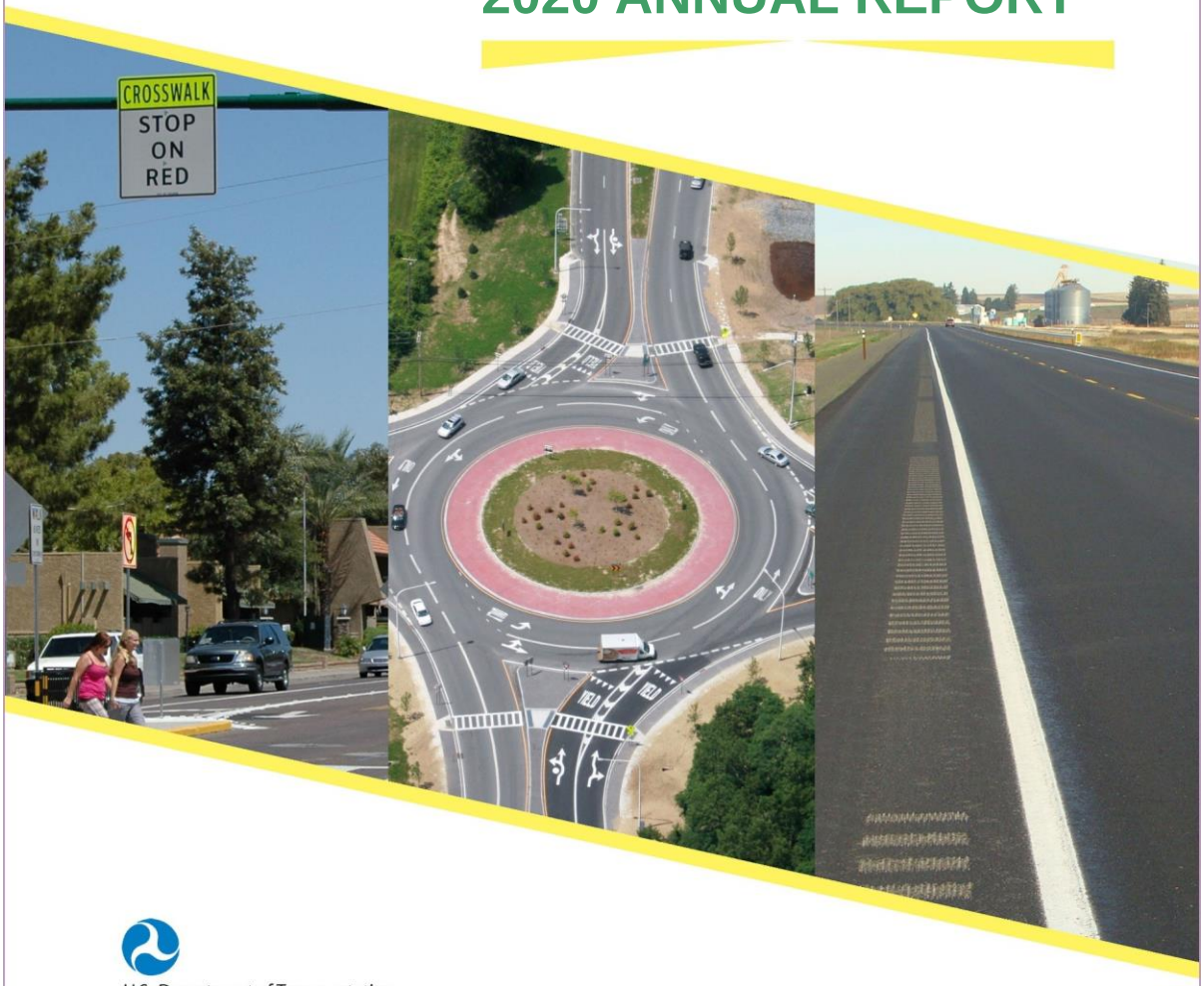
FLORIDA

HIGHWAY SAFETY IMPROVEMENT PROGRAM

2020 ANNUAL REPORT



U.S. Department of Transportation
Federal Highway Administration

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Table of Contents

Disclaimer

Protection of Data from Discovery Admission into Evidence

23 U.S.C. 148(h)(4) states “Notwithstanding any other provision of law, reports, surveys, schedules, lists, or data compiled or collected for any purpose relating to this section[HSIP], shall not be subject to discovery or admitted into evidence in a Federal or State court proceeding or considered for other purposes in any action for damages arising from any occurrence at a location identified or addressed in the reports, surveys, schedules, lists, or other data.

23 U.S.C. 148(h)(4) states “Notwithstanding any other provision of law, reports, surveys, schedules, lists, or data compiled or collected for any purpose relating to this section[HSIP], shall not be subject to discovery or admitted into evidence in a Federal or State court proceeding or considered for other purposes in any action for damages arising from any occurrence at a location identified or addressed in the reports, surveys, schedules, lists, or other data.23 U.S.C. 409 states “Notwithstanding any other provision of law, reports, surveys, schedules, lists, or data compiled or collected for the purpose of identifying, evaluating, or planning the safety enhancement of potential accident sites, hazardous roadway conditions, or railway-highway crossings, pursuant to sections 130, 144, and 148 of this title or for the purpose of developing any highway safety construction improvement project which may be implemented utilizing Federal-aid highway funds shall not be subject to discovery or admitted into evidence in a Federal or State court proceeding or considered for other purposes in any action for damages arising from any occurrence at a location mentioned or addressed in such reports, surveys, schedules, lists, or data.”

Executive Summary

Florida shares the national traffic safety vision, "Toward Zero Deaths," and formally adopted our own version of the national vision with our "Driving Down Fatalities," in 2012. The Florida Department of Transportation (FDOT) and its traffic safety partners are committed to eliminating fatalities and serious injuries with the understanding that the death of any person is unacceptable. Understanding that zero fatalities cannot be reached within 2020, Florida developed data models to forecast the fatalities that are statistically expected to occur as we diligently strive to drive down fatalities and serious injuries with an ultimate vision of zero.

The Highway Safety Improvement Program (HSIP) is a core Federal-aid program with the purpose to achieve a significant reduction in traffic fatalities and serious injuries on all public roads. The Florida Strategic Highway Safety Plan (SHSP) is the statewide plan focusing on how to accomplish the vision of eliminating fatalities and serious injuries on all public roads. The HSIP is a main component of the SHSP. The SHSP is updated at least every five years by FDOT in coordination with statewide, regional, and local traffic safety partners and was last updated in 2016. An update to the SHSP is underway and will be completed in 2021.

FDOT received an allocation of approximately $150 million in HSIP funds during the 2019 state fiscal year from July 1, 2019 through June 30, 2020. FDOT used HSIP funds to complete over 800 items across more than 400 projects. Systemic safety improvements were addressed by about $62 million in HSIP funds. Specific program accomplishments in our top emphasis areas include:

- The Intersection program completed over 400 project items totaling $74 million
- The Lane Departure program completed 154 project items totaling $31 million
- The Pedestrian and Bicyclist Safety program completed 148 project items totaling $28 million
- Multiple programs and SHSP emphasis areas including data were addressed by 66 project items totaling $18 million

Regarding roadway ownership:

- State-maintained roadways were addressed by 640 project items totaling $131 million
- Local roadways were addressed by 172 project items totaling $20 million

Non-infrastructure such as preliminary engineering, public information or education, traffic engineering studies, and transportation statistics was supported with about $19 million.

A statistical analysis of HSIP funded projects through the history of the Florida program including all injury severities shows statistically significant crash reduction for lane departure (-21%), rural (-16%), non-fatal injury (-13%), and fatal (-11%) crashes. Further program evaluation results in our top emphasis areas is included in the Evaluation section of this report.

[Source: HSIP Questions 16, 23, 29, and 41, 2020]
[Source: Florida Strategic Highway Safety Plan, 2016]
[Source: Florida Highway Safety Plan, 2020]
[Source: FDOT HSIP Guidelines Manual, 2020]

Introduction

The Highway Safety Improvement Program (HSIP) is a core Federal-aid program with the purpose of achieving a significant reduction in fatalities and serious injuries on all public roads. As per 23 U.S.C. 148(h) and 23 CFR 924.15, States are required to report annually on the progress being made to advance HSIP implementation and evaluation efforts. The format of this report is consistent with the HSIP Reporting Guidance dated December 29, 2016 and consists of five sections: program structure, progress in implementing highway safety improvement projects, progress in achieving safety outcomes and performance targets, effectiveness of the improvements and compliance assessment.

Program Structure

Program Administration

Describe the general structure of the HSIP in the State.

The HSIP is guided by the Florida SHSP, which outlines a vision of eliminating fatalities and reducing serious injuries on Florida's public roads. Thirteen emphasis areas are the primary focus for Florida's traffic safety improvement efforts. FDOT supports a broad range of programs aimed at improving transportation safety.

Our data driven SHSP focuses on 13 Emphasis Areas, which reflect ongoing and emerging highway safety issues in Florida. Key strategies related to each Emphasis Area are identified, as well as overarching strategies that apply across Emphasis Areas. These strategies align with the "4 Es" of traffic safety – engineering, education, enforcement, and emergency response. The SHSP also defines a framework for implementation activities to be carried out through strategic safety coalitions and specific activities by FDOT, other state agencies, metropolitan planning organizations, local governments, and other traffic safety partners. Data is the foundation of any effort to improve traffic safety and therefore Traffic Records is the first Emphasis Area and the remaining 12 Emphasis Areas are Lane Departure Crashes, Impaired Driving Crashes, Pedestrians and Bicyclists, Intersection Crashes, Unrestrained Occupants, Motorcyclists, Aging Drivers, Speeding and Aggressive Driving Crashes, Commercial Motor Vehicle Crashes, Teen Driver Crashes, Distracted Driving Crashes, and Work Zone Crashes.

The Florida HSIP is the program is managed by the Central Office with district staff performing project activities such as conducting safety studies, project scoping, public involvement, and coordinating with production staff on programming safety projects. To be eligible for HSIP funds, all safety improvement projects must address a SHSP emphasis area, be identified through a data-driven process, and contribute to a reduction in fatalities and serious injuries. The roles in administering and implementing the HSIP are as follows:

- The **FDOT State Safety Office (SSO)** manages the HSIP and evaluates the program's effectiveness. The SSO determines the eligibility of projects for funding approval and provides policies, tools, and guidelines to assist the Districts, Turnpike Enterprise, and local agencies with implementing the HSIP.
- The **FDOT Districts and Turnpike Enterprise** manage project funding and are responsible for delivering highway safety improvement projects. Each District has a District Safety Engineer (DSE) and supporting staff that identify, plan, design, and implement HSIP projects with support from the SSO. Each District also works with Metropolitan Planning Organizations (MPO), Transportation Planning Organizations (TPO), and local jurisdictions to assist them in improving safety within their District.

- The **Federal Highway Administration (FHWA)** assists with program strategy, oversees all Federal-aid expenditures, and assures the HSIP meets federal requirements. FHWA also offers technical assistance and training to FDOT and local agencies.
- **Florida's MPOs, TPOs, and local agencies** are integral to addressing the safety problems on all public roads. MPOs, TPOs, and local agencies coordinate with FDOT's Districts to identify and implement effective off-system highway safety improvement projects. Local agencies also develop and implement locally administered projects (LAPs) as well as Local Road Safety Plans (LRSP) to improve safety in their jurisdictions.
- **Partner organizations** serve as ambassadors of traffic safety and help promote the vision of Driving Down Fatalities. Partners include charities, community groups, universities, and professional associations responsible for supplemental programs that improve safety beyond road engineering, which helps achieve the HSIP's goals.
- **Community Traffic Safety Teams (CTST)** are multi-jurisdictional, with members from city, county, state, and occasionally federal agencies, as well as private industry representatives and local citizens. CTSTs integrate the 4E approach to safety (engineering, enforcement, education, and emergency services) to help solve local traffic safety problems and promote public awareness of traffic safety. Many effective HSIP projects are initiated through CTSTs.
- **Florida's road users** are the most important stakeholder in the HSIP. Each HSIP project aims to improve the safety and quality of life for road users. The HSIP is most effective when the public is engaged in safety, provides feedback during the development of HSIP projects, and actively reports safety concerns to FDOT and local government agencies.

[Source: Florida Department of Transportation FY 2021 Highway Safety Plan, 2020]
[Source: Florida HSIP Guidelines Manual, 2020]
[Source: Florida Strategic Highway Safety Plan, 2016]

Where is HSIP staff located within the State DOT?

Other-Engineering and Operations, State Safety Office

FDOT is decentralized with a Central Office and seven District Offices. The FDOT organizational structure is available at through fdot.gov. The primary contacts for the HSIP follow:

- Lora Hollingsworth, Chief Safety Officer, FDOT SSO
  - (850) 414-3100, https://www.fdot.gov/safety/7-ContactUs/CO-taffDirectory.shtm
- Brenda Young, State Safety Engineer, FDOT SSO
  - (850) 414-4097, https://www.fdot.gov/safety/7-ContactUs/CO-taffDirectory.shtm
- Rupert Giroux, Safety Data Coordinator, FDOT SSO
  - (850) 414-4072, https://www.fdot.gov/safety/7-ContactUs/CO-taffDirectory.shtm
- Ben Jacobs, Crash Records and Research Administrator, FDOT SSO
  - (850) 414-4007, https://www.fdot.gov/safety/7-ContactUs/CO-taffDirectory.shtm
- District Safety Engineers, FDOT Districts
  - http://ww w.fdot.gov/agencyresources/districts/

[Source: Florida HSIP Guidelines Manual, 2020]

How are HSIP funds allocated in a State?

- Formula via Districts/Regions
- Other-Central Office

FDOT focuses HSIP on highway safety improvement projects that are:

- Low cost (typically under $1,000,000).
- Shorter-term, with concept to construction in under three years.
- Implemented on a public road.
- Addressing a problem known to result in fatalities and serious injuries as identified in the Florida SHSP.

23 USC 148(c) indicates a focused, data-driven approach should be used for safety problem identification, countermeasure analysis, and resource allocation. Safety funds should be used on the most effective countermeasures at the locations with the greatest needs. The Department actively uses the AASHTO Highway Safety Manual (HSM) and other data-driven approaches discussed throughout the Florida HSIP Guidelines Manual.

[Source: Florida HSIP Guidelines Manual, 2020]

Describe how local and tribal roads are addressed as part of HSIP.

Many counties in Florida develop and implement Local Road Safety Plans (LRSPs). An LRSP should be consistent with the Florida SHSP and focus on specific, high priority emphasis areas and strategies for local road safety. HSIP funds can be used to develop LRSPs, which are a proven safety countermeasure.

LRSPs support strategic safety management of off-system roads through the identification, analysis, and prioritization of roadway safety opportunities and improvements on the local system. For example, local areas with a large proportion of rural roads may use data to show a focus on reducing fatal and serious injury run-off-road crashes. Counties and other local agencies should consider developing and implementing LRSPs to:

- Define local safety priorities.
- Prioritize safety investments on off-system public roadways.
- Communicate safety improvement opportunities to stakeholders.
- Apply for HSIP funding.

LRSP development mimics the SHSP development process but focuses on local issues and needs. LRSPs should have a prioritized list of issues, risks, actions, and improvements that can be used to reduce fatalities and serious injuries on off-system roads. The Federal Highway Administration's (FHWA's) Developing Safety Plans: A Manual for Local Road Owners outlines the LRSP development process and contains an LRSP template.

To assist with coordination with local governments on all Florida roadways, FDOT develops and uses Geographic Information Systems (GIS) that all agencies can use. The FDOT SSO works with internal and external partners to develop and provide GIS analysis to support the districts with identifying locations for safety improvement on local roads. The FDOT Open Data Hub provides a platform through which local partners use FDOT data for their own safety improvement analyses. The FDOT SSO also developed several analyses of non-motorist (cyclist or pedestrian) involved crashes and intersection crashes. FDOT SSO works with internal and external partners to identify on local roads. Coordination between FDOT District Safety Engineers and the Community Traffic Safety Teams (CTSTs) identifies other local projects and training opportunities.

[Source: FDOT SSO Staff, 2020]
[Source: Florida HSIP Guidelines Manual, 2020]

Identify which internal partners (e.g., State departments of transportation (DOTs) Bureaus, Divisions) are involved with HSIP planning.

- Design
- Districts/Regions
- Governors Highway Safety Office
- Local Aid Programs Office/Division
- Operations
- Planning
- Traffic Engineering/Safety
- Other-Construction Office

Describe coordination with internal partners.

The FDOT SSO is responsible for administering the HSIP statewide. The FDOT SSO issues guidance and policy related to HSIP and approves HSIP projects for inclusion in the FDOT Work Program and Statewide Transportation Improvement Program (STIP). The FDOT SSO is responsible for coordinating the HSIP with other roadway safety programs and initiatives within FDOT and external partners.

The FDOT Districts are responsible for investigating roadway safety issues within their jurisdictions, evaluating options to address those issues, proposing projects for HSIP funding, and implementing those projects. Districts also report performance measures to support project evaluation. FDOT Districts also coordinate safety improvement efforts with local jurisdictions and assists them in coordinated efforts to reduce fatal and serious injuries within the District.

Many FDOT business areas coordinate and support effective administration of the HSIP. These offices and business areas include planning, design, operations, utilities, finance, construction, maintenance the State Bicycle and Pedestrian Safety Manager, FDOT SSO, Safe Routes to School Program, Local Agency Program and the Work Program Office. All FDOT offices work with FDOT SSO to provide appropriate attention and consideration to all project decisions.

Safety is one of the Vital Few focus areas. FDOT initiated departmental priorities with statewide, multidisciplinary, internal teams to address them. Three Vital Few Safety sub-teams address lane departure, intersection, and bicyclist and pedestrian safety. Although the safety initiatives of the FDOT Vital Few are not directly involved in the HSIP administration practices, their input helps to focus safety priorities.

[Source: FDOT SSO Staff, 2020]
[Source: Florida HSIP Guidelines Manual, 2020]
[Source: FDOT Mission, Vision, and Values, 2020]
[Source: Florida Strategic Highway Safety Plan, 2016]

Identify which external partners are involved with HSIP planning.

- Academia/University
- FHWA
- Governors Highway Safety Office
- Law Enforcement Agency
- Local Government Agency
- Local Technical Assistance Program
- Regional Planning Organizations (e.g. MPOs, RPOs, COGs)
- Tribal Agency
- Other-Community Traffic Safety Team (CTST)

- Other-FACERS

FACERS is the Florida Association of County Engineers and Roadway Superintendents. Other SHSP partners are involved with HSIP planning. They include the Florida Department of Highway Safety and Motor Vehicles (FLHSMV), Florida Highway Patrol (FHP), Florida Sheriffs Association (FSA), Florida Police Chiefs Association (FPCA), Federal Motor Carrier Safety Administration (FMCSA), and National Highway Traffic Safety Administration (NHTSA).

Describe coordination with external partners.

The 2016 SHSP was updated through collaboration with Florida's traffic safety partners. It is aligned with, and builds on, the FTP, the State's long-range transportation plan. Both the FTP and the SHSP share the vision of a fatality-free roadway system to protect Florida's 20 million residents and more than 105 million annual visitors.

