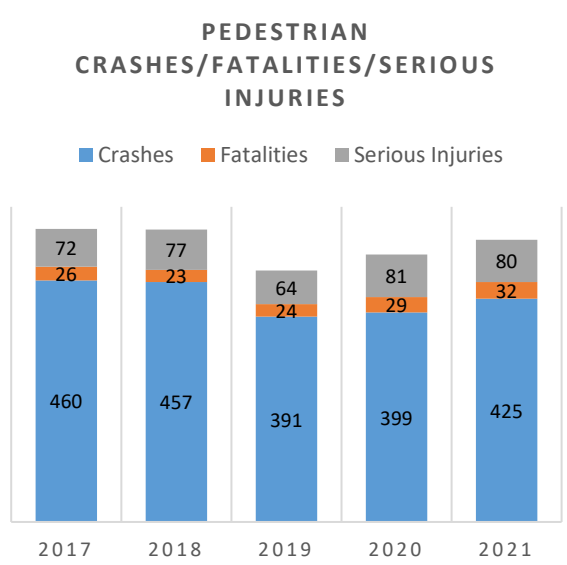
In 2020, there were 6,516 pedestrians killed nationally in traffic crashes. This represented a 3.9% increase from the 6,272 pedestrian fatalities in 2019. On average, a pedestrian was killed every 81 minutes and injured every 10 minutes in traffic crashes in 2020.[9] Pedestrian fatalities represented 8% of all traffic fatalities in Iowa in 2020. The trend for pedestrian fatalities continues to be on the rise in the State.

The University of Iowa, Injury Prevention Research Center continues to conduct studies in the area of vulnerable road users. The Iowa Department of Transportation also develops and implements a Bicycle and Pedestrian Long-Range Plan to serve as the over-arching guide for the State to ensure the needs for all users are considered in the future.



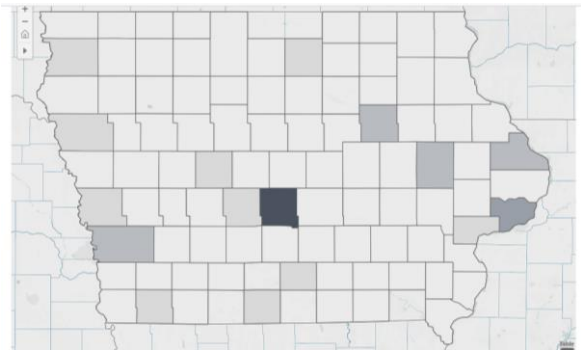
Location of pedestrian-involved crashes – 2021

Souce: Iowa DOT/ICAT (Preliminary)



Source: Iowa DOT/ICAT

Pedestrian Fatalities by County – 2020



Polk County *had the most pedestrian fatalities of any county in the state in 2020.*

Pedestrian Fatalities = 6; Total Fatalities = 38
Percentage of Total Fatalities who were pedestrians = 15.8%
Fatalities per 100,000 Population (County) = 1.21

Source: NHTSA/Fatal Motor Vehicle Crash Data Visualization

[9] Traffic Safety Facts, Pedestrians, 2020 Data, May 2022, DOT HS 813 310.

Associated Performance Measures

Fiscal Year	Performance Measure Name	Target End Year	Target Period	Target Value
2023	C-1) Number of traffic fatalities	2023	5 Year	351.4
2023	C-2) Number of serious injuries in traffic crashes	2023	5 Year	1,398.2
2023	C-3) Fatalities/100M VMT	2023	5 Year	1.073
2023	C-6) Speeding-related fatalities	2023	5 Year	69
2023	C-10) Number of pedestrian fatalities	2023	5 Year	22

Countermeasure Strategies in Program Area

Communication Campaign
Pedestrian Safety

Countermeasure Strategy: Communication Campaign

Project Safety Impacts

Through educational and awareness efforts, ZLR ignition will provide messaging focused on pedestrian safety. A variety of venue and platforms will be utilized to reach target audiences.

Linkage Between Program Areas

Statewide Traffic data will be analyzed (specific to pedestrians) to help identify target areas of the state for messaging. Specific pedestrian-related messaging will be a component of Iowa's overall communication campaign countermeasure strategies to address all program areas with the over-arching goal to discourage unsafe driving behaviors.

Rationale

Road safety campaigns are defined as purposeful attempts to inform, persuade, or motivate people to change their beliefs and behavior in order to improve road safety.[10]

Education, messaging and campaigns are in line with the State Strategic Highway Safety Plan (2019-2023).

Planned Activity Name: ZLR Ignition / Pedestrian Campaign

Unique Identifier/Planned Activity Number: 23-402-M0PM, Task 01-00-00 & 23-405b-M1*PM, Task 01-00-00

Intended Subrecipent: ZLR Ignition

Primary Countermeasure Strategy ID: Communication Campaign

Planned Description:

ZLR Ignition's pedestrian safety campaign objectives will be developed after the analysis of state specific data. Current and emerging traffic safety issues specific to pedestrian safety will help direct the rollout of media-related activities. ZLR's strategies for delivery may include the development of new materials for digital placements in addition to a mix of proven mediums, such as geo-fence banners, social listening venues, spot radio, and/or billboard.

Funding Sources:

Source Fiscal Year	Funding Source ID	Eligible Use of Funds	Estimated Funding Amount	Match Amount	Local Benefit
2020	FAST Act NHTSA 402	Paid Advertising	$19,655.25	$0.00	$0.00
2019	FAST Act 405b OP High	405b High Paid Advertising	$24,424.25	$0.00	$0.00

[10] Road Safety Communication Campaign Manual for Design, Implementation, and Evaluation, https://op.europa.eu/en.publication-detail.-/publication/cf

Countermeasure Strategy: Pedestrian Safety (Added through HSP Amendment)

Project Safety Impacts

The goal of this project is to provide awareness of pedestrian safety through both enforcement and education. Enforcement efforts will focus on one or more of the following related to pedestrian safety: driver speed, pedestrian laws, drug/alcohol impairment, electronic device use, move-over laws and/or visibility.

Linkage Between Program Areas

The pedestrian project will have a speed emphasis. Enforcement will be conducted in high pedestrian areas.

Rationale

Nationally pedestrian fatalities are on the rise. Pedestrian deaths accounted for 17% of all traffic fatalities in 2018 nationally. Iowa remains well below the national average but is starting to see an upward shift in trends.

Planned Activities in Countermeasure Strategy

Unique Identifier	***Planned Activity Name***
23-402-M0PS	*Pedestrian Safety*

Planned Activity Name: Pedestrian Project

Unique Identifier/Planned Activity Number: 23-402-M0PS

Intended Subrecipients:

Altoona Police Department	*23-402-M0PS, Task 00-01-00*	*$3,000*
Ames Police Department	*23-402-M0PS, Task 00-02-00*	*$1,500*
Council Bluffs Police Department	*23-402-M0PS, Task 00-03-00*	*$5,000*
Davenport Police Department	*23-402-M0PS, Task 00-04-00*	*$3,000*
Des Moines Police Department	*23-402-M0PS, Task 00-05-00*	*$3,000*
Sioux City Police Department	*23-402-M0PS, Task 00-06-00*	*$3,000*
West Des Moines Police Department	*23-402-M0PS, Task 00-07-00*	*$1,500*

After additional analysis of pedestrian fatality and serious injury data and acknowledging the trend for pedestrian fatalities continues to be on the rise, the Governor's Traffic Safety Bureau would like to add a pedestrian specific project to the FFY 2023 Highway Safety Plan. The following seven (7) agencies have been identified to conduct overtime enforcement. Planned high visibility enforcement efforts will focus on one or more of the following related to pedestrian safety: driver speed, pedestrian laws, drug/alcohol impairment, electronic device use, more over laws and/or visibility. Sioux City Police Department will also be utilizing overtime for educational presentations for pedestrian safety to include the topics of traffic rules, visibility, drug/alcohol impairment, more over laws and electronic device use. All agencies will conduct at least two media contacts via radio, television, and/or newspaper in addition to six (6) social media posts to improve pedestrian safety aimed at both drivers and pedestrians. The additional funding will come from 23-402-PT-2023-00-00-06 FAST Act NHTSA 402. This amendment was approved by NHTSA Region 7 Administrator Susan DeCourcy on December 5, 2022.

Program Area: Non-Motorized (Bicyclist)

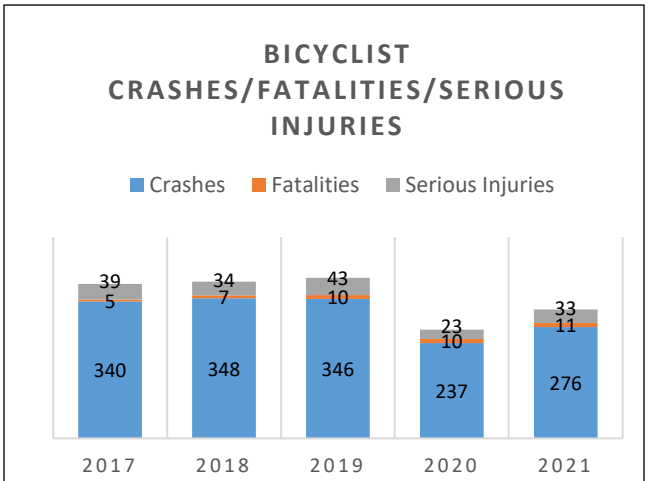
Bicyclist fatalities represented 2.9% of all traffic fatalities in the state of Iowa in 2020.

Source: NHTSA/STSI

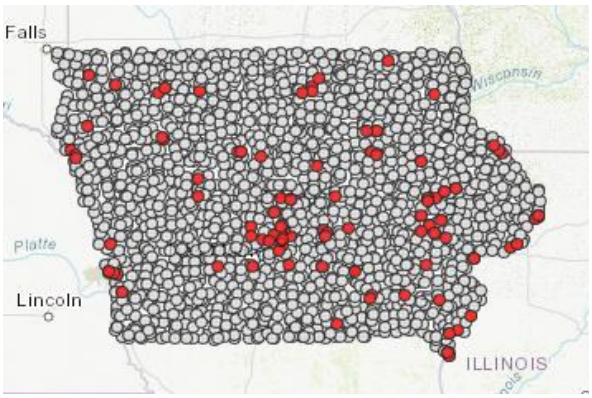
Description of Highway Safety Problems

Bicycling is a proven way to improve the quality of life for Iowa's citizens, providing an option to commute to work, school or other destinations. Iowa maintains extensive bicycle trails; however, bicyclists can and do utilize the state's roadways. Under Iowa law, a bicyclist has to follow the same rules and laws as motorists. Bicycle lanes are also be regularly included in municipal street designs as a means to incorporate bicycling on the roadways.

The motoring public also has the responsibility to be extra vigilant of bicyclists. If a motorist is in doubt, they are to yield to the bicyclist.



Source: IA DOT/ICAT



Bicyclist crashes – 2021

Source: IA DOT/ICAT (Preliminary)

Associated Performance Measures

Fiscal Year	Performance Measure Name	Target End Year	Target Period	Target Value
2023	C-1) Number of traffic fatalities	2023	5 Year	351.4
2023	C-2) Number of serious injuries in traffic crashes	2023	5 Year	1,398.2
2023	C-3) Fatalities/100M VMT	2023	5 Year	1.073
2023	C-11) Number of bicyclist fatalities	2023	5 Year	7

Countermeasure Strategies in Program Area

Bicycle Safety Education
Communication Campaign

Countermeasure Strategy: Bicycle Safety Education

Project Safety Impacts

At Unity Point/Blank Children's Hospital, the main focus in regard to bicycle safety is expanding school-based and community based bicycle safety programs which include increasing access to affordable or free helmets for both children and adults. The All Heads Covered (AHC) programming is essential to promote statewide injury prevention and continues to be an identified need in communities throughout the State.

Data provided from Safe Kids Worldwide supports that properly-fitted helmets can reduce the risk of head injurie by at least 45%, yet less than half the children 14 and under usually wear a helmet. Bicycling leads to the highest number of sports related emergency visits for traumatic brain injury for children and adults according to the Centers for Diseases Control and Prevention (CDC).

Linkage Between Program Areas

Programming allows for the opportunity to collaborate with multiple agencies across the State by providing prevention education, outreach programming/activities and bicycle helmets (no-cost/low-cost) which will impact the overall health and safety of Iowa's youth and adult populations.

The University of Iowa, Injury Prevention Research Center continues to conduct studies in the area of vulnerable road users. The Iowa Department of Transportation also develops and implements a Bicycle and Pedestrian Long-Range Plan to serve as the over-arching guide for the State to ensure the needs for all users are considered in the future.

Rationale

The planned activities correlate with the National Highway Traffic Safety Administrations' set of recommendations regarding bicyclist safety, specifically in regard to expanding school-based and community-based bicycle safety programs which include increasing access to free or affordable helmets for both children and adults.

Planned Activities in Countermeasure Strategy

Unique Identifier	Planned Activity Name
23-402-M0PS, Task 01-00-00	All Heads Covered

Planned Activity Name: All Heads Covered
Unique Identifier/Planned Activity Number: 23-402-M0PS, Task 01-00-00
Intended Subrecipient: Unity Point Hospital/Blank Children's Hospital
Primary Countermeasure Strategy ID: Bicycle Safety Education
Planned Description: Blank Children's Hospital commitment to serving children extends into the community through targeted injury prevention programs. The All Heads Covered (AHC) program seeks to increase the number of children and adults wearing properly fitted helmets to decrease injuries that may result from a biking crash. In FFY 2023, the All Heads Covered program will continue the helmet and bike safety program focused on education and helmeting on a statewide level. The program allies with NHTSA's recommendations for bike safety included community based bike safety programs that include access to helmets for both children and adults. Funding will support the purchase and distribution of bicycle helmets. In each of the communities in which bike helmets are distributed, observational surveys of helmet usage will be requested and reported.

Funding Sources:					
Source Fiscal Year	**Funding Source ID**	**Eligible Use of Funds**	**Estimated Funding Amount**	**Match Amount**	**Local Benefit**
2020	FAST Act NHTSA 402	Pedestrian/Bicycle Safety	$21,500	$0.00	$0.00

Countermeasure Strategy: Communication Campaign

Project Safety Impacts

Through educational and awareness efforts, ZLR Ignition will provide messaging to discourage impaired driving. A variety of venues and platforms will be utilized to expand messaging to reach target audiences.

Linkage Between Program Areas

Statewide traffic data will be analyzed (specific to bicyclists) to help identify target areas of the state for messaging. Specific bicyclist safety messaging will be a component of Iowa's overall communication campaign countermeasure strategies to address all program areas with the overarching goal to discourage unsafe driving behaviors.

Rationale

Road safety campaigns are defined as purposeful attempts to inform, persuade, or motivate people to change their beliefs and behavior in order to improve road safety.[11]

Education, messaging and campaigns are in line with the State Strategic Highway Safety Plan (2019-2023).

