MISSOURI

HIGHWAY SAFETY IMPROVEMENT PROGRAM

2024 ANNUAL REPORT

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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. 407 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

The Missouri Coalition for Roadway Safety and the Missouri Department of Transportation (MoDOT) are dedicated to improving safety of roadway users through education, engineering, enforcement and emergency medical services initiatives. Safety is one of MoDOT's core values: "Be Safe." This message is also reinforced in the Department's Practical Design Guide that states, "Safety will not be compromised. Every project we do will make the facility safer after its completion." Additionally, "keeping our customers and ourselves safe" is a MoDOT Tangible Result and is regularly tracked and reviewed in MoDOT's performance management system.

Missouri's Highway Safety Improvement Program (HSIP) is driven by the state's Strategic Highway Safety Plan (SHSP). In October 2020, Missouri introduced its fifth edition of the SHSP and established a highway safety goal of ZERO fatalities by 2030. Show-Me ZERO: Driving Missouri Toward Safer Roads guides the State's safety initiatives and addresses safety from a comprehensive standpoint including engineering, enforcement, education, emergency medical services, technology, and public policy solutions. The SHSP focuses on implementing strategies that will reduce both fatal and serious injuries on Missouri roadways.

Evidenced-based decision-making is paramount to a sound safety program. Data analysis is a critical part of identifying overrepresented crash types, locations, driver age, driver gender, and driver behaviors. These findings guide the deployment of effective and appropriate strategies to improve safety on the entire system. Efforts are made to analyze fatal and serious injury crashes to help discern where limited safety funding should be applied so that maximum safety benefits are attained.

Missouri experienced 991 fatalities in 2023, which is a 6% decrease from 2022. While this is positive, Missouri is still experiencing an increase in speeding and aggressive driving as became a more prevalent trend during the COVID-19 pandemic. This decrease in fatalities; however, does show the benefits of Missouri's HSIP in helping to mitigate severe crashes. This can be attributed to the systemic initiatives and high benefit spot treatments being deployed, as well as other efforts to change the safety culture of Missouri's motorists, such as the Buckle Up/Phone Down campaign and the Safety Assessment For Every Roadway (SAFER) program.

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 overall HSIP is administered by MoDOT's Highway Safety and Traffic Division. However, the division does not typically identify individual projects as part of this process. Instead, HSIP funds are distributed to each of MoDOT's seven districts based on a three-year average of the number of fatalities and serious injuries occurring their areas. From there, each district identifies how their share of HSIP funds will be programmed in accordance with Missouri's Strategic Highway Safety Plan (SHSP) and the latest safety research and guidance. The districts carry out the projects to completion. Occasionally, statewide safety projects may be carried out by the Highway Safety and Traffic Division. While Missouri's HSIP is led by MoDOT, each project goes through a robust planning process and allows input from various stakeholders. Additionally, these projects are tied to strategies identified in the SHSP, which involved collaboration with various partners throughout the state.

Where is HSIP staff located within the State DOT?

Planning

MoDOT's Highway Safety and Traffic Division leads the HSIP reporting effort. MoDOT's District Traffic Offices facilitate the selection of HSIP projects and implement the HSIP program.

With the goal that every MoDOT project makes the facility safer after completion, Design and Planning staff also consider safety in their efforts.

How are HSIP funds allocated in a State?

- Formula via Districts/Regions

MoDOT's Highway Safety and Traffic Division also have some HSIP funds distributed to them. In January of 2018, the Missouri Highways and Transportation Commission approved the use of a new formula for distributing safety funds to MoDOT's Districts. This new formula places more focus on areas where fatalities and serious injuries are occurring. This new distribution took effect in SFY 2021.

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

Crash data on local roadways are included in the Missouri Statewide Traffic Accident Records System (STARS) managed by the Missouri State Highway Patrol (MSHP). MoDOT uses this data to evaluate all roadways in the state and places emphasis where severe crashes are occurring. This analysis is performed for both intersections and non-intersection locations. This analysis method places weight towards locations experiencing a higher frequency of severe crashes and identifying them as locations of higher interest. Most locations are on state system roadways but there are local roadways identified on these lists as well. While the majority of the severe crash problem is located on the state system, non-state system needs are also investigated. MoDOT communicates the locations of interest to planning entities such as the Metropolitan Planning Organizations and Regional Planning Commissions.