On August 22, 2016, the SHSP's signatory partners met in Tallahassee to pledge their support for the implementation of the five-year plan. Partners that reviewed and approved the plan include:

- Florida Department of Transportation
- Florida Department of Highway Safety and Motor Vehicles
- Florida Highway Patrol
- Florida Sheriffs Association
- Florida Police Chiefs Association
- Metropolitan Planning Organization Advisory Council
- Florida Rail Enterprise
- Florida Association of County Engineers and Road Superintendents
- Federal Highway Administration
- National Highway Traffic Safety Administration
- Federal Motor Carrier Safety Administration

The SHSP update process included:

- Analysis of safety data collected by FDOT, the Florida Department of Highway Safety and Motor Vehicles (DHSMV), and other sources to identify trends in the number of traffic fatalities and serious injuries and factors often associated with these events. All data presented in the SHSP are from DHSMV for 2011 to 2015 unless otherwise noted. This plan was developed using the most recent data available at the time of plan approval.
- Consideration of extensive partner and public input gathered through the FTP update process in 2015. This process engaged more than 15,000 participants through a 35-member Steering Committee, four advisory groups, three statewide events, 13 regional forums and workshops, and more than 350 partner briefings. This input reaffirmed the State's commitment to maintaining a safe and secure transportation system for residents, visitors, and businesses. The process also highlighted several safety issues of concern to the public, including bicycle and pedestrian safety, commercial vehicles, the impacts of changing technologies, and the role of design and operational decisions in creating a safe environment.
- Coordination with at least eight traffic safety coalitions representing statewide, regional, and local partners from both the public and private sectors. These coalitions provided targeted input on the emphasis areas specifically related to their current strategic plans and defined key strategies for the next five years.
- Coordination with Florida's 27 metropolitan planning organizations (MPOs), including review of safety-related goals, objectives, and strategies in MPO plans and targeted outreach sessions through Florida's Metropolitan Planning Organization Advisory Council.

- Review and approval by the signing partners.

The goals of the Florida SHSP are echoed in the HSIP and the Florida Highway Safety Plan (HSP). All three plans cite the goal of reducing traffic crashes, fatalities, and serious injuries, with an ultimate target of zero deaths.

Florida traffic safety coalitions bring together multiple traffic safety partner agencies, working together to make Florida's roadways not only an efficient, but safe transportation system. Statewide traffic safety coalitions include Florida Lane Departure and Intersection Coalition; Florida Impaired Driving Coalition; Florida's Pedestrian and Bicycle Safety Coalition; Florida Occupant Protection Coalition; Motorcycle Safety Coalition; Safe Mobility for Life Coalition; Distracted Driving Coalition; and the Work Zone Safety Coalition. The reported number of fatal and serious injuries come from previous HSIP annual reports, the state crash data system managed by the Florida Department of Highway Safety and Motor Vehicles (FLHSMV), and the Traffic Crash Report published by FLHSMV based on the state crash data system.

FDOT has the benefit of the expertise and experience of several additional partners throughout the HSP planning process. Input on safety priorities and activities comes from traffic safety coalitions, advocates, FDOT District Traffic Safety Engineers, law enforcement officers and their leadership, emergency responders, judges, Mothers Against Drunk Driving (MADD), Students Against Destructive Decisions (SADD), and many other state and local agencies. Florida’s Community Traffic Safety Teams (CTSTs) also provide consistent input into the highway safety planning process.

CTSTs are locally based groups of highway safety advocates that are committed to solving traffic safety problems through a comprehensive, multi-jurisdictional, multi-disciplinary approach. Members include city, county, state, and occasionally Federal agencies, as well as private industry representatives and local citizens. Community boundaries are determined by the organizations comprising a CTST: a city, an entire county, a portion of a county, multiple counties, or some other jurisdictional arrangement may be the basis for a CTST.

Through the combination of these efforts there are literally thousands of partners that work in concert with FDOT toward the goal of a fatality-free roadway system.

[Source: Florida Department of Transportation FY 2021 Highway Safety Plan, 2020]
[Source: Florida HSIP Guidelines Manual, 2020]
[Source: FDOT State Safety Office, Programs website (https://www.fdot.gov/safety/2a-programs/programs.shtm), as of 2020-08-10]
[Source: FDOT State Safety Office, Traffic Safety Coalitions website (https://www.fdot.gov/safety/safety-coalitions/coalitonsresources.shtm), as of 2020-08-10]
[Source: Florida Strategic Highway Safety Plan, 2016]

Describe HSIP program administration practices that have changed since the last reporting period.

Since the last reporting period, FDOT began transitioning fund allocation responsibilities from central office to the districts. In fiscal year 2024, the districts will exercise greater control on project selection and funding as guidance and support continues at the central office level.

Florida is a Vision Zero state, recognizing that no traffic fatality is acceptable on our roadways. Opportunities to improve traffic safety include focusing attention on the shortcomings of the built environment, policies and technologies that influence behavior, the development of safer vehicles, education, and law enforcement.

Vision Zero is not just “business as usual” with a new name; its core principles must be acknowledged and built into everyday efforts.

- Traffic fatalities and serious injuries are acknowledged to be preventable
- Human life and health are prioritized within all aspects of transportation systems
- Safety work should focus on systems-level changes influencing individual behavior
- Speed is recognized and prioritized as a fundamental factor in crash severity

Recently, in efforts to further coordinate and align Vision Zero initiatives throughout the state to support the goal of a fatality-free transportation system, Florida conducted its May 2019 Long-Range Transportation Visioning Session with a “Vision Zero Workshop” component.

The emphasis of this workshop was to forge new strategies, or reinforce effective strategies, including the 4 E’s of traffic safety (engineering, enforcement, education, and emergency services) and beyond. Participants included representatives from metropolitan planning organizations, regional planning councils, traffic safety officials, various transportation modes, and local government planning officials. This multi-disciplinary brainstorming allowed for open dialogue to proactively spearhead ideas to unify processes, structures and education methods that coincide with Vision Zero initiatives within each participant’s respective sphere of influence.

Participants were challenged to view traffic fatalities and serious injuries as a public health crisis and were encouraged to take away ideas for both immediate and long-term implementation strategies that will encompass a broader and more inclusive perspective for Vision Zero implementation. FDOT has committed to use data collected from the meeting to launch the Florida Strategic Highway Safety Plan refresh and incorporate these themes throughout all future planning documents.
[Source: Florida Department of Transportation FY 2021 Highway Safety Plan, 2020]
[Source: Florida HSIP Guidelines Manual 2020]

Describe other aspects of HSIP Administration on which the State would like to elaborate.

Prioritized lists of safety needs are maintained by each District and Central Office verifies whether proposed projects are eligible for HSIP funding. Districts authorize and fund eligible HSIP projects according to procedures consistent with the Office of Work Program and Budget.

[Source: FDOT HSIP Guidelines Manual, 2020]
[Source: FDOT Office of Work Program and Budget, 2020]

Program Methodology

Does the State have an HSIP manual or similar that clearly describes HSIP planning, implementation and evaluation processes?

Yes
The FDOT SSO regularly reviews and updates the Florida HSIP Guidelines Manual, which clearly describes HSIP planning, implementation, and evaluation processes.

[Source: Florida HSIP Guidelines Manual, 2020]

Select the programs that are administered under the HSIP.

- Bicycle Safety
- Intersection
- Pedestrian Safety
- Skid Hazard

- Other-Lane Departure

The HSIP is guided by the Florida SHSP, which outlines a framework for implementation activities to eliminate fatalities and reduce serious injuries on Florida's public roads. Our data driven SHSP focuses on 13 Emphasis Areas including those selected from the list above, and they are reflected by the programs that are administered under the HSIP.

Administered HSIP Programs
Traffic Records is the first Emphasis Area since data is the foundation of any improvement efforts for traffic safety. The remaining 12 Emphasis Areas (i.e., HSIP programs) are:

- Lane Departure Crashes,
- Impaired Driving Crashes,
- Pedestrians and Bicyclists,
- Intersection Crashes,
- Unrestrained Occupants,
- Motorcyclists,
- Aging Drivers,
- Speeding and Aggressive Driving Crashes,
- Commercial Motor Vehicles Crashes,
- Teen Driver Crashes,
- Distracted Driving Crashes, and
- Work Zone Crashes.

Program Methodology
Since the last update of the SHSP in 2016, FDOT and traffic safety stakeholders reviewed and updated program methodologies regularly.

Program Justification
Justification for the programs is that they (1) address Florida SHSP priorities and (2) are FHWA focused approaches to safety.

Data Types for Program Methodologies
The data types used in the program methodologies include:

- Crash
  - fatal and serious injury crashes
  - all crashes
- Exposure
  - traffic
  - volume
  - population
- Roadway
  - horizontal curvature
  - functional classification
  - roadside features
  - context classification

Project Identification
Project identification methodologies used for these programs are:

- crash frequency,

- crash rate,
- excess expected crash frequency,
- over-representation of crashes,
- crash tree diagrams, and
- applications of safety performance functions (SPFs).

Local Roads
Local roads (non-state owned and operated) are included or addressed in the Florida HSIP programs.

Local Road Methodologies
Local road projects are identified through the same methodologies used for state roads.

Program Advancement for Implementation
Projects under the Florida HSIP programs are advanced for implementation by identifying locations through GIS analysis by Central Office or vetting through the districts. District submitted projects are evaluated using a benefit-cost ratio greater than 1.

Prioritization Processes
Central Office and the Districts use several methods to prioritize HSIP projects. They include:

- ranking based on the benefit-cost ratio,
- ranking based on net benefit,
- net present value,
- available funding, and
- cost effectiveness.

[Source: Florida HSIP Guidelines Manual, 2020]
[Source: FDOT State Safety Office, 2020]
[Source: FDOT Work Program and Budget Office, 2020]

Program: Bicycle Safety

Date of Program Methodology:5/1/2017

What is the justification for this program?

- Addresses SHSP priority or emphasis area
- FHWA focused approach to safety

What is the funding approach for this program?
Competes with all projects

What data types were used in the program methodology?

Crashes
- All crashes
- Fatal and serious injury crashes only

Exposure
- Traffic
- Volume
- Population

Roadway
- Functional classification
- Roadside features

What project identification methodology was used for this program?

- Crash frequency
- Crash rate

Are local roads (non-state owned and operated) included or addressed in this program?

Yes

Are local road projects identified using the same methodology as state roads?

Yes

How are projects under this program advanced for implementation?

- Other-Contributing factors such as time of day (75% of fatal pedestrian and bicycle crashes occur during dusk or dark hours)
- Other-Locations are identified through GIS analysis by Central Office or vetted through the districts. District submitted projects are evaluated using a Benefit Cost Ratio greater than 1.

Select the processes used to prioritize projects for implementation. For the methods selected, indicate the relative importance of each process in project prioritization. Enter either the weights or numerical rankings. If weights are entered, the sum must equal 100. If ranks are entered, indicate ties by giving both processes the same rank and skip the next highest rank (as an example: 1, 2, 2, 4).

Reference Question 14 regarding details for this program.

Program: Intersection

Date of Program Methodology:9/1/2007

What is the justification for this program?

- Addresses SHSP priority or emphasis area
- FHWA focused approach to safety

What is the funding approach for this program?

Competes with all projects

What data types were used in the program methodology?

Crashes

- All crashes
- Fatal and serious injury crashes only

Exposure

- Traffic
- Volume
- Population

Roadway

- Functional classification
- Roadside features
- Other-Mile Point
- Other-Context classification

What project identification methodology was used for this program?

- Crash frequency

- Crash rate
- Excess expected crash frequency using SPFs

Are local roads (non-state owned and operated) included or addressed in this program?

Yes

Are local road projects identified using the same methodology as state roads?

Yes

How are projects under this program advanced for implementation?

- Other-Districts coordinate with staff for projects and submit to Central Office for approval.

Select the processes used to prioritize projects for implementation. For the methods selected, indicate the relative importance of each process in project prioritization. Enter either the weights or numerical rankings. If weights are entered, the sum must equal 100. If ranks are entered, indicate ties by giving both processes the same rank and skip the next highest rank (as an example: 1, 2, 2, 4).

Rank of Priority Consideration

Ranking based on B/C:5
Available funding:5
Ranking based on net benefit:5
Cost Effectiveness:5
Other-Net Present Value:5
Reference Question 14 regarding details for this program.

Program: Pedestrian Safety

Date of Program Methodology:5/1/2017

What is the justification for this program?

- Addresses SHSP priority or emphasis area
- FHWA focused approach to safety

What is the funding approach for this program?

Competes with all projects

What data types were used in the program methodology?

Crashes

- All crashes
- Fatal and serious injury crashes only

Exposure

- Traffic
- Volume
- Population

Roadway

- Functional classification
- Roadside features

What project identification methodology was used for this program?

- Crash frequency
- Crash rate
- Other-Contributing factors such as time of day (75% of fatal pedestrian and bicycle crashes occur during dusk or dark hours)
- Other-Projects are identified using GIS analysis of crash locations and frequency.

Are local roads (non-state owned and operated) included or addressed in this program?

Yes

Are local road projects identified using the same methodology as state roads?

Yes

How are projects under this program advanced for implementation?

- Competitive application process

Select the processes used to prioritize projects for implementation. For the methods selected, indicate the relative importance of each process in project prioritization. Enter either the weights or numerical rankings. If weights are entered, the sum must equal 100. If ranks are entered, indicate ties by giving both processes the same rank and skip the next highest rank (as an example: 1, 2, 2, 4).

Rank of Priority Consideration

Ranking based on B/C:5
Available funding:5
Ranking based on net benefit:5
Cost Effectiveness:5
Other-Net Present Value:5
Reference Question 14 regarding details for this program.

Program: Skid Hazard

Date of Program Methodology:9/1/2007

What is the justification for this program?

- Addresses SHSP priority or emphasis area
- FHWA focused approach to safety

What is the funding approach for this program?

Competes with all projects

What data types were used in the program methodology?

Crashes	Exposure	Roadway

- All crashes
- Fatal and serious injury crashes only
- Traffic
- Volume
- Population
- Horizontal curvature
- Functional classification
- Roadside features
- Other-Friction Number

What project identification methodology was used for this program?

- Crash frequency
- Crash rate
- Excess expected crash frequency using SPFs
- Other-Locations with a high proportion of wet weather crashes are included in the screening process for skid hazard project locations.

Are local roads (non-state owned and operated) included or addressed in this program?

Yes

Are local road projects identified using the same methodology as state roads?

Yes

How are projects under this program advanced for implementation?

- Competitive application process

Select the processes used to prioritize projects for implementation. For the methods selected, indicate the relative importance of each process in project prioritization. Enter either the weights or numerical rankings. If weights are entered, the sum must equal 100. If ranks are entered, indicate ties by giving both processes the same rank and skip the next highest rank (as an example: 1, 2, 2, 4).

Rank of Priority Consideration

Ranking based on B/C:5
Available funding:5
Ranking based on net benefit:5
Cost Effectiveness:5
Other-Net Present Value:5
Reference Question 14 regarding details for this program.

Program: Other-Lane Departure

Date of Program Methodology:9/1/2007

What is the justification for this program?

- Addresses SHSP priority or emphasis area
- FHWA focused approach to safety

What is the funding approach for this program?

Competes with all projects

What data types were used in the program methodology?

Crashes

- All crashes
- Fatal and serious injury crashes only

Exposure

- Traffic
- Volume
- Population

Roadway

- Horizontal curvature
- Functional classification
- Roadside features
- Other-Mile Point

What project identification methodology was used for this program?

- Crash frequency
- Crash rate
- Excess expected crash frequency using SPFs
- Excess proportions of specific crash types

Are local roads (non-state owned and operated) included or addressed in this program?

Yes

Are local road projects identified using the same methodology as state roads?

Yes

How are projects under this program advanced for implementation?

- Competitive application process

Select the processes used to prioritize projects for implementation. For the methods selected, indicate the relative importance of each process in project prioritization. Enter either the weights or numerical rankings. If weights are entered, the sum must equal 100. If ranks are entered, indicate ties by giving both processes the same rank and skip the next highest rank (as an example: 1, 2, 2, 4).

Rank of Priority Consideration

Ranking based on B/C:5
Available funding:5
Ranking based on net benefit:5
Cost Effectiveness:5
Other-Net Present Value:5
Reference Question 14 regarding details for this program.

What percentage of HSIP funds address systemic improvements?

41

HSIP funds are used to address which of the following systemic improvements?

- Add/Upgrade/Modify/Remove Traffic Signal
- High friction surface treatment
- Horizontal curve signs
- Install/Improve Lighting
- Install/Improve Pavement Marking and/or Delineation
- Install/Improve Signing
- Pavement/Shoulder Widening
- Rumble Strips
- Upgrade Guard Rails

The list does not include all improvement types because queries of FDOT Work Program and Budget systems are limited to available work mix fields.

[Source: FDOT Office of Work Program and Budget, MADDOG system, HSIP Funds for FY 2019/2020]

What process is used to identify potential countermeasures?

- Crash data analysis
- Data-driven safety analysis tools (HSM, CMF Clearinghouse, SafetyAnalyst, usRAP)
- Engineering Study
- Road Safety Assessment
- SHSP/Local road safety plan
- Stakeholder input
- Other-FHWA resources

Does the State HSIP consider connected vehicles and ITS technologies?

Yes

Describe how the State HSIP considers connected vehicles and ITS technologies.

FDOT has an ITS Strategic Plan to provide statewide direction and guidance for the FDOT, Florida's Metropolitan Planning Organizations, and local governments in planning, programming, and implementing integrated multi-modal ITS elements to maximize the safety and efficiency of Florida's Transportation System. The priorities set by *Florida's ITS Strategic Plan* align with the goals outlined in the*2025 Florida Transportation Plan.*Each goal is supported by a corresponding group of ITS objectives and strategies that can be tracked using a common set of performance measures.

Florida's *ITS Strategic Plan* defines the goals, objectives, and strategies for the statewide ITS Program over the next three to five years. During this time, many initiatives and programs will begin to mature and, therefore, should be considered by FDOT. These projects and programs include but are not limited to connected vehicles and ITS technologies and applications.

The Connected and Automated Vehicle (CAV) Program goals and objectives support the FDOT Transportation Systems Management & Operations (TSM&O) 2017 Strategic Plan. The CAV technologies have the potential to significantly reduce highway crashes that result in traffic fatalities. This is consistent with FDOT's vision and that of Vision Zero.

[Source: Florida Intelligent Transportation Systems Strategic Plan, 2014]
[Source: Florida's Connected and Automated Vehicles (CAV) Business Plan, January 2019]

Does the State use the Highway Safety Manual to support HSIP efforts?

Yes

Please describe how the State uses the HSM to support HSIP efforts.

The Florida Department of Transportation (FDOT) supports research to configure and customize the Highway Safety Manual (HSM) methods to Florida's roadways. The FDOT State Safety Office (SSO) maintains an HSM implementation website with more information and the Federal Highway Administration's (FHWA's) Integrating the HSM into the Highway Project Development Process is another resource. FDOT also promotes using AASHTOWare Safety Analyst and Interactive Highway Safety Design Model (IHSDM) to implement HSM methods. However, Districts may use spreadsheets or other analysis tools to apply HSM and other data-driven safety analysis methods.

The FDOT HSM User Guide provides an abbreviated overview for practitioners of the HSM. The intent is to provide guidance on the application of the HSM. The FDOT HSM User Guide contains information on the following topics.

- HSM Terms and Concepts.
- HSM Predictive Method.
- Selecting an Appropriate Crash Modification Factor (CMF) or Crash Reduction Factor (CRF).
- Applying Countermeasure CMFs.

[Source: Florida HSIP Guidelines Manual, 2020]
[Source: FDOT Highway Safety Manual User Guide, 2015]

Describe program methodology practices that have changed since the last reporting period.

The Florida Department of Transportation (FDOT) moved more control and management of project selection and execution to the district level. First, FDOT districts propose projects for Highway Safety Improvement Program (HSIP) funding. Afterwards, FDOT Central Office verifies whether the project meet eligibility criteria for HSIP. Finally, the Districts approve and manage HSIP projects from the projects that are eligible for HSIP.
[Source: Florida HSIP Guidelines Manual, 2020]

Describe other aspects of the HSIP methodology on which the State would like to elaborate.