Planned Activity Name: ZLR Ignition / Bicycle Safety Campaign					
Unique Identifier/Planned Activity Number: 23-402-M0PM, Task 01-00-00					
Intended Subrecipent: ZLR Ignition					
Primary Countermeasure Strategy ID: Communication Campaign					
Planned Description: ZLR Ignition's bicycle safety campaign objectives will be developed after the analysis of state specific data. Current and emerging traffic safety issues specific to bicycle safety will help direct the rollout of media-related activities. ZLR's strategies for delivery may include the development of new materials for digital placements in addition to a mix of proven mediums, such as go-fence banners, social listening venues, spot radio, and/or billboard.					
Funding Sources:					
Source Fiscal Year	**Funding Source ID**	**Eligible Use of Funds**	**Estimated Funding Amount**	**Match Amount**	**Local Benefit**
2020	FAST Act NHTSA 402	Paid Advertising	$22,044.75	$0.00	$0.00

[11] Road Safety Communication Campaigns Manual for Design, Implementation, and Evaluation, http://op.europa.eu/en.publication-detail.-/publication/cf

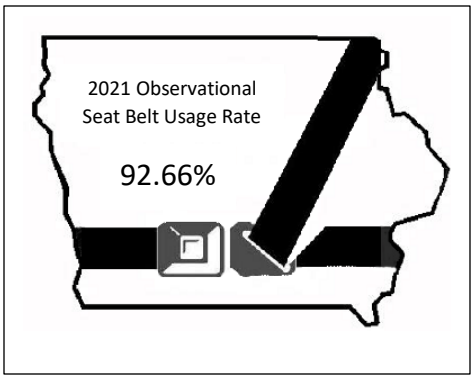
Program Area: Occupant Protection (Adult and Child Passenger Safety)

In 2021, 39.66% of passenger vehicle occupant fatalities were unbelted; an additional 11.39% were recorded as "unknown".*

*Source: Iowa DOT (*Preliminary Data)*

Description of Highway Safety Problems

Both enforcement and educational components have strengthened Iowa's seat belt usage over the years. Iowa's primary seat belt law was enacted in July 1986. At that time only 18% of drivers in the state regularly wore a safety belt. Since that time, Iowa's usage rate has increased significantly yet there is still a lot of work to do. In 2021, Iowa's Safety Belt Usage Survey was conducted by Iowa State University, Center for Survey Statistics and Methodology. The survey concluded a usage rate of 92.66%. This was a 2.66% decrease from the 95.2% belt usage rate recorded in 2020. In addition to the statewide survey, law enforcement agencies funded under Section 402 funding also conduct seat belt surveys.



In 2021, 39.66% of Iowa's passenger vehicle fatalities (94 individuals) were unbelted with an additional 11.39% (27 fatalities) recorded as "unknown" as to belt usage by the reporting officer.

Enforcement partners play a significant role in enforcing belt use laws. There is an increased emphasis in seat belt enforcement throughout the state during the May sTEP wave/"Click It or Ticket" national mobilization. We have, however, seen an overall decrease in the number of seat belt citations/convictions over the past several years.

Although Iowa is a "high belt use state" due to the results of the statewide observational survey, it is imperative that efforts continue in the area of occupant protection. Seat belts/proper restraints dramatically reduce risk of death and serious injuries.

Iowa's 2021 Awareness Survey produced the following results:

- 93.89% of respondents indicated they always wear a seat belt when they drive or ride in a car, van, sport utility vehicle, or pick-up
- Only 37.90% of respondents indicated that chances were very likely that you would get a ticket for not wearing a seat belt; 43.28% indicated chances would be somewhat likely

Associated Performance Measures

Fiscal Year	Performance Measure Name	Target End Year	Target Period	Target Value
2023	C-1) Number of traffic fatalities	2023	5 Year	351.4
2023	C-2) Number of serious injuries in traffic crashes	2023	5 Year	1,398.2
2023	C-3) Fatalities/100M VMT	2023	5 Year	1.073
2023	C-4) Number of unrestrained passenger vehicle occupant fatalities, all seat positions	2023	5 Year	92
2023	B-1) Observed seat belt use for passenger vehicles, front seat outboard occupant	2023	Annual	92.75%

Countermeasure Strategies in Program Area

Highway Safety Office Program Management
Public Education (Seat Belt Convincer)
High Visibility Enforcement / High Five
Communication Campaign

Countermeasure Strategy: Highway Safety Office Program Management

Project Safety Impact

Adequate staff, resources and training are necessary to effectively manage state traffic safety funding and programs that support the mission of the Governor's Traffic Safety Bureau.

Linkage Between Program Areas

Adequate staff, resources and training are necessary to effectively manage state traffic safety funding and programs that support the mission of the Governor's Traffic Safety Bureau.

Rationale

GTSB staff are committed to ensure the federal highway safety program for the state of Iowa is run in an efficient and effective manner. Program management involves providing quality and timely project management which includes the evaluation of risk, continuous monitoring and technical/analytical support. Members of the GTSB staff are actively involved in meetings, conferences, and trainings. Such activities strengthen the professional relationships with traffic safety stakeholders through the State, NHTSA region and nationally.

Planned Activities in Countermeasure Strategy

Unique Identifier	Planned Activity Name
23-402-M0OP, Task 00-00-02	GTSB Program Management (OP)
23-402-M0OP, Task 00-00-03	GTSB Travel (OP)
23-405b-M1TR, Task 00-00-03	GTSB Travel (405b)
23-402-M0OP, Task 00-00-04	GTSB Printing (Added through amendment approved 10/17/2022.

Planned Activity Name: GSTB Program Management (OP)

Unique Identifier/Planned Activity Number: 23-402-M0OP, Task 00-00-02

Intended Subrecipient: GTSB - Internal

Primary Countermeasure Strategy ID: Highway Safety Office Program Management

Planned Description:

Split proportions of GTSB staff salaries for activities focusing on occupant protection projects and technical assistance of occupant restraint activities and to help increase occupant restraint usage. This project provides technical assistance with on-going public information and educational activities which support national campaigns/mobilizations. Activities also include the coordination, monitoring and audits of occupant protection grants and activities.

Funding Sources:

Source Fiscal Year	Funding Source ID	Eligible Use of Funds	Estimated Funding Amount	Match Amount	Local Benefit
2020	FAST Act NHTSA 402	Occupant Protection	$317,500	$0.00	$0.00

Planned Activity Name: GTSB Travel (OP)					
Unique Identifier/Planned Activity Number: 23-402-M0OP, Task 00-00-03					
Intended Subrecipient: GTSB - Internal					
Primary Countermeasure Strategy ID: Highway Safety Office Program Management					
Planned Description: Funding in FFY 2023 is allocated for staff travel including attendance at trainings and conferences.					
Funding Sources:					
Source Fiscal Year	**Funding Source ID**	**Eligible Use of Funds**	**Estimated Funding Amount**	**Match Amount**	**Local Benefit**
2020	FAST Act NHTSA 402	Occupant Protection	$7,000	$0.00	$0.00

Planned Activity Name: GTSB Travel (405b)					
Unique Identifier/Planned Activity Number: 23-405b-M1TR, Task 00-00-03					
Intended Subrecipient: GSTB – Internal					
Primary Countermeasure Strategy ID: Highway Safety Office Program Management					
Planned Description: Funding in FFY 2023 is allocated for GTSB staff travel which is specific to occupant protection.					
Funding Sources:					
Source Fiscal Year	**Funding Source ID**	**Eligible Use of Funds**	**Estimated Funding Amount**	**Match Amount**	**Local Benefit**
2019	FAST Act 405b OP High	Training	$1,500	$0.00	$0.00

Planned Activity Name: GTSB Printing					
Unique Identifier/Planned Activity Number: 23-402-M0OP, Task 00-00-04					
Intended Subrecipient: GSTB – Internal					
Primary Countermeasure Strategy ID: Highway Safety Office Program Management					
Planned Description: *Funding in FFY 2023 is allocated for occupant protection specific printing to include, but not limited to, educational coloring books.* *Added through amendment* - *Approved by NHTSA Region 7 Administrator Susan DeCourcy on October 17, 2022* - *Funding to come from PT-2023-00-00-06*					
Funding Sources:					
Source Fiscal Year	***Funding Source ID***	***Eligible Use of Funds***	***Estimated Funding Amount***	***Match Amount***	**Local Benefit**
2019	*FAST Act NHTSA 402*	*Occupant Protection*	*$20,000*	-	-

Countermeasure Strategy: Public Education (Seat Belt Convincer)

Project Safety Impact

In FFY 2020, the Blue Grass Police Department purchased a seat belt convincer (20-402-M0OP, Task 00-02-00) with the intention to have the unit utilized by all Scott County, Iowa law enforcement partners to help promote the importance of seat belt usage at community events.

Linkage Between Program Areas

The Blue Grass Police Department will partner with other law enforcement agencies throughout Scott County, Iowa, for multi-agency efforts to provide safety programs and community events focusing on the importance of seat belt usage. The seat belt convincer educational programs will support other educational activities such as statewide occupant protection messaging, social media posts and national mobilization efforts.

"Unprotected Persons" is a Safety Emphasis area within the 2019-2023 Strategic Highway Safety Plan. A specific strategy listed within the plan with a connection to the primary countermeasure strategy of education is:

1. Conduct public awareness campaigns focused on generating awareness of the risks associated with being an unprotected person.

Rationale

The Scott County law enforcement agencies have a strong history of conducting multi-agency projects. The seat belt convincer will provide an opportunity for those agencies to continue to work together to provide safety programs to reduce the number of fatal and serious injury crashes where a seat belt is not used.

Planned Activities in Countermeasure Strategy

Unique Identifier	Planned Activity Name
23-405b-M1PE	Seat Belt Convincer

Planned Activity Name: Seat Belt Convincer		
Intended Subrecipients and Unique Identifier/Planner Activity Number		
Bettendorf Police Department	**23-405b-M1PE, Task 01-00-00**	**$1,000**
Buffalo Police Department	**23-405b-M1PE, Task 03-00-00**	**$1,000**
Davenport Police Department	**23-405b-M1PE, Task 04-00-00**	**$2,000**
Eldridge Police Department	**23-405b-M1PE, Task 05-00-00**	**$1,000**
LeClaire Police Department	**23-405b-M1PE, Task 06-00-00**	**$1,000**
Scott Co. Sheriff's Office	**23-405b-M1PE, Task 08-00-00**	**$2,000**

Primary Countermeasure Strategy ID: Public Education

Planned Description:
The seat belt convincer, which was purchased in FFY 2020 by the Blue Grass Police Department (20-402-M0OP, Task 00-02-00), will be utilized by the above-mentioned agencies at community events to educate the public on the importance of seat belt usage.

Funding Sources:

Source Fiscal Year	Funding Source ID	Eligible Use of Funds	Estimated Funding Amount	Match Amount	Local Benefit
2019	FAST Act 405b OP High	Public Education	$8,000	$0.00	$8,000

Countermeasure Strategy: High Visibility Enforcement/High 5

See page 97.

Countermeasure Strategy: Communication Campaign

Project Safety Impacts

Through education and awareness efforts, ZLR ignition will provide messaging to encourage seat belt usage. A variety of venues and platforms will be utilized to expand messaging to reach target audiences.

Linkage Between Program Areas

Statewide traffic data will be analyzed (specific to occupant protection) to help identify target areas of the state for messaging. Specific occupant protection messaging will be a component of Iowa's overall communication campaign countermeasure strategies to address all program areas with the overarching-goal to d*iscourage unsafe driving behaviors.*

Rationale

Road safety campaigns are defined as purposeful attempts to inform, persuade, or motivate people to change their beliefs and behavior in order to improve road safety.[12]

[12] Road Safety Communication Campaigns Manual for Design, Implementation, and Evaluation, http://op.europa.eu/en.publication-detail.-publication/cf

Education messaging and campaigns are in line with the State Strategic Highway Safety Plan (2019-2023). Communications and outreach when supporting enforcement efforts has been determined as an effective countermeasure as indicated in NHTSA's "Countermeasures That Work: A Highway Safety Countermeasures Guide for State Highway Safety Offices", 10th Edition, 2020.

Planned Activity Name: ZLR Ignition / Occupant Protection Campaign					
Unique Identifier/Planned Activity Number: 23-405b-M1*PM, Task 01-00-00					
Intended Subrecipent: ZLR Ignition					
Primary Countermeasure Strategy ID: Communication Campaign					
Planned Description: ZLR Ignition's occupant protection campaign objectives will include supporting NHTSA national mobilization periods through paid media. State specific data will be analyzed to address current and emerging traffic safety issues specific to occupant protection to help direct the rollout of other media-related activities. ZLR's strategies for delivery may include the development of new materials for digital placements in addition to a mix of proven mediums, such as geo-fence banners, social listening venues, spot radio, and/or billboard.					
Funding Sources:					
Source Fiscal Year	**Funding Source ID**	**Eligible Use of Funds**	**Estimated Funding Amount**	**Match Amount**	**Local Benefit**
2019	FAST Act 405b OP High	405b High Paid Advertising	$77,805	$0.00	$0.00

Program Area: Occupant Protection (Adult)

Description of Highway Safety Problems

Preliminary Iowa Department of Transportation data for 2021 indicates that 39.66% of all passenger vehicle fatalities were unbelted with an additional 11.39% recorded as "unknown" by the reporting officer.

Seat belt use is an ongoing highway safety issue in Iowa as in every state. The use of seat belts has repeatedly demonstrated a reduction in injuries and fatalities among both drivers and passengers involved in traffic crashes. Despite Iowa's official safety belt usage rate being 92.66%, many of the small rural communities report significantly lower rates. Agency conducted seat belt usage surveys submitted by sTEP agencies in 2021 reported usage rates as low as 60.8%.

Iowa was required to go through the process to reselect observational locations to be implementation for the 2022 survey.

Associated Performance Measures

Fiscal Year	Performance Measure Name	Target End Year	Target Period	Target Value
2023	C-1) Number of traffic fatalities	2023	5 Year	351.4
2023	C-2) Number of serious injuries in traffic crashes	2023	5 Year	1,398.2
2023	C-3) Fatalities/100M VMT	2023	5 Year	1.073
2023	C-4) Number of unrestrained passenger vehicle occupant fatalities, all seat positions	2023	5 Year	92
2023	B-1) Observed seat belt use for passenger vehicle, front seat outboard occupant	2023	5 Year	92.75%

Countermeasure Strategies in Program Area

Annual Observational Safety Belt Usage Survey

Countermeasure Strategy: Annual Observational Safety Belt Usage Survey

Project Safety Impacts

Seat belt use among drivers is an ongoing highway safety issue in Iowa as in every state. The use of seat belts has repeatedly been demonstrated to result in reduced injuries and lower fatalities among drivers and passengers involved in traffic crashes. NHTSA requires an annual report of seat belt use from each state following specifically prescribed statistical and operational protocols.

Through the results of the Annual Observational Safety Belt Usage Survey, the State will be able to analyze the results and adjust programming (enforcement, education, media, etc.) accordingly and identify problematic areas.

Linkage Between Program Areas

Survey sites are determined through crash data with the assistance of safety partners at In-Trans at Iowa State University.

Results of the survey will help guide programs and efforts to promote seat belt use among Iowa drivers.

Rationale

Conducting an annual safety belt usage survey is a NHTSA requirement and the results determine the State's official usage rate. Results are also used for the deployment of enforcement, education and media efforts. NHTSA requires an annual report of seat belt use rates from each state/territory which follows specific prescribed and approved statistical methodologies and protocols.