More than half of non-state system fatalities occur in four counties (Jackson, St. Louis City, St. Louis County, and Greene). In total, there were 301 non-state system fatalities. However, these four counties accounted for 170 or 56% of the fatalities. In previous years, local strategic highway safety plans (SHSP) were developed for the top counties experiencing severe crashes. The local SHSPs identified systemic countermeasures and projects.

The Missouri Coalition for Roadway Safety has a subcommittee focused on infrastructure improvement. In this subcommittee, several local agencies discuss implementation of key SHSP strategies, promote road safety assessments and local road safety plans, and share information on the latest safety research. Missouri now has three Vision Zero cities, which are Columbia, Kansas City, and Kirkwood.

Missouri's LTAP center continues to move safety forward. MoDOT has a Safety Circuit Rider program through the LTAP center. This program provides a safety expert to work with local agencies that may not have the staff required for the development of a local road safety plan or identification of safety countermeasures for issues in their community.

Additionally, MoDOT facilitates the Transportation Engineering Assistance Program (TEAP) which allows local public agencies (LPAs) to receive engineering assistance for studying traffic engineering problems.

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
- Maintenance
- Operations
- Planning
- Traffic Engineering/Safety

There is some overlap in these selections with the way MoDOT is structured. Traffic engineering/safety could be included under operations. However, operations is more inclusive in other traffic areas, so both were selected.

Describe coordination with internal partners.

MoDOT has focused for some time on system-wide safety solutions. Collaboration continues to take place with the Design Division to update MoDOT's Engineering Policy Guide, the Maintenance Division to improve roadsides, and the Planning Division to better evaluate and select safety needs for improvements. Training

opportunities are offered to the internal partners mentioned previously, in topics such as the Highway Safety Manual (HSM), Complete Streets, and Safe Transportation for Every Pedestrian (STEP). FHWA's Resource Center continues to provide training support in these subjects. Additionally, we work daily with the Highway Safety office to evaluate and monitor the crash types. It is vital that all areas in our department work together and focus on safety improvements.

MoDOT has also established a process to report the safety benefits of all projects utilizing HSIP funds as part of an ongoing internal assessment of Missouri's HSIP program. This assessment is used as part of an evaluation process for safety projects planned to be incorporated into the State Transportation Improvement Program.

In an effort to continue furthering safety, MoDOT's Highway Safety and Traffic division has created the SAFER document. The intent is for SAFER to be used to promote more safety conversations throughout the project development process. Last year the additional step as taken to try and quantify the benefits of safety for all improvements. This was broken into two sections of maintenance and new. This was to show the cost of the safety items that are already in place and the investment in maintaining the current safety condition of the roadway versus the new items that are working to further safety. This program will continue to be a focus and help to lower fatalities and serious injuries on Missouri roads.

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)
- Other-National Highway Traffic Safety Administration
- Other-Federal Motor Carrier Safety Administration
- Other-Emergency Services, Department of Revenue, etc

Describe coordination with external partners.

Missouri's Strategic Highway Safety Plan (SHSP) is the umbrella document that identifies emphasis areas and prioritizes strategies for reducing fatalities and serious injuries on all Missouri roadways. The development of the SHSP utilized significant involvement from external stakeholders throughout the state, including metropolitan planning organizations and local government agencies.

MoDOT also works with Missouri's LTAP center to continue to move safety forward. MoDOT sees benefit in continuing the Safety Circuit Rider program through the LTAP center. The Safety Circuit Rider helps to assist local public agencies in the analysis of safety issues on locally owned roads and help determine possible low-cost solutions to improve safety.