FDOT implements highway safety improvement projects in four ways (1) systemic projects, (2) hotspot projects, (3) policy-based projects, and (4) data and analysis projects. incorporate a combination of these types of projects within the HSIP. Each type addresses serious crash risks and safety problems in a different way, creating a diversified portfolio of investments in safety improvements. However, the HSIP does not have to include projects of each type every year. Districts are encouraged to use discretion to address their safety concerns with projects that provide the greatest opportunity to reduce fatalities and serious injuries.

Systemic projects focus on mitigating highly prevalent crash types or contributing factors in the SHSP that result in large numbers of fatalities and serious injuries across the network. FDOT tries to address these issues as cost-efficiently as possible. FDOT leverages the mobilization and other fixed costs of existing projects (e.g., resurfacing, restoration, rehabilitation) and promotes using cost-effective countermeasures to existing non-HSIP projects. Hotspot projects focus on the roadway segments, corridors, intersections, or ramps with highest overall potential for safety improvement across the network. FDOT supports improvement projects that are feasible, cost-effective, and address serious or fatal injuries for emphasis areas in the Florida SHSP. Geometric and operational characteristics are also considered for these projects. Policy-based projects are improvements to bring roadway design or operational features up to a standard. Policy-based

countermeasures (also called nominal or systematic) often aim to reduce liability as well as crash risk, such as updating old roadside hardware to current designs or meeting sign retro-reflectivity standards. Data and analysis projects enhance the delivery of the HSIP by advancing planning, implementation, and evaluation methods. FDOT recommends projects that are strategic with a clear goal to help reduce fatalities and serious injuries.

[Source: Florida HSIP Guidelines Manual, 2020]

Project Implementation

Funds Programmed

Reporting period for HSIP funding.

State Fiscal Year

Enter the programmed and obligated funding for each applicable funding category.

FUNDING CATEGORY	PROGRAMMED	OBLIGATED	% OBLIGATED/PROGRAMMED
HSIP (23 U.S.C. 148)	$150,917,547	$150,760,519	99.9%
HRRR Special Rule (23 U.S.C. 148(g)(1))	$0	$0	0%
Penalty Funds (23 U.S.C. 154)	$0	$0	0%
Penalty Funds (23 U.S.C. 164)	$0	$0	0%
RHCP (for HSIP purposes) (23 U.S.C. 130(e)(2))	$0	$0	0%
Other Federal-aid Funds (i.e. STBG, NHPP)	$0	$0	0%
State and Local Funds	$0	$0	0%
Totals	$150,917,547	$150,760,519	99.9%

Financial data is based on fund codes associated with the Highway Safety Improvement Program (HSIP).

[Source: FDOT Office of Work Program and Budget, MADDOG system, FY 2019/2020, as of 2020-04-20]

How much funding is programmed to local (non-state owned and operated) or tribal safety projects?

$19,511,746

How much funding is obligated to local or tribal safety projects?

$19,511,742

Financial information based on data in FDOT Work Program and Budget Office systems.

[Source: MADDOG, FY2019/2020, as of 2020-06-15]

How much funding is programmed to non-infrastructure safety projects?

$18,796,878

How much funding is obligated to non-infrastructure safety projects?

$18,642,677

Financial information based on data in FDOT Work Program and Budget Office systems.

[Source: MADDOG, FY2019/2020, as of 2020-06-15]

How much funding was transferred in to the HSIP from other core program areas during the reporting period under 23 U.S.C. 126?

$14,002,824

How much funding was transferred out of the HSIP to other core program areas during the reporting period under 23 U.S.C. 126?

$14,002,824
Financial information based on data in FDOT Work Program and Budget Office systems.

[Source: MADDOG, FY2019/2020, as of 2020-06-15]

Discuss impediments to obligating HSIP funds and plans to overcome this challenge in the future.

None to report at this time.

[Source: FDOT State Safety Office, 2020]

General Listing of Projects

List the projects obligated using HSIP funds for the reporting period.

PROJECT NAME	IMPROVEMENT CATEGORY	SUBCATEGORY	OUTPUTS	OUTPUT TYPE	HSIP PROJECT COST($)	TOTAL PROJECT COST($)	FUNDING CATEGORY	LAND USE/AREA TYPE	FUNCTIONAL CLASSIFICATION	AADT	SPEED	OWNERSHIP	METHOD FOR SITE SELECTION	SHSP EMPHASIS AREA	SHSP STRATEGY
190258-1	Advanced technology and ITS	Advanced technology and ITS - other			$413375					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Pedestrians and bicyclists	Engineering
211079-2	Non-infrastructure	Transportation safety planning			$298740					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Multiple	Engineering
211079-4	Non-infrastructure	Transportation safety planning			$282318					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Multiple	Engineering
211079-5	Non-infrastructure	Transportation safety planning			$324029					0		Other Local Agency	Benefit-cost ratio, net present value, or similar	Multiple	Engineering
211079-6	Non-infrastructure	Transportation safety planning			$420731					0		Other Local Agency	Benefit-cost ratio, net present value, or similar	Multiple	Engineering
211079-8	Non-infrastructure	Transportation safety planning			$369379					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Multiple	Engineering
220838-2	Roadway	Roadway - other			$5564					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Multiple	Engineering
220838-3	Roadway	Roadway - other			$120671					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Multiple	Engineering

PROJECT NAME	IMPROVEMENT CATEGORY	SUBCATEGORY	OUTPUTS	OUTPUT TYPE	HSIP PROJECT COST($)	TOTAL PROJECT COST($)	FUNDING CATEGORY	LAND USE/AREA TYPE	FUNCTIONAL CLASSIFICATION	AADT	SPEED	OWNERSHIP	METHOD FOR SITE SELECTION	SHSP EMPHASIS AREA	SHSP STRATEGY
230094-6	Non-infrastructure	Transportation safety planning			$160000					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
237995-1	Roadway	Roadway - other			$1289089					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Multiple	Engineering
254553-1	Non-infrastructure	Transportation safety planning			$947396					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Multiple	Engineering
254553-2	Non-infrastructure	Transportation safety planning			$1555321					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Multiple	Engineering
254647-1	Pedestrians and bicyclists	Miscellaneous pedestrians and bicyclists			$492795					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Pedestrians and bicyclists	Engineering
254677-2	Roadway	Roadway - other			$5406368					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Multiple	Engineering
256881-5	Pedestrians and bicyclists	Pedestrian bridge			$17778					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Pedestrians and bicyclists	Engineering
405679-2	Roadway	Roadway - other			$205439					0		Other Local Agency	Benefit-cost ratio, net present value, or similar	Lane Departure	Engineering
412473-7	Roadway	Pavement surface - miscellaneous			$37531					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Lane Departure	Engineering

PROJECT NAME	IMPROVEMENT CATEGORY	SUBCATEGORY	OUTPUTS	OUTPUT TYPE	HSIP PROJECT COST($)	TOTAL PROJECT COST($)	FUNDING CATEGORY	LAND USE/AREA TYPE	FUNCTIONAL CLASSIFICATION	AADT	SPEED	OWNERSHIP	METHOD FOR SITE SELECTION	SHSP EMPHASIS AREA	SHSP STRATEGY
412473-9	Roadway	Pavement surface - miscellaneous			$9464					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Lane Departure	Engineering
412479-3	Intersection geometry	Intersection geometry - other			$604					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
421993-2	Roadway	Pavement surface - high friction surface			$504					0		Other Local Agency	Benefit-cost ratio, net present value, or similar	Lane Departure	Engineering
422814-1	Non-infrastructure	Educational efforts			$32179					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Pedestrians and bicyclists	Education
422814-2	Non-infrastructure	Transportation safety planning			$125000					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Pedestrians and bicyclists	Engineering
422814-3	Non-infrastructure	Educational efforts			$2056995					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Pedestrians and bicyclists	Education
425646-5	Non-infrastructure	Educational efforts			$249844					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Multiple	Education
425979-2	Roadway	Pavement surface - miscellaneous			$86645					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Lane Departure	Engineering
427369-2	Roadway	Roadway widening - add lane(s) along segment			$62211					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Lane Departure	Engineering

PROJECT NAME	IMPROVEMENT CATEGORY	SUBCATEGORY	OUTPUTS	OUTPUT TYPE	HSIP PROJECT COST($)	TOTAL PROJECT COST($)	FUNDING CATEGORY	LAND USE/AREA TYPE	FUNCTIONAL CLASSIFICATION	AADT	SPEED	OWNERSHIP	METHOD FOR SITE SELECTION	SHSP EMPHASIS AREA	SHSP STRATEGY
427518-2	Roadway	Pavement surface - miscellaneous			$125421					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Lane Departure	Engineering
427938-1	Pedestrians and bicyclists	Install sidewalk			$161					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Pedestrians and bicyclists	Engineering
429022-1	Non-infrastructure	Transportation safety planning			$181031					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
429022-2	Intersection geometry	Intersection geometry - other			$72127					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
429506-1	Lighting	Lighting - other			$50					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Pedestrians and bicyclists	Engineering
429585-2	Non-infrastructure	Transportation safety planning			$3971					0		Other Local Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
429650-3	Roadway	Roadway - other			$250000					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Multiple	Engineering
430590-2	Intersection traffic control	Modify traffic signal - modify signal mounting (spanwire to mast arm)			$778759					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
430608-2	Intersection traffic control	Modify traffic signal - modernization/replacement			$725486					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering

PROJECT NAME	IMPROVEMENT CATEGORY	SUBCATEGORY	OUTPUTS	OUTPUT TYPE	HSIP PROJECT COST($)	TOTAL PROJECT COST($)	FUNDING CATEGORY	LAND USE/AREA TYPE	FUNCTIONAL CLASSIFICATION	AADT	SPEED	OWNERSHIP	METHOD FOR SITE SELECTION	SHSP EMPHASIS AREA	SHSP STRATEGY
430910-1	Intersection geometry	Intersection geometry - other			$78501					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
430911-1	Intersection geometry	Auxiliary lanes - miscellaneous/other/unspecified			$1467					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
430914-1	Intersection geometry	Intersection geometry - other			$124534					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
431170-1	Roadway	Pavement surface - miscellaneous			$56305					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Lane Departure	Engineering
431170-3	Roadway	Pavement surface - miscellaneous			$44897					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Lane Departure	Engineering
431170-4	Intersection geometry	Intersection geometry - other			$2240445					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
431170-5	Non-infrastructure	Transportation safety planning			$20310					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
431657-1	Pedestrians and bicyclists	Install sidewalk			$7317					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Pedestrians and bicyclists	Engineering
431665-1	Pedestrians and bicyclists	Install sidewalk			$2000					0		Other Local Agency	Benefit-cost ratio, net present value, or similar	Pedestrians and bicyclists	Engineering

PROJECT NAME	IMPROVEMENT CATEGORY	SUBCATEGORY	OUTPUTS	OUTPUT TYPE	HSIP PROJECT COST($)	TOTAL PROJECT COST($)	FUNDING CATEGORY	LAND USE/AREA TYPE	FUNCTIONAL CLASSIFICATION	AADT	SPEED	OWNERSHIP	METHOD FOR SITE SELECTION	SHSP EMPHASIS AREA	SHSP STRATEGY
431820-3	Pedestrians and bicyclists	Miscellaneous pedestrians and bicyclists			$694					0		Other Local Agency	Benefit-cost ratio, net present value, or similar	Pedestrians and bicyclists	Engineering
432066-4	Pedestrians and bicyclists	Install sidewalk			$8491					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Pedestrians and bicyclists	Engineering
432193-1	Roadway	Roadway widening - add lane(s) along segment			$11000001					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Lane Departure	Engineering
432348-1	Roadway	Pavement surface - miscellaneous			$369412					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Lane Departure	Engineering
432404-1	Intersection traffic control	Modify traffic signal - modernization/replacement			$316876					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
432584-3	Intersection traffic control	Modify traffic signal - modify signal mounting (spanwire to mast arm)			$889336					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
432586-1	Roadway	Pavement surface - miscellaneous			$2500					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Lane Departure	Engineering
432648-1	Intersection geometry	Intersection geometry - other			$512935					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
432698-1	Roadway	Pavement surface - miscellaneous			$14682					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Lane Departure	Engineering

PROJECT NAME	IMPROVEMENT CATEGORY	SUBCATEGORY	OUTPUTS	OUTPUT TYPE	HSIP PROJECT COST($)	TOTAL PROJECT COST($)	FUNDING CATEGORY	LAND USE/AREA TYPE	FUNCTIONAL CLASSIFICATION	AADT	SPEED	OWNERSHIP	METHOD FOR SITE SELECTION	SHSP EMPHASIS AREA	SHSP STRATEGY
432720-1	Roadway	Pavement surface - miscellaneous			$2					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Lane Departure	Engineering
432748-4	Roadway	Pavement surface - miscellaneous			$63728					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Lane Departure	Engineering
432755-1	Lighting	Continuous roadway lighting			$46567					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Lane Departure	Engineering
432883-3	Intersection traffic control	Intersection traffic control - other			$326061					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Multiple	Engineering
433109-5	Interchange design	Acceleration / deceleration / merge lane			$7746597					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
433144-1	Non-infrastructure	Educational efforts			$7748582					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Pedestrians and bicyclists	Education
433144-2	Non-infrastructure	Educational efforts			$125000					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Pedestrians and bicyclists	Education
433144-3	Non-infrastructure	Educational efforts			$180000					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Pedestrians and bicyclists	Education
433283-1	Intersection geometry	Intersection geometry - other			$28758					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering

PROJECT NAME	IMPROVEMENT CATEGORY	SUBCATEGORY	OUTPUTS	OUTPUT TYPE	HSIP PROJECT COST($)	TOTAL PROJECT COST($)	FUNDING CATEGORY	LAND USE/AREA TYPE	FUNCTIONAL CLASSIFICATION	AADT	SPEED	OWNERSHIP	METHOD FOR SITE SELECTION	SHSP EMPHASIS AREA	SHSP STRATEGY
433390-1	Non-infrastructure	Transportation safety planning			$399527					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Multiple	Engineering
433455-1	Intersection geometry	Intersection geometry - other			$1996					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
433489-1	Intersection geometry	Intersection geometry - other			$37547					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
433519-2	Roadway signs and traffic control	Roadway signs (including post) - new or updated			$233					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
433519-3	Non-infrastructure	Transportation safety planning			$3298					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
433522-3	Non-infrastructure	Transportation safety planning			$1000000					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Multiple	Engineering
433875-1	Non-infrastructure	Transportation safety planning			$320409					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Multiple	Engineering
433985-1	Pedestrians and bicyclists	Install sidewalk			$965					0		Other Local Agency	Benefit-cost ratio, net present value, or similar	Pedestrians and bicyclists	Engineering
434273-3	Lighting	Site lighting - interchange			$8059					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Lane Departure	Engineering

PROJECT NAME	IMPROVEMENT CATEGORY	SUBCATEGORY	OUTPUTS	OUTPUT TYPE	HSIP PROJECT COST($)	TOTAL PROJECT COST($)	FUNDING CATEGORY	LAND USE/AREA TYPE	FUNCTIONAL CLASSIFICATION	AADT	SPEED	OWNERSHIP	METHOD FOR SITE SELECTION	SHSP EMPHASIS AREA	SHSP STRATEGY
434273-4	Lighting	Site lighting - interchange			$7311					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Lane Departure	Engineering
434309-1	Pedestrians and bicyclists	Install sidewalk			$45					0		Other Local Agency	Benefit-cost ratio, net present value, or similar	Pedestrians and bicyclists	Engineering
434333-1	Pedestrians and bicyclists	Install sidewalk			$2157990					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Pedestrians and bicyclists	Engineering
434337-1	Intersection traffic control	Intersection signing - miscellaneous/other/unspecified			$237759					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
434342-1	Roadway	Pavement surface - miscellaneous			$11161					0		Other Local Agency	Benefit-cost ratio, net present value, or similar	Lane Departure	Engineering
434343-1	Pedestrians and bicyclists	Install sidewalk			$72398					0		Other Local Agency	Benefit-cost ratio, net present value, or similar	Pedestrians and bicyclists	Engineering
434497-1	Pedestrians and bicyclists	Install sidewalk			$1091					0		Other Local Agency	Benefit-cost ratio, net present value, or similar	Pedestrians and bicyclists	Engineering
434502-1	Intersection geometry	Intersection geometry - other			$89307					0		Other Local Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
434686-1	Pedestrians and bicyclists	Install sidewalk			$172830					0		Other Local Agency	Benefit-cost ratio, net present value, or similar	Pedestrians and bicyclists	Engineering

PROJECT NAME	IMPROVEMENT CATEGORY	SUBCATEGORY	OUTPUTS	OUTPUT TYPE	HSIP PROJECT COST($)	TOTAL PROJECT COST($)	FUNDING CATEGORY	LAND USE/AREA TYPE	FUNCTIONAL CLASSIFICATION	AADT	SPEED	OWNERSHIP	METHOD FOR SITE SELECTION	SHSP EMPHASIS AREA	SHSP STRATEGY
434694-1	Intersection traffic control	Intersection traffic control - other			$60					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
434700-1	Shoulder treatments	Shoulder treatments - other			$3539					0		Other Local Agency	Benefit-cost ratio, net present value, or similar	Lane Departure	Engineering
434768-2	Intersection traffic control	Intersection traffic control - other			$7890					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
434768-4	Intersection traffic control	Intersection traffic control - other			$84335					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
434769-1	Intersection geometry	Intersection geometry - other			$74064					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
434776-1	Intersection geometry	Intersection geometry - other			$18254					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
434778-1	Intersection geometry	Intersection geometry - other			$21471					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
434779-1	Non-infrastructure	Transportation safety planning			$460564					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Multiple	Engineering
434807-1	Roadway	Pavement surface - miscellaneous			$3740					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Lane Departure	Engineering

PROJECT NAME	IMPROVEMENT CATEGORY	SUBCATEGORY	OUTPUTS	OUTPUT TYPE	HSIP PROJECT COST($)	TOTAL PROJECT COST($)	FUNDING CATEGORY	LAND USE/AREA TYPE	FUNCTIONAL CLASSIFICATION	AADT	SPEED	OWNERSHIP	METHOD FOR SITE SELECTION	SHSP EMPHASIS AREA	SHSP STRATEGY
435053-1	Lighting	Site lighting - interchange			$10117					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
435059-1	Lighting	Site lighting - interchange			$24084					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
435160-1	Pedestrians and bicyclists	Install sidewalk			$20155					0		Other Local Agency	Benefit-cost ratio, net present value, or similar	Pedestrians and bicyclists	Engineering
435477-1	Pedestrians and bicyclists	Install sidewalk			$297					0		Other Local Agency	Benefit-cost ratio, net present value, or similar	Pedestrians and bicyclists	Engineering
435837-1	Intersection traffic control	Intersection traffic control - other			$1816540					0		Other Local Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
436009-1	Shoulder treatments	Shoulder treatments - other			$7386					0		Other Local Agency	Benefit-cost ratio, net present value, or similar	Lane Departure	Engineering
436010-1	Pedestrians and bicyclists	Install sidewalk			$10902					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Pedestrians and bicyclists	Engineering
436011-1	Shoulder treatments	Shoulder treatments - other			$1767					0		Other Local Agency	Benefit-cost ratio, net present value, or similar	Lane Departure	Engineering
436023-1	Pedestrians and bicyclists	Install sidewalk			$219140					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Pedestrians and bicyclists	Engineering

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436041-1	Intersection traffic control	Intersection traffic control - other			$160184					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
436111-1	Intersection geometry	Auxiliary lanes - add right-turn lane			$2474449					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
436114-1	Pedestrians and bicyclists	Install sidewalk			$10718					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Pedestrians and bicyclists	Engineering
436118-1	Intersection geometry	Intersection geometry - other			$207945					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
436119-1	Shoulder treatments	Shoulder treatments - other			$3960					0		Other Local Agency	Benefit-cost ratio, net present value, or similar	Lane Departure	Engineering
436124-1	Lighting	Site lighting - intersection			$927					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
436134-1	Roadway	Roadway - other			$221786					0		Other Local Agency	Benefit-cost ratio, net present value, or similar	Lane Departure	Engineering
436135-1	Pedestrians and bicyclists	Install sidewalk			$2887					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Pedestrians and bicyclists	Engineering
436135-2	Pedestrians and bicyclists	Install sidewalk			$2098133					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Pedestrians and bicyclists	Engineering