Planned Activities in Countermeasure Strategy

Unique Identifier	Planned Activity Name
23-405b-M1OP, Task 01-00-00	Annual Observational Safety Belt Usage Survey

Planned Activity Name: Annual Observational Safety Belt Usage Survey

Unique Identifier/Planned Activity Number: 23-405b-M1OP, Task 01-00-00

Intended Subrecipient: Iowa State University, Center for Survey Statistics and Methodology (CSSM)

Primary Countermeasure Strategy ID: Annual Observational Safety Belt Usage Survey

Planned Description:

Iowa's annual observational seat belt usage survey will be conducted by Iowa State University, Center for Survey Statistics and Methodology (CSSM). In FFY 2023, CSSM will collect and weight seat belt use data as required and approved by NHTSA. CSSM activities will include:

- Check 84 sampled road segments for road construction and their observation sites for visibility and safety
- Update and prepare project materials
- Train field observers in safety, observation techniques and recording procedures
- Assign day/time/direction of road segment site observations
- Notify local officials of the observation schedule and assign sites to field staff
- During the month of June, observe and record seat belt use by approximately 12,000-15,000 drivers and right front passengers in specified vehicle types
- Conduct NHTSA-required quality control checks of field staff
- Tabulate observations and complete data tables requested by GTSB. Calculate selection probability and weights, and complete the Iowa Seat Belt Use Survey Report.
- Deliver weighted data files and report to GTSB before September 30, 2023

Funding Sources:

Source Fiscal Year	Funding Source ID	Eligible Use of Funds	Estimated Funding Amount	Match Amount	Local Benefit
2019	FAST Act 405b OP High	Occupant Protection	$63,751	$0.00	$0.00

Program Area: Occupant Protection (Child Passenger Safety)

Description of Highway Safety Problems

Since 1985, Iowa has had a law requiring all young children riding in motor vehicles to be properly protected through the use of child seats, booster seats, and/or seat belts. Iowa's child passenger safety law requires that:

1. Children must ride in an appropriate rear-facing child safety seat until one year of age and at least 20 pounds
2. Children must ride in a child safety seat or a booster seat through the age of 5 years
3. Children ages 6 through 17 must ride in a booster seat and/or seat belt

Associated Performance Measures

Fiscal Year	Performance Measure Name	Target End Year	Target Period	Target Value
2023	C-1) Number of traffic fatalities	2023	5 Year	351.4
2023	C-2) Number of serious injuries in traffic crashes	2023	5 Year	1,398.2
2023	C-3) Fatalities/100M VMT	2023	5 Year	1.073
2023	C-4) Number of unrestrained passenger vehicle occupant fatalities, all seat positions	2023	5 Year	92

Countermeasure Strategies in Program Area

Annual Child Restraint Usage Survey
Inspection Stations
Marshall County/Marshalltown CPS Event
Iowa State Fair

Countermeasure Strategy: Annual Child Restraint Usage Survey

Project Safety Impacts

The purpose of this project is to monitor compliance with Iowa's child restraint laws to be used to assess educational and policy-related efforts. Results of the survey can help the State identify and implement projects to improve restraint usage.

Linkage Between Program Areas

The results of the survey are shared with other traffic safety partners, specifically in the child passenger safety area, who will review the results to determine how educational efforts may need to be modified in the State. The results can also be reviewed to see how compliance has changed historically and to determine how Iowa compares to other states in regard to child passenger safety compliance.

Rationale

The results of the survey are shared with other traffic safety partners, specifically in the child passenger safety area, who will review the results to determine how educational efforts may need to be modified in the State. The results can also be reviewed to see how compliance has changed historically and to determine how Iowa compares to other states in regard to child passenger safety compliance.

Planned Activities in Countermeasure Strategy

Unique Identifier	Planned Activity Name
23-405b-M1OP, Task 02-00-00	Annual Child Restraint Usage Survey

Planned Activity Name: Annual Child Restraint Usage Survey					
Unique Identifier/Planned Activity Number: 23-405b-M1OP, Task 02-00-00					
Intended Subrecipient: University of Iowa, Injury Prevention Research Center (IPRC)					
Primary Countermeasure Strategy ID: Annual Child Restraint Usage Survey					
Planned Description: The University of Iowa, Injury Prevention Research Center (IPRC) will conduct Iowa's annual child restraint usage survey utilizing guidelines approved by NHTSA. The purpose of the project is to measure compliance with Iowa's child restraint law to direct education and policy. The data gathered through the survey will be analyzed by IPRC and a written report will be provided to the GTSB and shared with other traffic safety stakeholders and interested parties.					
Funding Sources:					
Source Fiscal Year	**Funding Source ID**	**Eligible Use of Funds**	**Estimated Funding Amount**	**Match Amount**	**Local Benefit**
2019	FAST Act 405b OP High	Information Systems	$41,034	$0.00	$0.00

Countermeasure Strategy: Inspection Stations

Project Safety Impacts

The Iowa CPS program is managed and coordinated by Unity Point Hospital/Blank Children's Hospital in Des Moines, Iowa. A large component of Iowa's CPS program is the child restrain inspection stations throughout the State. The inspection stations are a multi-disciplinary effort where parts and care givers can learn the correct use of child restraints. The stations are staffed by nationally certified CPS technicians with the assistance of local law enforcement agencies, fire departments and local hospitals.

Linkage Between Program Areas

Inspection stations are held in urban, rural and high-risk communities. Inspection stations are a positive way to promote traffic safety specific to child passenger safety.

Rationale

With the number of inspection stations and other educational events held throughout the state, there is a vast opportunity to utilize the expertise of the 400+ certified child passenger safety technicians across the State. These events provide invaluable resources and provide education to parents and caregivers on the proper use and installation of child restraint systems. When appropriate, a new child restraint may be provided to a parent/caregiver when safety issues have been identified as a concern and/or if the restraint system is expired. Statewide resources for CPS education and information are provided through multiple channels which also include website and the support of a toll-free number. Printed educational material is also distributed statewide.

Planned Activities in Countermeasure Strategy

Unique Identifier	Planned Activity Name
23-405b-M1CPS, Task 01-00-00	Statewide Child Passenger Safety (CPS) Program
23-405b-M1*CR, Task 01-00-00	Child Seat Distribution
23-405b Marshall Co CPS	Marshall Co/Marshalltown PD CPS Event
23-402-M0CR, Task 00-00-01	Child Restraint Education (Iowa State Fair)

Planned Activity Name: Statewide Child Passenger Safety (CPS) Program					
Unique Identifier/Planned Activity Number: 23-405b-M1CPS, Task 01-00-00					
Intended Subrecipient: Unity Point Hospital/Blank Children's Hospital					
Primary Countermeasure Strategy ID: Child Restraint Inspection Stations					
Planned Description: Iowa's Child Passenger Safety (CPS) program is managed through Unity Pont Health, Blank Children's Hospital, Des Moines, Iowa. The coordinator works with the CPS instructors throughout the State to train new CPS Technicians, organize updates and trainings that assist technicians in earning continuing education units (CEUs), and organize renewal/recertification courses. CPS Tech classes are held throughout the year. The coordinator also implements training and certification of CPS instructors. There are approximately 400 CPS Technicians throughout the State.					
Funding Sources:					
Source Fiscal Year	**Funding Source ID**	**Eligible Use of Funds**	**Estimated Funding Amount**	**Match Amount**	**Local Benefit**
2019	FAST Act 405b OP High	Community CPS Services	$204,500	$0.00	$0.00

Planned Activity Name: Child Seat Distribution					
Unique Identifier/Planned Activity Number: 23-405b-M1*CR, Task 01-00-00					
Intended Subrecipient: Unity Pont Hospital/Blank Children's Hospital					
Primary Countermeasure Strategy ID: Child Restraint System Inspection Stations					
Planned Description: Funding will support the purchase and distribution of child safety seats for CPS Technicians to use during outreach programs, inspection stations, and for the distribution of safety seats to low-income families/higher risk populations throughout the State.					
Funding Sources:					
Source Fiscal Year	**Funding Source ID**	**Eligible Use of Funds**	**Estimated Funding Amount**	**Match Amount**	**Local Benefit**
2019	FAST Act 405b OP High	Child Restraint	$52,000	$0.00	$0.00

Countermeasure Strategy: Marshall County/Marshalltown PD CPS Event

Project Safety Impacts

Parents and caregivers can make a lifesaving difference by knowing if their child/children are properly buckled up.

Linkage Between Program Areas

This project will build upon existing Child Passenger Safety events in the Marshall County area. Such events are interactive with the public and provide for an opportunity to reach underserved communities.

Rationale

According to the Children's Safety Network, child safety seats and belts can reduce fatal injury by up to 71% for infants and 54% for children ages 1-4.

Planned Activities in Countermeasure Strategy

Unique Identifier	Planned Activity Name
23-405b-M1CPS Marshall Co CPS	Marshall County/Marshalltown PD CPS Event

Planned Activity Name: Marshall County/Marshalltown PD CPS Event		
Unique Identifier/Planned Activity Numbers:		
Marshall Co. Sheriff's Office	**23-405b-M1CPS, Task 02-00-00**	**$ 800.00**
Marshalltown Police Department	**23-405b-M1CPS. Task 03-00-00**	**$ 900.00**
Intended Subrecipients: Marshall County Sheriff's Office and Marshalltown Police Department		
Primary Countermeasure Strategy ID: Child Restraint Education		
Planned Description: Over the years, the Marshall County Sheriff's Office and the Marshalltown Police Department have been dedicated to Child Passenger Safety programs. During FFY 2023, the two departments wish to continue to work closely with the Healthy Family Initiatives to provide education on child passenger safety to the county's diverse population. Through this multi-agency approach, they will continue to provide free child seats to those in need and ensure proper installation for anyone needing assistance.		
Funding Sources:		

Source Fiscal Year	Funding Source ID	Eligible Use of Funds	Estimated Funding Amount	Match Amount	Local Benefit
2019	FAST Act 405b OP High	Community CPS Services	$1,700	$0.00	$1,700

Countermeasure Strategy: Child Restraint Education

Project Safety Impacts

The GTSB has historically had an educational display booth at the Iowa State Fair. The purpose of the booth has been to provide traffic safety information to fairgoers of all ages. The venue allows for a diverse audience to be reached during the 10-day event.

Linkage Between Program Areas

In 2022, the primary focus of the fair interactive display will be child passenger safety.

Rationale

The Iowa State Fair is the largest outreach project conducted by the GTSB. Attendance at the fair is approximately one million annually.

Planned Activities in Countermeasure Strategy

Unique Identifier	Planned Activity Name
23-402-M0CR, Task 00-00-01	Iowa State Fair

Planned Activity Name: Iowa State Fair
Unique Identifier/Planned Activity Numbers: 23-402-M0CR, Task 00-00-01
Intended Subrecipients: GTSB - Internal
Primary Countermeasure Strategy ID: Child Restraint Education
Planned Description: Funding will be utilized in FFY 2023 to secure exhibit space at the Iowa State Fair for an interactive display. The exhibit will focus on Child Passenger Safety. Through a display of different car seats and informational brochures, the exhibit will provide the opportunity for one-on-one interaction with a diverse group of fairgoers. The exhibit will be staffed by CPS Technician volunteers and GTSB staff. The fair will be held for 10 days in August.
Funding Sources:

Source Fiscal Year	Funding Source ID	Eligible Use of Funds	Estimated Funding Amount	Match Amount	Local Benefit
2020	FAST Act NHTSA 402	Child Restraint	$5,000	$0.00	$0.00

Program Area: Planning & Administration

Planning and Administration (P&A) costs are those direct and indirect costs that are attributable to the management of the highway safety office. Staff and resources will be provided through Planning and Administration for the management of the federal highway safety funding awarded to Iowa through the GTSB.

Planned Activity Name: GSTB Planning and Administration					
Unique Identifier/Planned Activity Number: 23-402-M0PA, Task 00-00-01					
Intended Subrecipient: GTSB - Internal					
Primary Countermeasure Strategy ID: Highway Safety Office – Planning and Administration					
Planned Description: Funding will support staff and resources to effectively implement and manage the highway safety office to meet the goals and reduce crashes, injuries and fatalities on Iowa roadways. Funding will cover administrative costs including salaries and related personnel benefits. Positions funded through Planning and Administration will include the GTSB Bureau Chief, Financial Manager and Grants Administrator.					
Funding Sources:					
Source Fiscal Year	**Funding Source ID**	**Eligible Use of Funds**	**Estimated Funding Amount**	**Match Amount**	**Local Benefit**
2020	FAST Act NHTSA 402	Planning and Administration (FAST)	$190,000	$0.00	$0.00

Program Area: Program Management

Description of Highway Safety Problems

The staff of the GTSB manage highway safety grant programs administered by the National Highway Traffic Safety Administration. The traffic safety funds the State of Iowa receives are to be used to support countermeasure strategies and targets identified in the State's Highway Safety Plan.

Countermeasure Strategies in Program Area

Iowa Grants Highway Safety Office Dashboard

Countermeasure Strategy: Iowa Grants Highway Safety Office Dashboard

Project Safety Impacts

GTSB contracts with law enforcement agencies throughout the State in an effort to improve traffic safety. Within each contract, agency goals and corresponding budget are specified.

Linkage Between Program Areas

Law enforcement agencies are responsible for submitting monthly reports detailing their activities, including their progress toward contract goals. They are also responsible for submitting reimbursement requests based on their activities. GTSB engages with each agency, monitors progress and provides appropriate reimbursements.

Rationale

Traditionally, much of the reporting and monitoring has been done via hard copy reporting and regular interaction with each agency. Unfortunately, given the number of agencies and reporting mechanisms, challenges existed in contract management, such as identification of possible disproportionate use of funds compared to goal progress. With the implementation of Iowa Grants, new opportunities became available via agency electronic reporting and records management. A Tableau-based Highway Safety Grants dashboard was developed to better facilitate agency engagement and contract monitoring and management. Ongoing maintenance of the Highway Safety Grants dashboard is necessary to continue effective management and identification of potential issues or inconsistencies in reporting of activities.

Planned Activities in Countermeasure Strategy

Unique Identifier	Planned Activity Name
23-405b-M1*TR, Task 01-00-00	Iowa Grants Highway Safety Office Dashboard

Planned Activity Name: Iowa Grants Highway Safety Office Dashboard
Unique Identifier/Planned Activity Number: 23-405b-M1*TR, Task 01-00-00
Intended Subrecipient: Iowa State University, Institute for Transportation
Primary Countermeasure Strategy ID: Program Management
Planned Description: During FFY 2021, InTrans developed a demonstration highway safety grants dashboard for GTSB presenting selected agency data from Iowa Grants. Data included details regarding budget, claim reimbursements and goals accomplished. The demonstration dashboard utilized datasets, in comma separated values (CSV) format, extracted from IowaGrant.gov and proved by GTSB, with the assistance from Iowa Economic Development. The data presented in the dashboard were static, pending manual download from Iowa Grants, manual upload to a file sharing service and integration by InTrans. In an effort to facilitate the presentation of current agency data from IowaGrants.gov, GTSB contracted with Dulles Technology Partners to establish a more automated data sharing protocol with InTrans. During FFY 2022, InTrans was tasked with coordinating with Dulles to implement

daily data transfers, updating the dashboard to utilize new dataset formats and making dashboard enhancements in appearance and functionality.