Each project in Missouri has engagement with local agencies through MoDOT’s planning framework, starting with locals identifying and prioritizing projects through MoDOT’s regional process for programming into the STIP. MoDOT also collaborates with planning partners through monthly webinars, which include a safety update in each webinar. This is used to let partners know about safety issues, legislation, tools, challenges, opportunities, resources, up to date status on fatalities and trends, as well as safety target coordination.

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

Safety impacts are assessed for any project utilizing HSIP funds. These are tracked in MoDOT's internal project management system. This system has been updated to incorporate data required for the annual HSIP report, including items such as improvement category, subcategory, and SHSP relationship. This will streamline the annual HSIP reporting process. Additionally, this internal project management system continues to be enhanced to collect more detailed information for any project improving safety regardless of the use of HSIP funds programmed on that project.

Program Methodology

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

No

MoDOT has an Engineering Policy Guide (EPG) article published online that outlines safety program guidelines.

http://epg.modot.org/index.php?title=907.1_Safety_Program_Guidelines

Select the programs that are administered under the HSIP.

- Bicycle Safety
- Horizontal Curve
- Intersection
- Median Barrier
- Pedestrian Safety
- Roadway Departure
- Skid Hazard
- Wrong Way Driving
- Other-Work Zone Enforcement
- Other-MASH Upgrades
- Other-Stripe Retroreflectivity

Program: Bicycle Safety

Date of Program Methodology:10/1/2016

What is the justification for this program?

- Addresses SHSP priority or emphasis area

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 crashes only • Fatal and serious injury crashes only	• Traffic • Volume	• Functional classification

What project identification methodology was used for this program?

- Crash frequency
- Probability 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?

- Other-Systemic Evaluation

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:1

Program: Horizontal Curve

Date of Program Methodology:2/8/2013

What is the justification for this program?

- Addresses SHSP priority or emphasis area

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	• Volume	• Horizontal curvature

What project identification methodology was used for this program?

- Crash frequency
- Excess proportions of specific crash types
- Probability of specific crash types
- Relative severity index

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-Systemic evaluation

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

Other-Systemic safety initiative:2
Other-Severity Index:1

Program: Intersection

Date of Program Methodology:1/21/2009

What is the justification for this program?

- Addresses SHSP priority or emphasis area

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	• Volume	• Functional classification

What project identification methodology was used for this program?

- Crash frequency
- Excess proportions of specific crash types
- Relative severity index

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-Systemic evaluation

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

Other-Systemic safety initiative:2
Other-Severity Index:1

Program: Median Barrier

Date of Program Methodology:9/27/2002

What is the justification for this program?

- Addresses SHSP priority or emphasis area

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	• Volume	• Median width • Horizontal curvature • Functional classification • Roadside features

What project identification methodology was used for this program?

- Crash frequency
- Excess proportions of specific crash types
- Probability of specific crash types
- Relative severity index

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-Systemic evaluation

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

Other-Systemic safety initiative:1

Program: Pedestrian Safety

Date of Program Methodology:10/1/2016

What is the justification for this program?

- Addresses SHSP priority or emphasis area

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	• Traffic • Volume	• Functional classification

What project identification methodology was used for this program?

- Crash frequency
- Probability 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?

- Other-Systemic Evaluation

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:1

Program: Roadway Departure

Date of Program Methodology:10/1/2004

What is the justification for this program?

- Addresses SHSP priority or emphasis area

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	• Volume	• Functional classification

What project identification methodology was used for this program?

- Crash frequency
- Excess proportions of specific crash types
- Probability of specific crash types
- Relative severity index

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-Systemic evaluation

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

Other-Systemic safety initiative:2
Other-Severity Index:1

Program: Skid Hazard

Date of Program Methodology:2/8/2013

What is the justification for this program?

- Addresses SHSP priority or emphasis area

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
- Other-Wet pavement crashes

Exposure

Roadway

- Horizontal curvature

What project identification methodology was used for this program?