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436151-1	Shoulder treatments	Shoulder treatments - other			$345494					0		Other Local Agency	Benefit-cost ratio, net present value, or similar	Lane Departure	Engineering
436196-1	Pedestrians and bicyclists	Install sidewalk			$73730					0		Other Local Agency	Benefit-cost ratio, net present value, or similar	Pedestrians and bicyclists	Engineering
436237-1	Intersection geometry	Intersection geometry - other			$9797					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
436303-1	Intersection traffic control	Intersection traffic control - other			$1683965					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
436311-1	Intersection traffic control	Intersection traffic control - other			$73556					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
436386-1	Intersection traffic control	Intersection signing - miscellaneous/other/unspecified			$5550					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
436404-1	Intersection traffic control	Intersection traffic control - other			$1108066					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
436530-1	Intersection traffic control	Intersection traffic control - other			$87613					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
436547-1	Intersection geometry	Intersection geometry - other			$409933					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering

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436551-1	Roadway	Pavement surface - high friction surface			$1612935					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Lane Departure	Engineering
436612-1	Non-infrastructure	Transportation safety planning			$161861					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Multiple	Engineering
436612-2	Non-infrastructure	Transportation safety planning			$203945					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Multiple	Engineering
436612-3	Non-infrastructure	Transportation safety planning			$302140					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Multiple	Engineering
436613-1	Non-infrastructure	Transportation safety planning			$32975					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Multiple	Engineering
436614-1	Lighting	Continuous roadway lighting			$109					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Lane Departure	Engineering
436615-1	Pedestrians and bicyclists	Miscellaneous pedestrians and bicyclists			$12391					0		Other Local Agency	Benefit-cost ratio, net present value, or similar	Pedestrians and bicyclists	Engineering
436620-1	Roadway	Roadway widening - travel lanes			$2276086					0		Other Local Agency	Benefit-cost ratio, net present value, or similar	Lane Departure	Engineering
436621-1	Shoulder treatments	Shoulder treatments - other			$523198					0		Other Local Agency	Benefit-cost ratio, net present value, or similar	Lane Departure	Engineering

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436708-1	Pedestrians and bicyclists	Install sidewalk			$1643					0		Other Local Agency	Benefit-cost ratio, net present value, or similar	Pedestrians and bicyclists	Engineering
436709-1	Pedestrians and bicyclists	Install sidewalk			$486					0		Other Local Agency	Benefit-cost ratio, net present value, or similar	Pedestrians and bicyclists	Engineering
436710-1	Pedestrians and bicyclists	Install sidewalk			$1586					0		Other Local Agency	Benefit-cost ratio, net present value, or similar	Pedestrians and bicyclists	Engineering
436711-1	Pedestrians and bicyclists	Install sidewalk			$1192					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Pedestrians and bicyclists	Engineering
436712-1	Pedestrians and bicyclists	Install sidewalk			$769					0		Other Local Agency	Benefit-cost ratio, net present value, or similar	Pedestrians and bicyclists	Engineering
436720-1	Intersection traffic control	Intersection traffic control - other			$12690					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
437040-1	Intersection geometry	Auxiliary lanes - add right-turn lane			$1161227					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
437302-1	Roadway delineation	Raised pavement markers			$133030					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Lane Departure	Engineering
437451-1	Intersection geometry	Auxiliary lanes - add left-turn lane			$176741					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering

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437458-1	Shoulder treatments	Shoulder treatments - other			$954582					0		Other Local Agency	Benefit-cost ratio, net present value, or similar	Lane Departure	Engineering
437485-1	Shoulder treatments	Shoulder treatments - other			$557348					0		Other Local Agency	Benefit-cost ratio, net present value, or similar	Lane Departure	Engineering
437486-1	Intersection traffic control	Modify traffic signal - modernization/replacement			$383308					0		Other Local Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
437592-1	Intersection geometry	Intersection geometry - other			$1125608					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
437604-1	Shoulder treatments	Shoulder treatments - other			$564609					0		Other Local Agency	Benefit-cost ratio, net present value, or similar	Lane Departure	Engineering
437605-1	Lighting	Site lighting - interchange			$1789					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
437627-1	Shoulder treatments	Shoulder treatments - other			$427090					0		Other Local Agency	Benefit-cost ratio, net present value, or similar	Lane Departure	Engineering
437628-1	Roadway	Roadway - other			$56					0		Other Local Agency	Benefit-cost ratio, net present value, or similar	Lane Departure	Engineering
437629-1	Intersection geometry	Intersection geometry - other			$96771					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering

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437630-1	Lighting	Site lighting - intersection			$6118372					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
437634-1	Access management	Raised island - install new			$313112					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Lane Departure	Engineering
437639-1	Roadway	Roadway widening - travel lanes			$255701					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Lane Departure	Engineering
437643-1	Intersection geometry	Auxiliary lanes - add left-turn lane			$24202					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
437644-1	Intersection traffic control	Intersection traffic control - other			$465074					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
437646-1	Intersection traffic control	Intersection traffic control - other			$504122					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
437647-1	Pedestrians and bicyclists	Miscellaneous pedestrians and bicyclists			$839					0		Other Local Agency	Benefit-cost ratio, net present value, or similar	Pedestrians and bicyclists	Engineering
437687-1	Intersection geometry	Auxiliary lanes - add acceleration lane			$2646					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
437701-1	Lighting	Continuous roadway lighting			$3174452					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Lane Departure	Engineering

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437702-1	Intersection traffic control	Modify traffic signal - modernization/replacement			$569058					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
437707-1	Intersection traffic control	Modify traffic signal - modernization/replacement			$2145090					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
437708-1	Intersection traffic control	Modify traffic signal - modernization/replacement			$5081					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
437718-1	Lighting	Site lighting - intersection			$307575					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
437718-2	Lighting	Site lighting - intersection			$155653					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
437731-1	Lighting	Continuous roadway lighting			$345612					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Lane Departure	Engineering
437807-1	Pedestrians and bicyclists	Install sidewalk			$1363811					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Pedestrians and bicyclists	Engineering
437808-1	Intersection geometry	Auxiliary lanes - add left-turn lane			$10000					0		Other Local Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
437836-1	Roadway	Pavement surface - miscellaneous			$52431					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Lane Departure	Engineering

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437873-1	Pedestrians and bicyclists	Miscellaneous pedestrians and bicyclists			$558					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Pedestrians and bicyclists	Engineering
437915-1	Intersection traffic control	Intersection traffic control - other			$1391509					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
437916-1	Pedestrians and bicyclists	Miscellaneous pedestrians and bicyclists			$294649					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Pedestrians and bicyclists	Engineering
437916-2	Pedestrians and bicyclists	Miscellaneous pedestrians and bicyclists			$435416					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Pedestrians and bicyclists	Engineering
437917-1	Intersection geometry	Intersection geometry - other			$584538					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
437920-1	Intersection geometry	Auxiliary lanes - add right-turn lane			$813460					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
437922-1	Pedestrians and bicyclists	Miscellaneous pedestrians and bicyclists			$702007					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Pedestrians and bicyclists	Engineering
437923-1	Intersection geometry	Intersection geometry - other			$8745					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
438060-1	Roadway	Pavement surface - miscellaneous			$203113					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Lane Departure	Engineering

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438127-2	Pedestrians and bicyclists	Install sidewalk			$59731					0		Other Local Agency	Benefit-cost ratio, net present value, or similar	Pedestrians and bicyclists	Engineering
438135-3	Pedestrians and bicyclists	Install sidewalk			$214532					0		Other Local Agency	Benefit-cost ratio, net present value, or similar	Pedestrians and bicyclists	Engineering
438270-1	Roadway signs and traffic control	Curve-related warning signs and flashers			$135952					0		Other Local Agency	Benefit-cost ratio, net present value, or similar	Lane Departure	Engineering
438272-1	Roadway	Roadway - other			$410175					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Multiple	Engineering
438275-2	Lighting	Site lighting - intersection			$42					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
438277-1	Intersection traffic control	Modify traffic signal - modernization/replacement			$550000					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
438371-1	Access management	Raised island - install new			$873849					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Lane Departure	Engineering
438374-1	Access management	Raised island - install new			$952350					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Lane Departure	Engineering
438378-1	Intersection geometry	Auxiliary lanes - add left-turn lane			$1059926					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering

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439038-1	Pedestrians and bicyclists	Install sidewalk			$4741					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Pedestrians and bicyclists	Engineering
439156-1	Intersection geometry	Intersection geometry - other			$62316					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
439157-1	Intersection geometry	Intersection geometry - other			$3805					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Pedestrians and bicyclists	Engineering
439159-1	Intersection traffic control	Modify traffic signal - modernization/replacement			$46808					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
439368-1	Intersection traffic control	Intersection signing - miscellaneous/other/unspecified			$2491					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
439448-1	Intersection geometry	Intersection geometry - other			$78860					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
439458-1	Intersection geometry	Intersection geometry - other			$59					0		Other Local Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
439469-1	Roadway delineation	Roadway delineation - other			$454					0		Other Local Agency	Benefit-cost ratio, net present value, or similar	Multiple	Engineering
439470-1	Intersection geometry	Intersection geometry - other			$990					0		Other Local Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering

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439485-1	Pedestrians and bicyclists	Install sidewalk			$26					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Pedestrians and bicyclists	Engineering
439486-1	Pedestrians and bicyclists	Install sidewalk			$26					0		Other Local Agency	Benefit-cost ratio, net present value, or similar	Pedestrians and bicyclists	Engineering
439488-1	Intersection geometry	Intersection geometry - other			$8439					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
439489-1	Lighting	Site lighting - intersection			$8677					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
439490-1	Intersection geometry	Auxiliary lanes - miscellaneous/other/unspecified			$112276					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
439493-1	Pedestrians and bicyclists	Install sidewalk			$26					0		Other Local Agency	Benefit-cost ratio, net present value, or similar	Pedestrians and bicyclists	Engineering
439494-1	Pedestrians and bicyclists	Install sidewalk			$26					0		Other Local Agency	Benefit-cost ratio, net present value, or similar	Pedestrians and bicyclists	Engineering
439496-1	Roadway	Rumble strips - unspecified or other			$861					0		Other Local Agency	Benefit-cost ratio, net present value, or similar	Lane Departure	Engineering
439497-1	Shoulder treatments	Shoulder treatments - other			$1325					0		Other Local Agency	Benefit-cost ratio, net present value, or similar	Lane Departure	Engineering

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439498-1	Intersection geometry	Intersection geometry - other			$216					0		Other Local Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
439499-1	Roadway	Roadway widening - travel lanes			$1369					0		Other Local Agency	Benefit-cost ratio, net present value, or similar	Lane Departure	Engineering
439500-1	Intersection traffic control	Intersection signing - miscellaneous/other/unspecified			$564					0		Other Local Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
439511-1	Shoulder treatments	Shoulder treatments - other			$810					0		Other Local Agency	Benefit-cost ratio, net present value, or similar	Multiple	Engineering
439512-1	Pedestrians and bicyclists	Install new crosswalk			$30174					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Pedestrians and bicyclists	Engineering
439557-2	Lighting	Site lighting - intersection			$122					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
439559-2	Lighting	Site lighting - intersection			$225670					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
439561-2	Lighting	Site lighting - intersection			$122					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
439562-2	Lighting	Site lighting - intersection			$434754					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering

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439574-2	Lighting	Site lighting - intersection			$261000					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
439575-2	Lighting	Site lighting - intersection			$432252					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
439579-2	Lighting	Site lighting - intersection			$91700					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
439580-2	Lighting	Site lighting - intersection			$122					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
439581-2	Lighting	Site lighting - intersection			$252103					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
439583-2	Lighting	Site lighting - intersection			$95852					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
439584-2	Lighting	Site lighting - intersection			$122					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
439586-2	Lighting	Site lighting - intersection			$206285					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
439587-2	Lighting	Site lighting - intersection			$38718					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering

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439588-2	Lighting	Site lighting - intersection			$63100					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
439667-1	Pedestrians and bicyclists	Install sidewalk			$26					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Pedestrians and bicyclists	Engineering
439677-1	Pedestrians and bicyclists	Install sidewalk			$26					0		Other Local Agency	Benefit-cost ratio, net present value, or similar	Pedestrians and bicyclists	Engineering
439679-1	Pedestrians and bicyclists	Miscellaneous pedestrians and bicyclists			$863182					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Pedestrians and bicyclists	Engineering
439691-1	Pedestrians and bicyclists	Install sidewalk			$944					0		Other Local Agency	Benefit-cost ratio, net present value, or similar	Pedestrians and bicyclists	Engineering
439692-1	Pedestrians and bicyclists	Install sidewalk			$2698					0		Other Local Agency	Benefit-cost ratio, net present value, or similar	Pedestrians and bicyclists	Engineering
439696-1	Pedestrians and bicyclists	Install sidewalk			$1126					0		Other Local Agency	Benefit-cost ratio, net present value, or similar	Pedestrians and bicyclists	Engineering
439697-1	Pedestrians and bicyclists	Install sidewalk			$795					0		Other Local Agency	Benefit-cost ratio, net present value, or similar	Pedestrians and bicyclists	Engineering
439698-1	Pedestrians and bicyclists	Install sidewalk			$3575					0		Other Local Agency	Benefit-cost ratio, net present value, or similar	Pedestrians and bicyclists	Engineering

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439699-1	Pedestrians and bicyclists	Install sidewalk			$6967					0		Other Local Agency	Benefit-cost ratio, net present value, or similar	Pedestrians and bicyclists	Engineering
439768-1	Lighting	Site lighting - intersection			$283					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
439777-1	Access management	Access management - other			$3516					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Multiple	Engineering
439785-1	Lighting	Site lighting - intersection			$3981					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
439790-1	Lighting	Site lighting - intersection			$62					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
439795-1	Lighting	Site lighting - intersection			$29					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
439802-1	Lighting	Site lighting - intersection			$1017					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
439803-1	Lighting	Site lighting - intersection			$1152					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
439804-1	Lighting	Site lighting - intersection			$367					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering

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439805-1	Lighting	Site lighting - intersection			$508					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
439806-1	Lighting	Site lighting - intersection			$99547					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
439808-1	Lighting	Site lighting - intersection			$181799					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
439829-1	Lighting	Site lighting - intersection			$265303					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
439829-2	Lighting	Site lighting - intersection			$53795					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
439829-3	Lighting	Site lighting - intersection			$27359					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
439829-4	Lighting	Site lighting - intersection			$1297830					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
439829-5	Lighting	Site lighting - intersection			$565593					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
439847-1	Roadway	Pavement surface - miscellaneous			$101065					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Lane Departure	Engineering

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439880-1	Lighting	Site lighting - intersection			$666					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
439880-3	Lighting	Site lighting - intersection			$132486					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
439880-4	Lighting	Site lighting - intersection			$801					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
439880-5	Lighting	Site lighting - intersection			$8831					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
439880-6	Lighting	Site lighting - intersection			$1711					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
439880-7	Lighting	Site lighting - intersection			$27572					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
439881-1	Lighting	Site lighting - intersection			$1128					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
439881-2	Lighting	Site lighting - intersection			$328					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
439881-4	Lighting	Site lighting - intersection			$248					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering

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439881-5	Lighting	Site lighting - intersection			$133270					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
439883-1	Lighting	Site lighting - intersection			$649					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
439883-2	Lighting	Site lighting - intersection			$192849					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
439883-3	Lighting	Site lighting - intersection			$734					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
439884-1	Lighting	Site lighting - intersection			$22872					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
439885-1	Lighting	Site lighting - intersection			$1363491					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
439885-2	Lighting	Site lighting - intersection			$1472					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
439887-1	Lighting	Site lighting - intersection			$150030					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
439894-1	Pedestrians and bicyclists	Install sidewalk			$69					0		Other Local Agency	Benefit-cost ratio, net present value, or similar	Pedestrians and bicyclists	Engineering

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439895-1	Pedestrians and bicyclists	Install sidewalk			$63					0		Other Local Agency	Benefit-cost ratio, net present value, or similar	Pedestrians and bicyclists	Engineering
439896-1	Pedestrians and bicyclists	Install sidewalk			$50667					0		Other Local Agency	Benefit-cost ratio, net present value, or similar	Pedestrians and bicyclists	Engineering
439909-1	Lighting	Site lighting - interchange			$174221					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
439910-1	Intersection traffic control	Modify traffic signal - modernization/replacement			$254047					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
439911-1	Intersection geometry	Auxiliary lanes - add right-turn lane			$507518					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
439916-1	Intersection geometry	Intersection geometry - other			$14000					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
439917-1	Intersection traffic control	Intersection signing - miscellaneous/other/unspecified			$497815					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
439920-1	Intersection traffic control	Intersection signing - miscellaneous/other/unspecified			$14000					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
439930-1	Interchange design	Acceleration / deceleration / merge lane			$487610					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering

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439939-1	Interchange design	Acceleration / deceleration / merge lane			$152962					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
439979-1	Pedestrians and bicyclists	Install sidewalk			$4663					0		Other Local Agency	Benefit-cost ratio, net present value, or similar	Pedestrians and bicyclists	Engineering
439981-2	Intersection geometry	Intersection geometry - other			$14094					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
439986-1	Intersection traffic control	Intersection signing - miscellaneous/other/unspecified			$28000					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
440013-1	Intersection geometry	Intersection geometry - other			$262376					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
440072-1	Lighting	Site lighting - intersection			$413722					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
440073-1	Lighting	Site lighting - intersection			$703540					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
440074-1	Lighting	Site lighting - intersection			$659262					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
440075-1	Lighting	Site lighting - intersection			$450342					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering

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440076-1	Lighting	Site lighting - intersection			$343847					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
440077-1	Lighting	Site lighting - intersection			$478878					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
440078-1	Lighting	Site lighting - intersection			$70810					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
440079-1	Lighting	Site lighting - intersection			$7302					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
440080-1	Lighting	Site lighting - intersection			$42979					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
440082-1	Lighting	Site lighting - intersection			$13759					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
440083-1	Lighting	Site lighting - intersection			$17882					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
440084-1	Lighting	Site lighting - intersection			$13308					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
440085-1	Lighting	Site lighting - intersection			$4773					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering

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440086-1	Lighting	Site lighting - intersection			$819429					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
440087-1	Lighting	Site lighting - intersection			$635402					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
440088-1	Lighting	Site lighting - intersection			$1065351					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
440116-1	Lighting	Lighting - other			$21223					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Pedestrians and bicyclists	Engineering
440118-1	Lighting	Site lighting - intersection			$421989					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
440119-1	Lighting	Site lighting - intersection			$22791					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
440120-1	Lighting	Site lighting - intersection			$458699					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
440121-1	Lighting	Site lighting - intersection			$3450					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
440122-1	Lighting	Site lighting - intersection			$298789					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering

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440123-1	Lighting	Site lighting - intersection			$3685					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
440124-1	Lighting	Site lighting - intersection			$9690					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
440125-1	Lighting	Site lighting - intersection			$4875					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
440126-1	Lighting	Site lighting - intersection			$400					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
440127-1	Lighting	Site lighting - intersection			$2659					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
440128-1	Lighting	Site lighting - intersection			$8486					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
440129-1	Lighting	Site lighting - intersection			$1583974					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
440130-1	Lighting	Site lighting - intersection			$503					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
440133-1	Lighting	Site lighting - intersection			$25758					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering

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440134-1	Lighting	Site lighting - intersection			$1816					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
440135-1	Lighting	Site lighting - intersection			$4001					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
440136-1	Lighting	Site lighting - intersection			$4751					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
440137-1	Lighting	Site lighting - intersection			$176					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
440138-1	Lighting	Site lighting - intersection			$21716					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
440161-1	Pedestrians and bicyclists	Install sidewalk			$8653					0		Other Local Agency	Benefit-cost ratio, net present value, or similar	Pedestrians and bicyclists	Engineering
440162-1	Pedestrians and bicyclists	Install sidewalk			$22100					0		Other Local Agency	Benefit-cost ratio, net present value, or similar	Pedestrians and bicyclists	Engineering
440169-1	Lighting	Site lighting - intersection			$4977					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
440171-1	Lighting	Site lighting - intersection			$3741					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering

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440176-1	Lighting	Site lighting - intersection			$91914					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
440177-1	Lighting	Site lighting - intersection			$91761					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
440179-1	Lighting	Site lighting - intersection			$83490					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
440179-2	Lighting	Site lighting - intersection			$81154					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
440180-1	Lighting	Site lighting - intersection			$871212					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
440181-1	Lighting	Site lighting - intersection			$164410					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
440182-1	Lighting	Site lighting - intersection			$140522					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
440183-1	Lighting	Site lighting - intersection			$111242					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
440184-1	Lighting	Site lighting - intersection			$698129					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering

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440185-1	Lighting	Site lighting - intersection			$426433					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
440186-2	Lighting	Site lighting - intersection			$262304					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
440187-1	Lighting	Site lighting - intersection			$746909					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
440188-1	Lighting	Site lighting - intersection			$675825					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
440189-1	Lighting	Site lighting - intersection			$137303					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
440190-1	Lighting	Site lighting - intersection			$650288					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
440191-1	Lighting	Site lighting - intersection			$839217					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
440281-1	Lighting	Site lighting - intersection			$127599					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
440379-1	Pedestrians and bicyclists	Install sidewalk			$1273071					0		Other Local Agency	Benefit-cost ratio, net present value, or similar	Pedestrians and bicyclists	Engineering

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440382-1	Pedestrians and bicyclists	Install sidewalk			$445436					0		Other Local Agency	Benefit-cost ratio, net present value, or similar	Pedestrians and bicyclists	Engineering
440383-1	Pedestrians and bicyclists	Install sidewalk			$410516					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Pedestrians and bicyclists	Engineering
440385-1	Pedestrians and bicyclists	Install sidewalk			$78316					0		Other Local Agency	Benefit-cost ratio, net present value, or similar	Pedestrians and bicyclists	Engineering
440386-1	Pedestrians and bicyclists	Install sidewalk			$97678					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Pedestrians and bicyclists	Engineering
440386-4	Pedestrians and bicyclists	Install sidewalk			$103558					0		Other Local Agency	Benefit-cost ratio, net present value, or similar	Pedestrians and bicyclists	Engineering
440386-5	Pedestrians and bicyclists	Install sidewalk			$125969					0		Other Local Agency	Benefit-cost ratio, net present value, or similar	Pedestrians and bicyclists	Engineering
440647-1	Roadside	Barrier- metal			$149195					0		Other Local Agency	Benefit-cost ratio, net present value, or similar	Lane Departure	Engineering
440649-1	Roadside	Barrier- metal			$183439					0		Other Local Agency	Benefit-cost ratio, net present value, or similar	Lane Departure	Engineering
440655-1	Roadway	Roadway - other			$74974					0		Other Local Agency	Benefit-cost ratio, net present value, or similar	Lane Departure	Engineering

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440656-1	Lighting	Continuous roadway lighting			$98983					0		Other Local Agency	Benefit-cost ratio, net present value, or similar	Lane Departure	Engineering
440660-1	Shoulder treatments	Shoulder treatments - other			$557462					0		Other Local Agency	Benefit-cost ratio, net present value, or similar	Lane Departure	Engineering
440663-1	Roadside	Barrier - other			$11985					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Lane Departure	Engineering
440674-1	Intersection traffic control	Modify traffic signal - modernization/replacement			$364837					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
440685-1	Intersection geometry	Auxiliary lanes - add right-turn lane			$213893					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
440686-1	Intersection geometry	Intersection geometry - other			$61415					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
441050-1	Intersection traffic control	Intersection signing - miscellaneous/other/unspecified			$307808					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
441104-1	Pedestrians and bicyclists	Install sidewalk			$344406					0		Other Local Agency	Benefit-cost ratio, net present value, or similar	Pedestrians and bicyclists	Engineering
441119-1	Non-infrastructure	Transportation safety planning			$299944					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Multiple	Engineering

PROJECT NAME	IMPROVEMENT CATEGORY	SUBCATEGORY	OUTPUTS	OUTPUT TYPE	HSIP PROJECT COST($)	TOTAL PROJECT COST($)	FUNDING CATEGORY	LAND USE/AREA TYPE	FUNCTIONAL CLASSIFICATION	AADT	SPEED	OWNERSHIP	METHOD FOR SITE SELECTION	SHSP EMPHASIS AREA	SHSP STRATEGY
441173-1	Pedestrians and bicyclists	Miscellaneous pedestrians and bicyclists			$220257					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Pedestrians and bicyclists	Engineering
441194-1	Pedestrians and bicyclists	Miscellaneous pedestrians and bicyclists			$149898					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Pedestrians and bicyclists	Engineering
441195-1	Intersection traffic control	Modify traffic signal - modernization/replacement			$468639					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
441207-1	Advanced technology and ITS	Dynamic message signs			$578589					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Lane Departure	Engineering
441208-1	Intersection geometry	Intersection geometry - other			$175949					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
441213-1	Intersection geometry	Intersection geometry - other			$80227					0		Other Local Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
441214-1	Roadway	Roadway widening - travel lanes			$825328					0		Other Local Agency	Benefit-cost ratio, net present value, or similar	Lane Departure	Engineering
441218-1	Pedestrians and bicyclists	Install sidewalk			$114670					0		Other Local Agency	Benefit-cost ratio, net present value, or similar	Pedestrians and bicyclists	Engineering
441219-1	Intersection geometry	Auxiliary lanes - add left-turn lane			$85145					0		Other Local Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering

PROJECT NAME	IMPROVEMENT CATEGORY	SUBCATEGORY	OUTPUTS	OUTPUT TYPE	HSIP PROJECT COST($)	TOTAL PROJECT COST($)	FUNDING CATEGORY	LAND USE/AREA TYPE	FUNCTIONAL CLASSIFICATION	AADT	SPEED	OWNERSHIP	METHOD FOR SITE SELECTION	SHSP EMPHASIS AREA	SHSP STRATEGY
441347-1	Pedestrians and bicyclists	Install sidewalk			$247780					0		Other Local Agency	Benefit-cost ratio, net present value, or similar	Pedestrians and bicyclists	Engineering
441364-1	Roadway	Rumble strips - edge or shoulder			$508691					0		Other Local Agency	Benefit-cost ratio, net present value, or similar	Lane Departure	Engineering
441365-1	Intersection traffic control	Intersection traffic control - other			$175000					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
441366-1	Access management	Raised island - modify existing			$421380					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Lane Departure	Engineering
441370-1	Speed management	Traffic calming feature			$386704					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Multiple	Engineering
441396-1	Shoulder treatments	Shoulder treatments - other			$589576					0		Other Local Agency	Benefit-cost ratio, net present value, or similar	Lane Departure	Engineering
441414-1	Non-infrastructure	Transportation safety planning			$295498					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Multiple	Engineering
441480-1	Pedestrians and bicyclists	Install sidewalk			$54738					0		Other Local Agency	Benefit-cost ratio, net present value, or similar	Pedestrians and bicyclists	Engineering
441481-1	Pedestrians and bicyclists	Install sidewalk			$68958					0		Other Local Agency	Benefit-cost ratio, net present value, or similar	Pedestrians and bicyclists	Engineering

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441725-1	Lighting	Site lighting - intersection			$429616					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
441728-1	Lighting	Continuous roadway lighting			$37965					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Lane Departure	Engineering
441730-1	Roadway signs and traffic control	Roadway signs and traffic control - other			$83130					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Lane Departure	Engineering
441732-1	Intersection traffic control	Intersection traffic control - other			$303619					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
441734-1	Lighting	Continuous roadway lighting			$198472					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Lane Departure	Engineering
441735-1	Intersection traffic control	Intersection traffic control - other			$259926					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
441736-1	Lighting	Continuous roadway lighting			$189472					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Lane Departure	Engineering
441737-1	Intersection traffic control	Modify traffic signal - modernization/replacement			$232600					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
441741-1	Shoulder treatments	Pave existing shoulders			$89334					0		Other Local Agency	Benefit-cost ratio, net present value, or similar	Lane Departure	Engineering

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441742-1	Pedestrians and bicyclists	Miscellaneous pedestrians and bicyclists			$398692					0		Other Local Agency	Benefit-cost ratio, net present value, or similar	Pedestrians and bicyclists	Engineering
441743-1	Roadway	Rumble strips - unspecified or other			$94863					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Lane Departure	Engineering
441744-1	Roadway	Rumble strips - unspecified or other			$71326					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Lane Departure	Engineering
441763-1	Pedestrians and bicyclists	Install sidewalk			$793					0		Other Local Agency	Benefit-cost ratio, net present value, or similar	Pedestrians and bicyclists	Engineering
441773-1	Lighting	Site lighting - intersection			$58043					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
441774-1	Roadway	Roadway widening - travel lanes			$186367					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Lane Departure	Engineering
441795-1	Lighting	Site lighting - intersection			$114796					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
441796-1	Lighting	Site lighting - intersection			$94285					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
441797-1	Lighting	Site lighting - intersection			$97545					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering

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441798-1	Intersection traffic control	Modify traffic signal - modernization/replacement			$127589					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
441827-1	Roadway	Pavement surface - miscellaneous			$137562					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Lane Departure	Engineering
442115-1	Lighting	Site lighting - intersection			$15102					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
442116-1	Lighting	Site lighting - intersection			$93928					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
442117-1	Lighting	Site lighting - intersection			$93052					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
442118-1	Intersection geometry	Intersection geometry - other			$150514					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
442119-1	Roadway delineation	Roadway delineation - other			$1574					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Lane Departure	Engineering
442123-1	Intersection geometry	Intersection geometry - other			$269866					0		Other Local Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
443853-1	Intersection geometry	Auxiliary lanes - add left-turn lane			$148309					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering

PROJECT NAME	IMPROVEMENT CATEGORY	SUBCATEGORY	OUTPUTS	OUTPUT TYPE	HSIP PROJECT COST($)	TOTAL PROJECT COST($)	FUNDING CATEGORY	LAND USE/AREA TYPE	FUNCTIONAL CLASSIFICATION	AADT	SPEED	OWNERSHIP	METHOD FOR SITE SELECTION	SHSP EMPHASIS AREA	SHSP STRATEGY
444330-1	Lighting	Site lighting - intersection			$192273					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
444331-1	Lighting	Site lighting - intersection			$181773					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
444339-1	Lighting	Site lighting - intersection			$121219					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
445166-1	Non-infrastructure	Transportation safety planning			$45202					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Multiple	Engineering
445167-1	Lighting	Site lighting - intersection			$171842					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
445168-1	Lighting	Site lighting - intersection			$170854					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
254646-1(1)	Roadway	Roadway - other			$12442					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Multiple	Engineering
254646-1(2)	Roadway	Roadway - other			$1508604					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Multiple	Engineering
254646-1(3)	Roadway	Roadway - other			$104765					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Multiple	Engineering

PROJECT NAME	IMPROVEMENT CATEGORY	SUBCATEGORY	OUTPUTS	OUTPUT TYPE	HSIP PROJECT COST($)	TOTAL PROJECT COST($)	FUNDING CATEGORY	LAND USE/AREA TYPE	FUNCTIONAL CLASSIFICATION	AADT	SPEED	OWNERSHIP	METHOD FOR SITE SELECTION	SHSP EMPHASIS AREA	SHSP STRATEGY
254646-1(4)	Non-infrastructure	Transportation safety planning			$29992					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Pedestrians and bicyclists	Engineering
434314-1(1)	Shoulder treatments	Shoulder treatments - other			$451					0		Other Local Agency	Benefit-cost ratio, net present value, or similar	Lane Departure	Engineering
434314-1(2)	Shoulder treatments	Shoulder treatments - other			$236					0		Other Local Agency	Benefit-cost ratio, net present value, or similar	Lane Departure	Engineering
434314-1(4)	Roadway	Rumble strips - edge or shoulder			$2390					0		Other Local Agency	Benefit-cost ratio, net present value, or similar	Lane Departure	Engineering
434315-1(1)	Shoulder treatments	Shoulder treatments - other			$138					0		Other Local Agency	Benefit-cost ratio, net present value, or similar	Lane Departure	Engineering
434315-1(2)	Roadway	Rumble strips - edge or shoulder			$1444					0		Other Local Agency	Benefit-cost ratio, net present value, or similar	Lane Departure	Engineering
434509-1(1)	Intersection geometry	Intersection geometry - other			$4999					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
434509-1(2)	Intersection geometry	Auxiliary lanes - add left-turn lane			$651					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
437354-1(1)	Intersection geometry	Auxiliary lanes - miscellaneous/other/unspecified			$2335399					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering

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437354-1 (2)	Intersection geometry	Auxiliary lanes - miscellaneous/other/unspecified			$226599					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
437354-1 (3)	Intersection geometry	Auxiliary lanes - miscellaneous/other/unspecified			$28532					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
437354-1 (4)	Intersection geometry	Auxiliary lanes - miscellaneous/other/unspecified			$46374					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
437354-1 (5)	Intersection traffic control	Intersection traffic control - other			$30507					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
437648-1(1)	Pedestrians and bicyclists	Miscellaneous pedestrians and bicyclists			$2449388					0		Other Local Agency	Benefit-cost ratio, net present value, or similar	Pedestrians and bicyclists	Engineering
437648-1(2)	Intersection geometry	Intersection geometry - other			$27000					0		Other Local Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
437648-1(3)	Intersection geometry	Intersection geometry - other			$183734					0		Other Local Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
437918-1(1)	Intersection geometry	Intersection geometry - other			$608466					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
437918-1(2)	Intersection traffic control	Intersection signing - miscellaneous/other/unspecified			$21321					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering

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437918-1(3)	Intersection traffic control	Intersection signing - miscellaneous/other/unspecified			$59623					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
438272-2(1)	Roadway	Roadway - other			$5575					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Multiple	Engineering
438272-2(2)	Roadway	Roadway - other			$256834					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Multiple	Engineering
438272-2(3)	Roadway	Roadway - other			$38067					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Multiple	Engineering
438272-2(4)	Roadway	Roadway - other			$5231					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Multiple	Engineering
438272-2(5)	Intersection traffic control	Intersection traffic control - other			$188					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
440552-1(1)	Non-infrastructure	Transportation safety planning			$6496					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Pedestrians and bicyclists	Engineering
440552-1(2)	Pedestrians and bicyclists	Miscellaneous pedestrians and bicyclists			$1013873					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Pedestrians and bicyclists	Engineering
441220-1(1)	Roadway signs and traffic control	Roadway signs and traffic control - other			$37737					0		Other Local Agency	Benefit-cost ratio, net present value, or similar	Lane Departure	Engineering

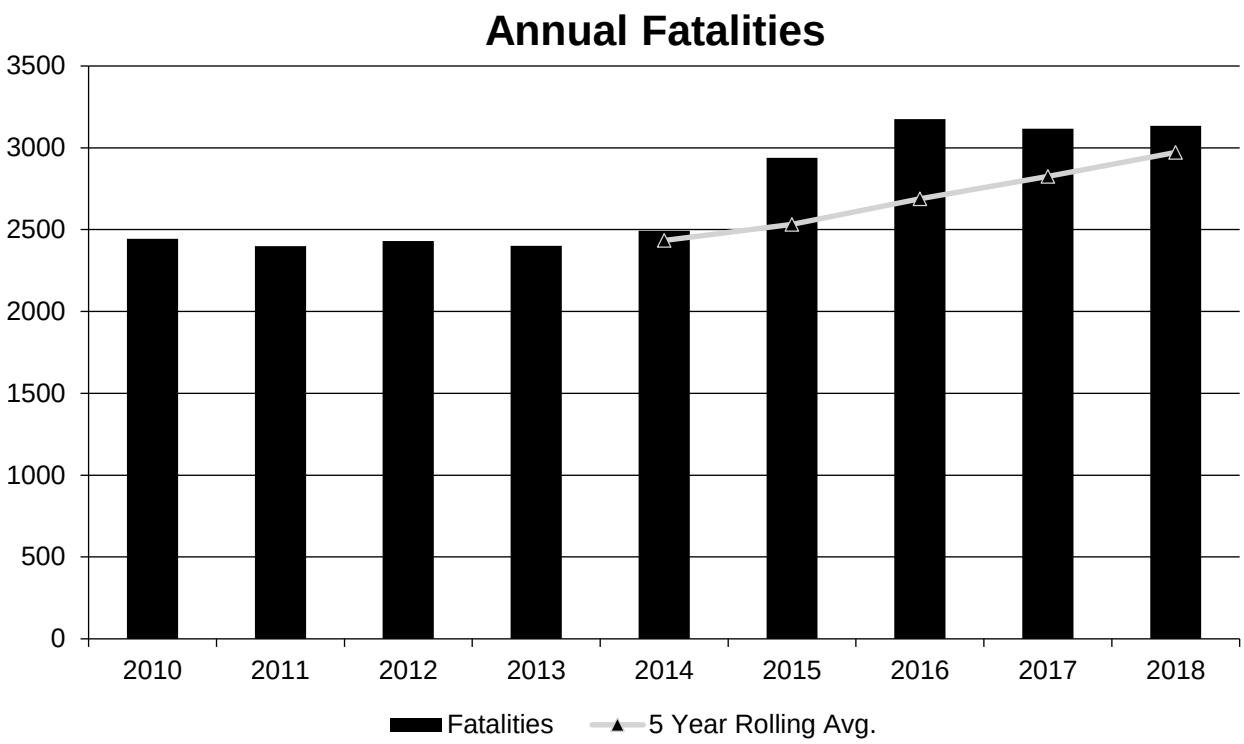
PROJECT NAME	IMPROVEMENT CATEGORY	SUBCATEGORY	OUTPUTS	OUTPUT TYPE	HSIP PROJECT COST($)	TOTAL PROJECT COST($)	FUNDING CATEGORY	LAND USE/AREA TYPE	FUNCTIONAL CLASSIFICATION	AADT	SPEED	OWNERSHIP	METHOD FOR SITE SELECTION	SHSP EMPHASIS AREA	SHSP STRATEGY
441220-1(2)	Roadway signs and traffic control	Roadway signs and traffic control - other			$3776					0		Other Local Agency	Benefit-cost ratio, net present value, or similar	Lane Departure	Engineering
441220-1(3)	Roadway	Roadway - other			$3744					0		Other Local Agency	Benefit-cost ratio, net present value, or similar	Lane Departure	Engineering
441738-1(1)	Intersection traffic control	Modify traffic signal - modernization/replacement			$2382					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering
441738-1(2)	Intersection traffic control	Modify traffic signal - modernization/replacement			$284451					0		State Highway Agency	Benefit-cost ratio, net present value, or similar	Intersections	Engineering