This project will provide ongoing maintenance of the highway safety grants dashboard so the GTSB and law enforcement agencies can continue to use it to monitor progress, expenditures and general reporting. InTrans will regularly coordinate with GTSB and support minor dashboard enhancements throughout FFY 2023, given software capabilities and project budget. This may also entail addressing possible changes in dataset format or content. Intrans will host and maintain the highway safety grants dashboard throughout FFY 2023. Maintenance will include ongoing confirmation of daily data transfer, data update and active dashboard status.

Funding Sources:

Source Fiscal Year	Funding Source ID	Eligible Use of Funds	Estimated Funding Amount	Match Amount	Local Benefit
2019	FAST Act 405b OP High	405b High Traffic Records	$5,416	$0.00	$0.00

Program Area: Police Traffic Services

Description of Highway Safety Problems

The purpose of Iowa's Police Traffic Services (PTS) program is to provide for an effective partnership with law enforcement agencies to enforce traffic laws with the ultimate goal to prevent crashes and resulting deaths and injuries. An effective PTS component is essential in the overall success of traffic safety countermeasures and changes in behavior.

Associated Performance Measures

Fiscal Year	Performance Measure Name	Target End Year	Target Period	Target Value
2023	C-1) Number of traffic fatalities	2023	5 Year	351.4
2023	C-2) Number of serious injuries in traffic crashes	2023	5 Year	1,398.2
2023	C-3) Fatalities/100M VMT	2023	5 Year	1.073
2023	C-4) Number of unrestrained passenger vehicle occupant fatalities, all seat positions	2023	5 Year	92
2023	C-5) Number of fatalities in crashes involving a driver or motorcycle operator with a BAC of .08 and above	2023	5 Year	99
2023	C-6) Number of speeding-related fatalities	2023	5 Year	69
2023	C-9) Number of drivers age 20 or younger involved in fatal crashes	2023	5 Year	45
2023	B-1) Observed seat belt use for passenger vehicles, front seat outboard occupants	2023	Annual	92.75%

Countermeasure Strategies in Program Area

Highway Safety Office Program Management
Short-Term High Visibility Enforcement
Traffic Safety Training
Law Enforcement Liaison

Countermeasure Strategy: Highway Safety Office Program Management

Project Safety Impacts

Adequate staff, resources, and training are necessary to effectively manage state traffic safety funding and programs that support the mission of the Governor's Traffic Safety Bureau.

Linkage Between Program Areas

Adequate staff, resources, and training are necessary to effectively manage state traffic safety funding and programs that support the mission of the Governor's Traffic Safety Bureau.

Rationale

The GTSB staff is committed to ensure the federal highway safety program for the State of Iowa is run in an efficient and effective manner. Program management involves providing quality and timely project management which includes the evaluation of risk and continuous monitoring and technical/analytical support. The members of the GTSB staff are actively involved in meetings, conferences and trainings. Such activities strengthen the professional relationships with traffic safety stakeholders throughout the State, NHTSA region and nationally.

Planned Activities in Countermeasure Strategy

Unique Identifier	Planned Activity Name
23-402-M0PT, Task 00-00-02	GTSB Program Management (PT)
23-402-M0PT, Task 00-00-03	GTSB Travel (PT)
23-402-M0PT, Task 00-00-04	GTSB – Printing (PT)

Planned Activity Name: GTSB Program Management (PT)

Unique Identifier/Planned Activity Number: 23-402-M0PT, Task 00-00-02

Intended Subrecipient: GTSB - Internal

Primary Countermeasure Strategy ID: Highway Safety Office Program Management

Planned Description:
Split proportions of GTSB staff salaries for Police Traffic Service-related projects including coordinating, monitoring, and auditing of grants and activities.

Funding Sources:

Source Fiscal Year	Funding Source ID	Eligible Use of Funds	Estimated Funding Amount	Match Amount	Local Benefit
2020	FAST Act NHTSA 402	Police Traffic Services	$445,000	$0.00	$0.00

Planned Activity Name: GTSB Travel (PT)

Unique Identifier/Planned Activity Number: 23-402-M0PT, Task 00-00-03

Intended Subrecipient: GTSB - Internal

Primary Countermeasure Strategy ID: Highway Safety Office Program Management

Planned Description:
Funding will be allocated for day-to-day travel expenses for site visits and various staff travel to conference and trainings. Funding will also be allocated for travel to the GHSA Annual Meeting and NAWHSL Conference.

Funding Sources:

Source Fiscal Year	Funding Source ID	Eligible Use of Funds	Estimated Funding Amount	Match Amount	Local Benefit
2020	FAST Act NHTSA 402	Police Traffic Services	$25,000	$0.00	$0.00

Planned Activity Name: GTSB - Printing

Unique Identifier/Planned Activity Number: 23-402-M0PT, Task 00-00-04

Intended Subrecipient: GTSB - Internal

Primary Countermeasure Strategy ID: Highway Safety Office Program Management

Planned Description:
Funding in FFY 2023 is allocated for occupant protection related brochures and sTEP calendars.

Funding Sources:

Source Fiscal Year	Funding Source ID	Eligible Use of Funds	Estimated Funding Amount	Match Amount	Local Benefit
2020	FAST Act NHTSA 402	Police Traffic Services	$10,000	$0.00	$0.00

Countermeasure Strategy: Short-Term High Visibility Enforcement

Project Safety Impacts:

Law enforcement plays an essential role in traffic safety. Agencies supported through Police Traffic Services funding use enforcement and education to work toward the common goal to reduce traffic fatalities and serious injuries

Linkage Between Program Areas

Law enforcement efforts support overall traffic safety initiatives and are consistent with strategies identified throughout the overall Highway Safety Plan and the State Strategic Highway Safety Plan.

Rationale

Providing traffic enforcement services and the enforcement of traffic laws and ordinances is a responsibility shared by all law enforcement agencies.

Short-term high visibility enforcement is identified as an effective strategy within NHTSA's "Countermeasures that Work: A Highway Safety Countermeasure Guide for State Highway Safety Offices", 10th Edition, 2020.

Planned Activities in Countermeasure Strategy

Unique Identifier	Planned Activity Name
23-402-HVE PTS	Law Enforcement/HVE – 402 (PTS)
23-402-M0PT sTEP	special Traffic Enforcement Program (sTEP)

Planned Activity Name: Law Enforcement/HVE – 402 (PTS)

Unique Identifier/Planned Activity Number: 23-402-HVE PTS

Intended Subrecipients: Local Law Enforcement Agencies

Primary Countermeasure Strategy ID: Short-Term High Visibility Enforcement

Planned Description:

Funding through Section 402 Police Traffic Services will support overtime for enforcement efforts. Speed, impaired, safety belt violations, and other traffic violations will be addressed through these enforcement efforts. Enforcement presence helps deter unsafe driving behaviors. Some agencies will also receive funding for educational overtime, travel and approved equipment purchases.

Funding Sources:

Source Fiscal Year	Funding Source ID	Eligible Use of Funds	Estimated Funding Amount	Match Amount	Local Benefit
2020	FAST Act NHTSA 402	Police Traffic Services (FAST)	$1,746,178	$0.00	$1,450,828
			AMENDMENT #1		
			After outreach conducted by our LEL at local law enforcement leadership meetings, the Belle Plaine Police Department and the Warren County Sheriff's Office wish to partner with the GTSB in FFY 2023. The increased funding for this amendment request will come from 23-402-PT-2023-00-00-06 FAST Act NHTSA 402 and 23-405d-M6OT2023-00-00-01, FAST Act 405d Impaired Driving Low.This amendment was approved by NHTSA Region 7 Administrator Susan DeCourcy on October 17, 2022. *Planned Activity #'s:*		

			Belle Plaine PD 23-402-M0PT, Task 00-00-91 *Warren County SO 23-402-M0PT Task 00-00-92*
			AMENDMENT #2
			The Council Bluffs Police Department has requested the addition of one lidar to their FFY 2023 contract. The department had a lidar unit damaged in a high-speed pursuit. The lidar is inoperable and unable to be fixed. A replacement lidar is needed in order to effectively help with speed-related traffic projects. The unit that was damaged was not originally purchased with NHTSA funds. The increased funding for this amendment request will come from PT-2023-00-00-06. This amendment was approved by NHTSA Region 7 Administrator Susan DeCourcy on October 17, 2022. *Planned Activity #: 23-402-M0PT, Task 19-00-00*
			AMENDMENT #3
			After outreach conducted by our LEL at local law enforcement leadership meetings, the Hiawatha Police Department wishes to partner with the GTSB in FFY 2023. The increased funding ($8,300.00) for this amendment request will come from 23-402-PT-2023-00-00-06 FAST Act NHTSA 402. This amendment was approved by NHTSA Region 7 Administrator Susan DeCourcy on October 28, 2022. *Planned Activity #: 23-402-M0PT, Task 00-00-95*
			AMENDMENT #4
			After outreach conducted by our LEL and other GTSB staff, the Boone County Sheriff's Office and the Van Meter Police Department wish to partner with the GTSB in FFY 2023. The increased funding ($10,000.00) for this amendment request will come from 23-402-PT-2023-00-00-06 FAST Act NHTSA 402. This amendment was approved by NHTSA Region 7 Administrator Susan DeCourcy on November 1, 2022. *Planned Activity #'s:* *Boone Co SO 23-402-M0PT, Task 00-00-93* *VanMeter PD 23-402-M0PT, Task 00-00-94*
			AMENDMENT #5

			After further outreach by GTSB staff, the Sac County Sheriff's Office has shown a desire to conduct overtime enforcement beyond the original sTEP contract which would limit activity to the 10 identified sTEP waves. This amendment is requested to increase funding for the Sac County Sheriff's Office and move their project agreement from sTEP (Planned Activity Name: special Traffic Enforcement Program (sTEP)) to allow for a general enforcement agreement under Planned Activity Name: Law Enforcement/HVE-402 (PTS). The increased funding for this amendment request ($4,500) will come from 23-402-PT-2023-00-00-06 FAST Act NHTSA 402. This amendment was approved by NHTSA Region 7 Administrator Susan DeCourcy on November 14, 2022. *New Project Agreement # 23-402-M0PT, Task 00-07-00*
			AMENDMENT #6
			After outreach conducted by our LEL and other GTSB staff, the Toledo Police Department wishes to partner with the GTSB in FFY 2023 for general overtime enforcement. The increased funding ($8,000.00) for this amendment request will come from 23-402-PT-2023-00-00-06 FAST Act NHTSA 402. *Planned Activity # 23-402-M0PT, Task 00-00-96* *This amendment was approved by NHTSA Region 7 Administrator Susan DeCourcy on December 28, 2022.*

Planned Activity Name: special Traffic Enforcement Program (sTEP)					
Unique Identifier/Planned Activity Number: 23-402-M0PT sTEP					
Intended Subrecipients: Local Law Enforcement Agencies					
Primary Countermeasure Strategy ID: Short-Term High Visibility Enforcement					
Planned Description: Iowa's sTEP program is an enforcement and education effort to ultimately reduce collisions, injuries and fatalities. The design of the program allows for smaller, rural community enforcement agencies to receive overtime funding to work the identified sTEP waves. During the May wave, which corresponds with the "Click It or Ticket" national mobilization, sTEP agencies will be required to conduct pre- and post-wave observational seat belt usage surveys. sTEP agencies are encouraged to work with the local media to help spread awareness to traffic safety issues. Funding is allocated for overtime enforcement and approved equipment.					
Funding Sources:					
Source Fiscal Year	**Funding Source ID**	**Eligible Use of Funds**	**Estimated Funding Amount**	**Match Amount**	**Local Benefit**

2020	FAST Act NHTSA 402	Police Traffic Services (FAST)	$495,014	$0.00	$431,564

Countermeasure Strategy: Traffic Safety Training

Project Safety Impacts

The annual Governor's Highway Traffic Safety Conference provides a venue for traffic safety partners from all disciplines to come together for training and networking. Each year the agenda contains a variety of traffic safety related subjects. Information provided can up attendees in setting their traffic safety strategies. Various areas identified in NHTSA's "Countermeasures that Work: A Highway Safety Countermeasures Guide for State Highway Safety Offices" will be considered in the planning for the 2023 conference.

Linkage Between Program Areas

Various program areas and countermeasures will be considered when planning the 2023 conference.

Rationale

2023 will represent the 32nd Annual Governor's Highway Traffic Safety Conference. The event has been successful over the years and provides a great opportunity to learn about traffic safety initiatives and networking. For smaller agencies, the annual conference may be the only traffic safety training opportunity they attend.

Planned Activities in Countermeasure Strategy

Unique Identifier	Planned Activity Name
23-402-M0PT, Task 00-20-00	GTSB Conference

Planned Activity Name: GTSB Conference

Unique Identifier/Planned Activity Number: 23-402-M0PT, Task 00-20-00

Intended Subrecipient: ~~GTSB – Internal~~ Iowa State University Conference Planning

Primary Countermeasure Strategy ID: Traffic Safety Training

Planned Description:

Allocated funds will be used to plan and host the annual Governor's Highway Traffic Safety Conference. The annual Governor's Highway Traffic Safety Conference provides a venue for traffic safety partners from all disciplines to come together for training and networking. Each year the agenda contains a variety of traffic safety related subjects. Information provided can help attendees in setting their traffic safety strategies. Various areas identified in NHTSA's "Countermeasures that Work: A Highway Safety Countermeasures Guide for State Highway Safety Offices" will be considered in the planning for the 2023 conference. For smaller agencies, the annual conference may be the only traffic safety training opportunity they attend.

Funding Sources:

Source Fiscal Year	Funding Source ID	Eligible Use of Funds	Estimated Funding Amount	Match Amount	Local Benefit
2020	FAST Act NHTSA 402	Police Traffic Services	$70,000	$0.00	$0.00
			AMENDMENT #1		
			The GTSB Conference was identified as a project in the initial HSP for FFY 23. At that time, the intended subrecipient was listed as GTSB-Internal (23-402-M0PT, Task 00-20-00). Since the original HSP submission, additional discussions have occurred and the GTSB would like to partner with		

			Iowa State University Conference Planning to coordinate the annual Governor's Highway Traffic Safety Conference. In addition to the 1 ½ day conference, a pre-conference training is also being planned. *This amendment is being requested to change the subrecipient from GTSB-Internal to Iowa State University Conference Planning. The estimated funding will remain at $70,000 and the planned activity number will remain 23-402-M0PT, Task 00-20-00.* *This amendment was approved by NHTSA Region 7 Administrator Susan DeCourcy on November 15, 2022.*

Countermeasure Strategy: Law Enforcement Liaison (LEL)

Project Safety Impacts

Law enforcement liaisons help promote and enhance state and national highway safety programs, initiatives and campaigns and perform a myriad of functions, including planning, organizing, networking, promoting, recruiting, implementing, reporting and evaluation of law enforcement's role in traffic safety projects, activities and achievements. Typically law enforcement liaisons are retired enforcement officials. One of their most important tasks is to recruit and encourage state and local law enforcement participation in national and state traffic safety mobilizations, but they continuously work toward a culture of sustained and effective traffic enforcement programs.