- Crash frequency
- Excess proportions of specific crash types
- Other-Wet/Dry Crash Ratio
- Relative severity index

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-Systemic evaluation

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

Other-Systemic safety initiative:0
Other-Wet/Dry Crash Ratio:1

Program: Wrong Way Driving

Date of Program Methodology:6/1/2017

What is the justification for this program?

- Addresses SHSP priority or emphasis area

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	• Volume	• Functional classification

What project identification methodology was used for this program?

- Crash frequency
- Probability of specific crash types

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

No

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

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

Other-Systemic Safety Initiative:1

Program: Other-Work Zone Enforcement

Date of Program Methodology:10/1/2016

What is the justification for this program?

- Addresses SHSP priority or emphasis area

What is the funding approach for this program?

Competes with all projects

What data types were used in the program methodology?

Crashes	Exposure	Roadway
• Fatal and serious injury crashes only	• Traffic	• Functional classification

What project identification methodology was used for this program?

- Crash frequency
- Probability of specific crash types

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

No

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

How are projects under this program advanced for implementation?

- selection committee

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
Available funding:1

Program: Other-MASH Upgrades

Date of Program Methodology:10/1/2016

What is the justification for this program?

- Addresses SHSP priority or emphasis area

What is the funding approach for this program?
Funding set-aside

What data types were used in the program methodology?

Crashes	Exposure	Roadway
		• Roadside features

What project identification methodology was used for this program?

- Probability of specific crash types

Are local roads (non-state owned and operated) included or addressed in this program?
No

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

How are projects under this program advanced for implementation?

- selection committee

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
Available funding:1

Program: Other-Stripe Retroreflectivity

Date of Program Methodology:10/1/2016

What is the justification for this program?

- Addresses SHSP priority or emphasis area

What is the funding approach for this program?
Funding set-aside

What data types were used in the program methodology?

Crashes	Exposure	Roadway
	• Lane miles	

What project identification methodology was used for this program?

- Probability of specific crash types

Are local roads (non-state owned and operated) included or addressed in this program?
No

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

How are projects under this program advanced for implementation?

- selection committee

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

Available funding:1

What percentage of HSIP funds address systemic improvements?

60

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

- Cable Median Barriers
- High friction surface treatment
- Install/Improve Pavement Marking and/or Delineation
- Install/Improve Signing
- Pavement/Shoulder Widening
- Rumble Strips
- Upgrade Guard Rails
- Wrong way driving treatments

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-Enforcement and other stakeholders input.
- Other-Peer Exchange - lessons learned

All the countermeasure identification processes listed here are applicable to MoDOT's countermeasure selection, although they vary depending on how the safety need was identified (Systemic, Spot, RSA).

Does the State HSIP consider connected vehicles and ITS technologies?

Yes

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

Missouri's Strategic Highway Safety Plan, Show-Me ZERO: Driving Missouri Toward Safer Roads, highlights several strategies to reduce severe crashes. One of these strategies is to take advantage of technology solutions to reduce the likelihood of crashes. This includes:

- Use intelligent transportation systems to detect and warn of high-risk or adverse conditions.
- Support ongoing implementation of crash avoidance systems in vehicles by maintaining retroreflectivity levels for signs and markings and by sharing traveler information and traffic control data with mobile providers.

MoDOT is also actively pursuing the use of autonomous Truck Mounted Attenuators (TMAs) for mobile work zones. A pilot project is currently underway testing an autonomous TMA that follows a lead vehicle. This pilot testing is in its field-testing stage.

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.

By MoDOT policy, any project that is funded with HSIP funds must calculate the anticipated reduction in fatal and serious injury crashes. This information is then used to justify and prioritize projects, to maximize the value of these limited safety funds.

MoDOT has expanded the use of the HSM to be performed on any project impacting safety, regardless of use of HSIP funds. One method that is being implemented to promote this at MoDOT is the SAFER document. Tools to be able to calculate these safety benefits have been developed to support the effort.

Additionally, MoDOT developed systemic evaluation tools for commonly used safety countermeasures. These tools provide information regarding the anticipated value that the systemic improvement may have, based on identified risk factors.