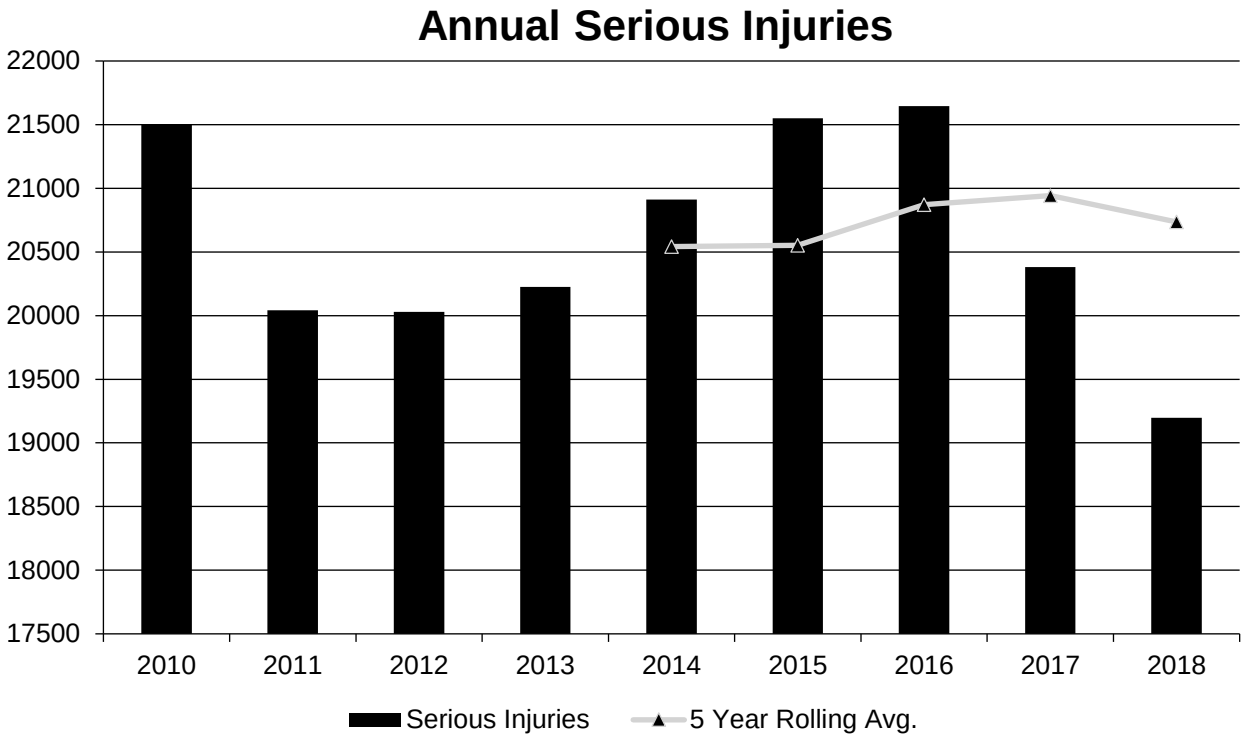
Safety Performance

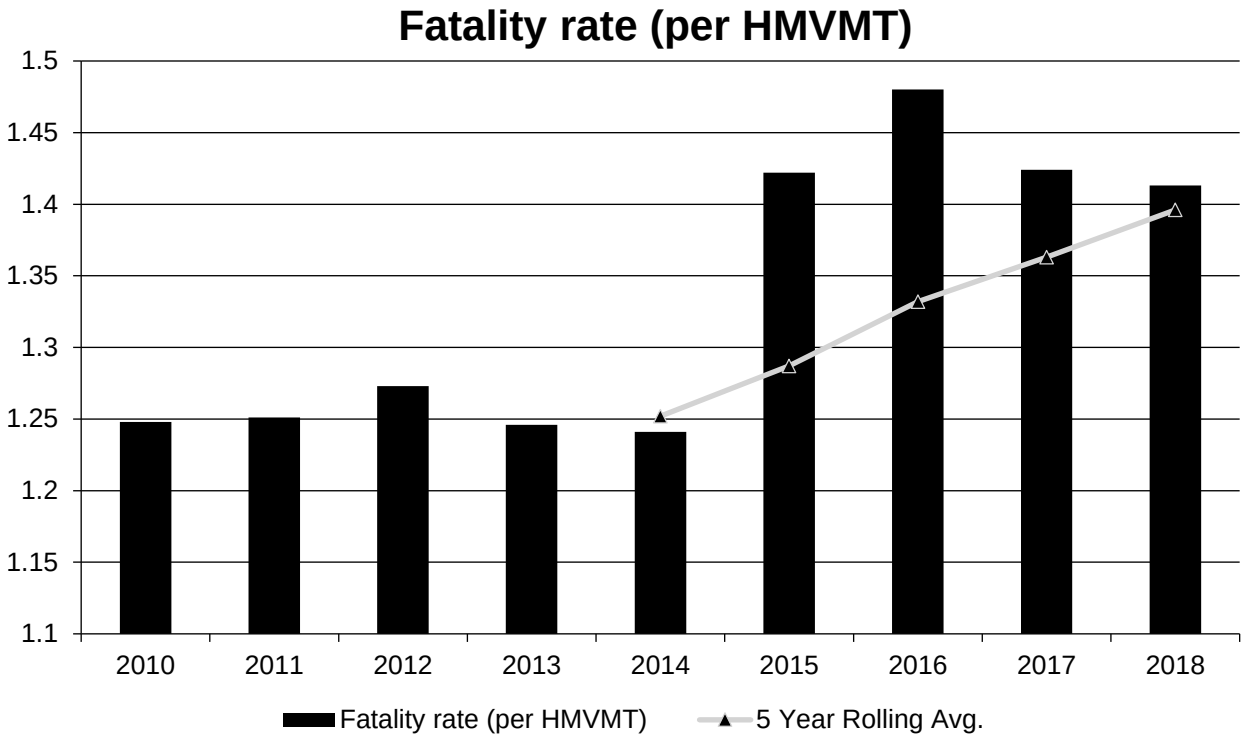
General Highway Safety Trends

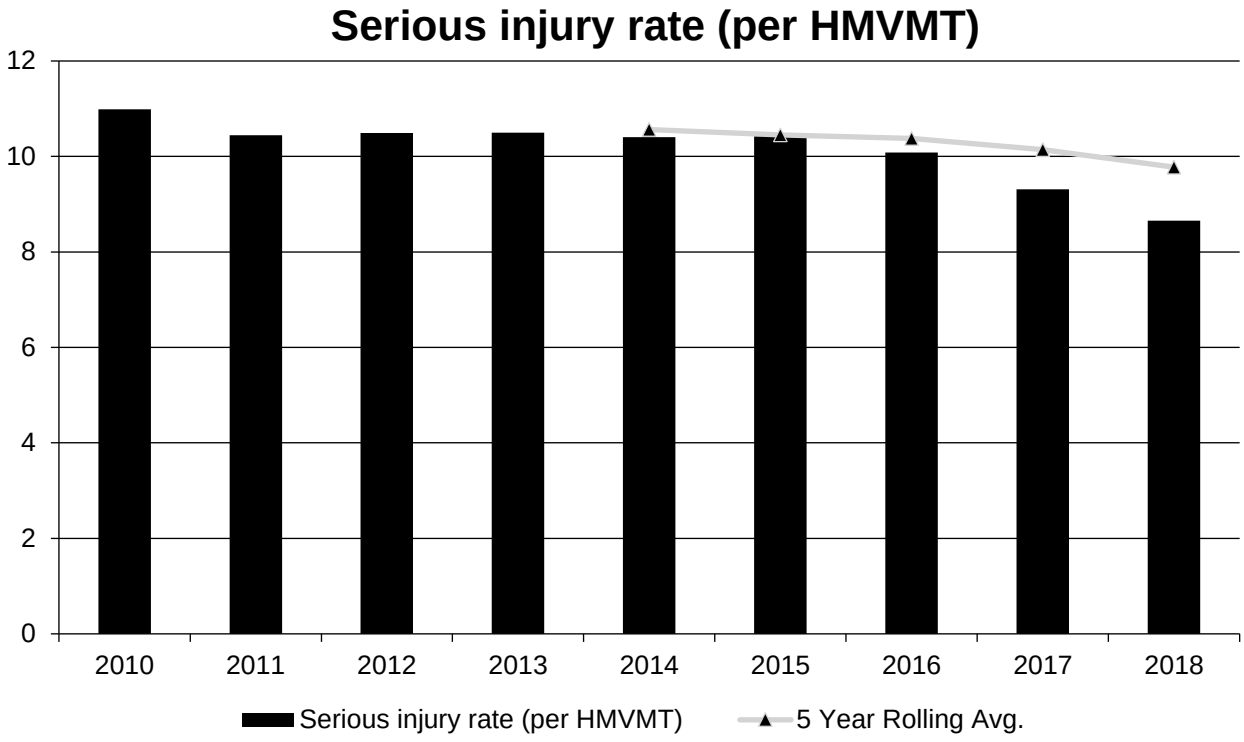
Present data showing the general highway safety trends in the State for the past five years.

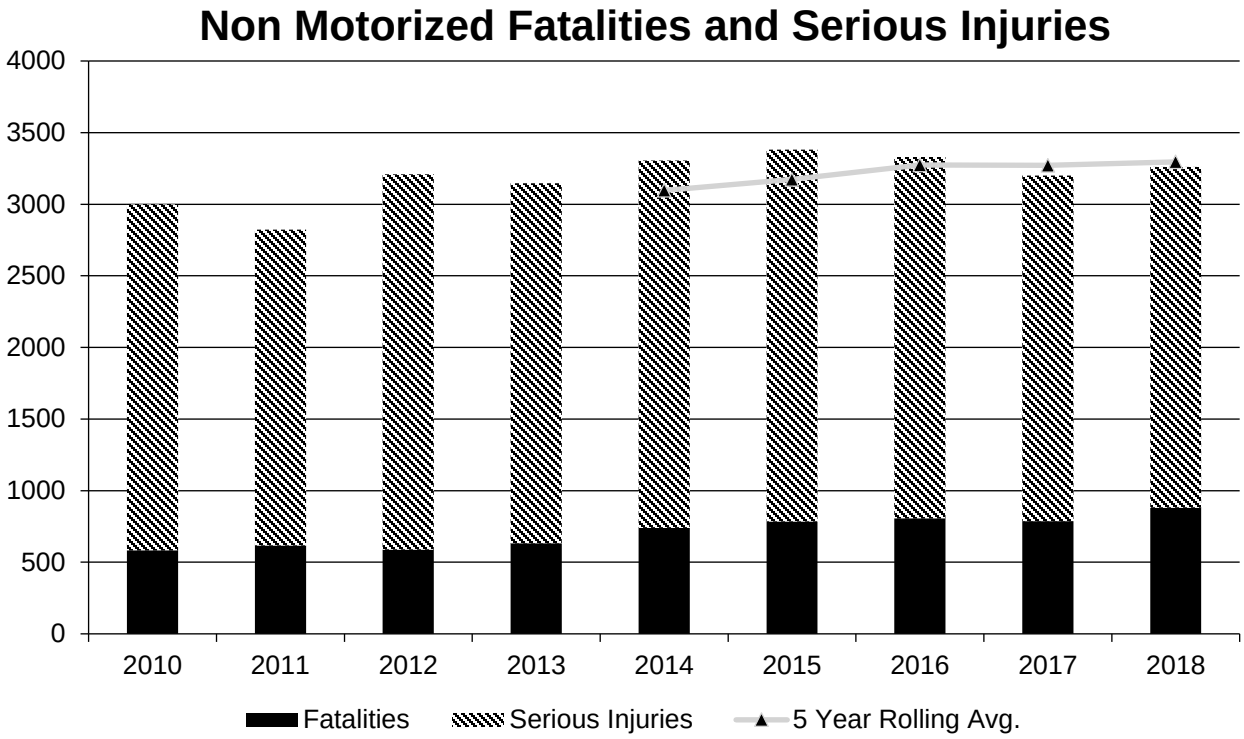
PERFORMANCE MEASURES	2010	2011	2012	2013	2014	2015	2016	2017	2018
Fatalities	2,444	2,400	2,430	2,402	2,494	2,939	3,176	3,116	3,135
Serious Injuries	21,503	20,042	20,028	20,226	20,912	21,551	21,645	20,380	19,196
Fatality rate (per HMVMT)	1.248	1.251	1.273	1.246	1.241	1.422	1.480	1.424	1.413
Serious injury rate (per HMVMT)	10.985	10.444	10.491	10.496	10.404	10.426	10.084	9.313	8.654
Number non-motorized fatalities	583	617	589	633	741	785	807	787	880
Number of non-motorized serious injuries	2,415	2,206	2,620	2,514	2,563	2,596	2,523	2,414	2,381


Annual Fatalities
3500
3000
2500
2000
1500
1000
500
0
2010
2011
2012
2013
2014
2015
2016
2017
2018
Fatalities
5 Year Rolling Avg.


Annual Serious Injuries
22000
21500
21000
20500
20000
19500
19000
18500
18000
17500
2010
2011
2012
2013
2014
2015
2016
2017
2018
Serious Injuries
5 Year Rolling Avg.


Fatality rate (per HMVMT)
1.5
1.45
1.4
1.35
1.3
1.25
1.2
1.15
1.1
2010
2011
2012
2013
2014
2015
2016
2017
2018
Fatality rate (per HMVMT)
5 Year Rolling Avg.


Serious injury rate (per HMVMT)
12
10
8
6
4
2
0
2010
2011
2012
2013
2014
2015
2016
2017
2018
Serious injury rate (per HMVMT)
5 Year Rolling Avg.



In response to a request by the Federal Highway Administration (FHWA), FDOT provides preliminary safety performance measures for 2019 data following the August 2020 submission of the 2020 HSIP Annual Report.Fatal and serious injury data are extracted from a FLHSMV data snapshot (used for reporting) as of 12/31/2020. Traffic volume data are extracted from the FDOT Public Mileage Report, 2019.

- Fatalities for 2019 = 3,185.
- Serious injuries for 2019 = 18,063.
- Fatality rate (per HMVMT) for 2019 = 1.411.
- Serious injury rate (per HMVMT) for 2019 = 8.002.
- Non-motorized fatalities for 2019 = 890.
- Non-motorized serious injuries for 2019 = 2,298.
- 5-year average number of fatalities for 2019 = 3,113.
- 5-year average number of serious injuries for 2019 = 20,085.
- 5-year average fatality rate (per HMVMT) for 2019 = 1.431.
- 5-year average serious injury rate (per HMVMT) for 2019 = 9.233.
- 5-year average number of non-motorized fatalities for 2019 = 823.
- 5-year average number of non-motorized serious injuries for 2019 = 2,439.

[Source: Florida Highway Safety Improvement Program Annual Report, 2019]
[Source: Traffic Crash Facts, 2018]
[Source: Florida Crash Dashboard (https://www.flhsmv.gov/traffic-crash-reports/crash-dashboard/) by FLHSMV as of 2020-01-23]
[Source: Florida Crash Dashboard (https://www.flhsmv.gov/traffic-crash-reports/crash-dashboard/) by FLHSMV as of 2021-01-07]
[Source: FDOT Public Mileage Report, 2009-2018]
[Source: FDOT Public Mileage Report, 2019]

Describe fatality data source.

State Motor Vehicle Crash Database

The Florida Department of Highway Safety and Motor Vehicles (FLHSMV) is the official custodian of the state motor vehicle crash database. Access to the data is available through the Traffic Crash Facts annual report (which is static) or through the Florida Crash Dashboard. FLHSMV reports fatality data to the Fatality Analysis Reporting System (FARS).

[Source: Traffic Crash Facts Annual Report, 2018]
[Source: Florida Crash Dashboard (https://www.flhsmv.gov/traffic-crash-reports/crash-dashboard/) as of 2020-01-23]

To the maximum extent possible, present this data by functional classification and ownership.

Year 2018

Functional Classification	Number of Fatalities (5-yr avg)	Number of Serious Injuries (5-yr avg)	Fatality Rate (per HMVMT) (5-yr avg)	Serious Injury Rate (per HMVMT) (5-yr avg)
Rural Principal Arterial (RPA) - Interstate	92.6	369	0.91	3.68
Rural Principal Arterial (RPA) - Other Freeways and Expressways	166.2	609.8	8.3	30.69
Rural Principal Arterial (RPA) - Other	49.8	161	0.66	2.15
Rural Minor Arterial	89.2	299.6	2.57	8.76
Rural Minor Collector	31.6		2.21	
Rural Major Collector	54	40.2	1.56	2
Rural Local Road or Street				
Urban Principal Arterial (UPA) - Interstate	190.4	1,333.8	0.65	4.57
Urban Principal Arterial (UPA) - Other Freeways and Expressways	93.2	364	0.66	2.59
Urban Principal Arterial (UPA) - Other	897.4	5,733.4	2.06	13.28
Urban Minor Arterial	413	1,575.4	1.62	7.16
Urban Minor Collector		3.2	0.76	0.26

Functional Classification	Number of Fatalities (5-yr avg)	Number of Serious Injuries (5-yr avg)	Fatality Rate (per HMVMT) (5-yr avg)	Serious Injury Rate (per HMVMT) (5-yr avg)
Urban Major Collector	108	86.6	0.62	1.26
Urban Local Road or Street				

Year 2018

Roadways	Number of Fatalities (5-yr avg)	Number of Serious Injuries (5-yr avg)	Fatality Rate (per HMVMT) (5-yr avg)	Serious Injury Rate (per HMVMT) (5-yr avg)
State Highway Agency	2,208.6	10,759	1.38	6.98
County Highway Agency				
Town or Township Highway Agency				
City or Municipal Highway Agency				
State Park, Forest, or Reservation Agency				
Local Park, Forest or Reservation Agency				
Other State Agency				
Other Local Agency	748.8	9,552	1.67	21.29
Private (Other than Railroad)				
Railroad				
State Toll Authority				
Local Toll Authority				
Other Public Instrumentality (e.g. Airport, School, University)				
Indian Tribe Nation				

Safety Performance Targets

Safety Performance Targets

Calendar Year 2021 Targets *

Number of Fatalities:0.0

Describe the basis for established target, including how it supports SHSP goals.

Target: Florida’s target for fatalities is zero in 2021.Annual Performance Forecast: Based on statistical forecasting, the five-year rolling average for total fatalities on Florida’s roads is forecasted as 3,116 in 2021.

This forecast was made with historical and current state data from 2009 to 2019 to predict probable outcomes for 2020 and 2021.Strategy: The data forecast indicates Florida's five year rolling average for fatalities could slowly trend downward in 2020 and 2021, the FDOT State Safety Office intends to execute Highway Safety Improvement Program projects to increase preventative applications and countermeasures consistent with traffic safety improvement. While the data forecast indicates Florida's five-year rolling average for fatalities could slowly trend downward in 2020 and 2021, the FDOT State Safety Office expects the projects chosen for funding will enhance the downward trend to ultimately reduce the number of traffic fatalities. Justification: Forecasts were made using a three-step analytical approach consisting of exploratory analysis, development of pre-forecast to choose a preferred model for each measure, and development of the final forecast. The exploratory analysis tested multiple independent variables (in addition to the stratification of the dependent safety measure variable into two categories) to assess statistical association. The results showed that fatalities are statistically correlated with vehicles miles of travel (VMT), gas consumption, vehicle registration and Florida gross domestic product (GDP) – with weak to moderate explanatory power. While the exploratory analysis identified correlations with multiple independent variables – the pre-forecasting process indication that most of the independent variables were not useful in estimating future fatalities or serious injuries. An ARIMA model was ultimately chosen which uses past values of the dependent variable as independent variables (e.g., fatalities) and year-to-year difference in the values to forecast future values.

Number of Serious Injuries:0.0

Describe the basis for established target, including how it supports SHSP goals.