Linkage Between Program Areas

Law enforcement liaisons help promote and enhance state and national highway safety programs, initiatives and campaigns and perform a myriad of functions, including planning, organizing, networking, promoting, recruiting, implementing, reporting and evaluation of law enforcement's role in traffic safety projects, activities and achievements.

Rationale

A law enforcement liaison serves as a vital link and conduit between a State Highway Safety Office and the State's law enforcement community.

The National Law Enforcement Liaison Program (NLELP) was created by the National Highway Traffic Safety Administration (NHTSA) and the Governor's Highway Safety Association (GHSA). The purpose of the program is to enhance communications between LELs, ensure greater coordination of LEL activities nationwide, create and support LEL training and guidance workshops to increase the knowledge and skills of LELs and provide technical assistance.

Planned Activities in Countermeasure Strategy

Unique Identifier	Planned Activity Name
23-402-M0PT, Task 00-00-01	Law Enforcement Liaison

Planned Activity Name: Law Enforcement Liaison (LEL)
Unique Identifier/Planned Activity Number: 23-402-M0PT, Task 00-00-01

Intended Subrecipient: GTSB - Internal					
Primary Countermeasure Strategy ID: Law Enforcement Liaison					
Planned Description: Funding will be allocated to support a part-time Law Enforcement Liaison to provide additional outreach to state law enforcement partners. This position will continue to solicit participation of law enforcement agencies to partner with the GTSB and promote traffic safety related programs through a data-driven approach. A minimum of 15 in-person collaborative meetings will be set in targeted regions/locations across the state. Meetings will bolster law enforcement partnerships and assist in communication and programming. In addition to in-person meetings, Iowa's LEL will send monthly traffic safety related emails to all law enforcement agencies in the state regardless if they currently partner with GTSB or not.					
Funding Sources:					
Source Fiscal Year	**Funding Source ID**	**Eligible Use of Funds**	**Estimated Funding Amount**	**Match Amount**	**Local Benefit**
2020	FAST Act NHTSA 402	Police Traffic Services	$75,000	$0.00	$0.00

Program Area: Roadway Safety/Traffic Engineering

Description of Highway Safety Problems

Engineering is an important component to an effective traffic safety program. Section 402 Roadway Safety funds help support collaborative statewide efforts to develop and promote traffic safe related education in construction and operation improvements.

Iowa's Traffic Records System contains data which can be analyzed to determine problem areas and support corrective engineering-related actions and recommendations. Iowa's traffic safety data is readily available to end-users through the Iowa Crash Analysis Tool (ICAT), http://icat.iowadot.gov. Over the past several years, various updates and improvements have been made to ICAT that has made the application user-friendly. The potential ICAT user base includes thousands of people affiliated with state, county, local agencies, and traffic safety consultants.

Associated Performance Measures

Fiscal Year	Performance Measure Name	Target End Year	Target Period	Target Value
2023	C-1) Number of traffic fatalities	2023	5 Year	351.4
2023	C-2) Number of serious injuries in traffic crashes	2023	5 Year	1,398.2
2023	C-3) Fatalities/100M VMT	2023	5 Year	1.073

Countermeasure Strategies in Program Area

Traffic Engineering Assistance Program
Multidisciplinary Safety Teams
Safety Circuit Rider

Countermeasure Strategy: Traffic Engineering Assistance Program

Project Safety Impacts

The Traffic Engineering Assistance Program (TEAP) provides traffic and safety expertise to counties and smaller cities in Iowa that do not have the resources to justify a full-time traffic engineering staff. Through TEAP, traffic engineering analyses are conducted on high crash locations and corrective measures are developed to reduce the number and severity of traffic crashes. The analyses of roadway-related crash information applies engineering principals in identifying highway design and/or safety operations improvements that will address the crash problem. Studies foster an ongoing dialogue among all disciplines of traffic safety including engineers, enforcement, and traffic data professionals, which in turn promotes a multidisciplinary approach to addressing highway safety issues which focus on comprehensive solutions to identified problems. Operational improvements include the coordination and consideration of law enforcement such as detour routes and law enforcement cross-overs. Studies and recommendations also consider statewide quick clearance policies. This program will allow the Iowa DOT to have two consultants on-call to do traffic engineering studies as well as a consultant to perform reviews for all-sized communities. Traffic engineering consultants will conduct interviews with local stakeholders, gather roadway, crash, and enforcement data, analyze information, and identify cost-effective traffic safety and operational improvements. Each TEAP study involves the community and all interested parties, analyses of current conditions, identification and recommendations of improvements and identification of potential funding sources to help guide local governments toward implementation. TEAP studies may be requested by any unit of government based on input from elected officials, enforcement personnel, engineering staff and/or citizens.

Linkage Between Program Areas
Partnerships between traffic safety stakeholders, including local engineers, are critical for the overall success of traffic safety efforts.

Rationale
Partnerships between traffic safety stakeholders, including local engineers, are critical for the overall success of traffic safety efforts.

Planned Activities in Countermeasure Strategy

Unique Identifier	Planned Activity Name
23-402-M0RS, Task 03-00-00	Traffic Engineering Assistance Program (TEAP)

Planned Activity Name: Traffic Engineering Assistance Program (TEAP)

Unique Identifier/Planned Activity Number: 23-402-M0RS, Task 03-00-00

Intended Subrecipient: Iowa Department of Transportation

Primary Countermeasure Strategy ID: Traffic Engineering Assistance Program

Planned Description:
Funding will support the Iowa DOT's Traffic Engineering Assistance Program (TEAP). TEAP provides free traffic engineering expertise to cities and counties that are experiencing traffic safety or operational problems but have neither the funds nor the personnel to conduct an appropriate study on their own. The purpose of every TEAP study is to recommend cost-effective improvements that will mitigate the identified traffic safety and/or operational issues, as well as to highlight potential funding sources that could be used to implement study recommendations. Grant funds will be used to pay on-call consultants for their time spent completing TEAP studies. Typical studies include high-crash locations, unique lane configurations, obsolete traffic control devices, social pedestrians, truck routes, parking issues, and other smaller-scale traffic studies. Every TEAP study concludes with a final, written report provided to the requesting agency.

Project activities will include:

- Analyzing road systems at approximately eight (8) locations
- Providing GTSB with a report detailing each completed study that includes the location, pre-study crash data, problems(s) addressed, and recommendation(s) made
- Conducting study follow-ups at locations analyzed five years prior (FFY 18) and provide the GTSB with a report detailing location; post-study crash data and outcomes, and countermeasures implemented based off of original study recommendations

Results will be measured by the number of studies completed.

Funding Sources:

Source Fiscal Year	Funding Source ID	Eligible Use of Funds	Estimated Funding Amount	Match Amount	Local Benefit
2020	FAST Act NHTSA 402	Roadway Safety	$100,000	$0.00	$0.00

Countermeasure Strategy: Multidisciplinary Safety Teams

Project Safety Impacts

Iowa's Statewide Multidisciplinary Safety Team (MDST) program assists with the facilitation, development and operation of local safety teams to help identify and resolve local crash causes and enhance crash response practices in Iowa. These teams include local and state safety professionals from various backgrounds. Local MDSTs meet on a regular basis to discuss safety topics, problems, projects, and improvements.

Linkage Between Program Areas

The statewide MDST program can assist with a number of technical services to develop existing safety groups, establish new relationships, and foster growth of innovative and effective safety practices within the transportation community. One of the program's main goals is the interagency collaboration and information exchange. This approach improves communication on technical issues among professionals from local governments, cities, counties, metropolitan planning organizations and the Iowa Department of Transportation. Some of the services the MDST program assists with include the following:

1. Provide technical brief, technical reports and research documentation
2. Provisions for technical and safety workshops
3. Outreach and technical services
4. Traffic safety assessment

Data is also a critical component of MDST programs. Traffic safety data specific to a MDST area is utilized to help steer conversations and ultimately traffic safety improvements.

Rationale

Due to the variety of disciplines represented and involved in MDSTs, there is a great opportunity for networking. By coordinating and collaborating with other stakeholders, MDST participants gain a broader perspective on safety issues and learn best practices from professionals outside their respective area of expertise. This ultimately leads to the development of solutions that may not have been considered otherwise. MDSTs should be considered as a proactive roadway safety outreach program which establishes strong communication channels among participants.

Planned Activities in Countermeasure Strategy

Unique Identifier	Planned Activity Name
23-402-M0RS, Task 02-00-00	Multidisciplinary Safety Team Program

Planned Activity Name: Multidisciplinary Safety Team Program
Unique Identifier/Planned Activity Number: 23-402-M0RS, Task 02-00-00
Intended Subrecipient: Iowa State University – Institute for Transportation
Primary Countermeasure Strategy ID: Multidisciplinary Safety Team Program
Planned Description: One of this planned activity goals is interagency collaboration and information exchange. This approach will improve communication on technical transportation issues among professionals from local governments, cities, counties, metropolitan planning organizations and regional entities and the DOT statewide. The program also offers assistance by providing technical briefs, technical reports, and research documents, technical and safety workshops, outreach and technology services, and traffic safety assessments. Specific activities of the statewide MDST facilitator will include the following in FFY 2023: • Promotion of the ongoing growth of a traffic safety culture in Iowa • Work with GTSB, DOT and other agencies to provide appropriate topics, presentations, crash maps, GIS data, workshops, contacts, and requested safety analysis for MDST meetings • Attendance and involvement with meetings to keep current on safety related information and issues, as well as current research projects and studies to share with our safety partners and MDST attendees

- Facilitation of multi-disciplinary processes to identify safety issues and improvements
- Provide assistance, information, and support to promote and enhance the formation and active participation of area agencies in MDSTs
- Ongoing development and/or evolution of each MDST
- Update MDST website to be used as a tool and resource for MDSTs and their members
- Develop marking materials to promote MDST program
- Participate in association meetings and conferences and provide safety presentations, demonstrations and moderator services when requested

Funding Sources:

Source Fiscal Year	Funding Source ID	Eligible Use of Funds	Estimated Funding Amount	Match Amount	Local Benefit
2020	FAST Act NHTSA 402	Roadway Safety	$38,250	$0.00	$0.00

Countermeasure Strategy: Safety Circuit Rider

Project Safety Impacts

The Safety Circuit Rider program provides training, outreach, and evaluation across Iowa through a variety of activities. The Circuit Rider provides training in transportation safety to local agencies across the state in topics such as roadway and roadside safety, work zone and flagging, and permanent signing and pavement markings from the Manual on Uniform Traffic Control Device (MUTCD). This program also provides information and advice on engineering problems and concerns related to traffic safety and operational issues. The Circuit Rider also organizes multidisciplinary workshops and safety assessments that facility collaboration between the engineering and law enforcement communities. Such activities promote traffic safety throughout the State and provide local agencies with outreach and support.

Linkage Between Program Areas

The Safety Circuit Rider program helps to improve the safety knowledge of the local government employees and workshop participants which allows for connectivity between stakeholders.

Rationale

The Safety Circuit Rider program was created over 30 years ago as a strategy to bring safety training to local government agency personnel (i.e. city and county engineering and maintenance staff) at or near their place of work. Often, local governments are short on funds for training and find it difficult to send all personnel in need of specific safety training to locations at a long distance from their community. This is especially true for trainings such as work zone and flagger. All trainings are specific to Iowa's Local Transportation Assistance Program approved work plan from FHWA and the Iowa DOT.

Planned Activities in Countermeasure Strategy

Unique Identifier	Planned Activity Name
23-402-M0RS, Task 01-00-00	Safety Circuit Rider

Planned Activity Name: Safety Circuit Rider

Unique Identifier/Planned Activity Number: 23-402-M0RS, Task 01-00-00

Intended Subrecipient: Iowa State University – Institute for Transportation

Primary Countermeasure Strategy ID: Safety Circuit Rider

Planned Description:

The Safety Circuit Rider program was established as part of the Iowa Local Transportation Assistance Program (LTAP) to provide traffic safety training at the local level for engineers, supervisors/managers, technicians, and equipment operators. The program allows local agencies to obtain access to safety training, information, and

assistance when and where needed. There is also a continuing need to remove barriers to multidisciplinary cooperation in addressing roadway safety between agencies. The project activities for the FFY 2023 Safety Circuit Rider program include:

- Complete work zone and flagger training for approximately 450 local transportation staff under an LTAP-approved work plan from FHWA and the Iowa DOT
- Provide training courses, workshops and presentations for state and local transportation staff on safety-related topics
- Organize and coordinate up to 10 multidisciplinary Road Safety Assessments (RSA) efforts for GTSB programs and local agencies on request
- Provide multidisciplinary technical assistance to and feedback on safety-related questions received from local transportation staff
- Document the outcome of previously completed RSAs
- Participate in association meetings and conferences and provide safety presentations, demonstrations, and moderator services when requested.

Funding Sources:

Source Fiscal Year	Funding Source ID	Eligible Use of Funds	Estimated Funding Amount	Match Amount	Local Benefit
2020	FAST Act NHTSA 402	Roadway Safety	$70,000	$0.00	$0.00

Program Area: Rural Traffic Safety Program

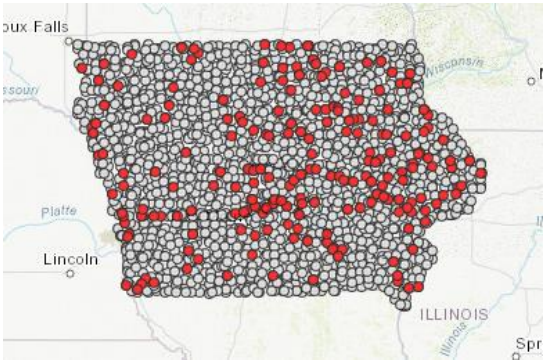
Rural fatalities represented 70.92% of all traffic fatalities in the state of Iowa in 2020.

Source: NHTSA/STSI

Description of Highway Safety Problems

Seventy-nine (79%) of Iowa's roadways are secondary. From data we know most rural crashes are single vehicle crashes. Contributing factors in rural crashes include losing control, driving too fast, failing to yield, lane departures, hitting stationary objects, impairment, and driver inexperience. A major factor in regard to the severity of the crash circles back to whether or not a safety belt was worn.

Preliminary 2021 data, as maintained by the Iowa Department of Transportation, indicates there were 25,876 rural crashes resulting in 254 fatalities, 949 serious injuries and 3,396 minor injuries. See map to the right.



Rural fatal crashes in 2021.

Iowa ranked 8th (tied with Kansas) highest in the nation for rural fatalities in 2019. Seventy-three percent (73%) of Iowa's fatalities were considered rural. Iowa ranked significantly higher in the percentage of rural crashes than the national average (45%). However, when reviewing the fatality rate per 100M VMT, Iowa is less than the national average.[13]

State	Land Use						Total Fatalities		VMT (Millions)		Fatality Rate Per 100M VMT	
	Rural		Urban		Unknown							
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Rural	Urban	Rural	Urban
Iowa	254	80%	64	20%	0	0%	318	100%	19,717	13,566	1.23	0.47
US	16,411	45%	19,498	53%	651	2%	36,560	100%	978,802	2,261,525	1.68	0.86

There are 114,510 miles within Iowa's public roadway system. Over 90% of the public roads (municipal and secondary) are the responsibility of local and county governments; however, over 60% of the vehicle traveled (VMT) happen on the state-owned/primary routes. Most VMT is concentrated within metropolitan areas or along major interstate and U.S. highway routes.