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

MoDOT uses data driven safety analysis to identify the top crash types occurring in Missouri and developed a list of strategies focused on addressing these crash types. Additionally, MoDOT develops lists of various locations of interest that identify where there may be safety concerns based on various criteria, such as:

- High Severity Locations (Intersections/Range)
- Run Off Road Crash Locations (Curves and No Shoulders)
- Wet Crash Locations
- Crossed Centerline Crash Locations

Details regarding MoDOT's Safety Program can be found in MoDOT's Engineering Policy Guide 907.1.

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)	$64,665,000	$68,861,432	106.49%
HRRR Special Rule (23 U.S.C. 148(g)(1))	$0	$0	0%
VRU Safety Special Rule (23 U.S.C. 148(g)(3))	$0	$0	0%
Penalty Funds (23 U.S.C. 154)	$13,004,000	$13,582,504	104.45%
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	$7,181,000	$7,647,010	106.49%
Totals	$84,850,000	$90,090,946	106.18%

One of the reasons for the difference between the total programmed funds and obligated funds is due to MoDOT's retroreflectivity striping and guardrail upgrades programs. Estimates for these programs were not included in the programmed numbers above. However, they are included in the obligated number above.

Another item of note is the programmed and obligated 154 penalty (open container) funds. Given the fact that the federal fiscal year ends in September and the state fiscal year ends in June, there are some safety projects programmed with open container funds that could be obligated in the following state fiscal year.

State and Local Funds were assumed to be 10 percent of the HSIP funds if other federal funds were included on projects for non-safety purposes.

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

$4,000,000

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

$4,000,000

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

3%

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

3%

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

0%

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

0%

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

MoDOT actively practices asset management to ensure the maintenance of the existing transportation network. Implementing new safety improvements that will add to the transportation system can be a challenge to fund in Districts that are unable to meet their asset management goals. It has been proposed to include HSIP projects into MoDOT's asset management process to ensure the safety improvements constructed will be able to be maintained into the future.

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 OR SPEED RANGE	OWNERSHIP	METHOD FOR SITE SELECTION	SHSP EMPHASIS AREA	SHSP STRATEGY
1I3317 - Pavement resurfacing from Rte. 59 north of Nodaway River to Bus. 71 north of St. Joseph and high friction surface treatment on ramp from sout	Roadway	Pavement surface – high friction surface	14	Miles	$224000	$9695000	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Interstate	8,371	70	State Highway Agency	Spot	Occupant Protection	Data Driven Safety Analysis
1P3246 - Pavement resurfacing and widening from Iowa State line to Rte. 136 in Unionville.	Roadway	Roadway widening - travel lanes	17	Miles	$300000	$3495000	HSIP (23 U.S.C. 148)	Rural	Minor Arterial	900	55	State Highway Agency	Spot	Occupant Protection	Data Driven Safety Analysis
1P3439 - On-call work zone enforcement at various locations in the Northwest District.	Miscellaneous	Work zone enforcement	1	Locations	$40000	$40000	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0		State Highway Agency	Systemic	Speed and Aggressive Driving	Work Zones
NW0101 - Striping upgrades in Andrew, Atchison, Buchanan, Caldwell, Clinton, Daviess, Dekalb, Harrison and Holt Counties.	Roadway delineation	Improve retroreflectivity	150	Miles	$1100000	$1100000	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Interstate	9,106	70	State Highway Agency	Systemic	Occupant Protection	Data Driven Safety Analysis
2P3405 - On-call work zone enforcement at various locations in the Northeast District.	Miscellaneous	Work zone enforcement	1	Locations	$10000	$10000	HSIP (23 U.S.C. 148)	Rural	Multiple/Varies	0	0	State Highway Agency	Spot	Speed and Aggressive Driving	Work Zones
NE0160 - Pavement repairs and resurfacing on	Roadway	Pavement surface - other	1	Curves	$306000	$4720000	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Other Freeways & Expressways	2,791	65	State Highway Agency	Spot	Occupant Protection	Lane Departures