Target: Florida's target for serious injuries is zero in 2021.Annual Performance Forecast: Based on statistical forecasting, the five-year rolling average for total serious injuries on Florida's roads is forecasted as 18,187 in 2021. This forecast was made with historical and current state data from 2009 to 2019 to predict probable outcomes for 2020 and 2021.Strategy: The data forecast indicates Florida's five year rolling average for serious injuries could slowly trend downward in 2020 and 2021, the FDOT State Safety Office intends to execute Highway Safety Improvement Program projects to increase preventative applications and countermeasures consistent with traffic safety improvement. While the data forecast indicates Florida's five-year rolling average for serious injuries could slowly trend downward in 2020 and 2021, the FDOT State Safety Office expects the projects chosen for funding will enhance the downward trend to ultimately reduce the number of serious injuries. Justification: Forecasts were made using a three-step analytical approach consisting of exploratory analysis, development of pre-forecast to choose a preferred model for each measure, and development of the final forecast. The exploratory analysis tested multiple independent variables (in addition to the stratification of the dependent safety measure variable into two categories) to assess statistical association. The results showed that fatalities are statistically correlated with vehicles miles of travel (VMT), gas consumption, vehicle registration and Florida gross domestic product (GDP) – with weak to moderate explanatory power. While the exploratory analysis identified correlations with multiple independent variables – the pre-forecasting process indication that most of the independent variables were not useful in estimating future fatalities or serious injuries. An ARIMA model was ultimately chosen which uses past values of the dependent variable as independent variables (e.g., fatalities) and year-to-year difference in the values to forecast future values.

Fatality Rate:0.000

Describe the basis for established target, including how it supports SHSP goals.

Target: Florida's target for fatality rate is zero in 2021.Annual Performance Forecast: Based on statistical forecasting, the five-year rolling average for fatality rate per 100M VMT on Florida's roads is forecasted as 1.37 in 2021. This forecast was made with historical and current state data from 2009 to 2019 to predict probable outcomes for 2020 and 2021.Strategy: The data forecast indicates Florida's five year rolling average for fatality rate could slowly trend downward in 2020 and 2021, the FDOT State Safety Office intends to execute Highway Safety Improvement Program projects to increase preventative applications and countermeasures consistent with traffic safety improvement. While the data forecast indicates Florida's five-year rolling average for fatality

rate could slowly trend downward in 2020 and 2021, the FDOT State Safety Office expects the projects chosen for funding will enhance the downward trend to ultimately reduce the fatality rate per 100M VMT.Justification: Forecasts were made using a three-step analytical approach consisting of exploratory analysis, development of pre-forecast to choose a preferred model for each measure, and development of the final forecast. The exploratory analysis tested multiple independent variables (in addition to the stratification of the dependent safety measure variable into two categories) to assess statistical association. The results showed that fatalities are statistically correlated with vehicles miles of travel (VMT), gas consumption, vehicle registration and Florida gross domestic product (GDP) – with weak to moderate explanatory power. While the exploratory analysis identified correlations with multiple independent variables – the pre-forecasting process indication that most of the independent variables were not useful in estimating future fatalities or serious injuries. An ARIMA model was ultimately chosen which uses past values of the dependent variable as independent variables (e.g., fatalities) and year-to-year difference in the values to forecast future values.

Serious Injury Rate:0.000

Describe the basis for established target, including how it supports SHSP goals.

Target: Florida's target for serious injury rate is zero in 2021.Annual Performance Forecast: Based on statistical forecasting, the five-year rolling average for serious injury rate per 100M VMT on Florida's roads is forecasted as 6.73 in 2021. This forecast was made with historical and current state data from 2009 to 2019 to predict probable outcomes for 2020 and 2021.Strategy: The data forecast indicates Florida's five year rolling average for serious injury rate could slowly trend downward in 2020 and 2021, the FDOT State Safety Office intends to execute Highway Safety Improvement Program projects to increase preventative applications and countermeasures consistent with traffic safety improvement. While the data forecast indicates Florida's five-year rolling average for serious injury rate could slowly trend downward in 2020 and 2021, the FDOT State Safety Office expects the projects chosen for funding will enhance the downward trend to ultimately reduce the serious injury rate per 100M VMT.Justification: Forecasts were made using a three-step analytical approach consisting of exploratory analysis, development of pre-forecast to choose a preferred model for each measure, and development of the final forecast. The exploratory analysis tested multiple independent variables (in addition to the stratification of the dependent safety measure variable into two categories) to assess statistical association. The results showed that fatalities are statistically correlated with vehicles miles of travel (VMT), gas consumption, vehicle registration and Florida gross domestic product (GDP) – with weak to moderate explanatory power. While the exploratory analysis identified correlations with multiple independent variables – the pre-forecasting process indication that most of the independent variables were not useful in estimating future fatalities or serious injuries. An ARIMA model was ultimately chosen which uses past values of the dependent variable as independent variables (e.g., fatalities) and year-to-year difference in the values to forecast future values.

Total Number of Non-Motorized Fatalities and Serious Injuries:0.0

Describe the basis for established target, including how it supports SHSP goals.

Target: Florida's target for non-motorized fatal and serious injuries is zero in 2021.Annual Performance Forecast: Based on statistical forecasting, the five-year rolling average for non-motorized fatal and serious injuries on Florida's roads is forecasted as 3,209 in 2021. This forecast was made with historical and current state data from 2009 to 2019 to predict probable outcomes for 2020 and 2021.Strategy: The data forecast indicates Florida's five year rolling average for non-motorized fatal and serious injuries could slowly trend downward in 2020 and 2021, the FDOT State Safety Office intends to execute Highway Safety Improvement Program projects to increase preventative applications and countermeasures consistent with traffic safety improvement. While the data forecast indicates Florida's five-year rolling average for non-motorized fatal and serious injuries could slowly trend downward in 2020 and 2021, the FDOT State Safety Office expects the projects chosen for funding and included in this Highway Safety Plan will enhance the downward trend to ultimately reduce the number of non-motorized fatal and serious injuries.Justification: Forecasts were made using a three-step analytical approach consisting of exploratory analysis, development of pre-forecast to

choose a preferred model for each measure, and development of the final forecast. The exploratory analysis tested multiple independent variables (in addition to the stratification of the dependent safety measure variable into two categories) to assess statistical association. The results showed that fatalities are statistically correlated with vehicles miles of travel (VMT), gas consumption, vehicle registration and Florida gross domestic product (GDP) – with weak to moderate explanatory power. While the exploratory analysis identified correlations with multiple independent variables – the pre-forecasting process indication that most of the independent variables were not useful in estimating future fatalities or serious injuries. An ARIMA model was ultimately chosen which uses past values of the dependent variable as independent variables (e.g., fatalities) and year-to-year difference in the values to forecast future values.
Florida shares the national traffic safety vision, “Toward Zero Deaths,” and formally adopted our own version of the national vision, “Driving Down Fatalities,” in 2012. FDOT and its traffic safety partners are committed to eliminating fatalities and reducing serious injuries with the understanding that the death of any person is unacceptable and based on that, zero deaths is our safety performance target. This target is consistent throughout our Strategic Highway Safety Plan, Highway Safety Improvement Program and Highway Safety Plan.

Describe efforts to coordinate with other stakeholders (e.g. MPOs, SHSO) to establish safety performance targets.

Florida's transportation system is large, multimodal, and owned by a number of entities including the state government, local governments (cities and counties), the federal government, and the private sector. The 2016 Florida SHSP is aimed at all public roads and was updated through collaboration with Florida’s safety partners. It is aligned with and builds on the recently adopted Florida Transportation Plan (FTP), the State’s long-range transportation plan. Stakeholders include: Florida Department of Transportation (FDOT), Florida Department of Highway Safety and Motor Vehicles, Florida Highway Patrol, Florida Sheriffs Association, Florida Police Chiefs Association, Metropolitan Planning Organizations Advisory Council, Florida Rail Enterprise, Florida Association of County Engineers and Road Superintendents, Federal Highway Administration, National Highway Traffic Safety Administration, and Federal Motor Carrier Safety Administration.

Florida shares the national traffic safety vision, "Toward Zero Deaths," and formally adopted our own version of the national vision, "Driving Down Fatalities," in 2012. FDOT and its traffic safety partners are committed to eliminating fatalities and reducing serious injuries with the understanding that the death of any person is unacceptable and based on that, zero deaths is our safety performance target. This target is consistent throughout our SHSP, HSIP, and HSP (Highway Safety Plan).
[Source: Florida Strategic Highway Safety Plan, 2016]
[Source: Florida Highway Safety Plan, 2019]

Does the State want to report additional optional targets?

No

Describe progress toward meeting the State’s 2019 Safety Performance Targets (based on data available at the time of reporting). For each target, include a discussion of any reasons for differences in the actual outcomes and targets.

PERFORMANCE MEASURES	TARGETS	ACTUALS
Number of Fatalities	0.0	2972.0
Number of Serious Injuries	0.0	20736.8
Fatality Rate	0.000	1.396
Serious Injury Rate	0.000	9.776

Non-Motorized Fatalities and Serious Injuries	0.0	3295.4

FDOT and its traffic safety partners are committed to eliminating fatalities and reducing serious injuries with the understanding that the death of any person is unacceptable and based on that, zero is our target for fatalities, serious injuries, fatality rate per 100 million VMT (vehicle miles travelled), serious injury rate per 100 million VMT, and non-motorized fatalities and serious injuries.

FDOT received an allocation of approximately $150 million in HSIP funds during the 2019 state fiscal year from July 1, 2019 through June 30, 2020. FDOT used HSIP funds to complete over 400 projects to addressed fatal and serious injuries through programs in intersection safety, lane departure safety, pedestrian and bicyclist safety, and other programs and SHSP emphasis areas.

A statistical analysis of HSIP funded projects through the history of the Florida HSIP program shows statistically significant crash reduction for fatal (11%), non-fatal injury (13%), property damage only (8%), rural (16%), night (11%), rear-end (5%), angle (4%), left-turn (6%), fixed object (2%), pedestrian (5%), lane departure (21%), and wet-surface crashes (12%).

Understanding that zero fatal and serious injuries cannot be reached within the 2019 reporting year, Florida uses data models to forecast the safety performance measures that are statistically probable as we diligently strive to drive down fatalities and serious injuries with an ultimate vision of zero. Florida’s data forecasts have been established using an Autoregressive Integrated Moving Average (ARIMA) Hybrid Regression Model (0, 1,1)(2,0,0)(12) with VMT. Forecasts regarding the number of fatalities, the number of serious injuries, the fatality rate, the serious injury rate, and non-motorized fatalities and serious injuries follow.

- Fatalities: the five-year rolling average for total fatalities on Florida’s roads is forecasted as 3,116 in 2021.
- Serious injuries: the five-year rolling average for total serious injuries on Florida’s roads is forecasted as 18,187 in 2021.
- Fatality rate: the five-year rolling average for fatality rate per 100M VMT on Florida’s roads is forecasted as 1.37 in 2021.
- Serious injury rate: the five-year rolling average for serious injury rate per 100M VMT on Florida’s roads is forecasted as 1.37 in 2021.
- Non-motorized fatal and serious injuries: the five-year rolling average for non-motorized fatal and serious injuries on Florida’s roads is forecasted as 3,209 in 2021.

[Source: Florida Highway Safety Plan, 2019]
[Source: Florida HSIP Guidelines Manual, 2020]
[Source: Florida Strategic Highway Safety Plan, 2016]

Applicability of Special Rules

Does the HRRR special rule apply to the State for this reporting period?

No

According to Section 148(g)(1) of title 23, United States Code (USC) establishing a High Risk Rural Road (HRRR) Special Rule, the rule is triggered if the fatality rate on rural roads increases over the most recent 2-year period.

The fatality rate per 100 million vehicle miles travelled (VMT) on rural minor collectors, rural major collectors, and rural local roads is approximately 3.86, 3.30, and 2.90 for 2016, 2017, and 2018 respectively.

Provide the number of older driver and pedestrian fatalities and serious injuries 65 years of age and older for the past seven years.

PERFORMANCE MEASURES	2012	2013	2014	2015	2016	2017	2018
Number of Older Driver and Pedestrian Fatalities	419	409	433	444	554	550	481
Number of Older Driver and Pedestrian Serious Injuries	2,377	2,402	2,592	2,702	2,824	2,851	2,012

[Source: Florida HSIP Annual Report, 2019]
[Source: Traffic Crash Facts, 2018]
[Source: University of Florida (UF) Bureau of Economic and Business Research (BEBR) as of 2020-08-12]

Evaluation

Program Effectiveness

How does the State measure effectiveness of the HSIP?

- Change in fatalities and serious injuries

FDOT and its partners are committed to eliminating fatalities and reducing serious injuries with the understanding that the death of any person is unacceptable. Therefore, the effectiveness of the HSIP is measured by its effect on fatalities and serious injuries in the State of Florida.

FDOT initiated the Vital Few which focuses on FDOT priorities to (1) improve safety, (2) enhance mobility, and (3) inspire motivation. FDOT formed several cross-functional Vital Few Safety teams which address intersection safety, lane departure safety, and pedestrian and bicycle safety. Input from these teams help guide FDOT initiatives for safety, including the HSIP.
[Source: FDOT Mission, Vision, Vital Few, 2020]
[Source: Florida Strategic Highway Safety Plan, 2016]

Based on the measures of effectiveness selected previously, describe the results of the State's program level evaluations.

Hypothesis Tests of Significance The Florida Department of Transportation (FDOT) uses the Poisson Comparison of Mean Test to evaluate countermeasures deployed in HSIP projects with statistical significance. The test determines whether crash reduction is significantly better, significantly worse, or exhibits no significant change. Furthermore, FDOT uses all injury severities for the Poisson Comparison of Mean Test. The results are included in this section to address program level evaluations based on project item evaluations.
FDOT considers 18 crash classifications which include total, fatal, injury (i.e. possible, non-incapacitating, serious), property damage only (PDO), urban, rural, night, day, rear-end, angle, left-turn, right turn, sideswipe, fixed-object, head-on, pedestrian, ran-off-road, and wet surface. FDOT included HSIP projects for which construction began and finished between 2004 and 2019 and for which 3 years of crash data exists before and after.

As noted previously, FDOT initiated the Vital Few which focuses on FDOT priorities to (1) improve safety, (2) enhance mobility, and (3) inspire motivation. FDOT formed several cross-functional Vital Few Safety teams which address intersection safety, lane departure safety, and pedestrian and bicycle safety. Input from these teams help guide FDOT initiatives for safety, including the Highway Safety Improvement Program (HSIP).

To support our Vital Few emphasis areas, we conducted the following additional evaluation:

OverallRegarding all countermeasures from all HSIP projects, the crash reduction factors for fatal (10.6), injury (4.92), rural (11.1), and lane departure crashes (17) are significantly better. Crash reduction factors for total (-2.34), PDO (-9.04), urban (-3.21), night (-2.78), day (-1.60), rear-end (-15.7), angle (-15.5), left turn (-33.6), right turn (-92.3), sideswipe (-37.0), fixed object (-5.63), head-on (-18.8), and wet surface crashes (-3.53) are significantly worse. There is no significant change in the crash reduction factor for pedestrian (-1.40) crashes.

Intersection Safety Regarding countermeasures for HSIP projects addressing intersection safety, the crash reduction factors for fatal (22.8), injury (13.9), rural (10.1), pedestrian (16.2), and wet-surface (5.22) crashes are significantly better. Crash reduction factors for PDO (-14.3), urban (-2.39), night (-9.60), rear-end (-20.1),

right turn (-90.2), and sideswipe (-50.9) crashes are significantly worse. There is no significant change for crash reduction factors of total (-1.65), day (0.33), angle (-2.53), left turn (-1.37), fixed-object (-5.32), head-on (1.44), and lane departure (14.1) crashes.

Lane Departure Safety Regarding countermeasures for HSIP projects addressing lane departure safety, the crash reduction factors for fatal (10.4), injury (13.9), rural (13.5), and lane departure (18.2) crashes are significantly better. Crash reduction factors for total (-1.51), PDO (-5.77), urban (-2.61), rear-end (-16.1), angle (-18.9), left turn (-49.5), right turn (-113), sideswipe (-37.8), fixed object (-7.45), head on (-18.8), and wet surface (-5.50) crashes are significantly worse. There is no significant change for crash reduction factors of night (-0.97), day (-0.54), and pedestrian (-5.24) crashes.

Pedestrian and Bicyclist Safety Regarding countermeasures for HSIP projects addressing pedestrian and bicyclist safety, the crash reduction factors for injury (8.44) and fixed object (16.7) crashes are significantly better. Crash reduction factors for total (-6.91), PDO (-19.0), urban (-6.43), rural (-33.6), day (-9.26), rear end (-5.83), right turn (-32.3), sideswipe (-12.2) and head on (-51.5) crashes are significantly worse. There is no significant change in crash reduction factors for fatal (-6.54), night (-3.82), left turn (-0.01), pedestrian (2.05), lane departure (-6.29), and wet surface (-1.78) crashes.

[Source: Project Evaluation and Selection Method in CRASH, as of 2020-08-14]

What other indicators of success does the State use to demonstrate effectiveness and success of the Highway Safety Improvement Program?

- Other-Reduction in fatalities and serious injuries

[Source: Florida Strategic Highway Safety Plan, 2016]

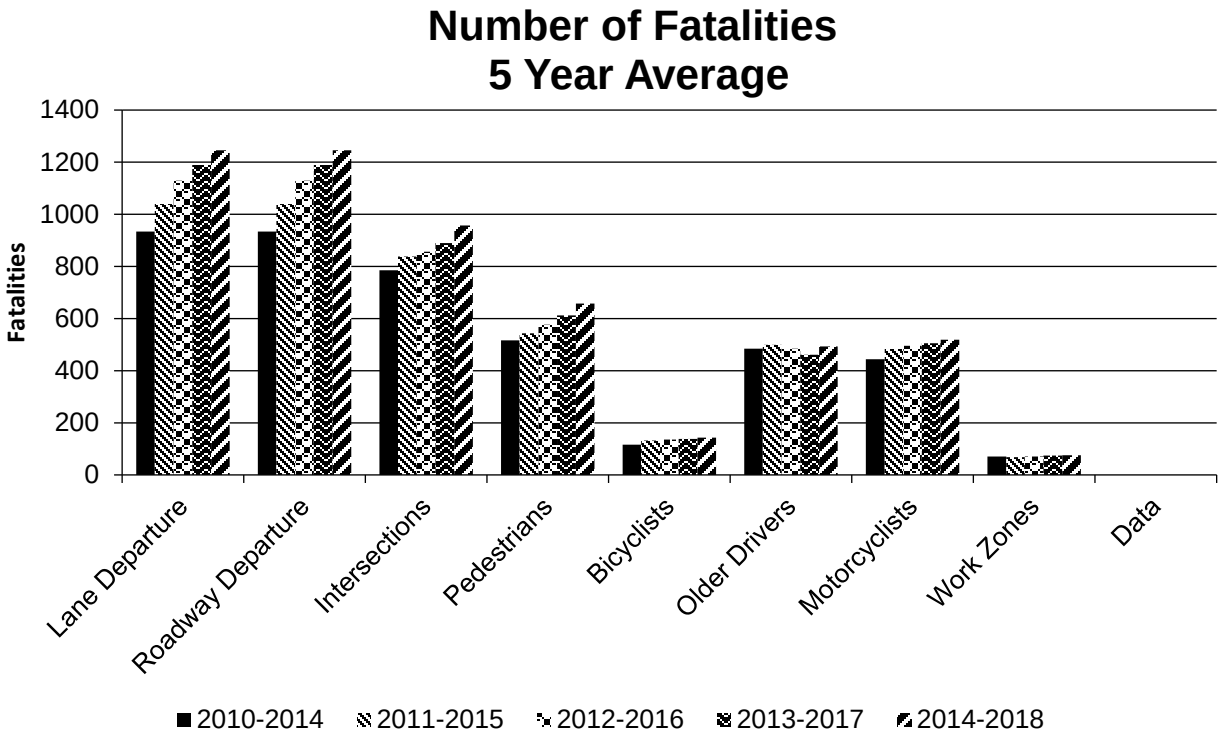
Effectiveness of Groupings or Similar Types of Improvements

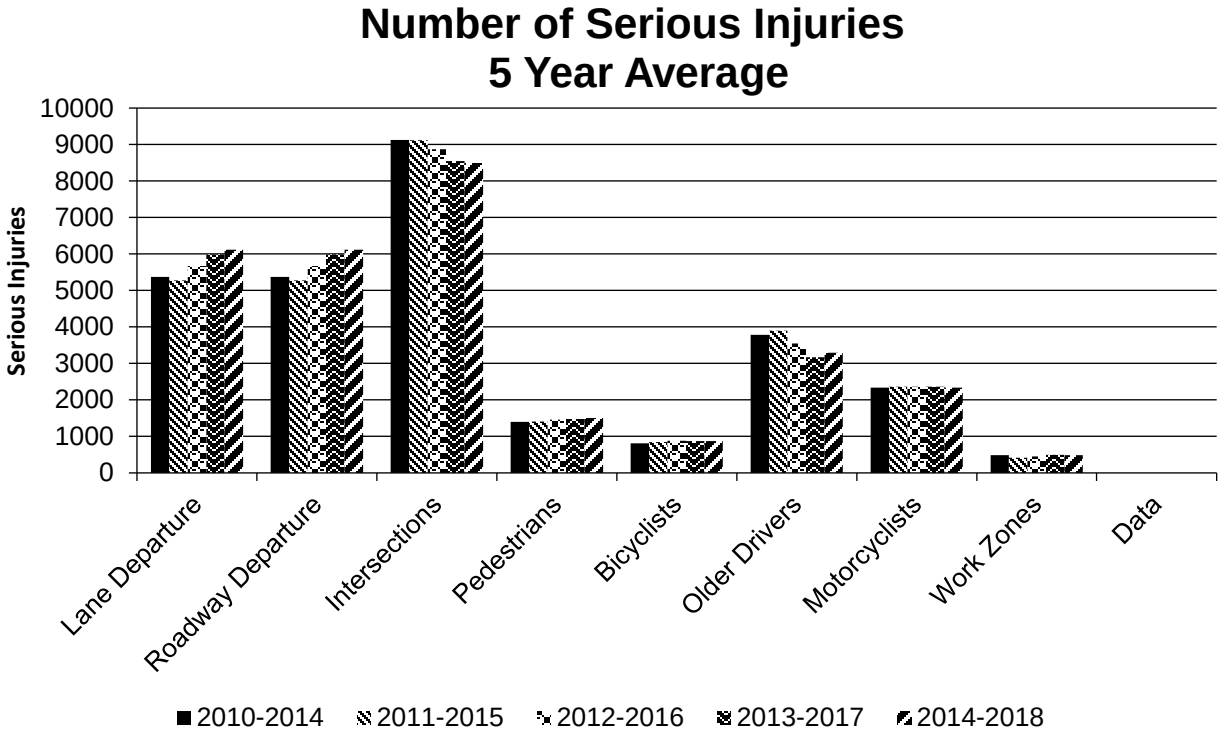
Present and describe trends in SHSP emphasis area performance measures.