System	Mileage	Percent of Total Mileage	Total VMT (Millions)	Percent of Total VMT
Primary	9,574	8%	20,645	61%
Secondary	89,834	79%	5,523	17%
Municipal	15,102	13%	7,095	21%
Total	114,510	100%	33,263	100%

Source: IDOT

[13] NHTSA Traffic Safety Facts, Rural/Urban Comparison of Motor Vehicle Traffic Fatalities, 2019 Data, November 2021, DOT HS DOT HS 813 206.

Associated Performance Measures

Fiscal Year	Performance Measure Name	Target End Year	Target Period	Target Value
2023	C-1) Number of traffic fatalities	2023	5 Year	351.4
2023	C-2) Number of serious injuries in traffic crashes	2023	5 Year	1,398.2
2023	C-3) Fatalities/100M VMT	2023	5 Year	1.073
2023	C-4) Number of unrestrained passenger vehicle occupant fatalities, all seat positions	2023	5 Year	92
2023	C-5) Number of fatalities in crashes involving a driver or motorcycle operator with BAC of .08 and above	2023	5 Year	99
2023	C-6) Number of speeding-related fatalities	2023	5 Year	69
2023	C-9) Number of drivers age 20 or younger involved in fatal crashes	2023	5 Year	45
2023	Additional Performance Measure - #1: Rural Traffic Safety/Rural Traffic Fatalities	2023	5 Year	255
2023	B-1) Observed seat belt use for passenger vehicles, front seat outboard occupants	2023	Annual	92.75%

Countermeasure Strategies in Program Area

High Visibility Enforcement / High Five
High Visibility Enforcement / sTEP
Communication Campaign

Countermeasure Strategy: High Visibility Enforcement (HVE)

Project Safety Impacts

This project will focus efforts on rural counties with lower seat belt usage rates. Funding will be provided for enforcement and educational efforts focused on occupant protection. The High Five project is designed to be a multi-agency effort. Engineering will be a component of the project with Road Safety Assessments being conducted in each of the counties. The assessments will provide the county with low cost engineering improvement recommendations.

Linkage Between Program Areas

Various data courses will be utilized to identify county to target for this program. In addition to the seat belt focus, the program will include an engineering component through road safety assessments.

Rationale

In 2020, 72.62% of Iowa's traffic fatalities were classified as rural crashes. Funding will be provided to rural counties with low seat belt usage rates.

Planned Activities in Countermeasure Strategy

Unique Identifier	Planned Activity Name
23-405b-M1HVE High Five	High Five Rural Traffic Safety Program

Planned Activity Name: High Five Rural Traffic Safety Program					
Unique Identifier/Planned Activity Number: 23-405b-M1HVE High Five					
Intended Subrecipients: To Be Determined					
Primary Countermeasure Strategy ID: High Visibility Enforcement (HVE)					
Planned Description: In FFY 2023, the High Five Rural Traffic Safety Program will place an emphasis on occupant protection. The GTSB will partner with rural counties with low seat belt usage rates. Funding will be provided for enforcement and educational efforts.					
Funding Sources:					
Source Fiscal Year	**Funding Source ID**	**Eligible Use of Funds**	**Estimated Funding Amount**	**Match Amount**	**Local Benefit**
2019	FAST Act 405b OP High	405b High HVE	$100,000	$0.00	$0.00
			AMENDMENT #1		
			<u>Amendment Submitted to Identify Partners/Project Level Detail</u> - Since the submission of the FFY 2023 Highway Safety Plan, an advisory team was formed with members from the Iowa Department of Transportation, In-Trans at Iowa State University, and GTSB staff. The team extensively reviewed 5-years of crash data to identify rural counties with low belt usage and a high percentage of unbelted fatal and serious injury crashes. *Earlier in the month of October, High Five Rural Traffic Safety Project informational meetings were held in each of the five identified counties. The GTSB has identified the following law enforcement agencies to partner with during the FFY 2023 project year to perform enforcement and educational activities:* *Iowa State Patrol 23-405b-M1HVE, Task 01-00-00* *Keokuk Co SO 23-405b-M1HVE, Task 04-00-00* *Fremont Co SO 23-405b-M1HVE, Task 08-00-00* *This amendment was approved by NHTSA Region 7 Administrator Susan DeCourcy on November 1, 2022.*		
			AMENDMENT #2		

			<u>Amendment Submitted to Identify Partners/Project Level Detail</u> *Since the submission of the FFY 2023 Highway Safety Plan, an advisory team was formed with members from the Iowa Department of Transportation, In-Trans at Iowa State University, and GTSB staff. The team extensively reviewed 5 years of crash data to identify rural counties with low belt usage and a high percentage of unbelted fatal and serious injury crashes.* *During the month of October, High Five Rural Traffic Safety Project informational meetings were held in each of the five identified counties. The The GTSB has identified the following law enforcement agency to partner with during FFY 2023 project year to perform enforcement and educational activities.* *Humboldt PD 23-405b-M1HVE, Task 06-00-00* *This amendment was approved by NHTSA Region 7 Administrator Susan DeCourcy on November 15, 2022.*

Countermeasure Strategy: sTEP

See page 87.

Countermeasure Strategy: Communication Campaign

<u>Project Safety Impacts</u>

Through educational and awareness efforts, ZLR Ignition will provide messaging to discourage impaired driving. A variety of venues and platforms will be utilized to expand messaging to reach target audiences.

Linkage Between Program Areas

Statewide traffic data will be analyzed (specific to rural driving) to help identify target areas of the state for messaging. Rural messaging will be a component of Iowa's overall communication campaign countermeasure strategies to address all program areas with the over-arching goal to discourage unsafe driving behaviors.

Rationale

Road safety campaigns are defined as purposeful attempts to inform, persuade, or motivate people to change their beliefs and behavior in order to improve road safety.[14]

Planned Activity Name: ZLR Ignition / Rural Driving Campaign
Unique Identifier/Planned Activity Number: To Be Determined

[14] Road Safety Communication Campaigns Manual for Design, Implementation, and Evaluation, http://op.europa.eu/en.publication-detail.-publication/cf

Intended Subrecipent: ZLR Ignition					
Primary Countermeasure Strategy ID: Communication Campaign					
Planned Description: ZLR Ignition's rural driving campaign will be developed after the analysis of state specific data. Current and emerging traffic safety issues will be considered. Strategies for deliver may include the development of new materials for digital placements in addition to a mix of proven mediums, such as go-fence banners, social listening venues, spot radio, and/or billboard.					
Funding Sources:					
Source Fiscal Year	**Funding Source ID**	**Eligible Use of Funds**	**Estimated Funding Amount**	**Match Amount**	**Local Benefit**
To Be Determined					

Program Area: Teen Traffic Safety Program

Motor vehicle crashes are the leading cause of death for teens (15-18 years old) in the United States.

Source: NHTSA

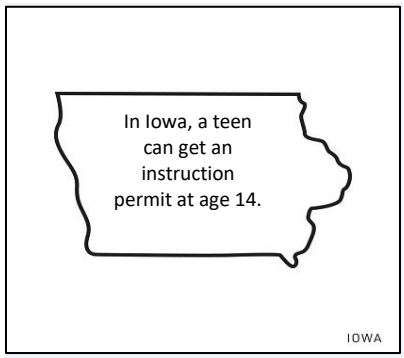
Description of Highway Safety Problems

Nationally, motor vehicle crashes continues to be the leading cause of unintentional death for young drivers. Young drivers are inexperienced and can overlook potentially risky situations. Normal adolescent development involves an increase in novelty seeking and risk-taking behaviors. They struggle judging gaps in traffic and driving the right speed for condition. In addition immaturity increases the likelihood of young drivers putting themselves in behaviors that can often result in fatal and serious injury crashes, such as speeding, impairment and distraction.

Between 2019 and 2020, there was a 51.51% increase in the number of drivers age 20 or younger involved in fatal crashes. The number increased from 33 to 50 drivers.

COVID-19 impacted Iowa's planned school programs in 2020 and partially in 2021. School programs have been reinstated in FFY 2022 with the Seatbelts Are for Everyone (S.A.F.E.) program. This teen-run, peer-to-peer program has been received positively in five Iowa schools since the beginning of the fiscal year.

Licensed Drivers Age 14-20			
Year	Female	Male	Total
2017	109,943	111,052	220,995
2018	110,663	111,179	221,842
2019	111,375	112,223	223,598
2020	108,201	108,766	108,766



Iowa's GDL System

Iowa has a graduated driver's license (GDL) system for drivers under age 18. GDL includes three steps that provide experience to improve driving skills. These steps include:

1. Instruction Permit

   Minor School License (optional)

2. Intermediate License

3. Full License

Associated Performance Measures

Fiscal Year	Performance Measure Name	Target End Year	Target Period	Target Value
2023	C-1) Number of traffic fatalities	2023	5 Year	351.4
2023	C-2) Number of serious injuries	2023	5 Year	1,398.2
2023	C-3) Fatalities/100M VMT	2023	5 Year	1.073
2023	C-4) Number of unrestrained passenger vehicle occupant fatalities, all seat positions	2023	5 Year	92

2023	C-5) Number of fatalities in crashes involving a driver or motorcycle operator with a BAC of .08 and above	2023	5 Year	99
2023	C-6) Number of speeding-related fatalities	2023	5 Year	69
2023	C-9) Number of drivers age 20 or younger involved in fatal crashes	2023	5 Year	45
2023	B-1) Observed seat belt use for passenger vehicle, front seat outboard occupant	2023	Annual	92.75%

Countermeasure Strategies in Program Area

School and Community Programs Focusing on Teen Driving

Countermeasure Strategy: School and Community Programs Focusing on Teen Driving

Project Safety Impacts

In 2022, Iowa initiated the Seatbelts are For Everyone (S.A.F.E.) program which has been successful in the past decade among teens in Kansas. S.A.F.E. is a teen-run, peer-to-peer program that focuses on increasing seat belt compliance through education, positive rewards and enforcement. It is designed to bring awareness to the importance of wearing a seat belt and other traffic safety related topics; therefore, reducing the number of motor vehicle-related injuries and fatalities among teens.

In FFY 2023, Iowa will be re-implementing the Alliance "Choices Matter" program as an additional effort to mitigate upward trends in young drivers involved in fatal crashes. The "Choices Matter" program's effectiveness is seen in peer-to-peer interaction.

Linkage Between Program Areas

S.A.F.E., "*Choices Matter*" and the Altoona Police Department's Driver's Education Program align well with Iowa's Strategic Highway Safety Plan and associated strategies which have the greatest potential to reduce traffic fatalities and serious injuries. Goals of the programs align with the emphasis areas of Education, Enforcement, and Everyone. An additional goal of the S.A.F.E program is to coordinate with regional coalitions, law enforcement liaisons, law enforcement agencies, communities, medical professionals and schools.

Rationale

"Young Drivers" is listed as a Safety Emphasis Area within the State Strategic Highway Safety Plan (2019-2023). Strategies identified in this safety area that have a direct correlation to school and community programs focusing on teen driving include continuing educating young drivers in a school-based setting using various training techniques including those that simulate impairment and supporting young drivers to avoid distractions and impairment.

Planned Activities in Countermeasure Strategy

Unique Identifier	Planned Activity Name
23-402-M0TSP, Task 01-00-00	Seatbelts Are For Everyone (S.A.F.E.)
23-402-M0TSP, Task 02-00-00	Altoona Police Department Driver's Education Program
23-402-M0TSP, Task 03-00-00	Alliance *"Choices Matter"*

Planned Activity Name: Seatbelts Are For Everyone (S.A.F.E.)

Unique Identifier/Planned Activity Number: 23-402-M0TSP, Task 01-00-00

Intended Subrecipient: DCCCA, Inc.

Primary Countermeasure Strategy ID: School and Community Programs Focusing on Teen Driving

Planned Description:

S.A.F.E. is a teen-run, peer-to-peer program that focuses on increasing seat belt compliance through education, positive rewards and enforcement. It is designed to bring awareness to the importance of wearing a seat belt, therefore reducing the number of motor vehicle-related injuries and fatalities among teens and decreasing risky driving behaviors. Activities of the S.A.F.E. program during FFY 2023 will include:

- Organize and lead a peer to peer program that focuses on increasing seat belt compliance and decreasing risky driving behaviors
- Hire a Traffic Safety Specialist to provide guidance, education and training to promote and implement the S.A.F.E. program in 15 high schools
- Solicit funding for prizes for the S.A.F.E. program by obtaining grants from groups such as AAA, State Farm Insurance or other agencies including local entities
- The Traffic Safety Specialist, in collaboration with law enforcement and community members, will recruit school sponsors and student S.A.F.E. teams in the targeted communities
- The Traffic Safety Specialist will provide training to S.A.F.E. teams to perform unannounced seat belt observational surveys at their schools
- Provide Thinkfast at 15 schools and report the outcome to the GTSB
- S.A.F.E. teams to conduct monthly programs promoting seat belt use at their schools and in their community
- Hold a two-week enforcement period in late February/early March utilizing area law enforcement agencies
- Analyze school participation and survey data. Provide results to the GTSB.
- Develop and maintain local partnerships with law enforcement, regional coalitions, communities, medical professionals, schools and traffic safety advocates to coordinate and implement the S.A.F.E. program
- Bring awareness to other traffic related focus areas: Impaired Driving, Distracted Driving, Speed and other risky driving behaviors
- Encourage law enforcement agencies to prioritize community enforcement of all traffic laws with a school vicinity focus

Funding Sources:

Source Fiscal Year	Funding Source ID	Eligible Use of Funds	Estimated Funding Amount	Match Amount	Local Benefit
2020	FAST Act NHTSA 402	Teen Safety Program	$118,898	$0.00	$0.00

Planned Activity Name: Altoona Police Department Driver's Education Program

Unique Identifier/Planned Activity Number: 23-402-M0TSP, Task 02-00-00

Intended Subrecipient: Altoona Police Department

Primary Countermeasure Strategy ID: School and Community Programs Focusing on Teen Driving

Planned Description:

In collaboration with the local school district (Southeast Polk), traffic unit officers will regularly instruct young drivers regarding traffic safety and Iowa traffic laws to include the danger of impaired driving through the driver's education program. The department will utilize both alcohol and marijuana googles as a method to demonstrate to students the dangers of impaired driving. The Altoona Police Department will produce educational materials such as brochures, posters and banners that convey traffic safety information and ultimately raise awareness of traffic safety issues. Educational materials will be directed towards the multi-

jurisdictional school district to reach young drivers and decrease the disproportionate number of traffic crashes, injuries and fatalities involving young, inexperienced drivers.					
Funding Sources:					
Source Fiscal Year	**Funding Source ID**	**Eligible Use of Funds**	**Estimated Funding Amount**	**Match Amount**	**Local Benefit**
2020	FAST Act NHTSA 402	Teen Safety Program	$6,750	$0.00	$6,750

Planned Activity Name: Alliance *"Choices Matter"*					
Unique Identifier/Planned Activity Number: 23-402-M0TSP, Task 03-00-00					
Intended Subrecipient: Alliance Sport Marketing, LLC					
Primary Countermeasure Strategy ID: School and Community Programs Focusing on Teen Driving					
Planned Description: "Choices Matter" is a program designed by Alliance Highway Safety to provide outreach to young drivers through peer-to-peer engagement and real world example of the impacts bad choices. Alliance coordinates with a variety of presenters, each with an impactful story. In FFY 2023, Alliance will identify 10 schools throughout Iowa to provide this programming. An important aspect of the project's effectiveness is peer-to-peer interaction. The "Choices Matter" project works with each school to identify students to participate in creating radio and video commercials to promote traffic safety messaging and interactive displays Students will also have the opportunity to have conversation with others, including their parents, about safety driving behaviors through very targeted social media marketing campaigns promoted to the followers of each school Campaign materials will also be given to the school to continue reinforcing the safety messaging. Iowa's partnership with Alliance "Choices Matter" for FFY 2023 will be impaired driving focused.					
Funding Sources:					
Source Fiscal Year	**Funding Source ID**	**Eligible Use of Funds**	**Estimated Funding Amount**	**Match Amount**	**Local Benefit**
2020	FAST Act NHTSA 402	Teen Safety Program	$40,000	$0.00	$0.00

Program Area: Distracted Driving

In 2021, 11 fatalities resulted as the result of a driver distracted by the use of phone or other electronic device.*

*Source: Iowa DOT (*Preliminary Data)*

Description of Highway Safety Problems

Distracted driving is one of the fastest growing safety issues on the roads today. Distracted drivers aren't just a threat to themselves; they are a danger to everyone else on the road. Distracted driving efforts focus on ways to change the behavior of drivers through legislation, enforcement, public awareness, and education.[15]

Associated Performance Measures

Fiscal Year	Performance Measure Name	Target End Year	Target Period	Target Value
2023	C-1) Number of traffic fatalities	2023	5 Year	351.4
2023	C-2) Number of serious injuries	2023	5 Year	1,398.2
2023	C-3) Fatalities/100M VMT	2023	5 Year	1.073
2023	Additional Performance Measures #2: Distracted Driving	2023	5 Year	6

Countermeasure Strategies in Program Area

Communication Campaign

Countermeasure Strategy: Communication Campaign

Project Safety Impacts

Through educational and awareness efforts, ZLR Ignition will provide messaging to discourage distracted driving. A variety of venues and platforms will be utilized to expand messaging to reach target audiences.