PROJECT NAME	IMPROVEMENT CATEGORY	SUBCATEGORY	OUTPUTS	OUTPUT TYPE	HSIP PROJECT COST($)	TOTAL PROJECT COST($)	FUNDING CATEGORY	LAND USE/AREA TYPE	FUNCTIONAL CLASSIFICATION	AADT	SPEED OR SPEED RANGE	OWNERSHIP	METHOD FOR SITE SELECTION	SHSP EMPHASIS AREA	SHSP STRATEGY
westbound lanes 0.5 mile west of Rte. 24 to 0.3 mile west of Macon County line near Clarence. Pavement g															
NE0174 - Striping upgrades in Lewis, Lincoln, Marion, Montgomery, Pike, Ralls and Warren Counties.	Roadway delineation	Longitudinal pavement markings - remarking	145	Miles	$1100000	$1100000	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Interstate	0	0	State Highway Agency	Systemic	Distracted Driving	Lane Departures
3P3226 - On-call work zone enforcement at various locations in the rural Kansas City District.	Miscellaneous	Work zone enforcement	1	Locations	$14000	$14000	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0	0	State Highway Agency	Systemic	Speed and Aggressive Driving	Work Zones
4I3522 - On-call work zone enforcement at various locations in the urban Kansas City District.	Miscellaneous	Work zone enforcement	1	Locations	$170000	$170000	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0	0	State Highway Agency	Systemic	Speed and Aggressive Driving	Work Zones
4P3488 - Add roundabout at Rte. 58 south junction.	Intersection geometry	Intersection geometry - other	1	Intersections	$1121000	$3227000	Penalty Funds (23 U.S.C. 154)	Urban	Major Collector	11,328	55	State Highway Agency	Systemic	Speed and Aggressive Driving	Intersections
KR0235 - Striping upgrades at various locations in the rural Kansas City District.	Roadway delineation	Improve retroreflectivity	285.2	Miles	$418000	$418000	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Interstate	36,170	70	State Highway Agency	Systemic	Distracted Driving	Lane Departures
KU0233 - Striping upgrades on I-70, I-35, I-29 and Rte. 71 in the	Roadway delineation	Improve retroreflectivity	101.118	Miles	$2066000	$2066000	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Interstate	71,000	65	State Highway Agency	Systemic	Distracted Driving	Lane Departures

PROJECT NAME	IMPROVEMENT CATEGORY	SUBCATEGORY	OUTPUTS	OUTPUT TYPE	HSIP PROJECT COST($)	TOTAL PROJECT COST($)	FUNDING CATEGORY	LAND USE/AREA TYPE	FUNCTIONAL CLASSIFICATION	AADT	SPEED OR SPEED RANGE	OWNERSHIP	METHOD FOR SITE SELECTION	SHSP EMPHASIS AREA	SHSP STRATEGY
urban Kansas City District.															
KU0372 - Improve median barrier from Briarcliff Road to the Broadway Bridge in Kansas City and North Kansas City.	Roadside	Barrier – concrete	2.07	Miles	$2831000	$2831000	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Other Freeways & Expressways	38,500	55	State Highway Agency	Systemic	Occupant Protection	Lane Departures
5P3325 - Pavement resurfacing from Rte. AA to Rte. 5 in Camden County.	Roadway	Pavement surface – high friction surface	32	Miles	$70000	$2396000	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Other	4,340	55	State Highway Agency	Spot	Speed and Aggressive Driving	Lane Departures
5P3517 - Pavement resurfacing and rumblestripes from Rte. 87 to Rte. 40 and Rte. 240 from Rte. 5 to Rte. 40.	Shoulder treatments	Widen shoulder – paved or other (includes add shoulder)	75	Miles	$499000	$7219000	Penalty Funds (23 U.S.C. 154)	Rural	Minor Arterial	3,014	55	State Highway Agency	Systemic	Speed and Aggressive Driving	Lane Departures
5P3521 - On-call work zone enforcement at various locations in the Central District.	Miscellaneous	Work zone enforcement	1	Locations	$63000	$63000	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0	0	State Highway Agency	Systemic	Speed and Aggressive Driving	Work Zones
5S3352 - Pavement resurfacing and add rumblestripes from I-44 outer road to end of state maintenance. Pavement resurfacing on Rte. W from Rte. 7 to en	Shoulder treatments	Widen shoulder – paved or other (includes add shoulder)	15	Miles	$447000	$2527000	HSIP (23 U.S.C. 148)	Rural	Major Collector	7,176	55	State Highway Agency	Systemic	Speed and Aggressive Driving	Lane Departures
5S3398 - Pavement resurfacing and signage upgrade	Roadway signs and traffic control	Roadway signs (including post) - new or updated	7.8	Miles	$92000	$1190000	HSIP (23 U.S.C. 148)	Rural	Major Collector	992	55	State Highway Agency	Systemic	Speed and Aggressive Driving	Lane Departures