Year 2018

SHSP Emphasis Area	Targeted Crash Type	Number of Fatalities (5-yr avg)	Number of Serious Injuries (5-yr avg)	Fatality Rate (per HMVMT) (5-yr avg)	Serious Injury Rate (per HMVMT) (5-yr avg)
Lane Departure		1,245.8	6,118.4	0.59	2.87
Roadway Departure		1,245.8	6,118.4	0.59	2.87
Intersections		957.4	8,495.6	0.45	4.01
Pedestrians		657	1,500.2	0.31	0.7
Bicyclists		143.4	869.6	0.07	0.41
Older Drivers		493	3,289	0.23	1.56
Motorcyclists		518.8	2,340.2	0.24	1.1
Work Zones		76	487.2	0.04	0.23

SHSP Emphasis Area	Targeted Crash Type	Number of Fatalities (5-yr avg)	Number of Serious Injuries (5-yr avg)	Fatality Rate (per HMVMT) (5-yr avg)	Serious Injury Rate (per HMVMT) (5-yr avg)
Data		0	0	0	0


Number of Fatalities
5 Year Average
Fatalities
1400
1200
1000
800
600
400
200
0
Lane Departure
Roadway Departure
Intersections
Pedestrians
Bicyclists
Older Drivers
Motorcyclists
Work Zones
Data
2010-2014
2011-2015
2012-2016
2013-2017
2014-2018


Number of Serious Injuries
5 Year Average
Serious Injuries
10000
9000
8000
7000
6000
5000
4000
3000
2000
1000
0
Lane Departure
Roadway Departure
Intersections
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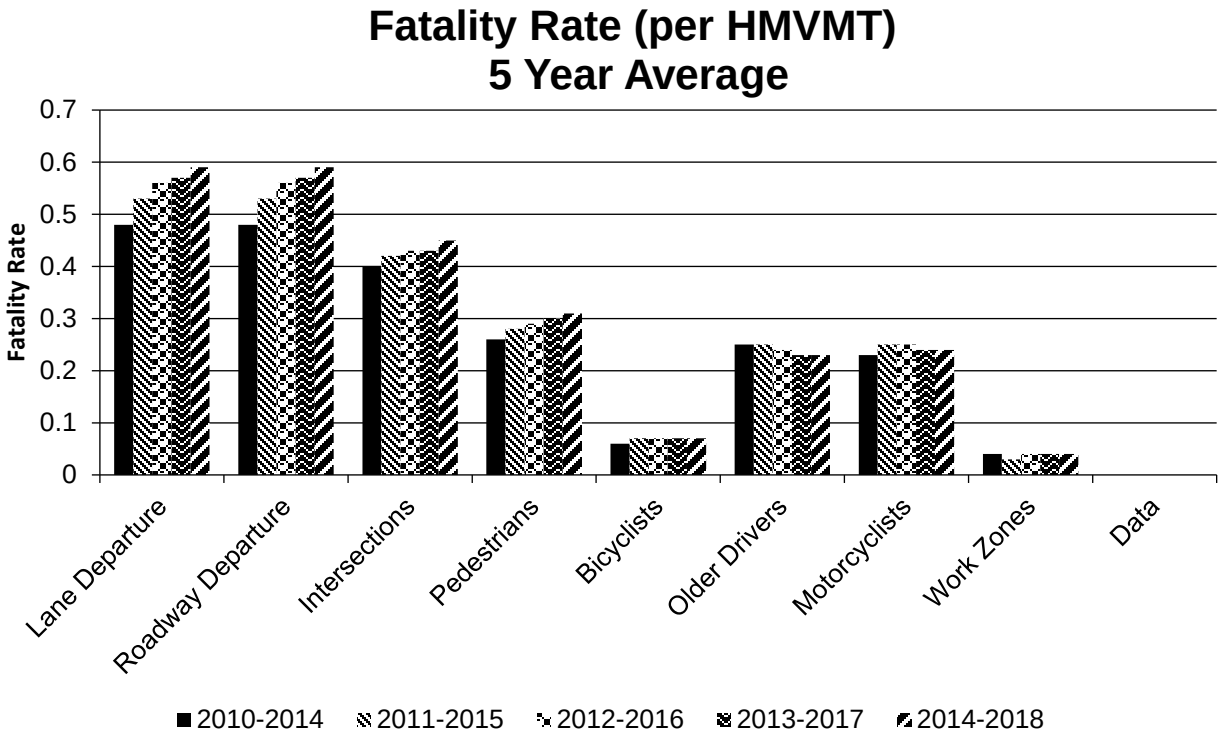
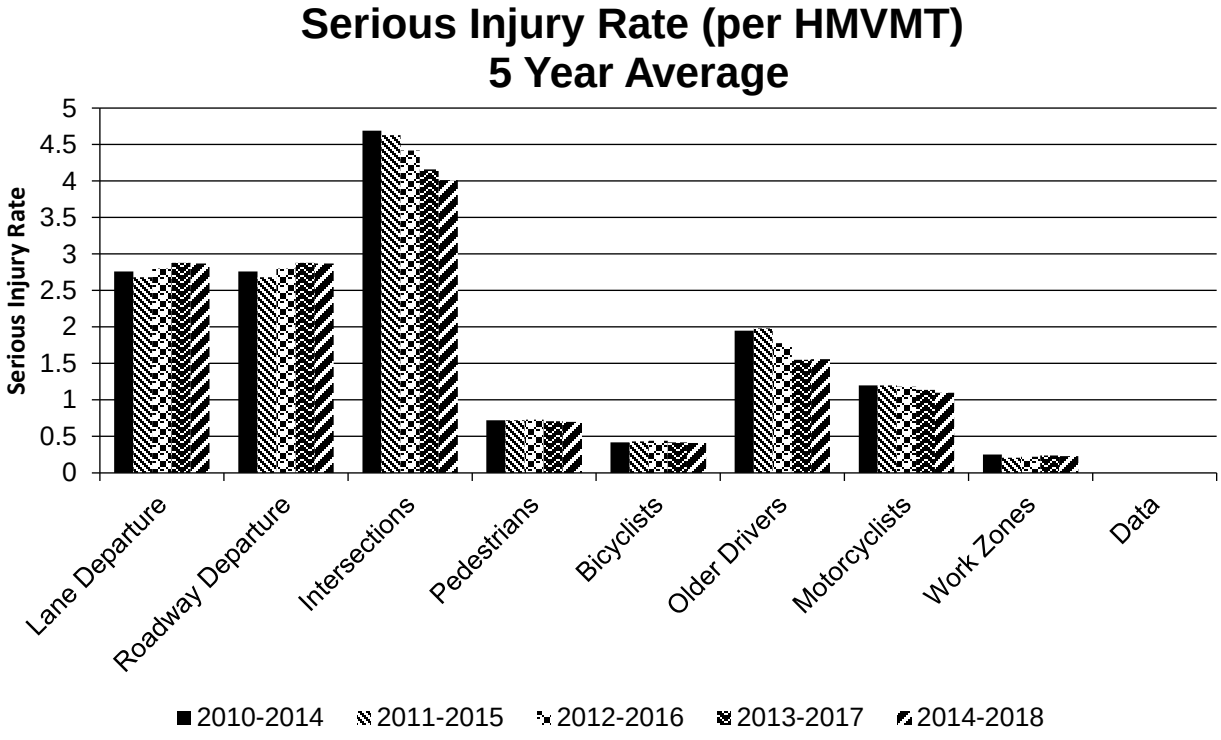
2011-2015
2012-2016
2013-2017
2014-2018





Has the State completed any countermeasure effectiveness evaluations during the reporting period?

Yes

Please provide the following summary information for each countermeasure effectiveness evaluation.

CounterMeasures:	All
Description:	
Target Crash Type:	
Number of Installations:	
Number of Installations:	
Miles Treated:	
Years Before:	
Years After:	
Methodology:	
Results:	Evaluations of all countermeasures are provided in attached files. [Source: Crash Reduction Analysis System Hub (CRASH), 2020]

File Name: Hyperlink

Project Effectiveness

Provide the following information for previously implemented projects that the State evaluated this reporting period.

FDOT has CRF (crash reduction factor) values for over 130 different countermeasures. A file listing improvement types, number of projects and other information including CRF values is attached.

Compliance Assessment

What date was the State's current SHSP approved by the Governor or designated State representative?

07/28/2016

What are the years being covered by the current SHSP?

From: 2016 To: 2021

When does the State anticipate completing it's next SHSP update?

2021

Provide the current status (percent complete) of MIRE fundamental data elements collection efforts using the table below.

*Based on Functional Classification (MIRE 1.0 Element Number) [MIRE 2.0 Element Number]

ROAD TYPE	*MIRE NAME (MIRE NO.)	NON LOCAL PAVED ROADS - SEGMENT		NON LOCAL PAVED ROADS - INTERSECTION		NON LOCAL PAVED ROADS - RAMPS		LOCAL PAVED ROADS		UNPAVED ROADS	
		STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE
ROADWAY SEGMENT	Segment Identifier (12) [12]	100	100					100	100	100	100
	Route Number (8) [8]	100	100								
	Route/Street Name (9) [9]	100	100								
	Federal Aid/Route Type (21) [21]	100	100								
	Rural/Urban Designation (20) [20]	100	100					100	100		
	Surface Type (23) [24]	100	100								
	Begin Point Segment Descriptor (10) [10]	100	100						100		
	End Point Segment Descriptor (11) [11]	100	100						100		
	Segment Length (13) [13]	100	100								
	Direction of Inventory (18) [18]	100	100								
	Functional Class (19) [19]	100	100						100		100

ROAD TYPE	*MIRE NAME (MIRE NO.)	NON LOCAL PAVED ROADS - SEGMENT		NON LOCAL PAVED ROADS - INTERSECTION		NON LOCAL PAVED ROADS - RAMPS		LOCAL PAVED ROADS		UNPAVED ROADS	
		STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE
	Median Type (54) [55]	100	100								
	Access Control (22) [23]	100	100								
	One/Two Way Operations (91) [93]	100	100								
	Number of Through Lanes (31) [32]	100	100					100	100		
	Average Annual Daily Traffic (79) [81]	100	100					100	100		
	AADT Year (80) [82]	100	100								
	Type of Governmental Ownership (4) [4]	100	100								
INTERSECTION	Unique Junction Identifier (120) [110]			100	100						
	Location Identifier for Road 1 Crossing Point (122) [112]			100	100						
	Location Identifier for Road 2 Crossing Point (123) [113]			100	100						
	Intersection/Junction Geometry (126) [116]			100	100						
	Intersection/Junction Traffic Control (131) [131]				100						
	AADT for Each Intersecting Road (79) [81]			100	100						
	AADT Year (80) [82]			100	100						
	Unique Approach Identifier (139) [129]			100	100						
INTERCHANGE/RAMP	Unique Interchange Identifier (178) [168]					100	100				
	Location Identifier for Roadway at					100	100				

ROAD TYPE	*MIRE NAME (MIRE NO.)	NON LOCAL PAVED ROADS - SEGMENT		NON LOCAL PAVED ROADS - INTERSECTION		NON LOCAL PAVED ROADS - RAMPS		LOCAL PAVED ROADS		UNPAVED ROADS	
		STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE
	Beginning of Ramp Terminal (197) [187]										
	Location Identifier for Roadway at Ending Ramp Terminal (201) [191]					100	100				
	Ramp Length (187) [177]					100	100				
	Roadway Type at Beginning of Ramp Terminal (195) [185]					100	100				
	Roadway Type at End Ramp Terminal (199) [189]					100	100				
	Interchange Type (182) [172]					100	100				
	Ramp AADT (191) [181]					100	100				
	Year of Ramp AADT (192) [182]					100	100				
	Functional Class (19) [19]					100	100				
	Type of Governmental Ownership (4) [4]					100	100				
Totals (Average Percent Complete):		**100.00**	**100.00**	**87.50**	**100.00**	**100.00**	**100.00**	**44.44**	**77.78**	**20.00**	**40.00**

*Based on Functional Classification (MIRE 1.0 Element Number) [MIRE 2.0 Element Number]
[Source: Roadway Characteristics Inventory (RCI), as of 2020-08-14]
[Source: All Roads Base Map (ARBM), 2018]
[Source: Florida All Roads Intersections and Streets (FLARIS), 2018]

Describe actions the State will take moving forward to meet the requirement to have complete access to the MIRE fundamental data elements on all public roads by September 30, 2026.

The Florida TRCC (Traffic Records Coordinating Committee) provides a statewide forum to facilitate the planning, coordination, and implementation of projects to improve the State of Florida's traffic records system. Objective 2.1 of the Action Plan for the 2011-2021 Florida Traffic Records Strategic Plan includes improving completeness of the Roadway Data System. Objective 2.3 includes improving uniformity of the Roadway Data System and working toward an integrated roadway data system with a map meeting the needs of multiple offices. Percent completion of MIRE (Model Inventory Roadway Elements) compliant data elements in the Roadway Data System is a performance measure. The custodian of Florida's roadway data system is the Florida Department of Transportation. The FDOT roadway data system, called the Roadway Characteristics Inventory, contains 36,280 centerline miles of estimated state total of 122,848 centerline miles. Out of the 36,280 centerline miles about 12,107 is considered State Highway System that is maintained by FDOT. The 24,173 centerline miles not maintained by FDOT are considered Off-System include functional classifications above local classifications as well as local classification. The remaining estimated 86,568 centerline miles not in the RCI are primarily roads that are maintained by local agencies in cities and counties. These local agencies submit paved and unpaved mileage data to support the State Certified Public Mileage and do not submit the necessary MIRE roadway data elements. Meeting the advisory would require the inclusion of data for all public roadways and to have performance measures applied to the entire system. In addition to including local data, consideration should be given to interfacing with regional and local data custodians, such as MPOs. The collected data elements should be updated for inclusion of the MIRE FDEs. Finally, a review of the data dictionary should be made with the addition of any data elements that might be needed to apply to the inclusion of roadway data for non-State-maintained roadways. The State indicated that not all of the MIRE FDE (Fundamental Data Elements) are collected for all public roads. The Florida All Roads BaseMap (ARBM) is published on FDOT's Unified Basemap Repository (UBR). The ARBM contains

some MIRE FDEs for all public roads, for example Annual Average Daily Traffic (AADT). The FDOT also sponsored research to collect MIRE FDEs for all public roads. Contract BDV29-977-07 focused on the extraction of basic roadway information for non-State roads. The FDOT State Safety Office indicates multiple teams in FDOT are working to acquire MIRE on all public roads with a priority for MIRE FDE.
[Source: Florida Traffic Safety Information System Strategic Plan 2017-2021, 2018]
[Source: FDOT Unified Basemap Repository (https://ubr.fdot.gov/featured), as of 2020-08-13]
[Source: FDOT Research Center, Documents and Publications (https://www.fdot.gov/research/documents.shtm), as of 2020-08-13]
[Source: FDOT State Safety Office Staff, 2020]
[Source: FDOT Transportation Data and Analytics Staff, 2020]

Optional Attachments

Program Structure:

florida hsip manual v2020 E (2020-08-06).pdf
Project Implementation:

Safety Performance:

Evaluation:

CRFAll.xls
hsip 2020 - previous project eval list (2020-08-17).xlsx
crash reduction factors all (2020-07-14).pdf
Compliance Assessment:

Glossary

5 year rolling average: means the average of five individuals, consecutive annual points of data (e.g. annual fatality rate).

Emphasis area: means a highway safety priority in a State's SHSP, identified through a data-driven, collaborative process.

Highway safety improvement project: means strategies, activities and projects on a public road that are consistent with a State strategic highway safety plan and corrects or improves a hazardous road location or feature or addresses a highway safety problem.

HMVMT: means hundred million vehicle miles traveled.

Non-infrastructure projects: are projects that do not result in construction. Examples of non-infrastructure projects include road safety audits, transportation safety planning activities, improvements in the collection and analysis of data, education and outreach, and enforcement activities.

Older driver special rule: applies if traffic fatalities and serious injuries per capita for drivers and pedestrians over the age of 65 in a State increases during the most recent 2-year period for which data are available, as defined in the Older Driver and Pedestrian Special Rule Interim Guidance dated February 13, 2013.

Performance measure: means indicators that enable decision-makers and other stakeholders to monitor changes in system condition and performance against established visions, goals, and objectives.

Programmed funds: mean those funds that have been programmed in the Statewide Transportation Improvement Program (STIP) to be expended on highway safety improvement projects.

Roadway Functional Classification: means the process by which streets and highways are grouped into classes, or systems, according to the character of service they are intended to provide.

Strategic Highway Safety Plan (SHSP): means a comprehensive, multi-disciplinary plan, based on safety data developed by a State Department of Transportation in accordance with 23 U.S.C. 148.

Systematic: refers to an approach where an agency deploys countermeasures at all locations across a system.

Systemic safety improvement: means an improvement that is widely implemented based on high risk roadway features that are correlated with specific severe crash types.

Transfer: means, in accordance with provisions of 23 U.S.C. 126, a State may transfer from an apportionment under section 104(b) not to exceed 50 percent of the amount apportioned for the fiscal year to any other apportionment of the State under that section.