Linkage Between Program Areas

Statewide traffic data will be analyzed (specific to distracted driving) to help identify areas of the state for messaging. Specific distracted driving messaging will be a component of Iowa's overall communication campaign countermeasure strategies to address all program areas with the over-arching goal to discourage unsafe driving behaviors.

Rationale

Road safety campaigns are defined as purposeful attempts to inform, persuade, or motivate people to change their beliefs and behavior in order to improve road safety.[16]

[15] https://www.trafficsafetymarketing.gov/get-materials/distracted-driving

[16] Road Safety Communication Campaigns Manual for Design, Implementation, and Evaluation, http://op.europa.eu/en.publication-detail.-/publication/cf

Planned Activity Name: ZLR Ignition – Distracted Driving					
Unique Identifier/Planned Activity Number: 23-405b-M1*PM, Task 01-00-00					
Intended Subrecipent: ZLR Ignition					
Primary Countermeasure Strategy ID: Communication Campaign					
Planned Description: ZLR Ignitions distracted driving campaigns will be developed after the analysis of state specific data. Current and emerging traffic safety issues specific to distracted driving will be considered and will help direct the rollout of the media-related activities. ZLR's strategies for deliver may include the development of new materials for digital placements in addition to a mix of proven mediums such as geo-fence banners, social listening venues, spot radio, and/or billboard.					
Funding Sources:					
Source Fiscal Year	**Funding Source ID**	**Eligible Use of Funds**	**Estimated Funding Amount**	**Match Amount**	**Local Benefit**
2019	FAST Act 405b OP High	405b High Paid Advertising	$132,268.50	$0.00	$0.00

Program Area: Traffic Records

Description of Highway Safety Problems

The State of Iowa is committed to making traffic data widely available to a broad group of potential users via datasets and tools. The true value of these data and tools likes in their application, including what information can be derived, extracted or integrated. This information can be used to make better safety-related decisions.

A successful Traffic Records System includes the collection, management, and analysis of data with six core datasets: Crash, Driver, Vehicle, Roadway, Citation and Adjudication, and Injury Surveillance. This complex network of programs and systems involve numerous agencies that collet, report, maintain, and analyze data involving many highway safety related processes and methods within the core component systems. The data systems are managed by a variety of agencies. It is critical that systems integrate and link for effectiveness. Performance attributes of timeliness, accuracy, completeness, uniformity, integration, and accessibility are tied to the core systems and related data projects. Section 405c funded projects will comply with national data standards when appropriate, such as Model Minimum Uniform Crash Criteria (MMUCC), National Emergency Medical Services Information System (NEMSIS), Crash Outcome Data Evaluation System (CODES) and Model Inventory of Roadway Element (MIRE). Quality data is paramount for traffic safety related projects.

The coordination and management of Iowa's traffic records system improvements in the role of the Statewide Traffic Records Coordinating Committee (STRCC). Since the creation of Iowa's STRCC in 1994, the State has been unified in promoting traffic records data improvement. STRCC is comprised of a diverse group of traffic safety professionals who understand the need for quality traffic safety data.

The most recent Traffic Records Assessment was conducted in the fall and early winter of 2020, with an official report-out being provided virtually in December 2020. The assessment consisted of 328 questions which were answered by Iowa's subject matter experts. The analysis provided the NHTSA Traffic Records Assessment Team to provide and in-depth peer review of Iowa's Traffic Records System. The State's responses were rated against an "Ideal System" and were categorized as "Meeting the Ideal", "Partially Meeting the Ideal", and "Does Not Meet the Ideal". Overall, Iowa met or partially met the Advisory ideal 66% of the time. The Traffic Records Assessment provided major recommendations and considerations in the following areas (excerpted from the Assessment Report):

TRCC	Considerations	- Develop performance measures for all six core data systems - Consider expanding the executive membership of the TRCC to have membership from all six core data systems - Consider creating a formal process for custodial agencies to seek, obtain and utilize feedback from the TRCC members in the planning of projects or system redesigns
Strategic Planning	Considerations	- Revise the strategic plan to include content to address life cycle costs, outreach and training efforts for local needs and coordination with other federal systems such as FARS and SafetyNet - Update and create were needed performance measures which clearly identify a baseline, a goal and a timeframe for measurement
Crash	Recommendations	- Improve the applicable guidelines for the Crash data system to reflect best practices identified in the Traffic Records Program Assessment Advisory - Improve the data dictionary for the Crash data system to reflect best practices identified in the Traffic Records Program Assessment Advisory - Improve the data quality control program for the Crash data system to reflect best practices identified in the Traffic Records Program Assessment Advisory - Improve the interfaces with the Crash data system to reflect best practices identified in the Traffic Records Program Assessment Advisory

	Considerations	- Update the crash system data dictionary to include the fields, derived fields, edit checks, and validation rules. Make this dictionary available to the appropriate personnel - Develop performance measures to easily identify improvements, deficiencies, or degradation of performance. These performance measure should have a baseline and a goal. Measures should be quantifiable and be designed to identify and monitor changes. - Conduct periodic data quality reviews of the crash system data and share results with key stakeholders through the TRCC
Vehicle	Recommendations	- Improve the data quality control program for the Vehicle data system to reflect best practices identified in the Traffic Records Program Assessment Advisory - Improve the procedures/process flows for the Vehicle data system to reflect best practices identified in the Traffic Records Program Assessment Advisory
	Considerations	- Because the vehicle record system is new and the staff is becoming more familiar with the new processes, serious consideration should be given to establish timeliness, accuracy, completeness, uniformity, integration, and accessibility performance measures. Once in place, these performance measures would aide data managers and users in maintaining maximum system performance and efficiency. - The Iowa Vehicle System only uses a subset of the available NMVTIS title brands. The State should consider updating the current title brands to include exact NMVTIS nomenclature.
Driver	Recommendations	- Improve the data dictionary for the Driver data system to reflect best practices identified in the Traffic Records Program Assessment Advisory - Improve the data quality control program for the Driver data system to reflect best practices identified in the Traffic Records Program Assessment Advisory
	Considerations	- Develop a comprehensive data management program and share reports and trends with the TRCC and data managers and users - Establish a formal DUI Tracking System with interfaces to the driver system to ensure problem drivers are identified - Create a formal data dictionary with all field values defined including null codes - Create a comprehensive process flow diagram for the driver system demonstrating all interfaces, inputs, and outputs
Roadway	Recommendations	- Improve the data quality control program for the Roadway data system to reflect best practices identified in the Traffic Records Program Assessment Advisory
	Considerations	- Develop performance measures for all six core traffic records performance attributes. Performance measures must include the establishment of baselines, goals and measures tailored to the needs of data managers and users - Expand the number of local and regional agencies interfacing with the State's enterprise roadway information system - Establish guidelines for presenting data quality management reports to the TRCC on a regular basis - Complete the data dictionary with all the MIRE elements collected
Citation and Adjudication	Recommendations	- Improve the data quality control program for the Citation and Adjudication systems to reflect best practices identified in the Traffic Records Program Assessment Advisory - Improve the interfaces with the Citation and Adjudication systems to reflect best practices identified in the Traffic Records Program Assessment Advisory
	Considerations	- Provide data quality reports to the TRCC. Iowa's TRCC should consider requesting data quality management reports or briefings about data collection, quality assurance and dissemination as a staple of their regular meetings. This would be a great way to share information amongst the six component record areas, to address performance measures, and receive project updates. - It is suggested the State explore the feasibility of establishing numeric goals-performance metrics for the citation system and incorporate the development of timeliness, accuracy, completeness, uniformity, integration, and accessibility performance measures tailored to the needs of citation systems managers and data users

		- It is suggested the State explore the feasibility of establishing numeric goals-performance metrics for the adjudication system and incorporate the development of timeliness, accuracy, completeness, uniformity, integration, and accessibility performance measures tailored to the needs of adjudication systems managers and data users
Injury Surveillance	Recommendations	- Improve the data quality control program for the Injury Surveillance systems to reflect best practices identified in the Traffic Records Program Assessment Advisory - Improve the interfaces with the Injury Surveillance system to reflect best practices identified in the Traffic Records Program Assessment Advisory
	Considerations	- Formulate the data quality assurance process at the State level for the EMS data. The Iowa Department of Public Health, Bureau of Emergency and Trauma Services has made progress toward identifying and implementing some performance measures (timeliness, accuracy regarding duplicate records, completeness as a manual process). Continue to add critical data elements periodically to those performance measures. Once established, consider addition uniformity and/or accessibility measures. - Institute data integration performance measures applicable to the EMS to crash linkage with the primary numeric goal of expected number of records linked. Establish the baseline and as the EMS data matures, measure systemic improvements in the linkage - Include the EMS data in the CODES (Crash Outcome Data Evaluation System) linkage conducted by the University of Iowa, Injury Prevention Research Center pending appropriate approvals - Conduct periodic data quality reviews of the emergency department and the hospital discharge data. Though collected and processed by the Iowa Hospital Association, the State may want to ensure that critical data elements, or the most used or required data elements, contain expected values and are logically consistent. Errors or inconsistencies in the data should be reported to the Iowa Hospital Association. - Institute timeliness performance measures for trauma registry data. Administrative Rule establishes the deadline for submission and those not in compliance are contacted by the Iowa Department of Public Health, Bureau of Emergency and Trauma Services and subject to penalty. Instituting a timeliness performance measure and monitoring over time will provide a visual of which trauma centers submit within timelines, identify repeat offenders and detect trends in the data. - Share data quality reports with the State TRCC. The data quality reports for trauma registry data do not have to identify patients, providers or trauma centers but give a general understanding as to any issues that may prohibit the integration or use of the trauma data with respect to motor vehicle crashes injuries and traffic safety. This is applicable to the emergency department data, the hospital discharge data, and the vital records data.
Data Use and Integration	Considerations	- The State should consider leveraging the expertise of the TRCC to lead and effort to formalize a Data Governance structure for all traffic safety systems. - Coordinate efforts with the University of Iowa to develop highly integrated datasets for the State. Leverage and utilize existing University projects to integrate more datasets for the State.

Countermeasure Strategies in Program Area

State Traffic Safety Information System Improvement Grant

Countermeasure Strategy: State Traffic Safety Information System Improvement Grant

Project Safety Impacts

The individuals and agencies making traffic safety-related decisions represent a diverse and evolving group, ranging from private citizens to public agencies. Even with access to the data and tools, opportunities exist in the areas of accessibility and integration. A successful Traffic Records System includes the collection, management

and analysis of data within the six core datasets of Crash, Roadway, Driver, Citation/Adjudication, Vehicle, and EMS/Injury Surveillance. The integration of these systems allows for comprehensive datasets. Iowa's traffic safety professionals understand the importance of data and coordinate efforts through the Statewide Traffic Records Coordinating Committee (STRCC).

Linkage Between Program Areas

Comprehensive data is utilized for highway safety decision in Iowa. The GTSB manages Section 405c money for projects that have a specific focus to improve Iowa's Traffic Records System which includes Crash, Roadway, Driver, Citation/Adjudication, Vehicle and EMS/Injury Surveillance data. Goals and performance measures address a minimum of one attribute in the area of accuracy, completeness, integration, timeliness, uniformity, and accessibility. All improvements are to be quantifiable.

Section 405c funded projects will focus on recommendations and considerations resulting from the 2020 Traffic Records Assessment.

Rationale

Comprehensive data is utilized for highway safety decision in Iowa, and therefore, must be accurate and complete. Iowa continues to improve the State's overall traffic records system through the support of the Statewide Traffic Records Coordinating Committee and through the development and implementation of the Traffic Records Strategic Plan.