PROJECT NAME	IMPROVEMENT CATEGORY	SUBCATEGORY	OUTPUTS	OUTPUT TYPE	HSIP PROJECT COST($)	TOTAL PROJECT COST($)	FUNDING CATEGORY	LAND USE/AREA TYPE	FUNCTIONAL CLASSIFICATION	AADT	SPEED OR SPEED RANGE	OWNERSHIP	METHOD FOR SITE SELECTION	SHSP EMPHASIS AREA	SHSP STRATEGY
from Rte. 52 to the end of state maintenance.															
5S3535 - Pavement resurfacing from Rt 7 to I-44, Rt J from I-44 to Rt 5, Rt A from Rt 32 to I-44, Rt YY from Hemlock Rd. to Rt 5 and Outer Road 44 fro	Shoulder treatments	Widen shoulder – paved or other (includes add shoulder)	7.1	Miles	$379000	$5958000	Penalty Funds (23 U.S.C. 154)	Rural	Major Collector	632	55	State Highway Agency	Systemic	Speed and Aggressive Driving	Lane Departures
CD0025 - Pavement preservation treatment from Rte. DD to Rte. 54.	Roadway	Pavement surface - other	11.7	Miles	$33000	$454000	HSIP (23 U.S.C. 148)	Rural	Multiple/Varies	0	0	State Highway Agency	Spot	Distracted Driving	Lane Departures
CD0030 - Add roundabout at Rte. 124 and Rte. 151.	Intersection geometry	Intersection geometry - other	1	Intersections	$1076000	$1076000	HSIP (23 U.S.C. 148)	Urban	Minor Arterial	0		State Highway Agency	Spot	Distracted Driving	Intersections
CD0100 - Pavement resurfacing and high friction surface treatment from County Road 147 north of Kingdom City to Missouri River bridge.	Roadway	Pavement surface – high friction surface	4	Lanes	$435000	$22135000	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Other Freeways & Expressways	17,991	70	State Highway Agency	Spot	Speed and Aggressive Driving	Lane Departures
CD0114 - Add auxiliary lanes at Old Jefferson City Road in Fulton.	Intersection geometry	Intersection realignment	1	Intersections	$1638000	$1638000	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Other Freeways & Expressways	15,094	70	State Highway Agency	Spot	Speed and Aggressive Driving	Intersections
6P3496 - Safety improvements at various locations in the St. Louis District.	Miscellaneous	Miscellaneous - other	226	Locations	$29061000	$41269000	HSIP (23 U.S.C. 148)	Urban	Multiple/Varies	35,000	40	State and Local Ownership	Systemic	Distracted Driving	Data Driven Safety Analysis
6P3641 - On-call work zone enforcement at	Miscellaneous	Work zone enforcement	1	Locations	$1000000	$1000000	HSIP (23 U.S.C. 148)	Urban	Multiple/Varies	80,000	60	State Highway Agency	Systemic	Speed and Aggressive Driving	Work Zones