Planned Activities in Countermeasure Strategy

Unique Identifier	Planned Activity Name
23-405c-M3DA, Task 01-00-00	Iowa Traffic and Criminal Software (TraCS) Program
23-405c-M3DA, Task 02-00-00 & 23-405d-F24*IS, Task 00-03-00	Data Quality Improvement & Analysis Tool Enhancement - Iowa DOT Traffic and Safety
23-405c-M3DA, Task 03-00-00	Human Rights – Crash Linkage (CJJP)
23-405c-M3DA, Task 04-00-00 & 23-405d-F24*IS, Task 00-01-00	Iowa Traffic Safety Data Service (ITSDS)
23-405c-M3DA, Task 07-00-00 & 23-405d-F24*IS, Task 00-03-00	Driver Behavior and Medical Outcomes Data Improvement and Linkage/IPRC
23-405c-M3DA, Task 06-00-00	Data Integration and ISP Support/In-Trans
23-405c-M3DA, Task 05-00-00 & 23-405d-F24*IS, Task 00-03-00	EMS Data Improvement and Utilization
23-405c-M3DA, Task 08-00-00	Enforcement Dashboard to Support Local Agencies/In-Trans

Planned Activity Name: Iowa Traffic and Criminal Software (TraCS) Program
Unique Identifier/Planned Activity Number: 23-405c-M3DA, Task 01-00-00
Intended Subrecipient: Iowa Department of Transportation
Primary Countermeasure Strategy ID: State Traffic Safety Information System Improvement Grants
Planned Description: TraCS is a data collection, reporting and records management system (RMS) for the public safety community to use to streamline and automate the capture and transmission of critical information from the local agency to other members of the criminal justice enterprise. Funding will be used to maintain a remote support capability for the TraCS team which increases efficiency as less travel time is required to support and maintain the TraCS software. This will enhance the capability to provide installation, training, and support as efficiently as possible. Additionally, these funds will be used to subcontract for technical support from service providers who will develop, maintain, and provide overall software maintenance for the TraCS program in Iowa. These sub-contractor activities will provide Iowa with adequate programming and support to carry out essential TraCS

updates and modifications as needed. These include new and modified validations to increase data accuracy. Specific project activities will include:

- Providing a remote staff support capability to all for staff to provide installation, training and support activities more efficiently
- Electronic crash reporting will be expanded and enhanced by providing technical and field support for TraCS through training events, workshops and user group meetings
- Continue to test and deploy a DRE evaluation form in TraCS
- The number of agencies utilizing TraCS to complete and submit traffic citations electronically through the State's CJIS network to the State's court system will be increased
- The number of agencies utilizing TraCS Web Services for reporting crashes, citations, and complaint and affidavits will be expanded
- Convert databases and provide access to TraCS Records Management System (RMS)

Funding Sources:

Source Fiscal Year	Funding Source ID	Eligible Use of Funds	Estimated Funding Amount	Match Amount	Local Benefit
2020	FAST Act 405c Data Program	405c Data Program (FAST)	$100,000	$0.00	$0.00

Planned Activity Name: Data Quality Improvement & Analysis Tool Enhancement

Unique Identifier/Planned Activity Number: 23-405c-M3DA, Task 02-00-00 & 23-405d-F24*IS, Task 00-03-00

Intended Subrecipient: Iowa Department of Transportation, Traffic and Safety

Primary Countermeasure Strategy ID: State Traffic Safety Information System Improvement Grants

Planned Description:

The Iowa DOT, Traffic and Safety plans to implement the following projects during FFY 2023.

1. Automation of Crash Data Extraction, Transfer and Loading Process - The crash reports are transmitted from TraCS to APS on a nightly basis. The current process is manual. There is an essential need to develop an automated process that can be based on more efficient database analytics like Python. The automation process has many potential benefits as it eliminates the possibility of human errors in updating the complex SAS codes required to run data in multiple steps and provides the output in a fraction of the time needed for manual process. This will in turn will provide more timely and accurate data for decision makers.
2. Improvement of Data Documentation and Quality Assurance – Improving the quality of crash data is one of the main objectives of Iowa DOT. One way to improve the quality of crash data is by documenting the course and definitions of the data. On-going efforts to maintain and improve crashes data dictionaries and quality assurance are critical for conducting safety research and assuring users' perceptions of various elements in crash data are consistent. The improvements will improve the efficiency of data requests for roadway safety studies as well as the overall crash data requests workflow.
3. Iowa Traffic Safety Database Completion, Update, Maintenance and Use – Maintaining an accurate and complete intersection and curve database is vital for safety research and to the development of safety performance functions for a network screening process to develop scientific models which identify and rank intersections with potential for safety improvements. The intersection database has been developed since 2013 and there is always a need to update and maintain the database for new developments, changes in roadway, and traffic control devices. There is an essential need to validate the curve database and see if there are other issues associated with the existing database and find attributes that can be added to the database to improve the quality of the curve data.
4. Investigating Crash Data Quality and Identifying the Major Issues Associated with Crash Reports – The main objective of this effort is to evaluate the crash data quality as the existing crash data contains data elements that are misreported or unreported. The crash data need to be investigated for data elements that independently or in various combinations are commonly unreported or misreported.

The aim is to quantify data quality issues that have been observed by the Iowa DOT Traffic and Safety Team and other researchers and users of crash data. The project effort will result in metrics of accuracy and completeness for each issue investigated. The identified metrics can be tracked over time to achieve data quality improvement goals.

Funding Sources:

Source Fiscal Year	Funding Source ID	Eligible Use of Funds	Estimated Funding Amount	Match Amount	Local Benefit
2020	FAST Act 405c Data Programs	405c Data Program (FAST)	$175,000	$0.00	$0.00
2020	FAST Act 405d 24-7 Sobriety	405d Low Identification + Surveillance	$5,000	$0.00	$0.00

Planned Activity Name: Crash Linkage (CJJP)

Unique Identifier/Planned Activity Number: 23-405c-M3DA, Task 03-00-00

Intended Subrecipient: Iowa Department of Human Rights, Criminal and Juvenile Justice Planning

Primary Countermeasure Strategy ID: State Traffic Safety Information System Improvement Grants

Planned Description:

Criminal and Juvenile Justice Planning (CJJP) is the State of Iowa Statistical Analysis Center (SAC) which conducts independent research, policy analysis, planning, program evaluation, data coordination and information clearinghouse functions to identify issues of concern and to improve the operation and effectiveness of the criminal justice system, including traffic safety. During FFY 2023, CJJP plans to analyze adult court data (citations/disposed charges and convictions) for three common traffic safety-related areas: seat belts, impaired driving/OWI, and speeding. This analysis will include trend data, along with demographics, including arresting agency of those that received a citation and conviction, if applicable. By looking at these three areas, the data should help show short-term law enforcement activity concerning those traffic-safety offenses. Focusing on these areas may show a glimpse of commitment level to traffic safety across the State. The results/outcomes may help to determine if there's a need for targeted enforcement, public education campaigns, or partnerships with other agencies and organizations to combine resources, when applicable, to better achieve results. CJJP will also continue to provide citation/disposed charge and conviction data upon request. CJJP will utilize two software applications, Universe Platter and SPSS, for this effort.

Funding Sources:

Source Fiscal Year	Funding Source ID	Eligible Use of Funds	Estimated Funding Amount	Match Amount	Local Benefit
2020	FAST Act – 405c Data Program	405c Data Program (FAST)	$35,000	$0.00	$.00

Planned Activity Name: Iowa Traffic Safety Data Service (ITSDS)

Unique Identifier/Planned Activity Number: 23-405c-M3DA, Task 04-00-00 & 23-405d-F24*IS, Task 00-01-00

Intended Subrecipient: Iowa State University, Iowa Traffic Safety Data Service (ITSDS)

Primary Countermeasure Strategy ID: State Traffic Safety Information System Improvement Grants

Planned Description:

ITSDS will supplement and facilitate crash data accessibility and data integration, proving agencies, organizations and individuals with crash data expertise and resources. ITSDS will fill the gap between what safety data users can gather for themselves, and what they can obtain from experts. ITSDS will serve as a resource to those lacking the necessary knowledge and experience to effectively assimilate and present crash data. ITSDS will provide guidance regarding the use of existing tools, such as the Iowa Crash Analysis Tool (ICAT), and accessing datasets which may help satisfy their needs. Through ITSDS support, agencies may identify strategies to help reduce crash frequency and severity. ITSDS will assist anyone needing to use crash data to make decisions about funding, improving roads, implementing enforcement, writing reports and proposals, designing presentations or increasing traffic safety awareness. ITSDS will address "on demand" basis

for ad hoc requests and will support semi-regular and special projects for various agencies. The complexity and level of support necessary for "on demand", semi-regular and special project requests may vary.

Funding Sources:

Source Fiscal Year	Funding Source ID	Eligible Use of Funds	Estimated Funding Amount	Match Amount	Local Benefit
2020	FAST Act 405c Data Program	405c Data Program (FAST)	$114,105	$0.00	$0.00
2020	FAST Act 405d 24-7 Sobriety	405d Low Identification + Surveillance	$3,400	$0.00	$0.00

AMENDMENT #1

*Upon identifying a 2022 claim for the University of Iowa, Injury Prevention Research Center, where we inadvertently allocated the expenditure of indirect costs out of Section 405c which should have been applied to the matching funding source, we reviewed other current project agreements for FFY 2023. It has been determined the indirect cost should be related to the matching funding source and, therefore, a portion of the indirect costs that were originally assigned to 405c should have been related to/assigned to 405d for the following project agreements. This amendment request is to correct this issue by moving the indirect cost of $1,362.50 from project agreement 23-405c-M3DA, Task 07-00-00 to project agreement 23-405d-F24*IS, Task 00-02-00 and moving the indirect cost amount of $1,802.00 from 23-405c-M3DA, Task 04-00-00 to 23-405d-F24*IS, Task 00-01-00. The increased funding to project agreements 23-405d-F24*IS, Task 00-02-00 and 23-405d-F24*IS, Task 00-02-00 will come from M3DA-2023-00-00-01.*

This amendment was approved by NHTSA Region 7 Administrator Susan DeCourcy on December 5, 2022.

Planned Activity Name: Driver Behavior and Medical Outcomes Data Improvement and Linkage

Unique Identifier/Planned Activity Number: 23-405c-M3DA, Task 07-00-00 & 23-405d-F24*IS, Task 00-02-00

Intended Subrecipient: University of Iowa-Injury Prevention Research Center

Primary Countermeasure Strategy ID: State Traffic Safety Information System Improvement Grants

Planned Description:

This project will continue activities related to data accessibility that include acquiring traffic records datasets, developing linkages for data integration, maintaining linkages and assessing quality of the Crash Outcome Date Evaluation System (CODES), driver licensure, justice (charges and convictions) and Enhanced Medical Referral and Evaluation Management System (EMREMS). This project continues IPRC's established track record of integrating data from multiple traffic records systems in order to identify risk factors for motor vehicle crash involvement and injury and to target populations for potential interventions. The proposed project activities

will extend work currently in progress and identify new areas for exploration. Extended activities will address the need for continued and increased integration of Iowa DOT crash data with medical data in order to support new and innovative collaborations between researchers and practitioners.

Funding Sources:

Source Fiscal Year	Funding Source ID	Eligible Use of Funds	Estimated Funding Amount	Match Amount	Local Benefit
2020	FAST Act 405c Data Program	405c Data Program (FAST)	$176,455	$0.00	$0.00
2020	FAST Act 405d 24-7 Sobriety	405d Low Identification + Surveillance	$2,500	$0.00	$0.00

AMENDMENT #1

*Upon identifying a 2022 claim for the University of Iowa, Injury Prevention Research Center, where we inadvertently allocated the expenditure of indirect costs out of Section 405c which should have been applied to the matching funding source, we reviewed other current project agreements for FFY 2023. It has been determined the indirect cost should be related to the matching funding source and, therefore, a portion of the indirect costs that were originally assigned to 405c should have been related to/assigned to 405d for the following project agreements. This amendment request is to correct this issue by moving the indirect cost of $1,362.50 from project agreement 23-405c-M3DA, Task 07-00-00 to project agreement 23-405d-F24*IS, Task 00-02-00 and moving the indirect cost amount of $1,802.00 from 23-405c-M3DA, Task 04-00-00 to 23-405d-F24*IS, Task 00-01-00. The increased funding to project agreements 23-405d-F24*IS, Task 00-02-00 and 23-405d-F24*IS, Task 00-02-00 will come from M3DA-2023-00-00-01.*

This amendment was approved by NHTSA Region 7 Administrator Susan DeCourcy on December 5, 2022.

Planned Activity Name: Data Integration and ISP Support

Unique Identifier/Planned Activity Number: 23-405c-M3DA, Task 06-00-00

Intended Subrecipient: Iowa State University – Institute for Transportation

Primary Countermeasure Strategy ID: State Traffic Safety Information System Improvement Grants

Planned Description:

As the largest agency responsible for traffic enforcement in the State of Iowa, the Iowa State Patrol (ISP) issues more than 100,000 citations, 100,000 warnings and 1,000 OWI-related complaints annually. They also respond to more than 4,000 crashes annually. In an effort to make more data driven decisions, monitor and target enforcement and investigation the possible relationships between crashes and enforcement, this project will continue the support and maintenance of the ISP interactive crash/enforcement dashboard that was developed

as part of a previous GTSB contract in FFY 2022. The support and maintenance will ensure the data is up to date and resolve any issues that may arise as part of the data transfer process or within the dashboards themselves. Ensuring the date is up to date will allow ISP to make effective data driven decisions by utilizing the latest enforcement activity and crash history to improve traffic safety.

Funding Sources:

Source Fiscal Year	Funding Source ID	Eligible Use of Funds	Estimated Funding Amount	Match Amount	Local Benefit
2020	FAST Act 405c Data Program	405c Data Program (FAST)	$6,396	$0.00	$0.00

Planned Activity Name: EMS Data Improvement and Utilization

Unique Identifier/Planned Activity Number: 23-405c-M3DA, Task 05-00-00 & 23-405d-F24*EM, Task 00-01-00

Intended Subrecipient: Iowa Department of Public Health, Bureau of Emergency and Trauma Services

Primary Countermeasure Strategy ID: State Traffic Safety Information System Improvement Grants

Planned Description:

This project will have two main focus areas. The first focus will be on the improvement to the training provided to emergency medical services on data utilization for performance improvement to improve patient outcomes. Virtual trainings will be utilized for large group settings on a quarterly basis. These trainings will focus on data report interpretation and performance improvement strategies to improve patient outcomes. The second focus area will be on Compass report improvement. Currently there are data points that are shared back with services within nine (9) data categories quarterly.

Funding in FFY 2023 will be used to support one full-time staff to coordinate and complete the following activities:

- Build a formal training program focused on data report interpretation and performance improvement strategies to improve patient outcomes. This training will be available to all EMS services and will address how local level EMS data can be used to improve patient outcomes, what data can be leveraged, and how data can provide a picture of resources to broaden EMS services understanding to improve patient outcomes.
- Leverage existing Compass report distribution by creating an additional individual EMS service reports regarding motor vehicle crash response incidents. These reports will analyze data on response time to scene, scene time, severity of injury, alcohol/drug use indicators, trauma-triage criteria and occupant safety equipment utilization.

Funding Sources:

Source Fiscal Year	Funding Source ID	Eligible Use of Funds	Estimated Funding Amount	Match Amount	Local Benefit
2020	FAST Act 405c Data Program	405c Data Program (FAST)	$68,103	$0.00	$0.00
2020	FAST Act 405d 24-7 Sobriety	405d 24-7 Emergency Medical Services	$68,103	$0.00	$0.00

Planned Activity Name: Enforcement Dashboard to Support Local Agencies

Unique Identifier/Planned Activity Number: 23-405c-M3DA, Task 08-00-00

Intended Subrecipient: Iowa State University – Institute for Transportation

Primary Countermeasure Strategy ID: State Traffic Safety Information System Improvement Grants

Planned Description:

This project will develop dashboards to allow law enforcement agencies easier access to the data submitted using TraCS. The dashboards will utilize data that is collected by a central server maintained by TraCS which currently has over 2.3 million records. Through the development of the dashboards, law enforcement agencies will have easier access to crash and enforcement data which will allow them to make more informed decisions related to traffic safety.

Funding Sources:					
Source Fiscal Year	**Funding Source ID**	**Eligible Use of Funds**	**Estimated Funding Amount**	**Match Amount**	**Local Benefit**
2020	FAST Act 405c Data Program	405c Data Programs (FAST)	$40,955	$0.00	$0.00

Iowa Department of Public Safety
215 E 7th Street
Des Moines, IA 50319
Telephone: 515/725-6127
Fax: 515/725-6133
gtsb@dps.state.ia.us
www.iowagtsb.org