PROJECT NAME	IMPROVEMENT CATEGORY	SUBCATEGORY	OUTPUTS	OUTPUT TYPE	HSIP PROJECT COST($)	TOTAL PROJECT COST($)	FUNDING CATEGORY	LAND USE/AREA TYPE	FUNCTIONAL CLASSIFICATION	AADT	SPEED OR SPEED RANGE	OWNERSHIP	METHOD FOR SITE SELECTION	SHSP EMPHASIS AREA	SHSP STRATEGY
various locations in the St. Louis District.															
6P3643 - Upgrade striping and signage for wrong way countermeasures at various locations in the St. Louis District.	Roadway signs and traffic control	Roadway signs (including post) - new or updated	2000	Signs	$1725000	$1725000	HSIP (23 U.S.C. 148)	Urban	Multiple/Varies	50,000	60	State Highway Agency	Systemic	Impaired Driving	Lane Departures
6S3215 - Pavement resurfacing and upgrade pedestrian facilities to comply with the ADA Transition Plan from I-170 to west of Pennsylvania Avenue.	Pedestrians and bicyclists	Install new crosswalk	20	Crosswalks	$1200000	$9304000	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Other	27,000	40	State Highway Agency	Spot	Distracted Driving	Intersections
6S3640 - Signalize intersection and add intersection turn lanes at Miller Road and St. John's Church Road.	Intersection traffic control	Modify control – other	3	Intersections	$2914000	$3053000	HSIP (23 U.S.C. 148)	Rural	Multiple/Varies	28,000	55	State Highway Agency	Spot	Speed and Aggressive Driving	Intersections
SL0123 - Striping upgrades in St. Louis City and St. Louis and Jefferson Counties.	Roadway delineation	Longitudinal pavement markings – new	36.782	Miles	$816000	$816000	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Interstate	108,000	60	State Highway Agency	Systemic	Distracted Driving	Lane Departures
SL0160 - Striping upgrades on ramps at various locations from 0.3 mile south of I-70 to the Mississippi River, on I-270 from 0.2 mile east of James S.	Roadway delineation	Longitudinal pavement markings – new	250	Ramps	$2002000	$2002000	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Interstate	140,000	60	State Highway Agency	Systemic	Distracted Driving	Lane Departures

PROJECT NAME	IMPROVEMENT CATEGORY	SUBCATEGORY	OUTPUTS	OUTPUT TYPE	HSIP PROJECT COST($)	TOTAL PROJECT COST($)	FUNDING CATEGORY	LAND USE/AREA TYPE	FUNCTIONAL CLASSIFICATION	AADT	SPEED OR SPEED RANGE	OWNERSHIP	METHOD FOR SITE SELECTION	SHSP EMPHASIS AREA	SHSP STRATEGY
7I3512 - On-call work zone enforcement at various locations in the rural Southwest District.	Miscellaneous	Work zone enforcement	1	Locations	$100000	$100000	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Interstate	0	70	State Highway Agency	Systemic	Speed and Aggressive Driving	Work Zones
7P3394 - Pavement resurfacing from south of the Kimberling City Bridge to the Arkansas State line in Blue Eye.	Shoulder treatments	Shoulder treatments - other	1	Miles	$125000	$1646000	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Other	9,200	55	State Highway Agency	Systemic	Distracted Driving	Lane Departures
7S3447 - Pavement resurfacing and add rumblestripes from Rte. U to 0.2 mile east of Old Exeter Road and on Bus. 37 (Main Street) from east of County R	Roadway	Rumble strips – edge or shoulder	17	Miles	$1003000	$3080000	HSIP (23 U.S.C. 148)	Rural	Multiple/Varies	1,723	55	State Highway Agency	Systemic	Distracted Driving	Lane Departures
7S3491 - Pavement resurfacing and add rumblestripes from Rte. 112 to Rte. 86 and upgrade pedestrian facilities to comply with the ADA Transition Plan	Shoulder treatments	Widen shoulder – paved or other (includes add shoulder)	5	Miles	$177000	$882000	HSIP (23 U.S.C. 148)	Rural	Major Collector	2,168	55	State Highway Agency	Systemic	Speed and Aggressive Driving	Lane Departures
7S3492 - Pavement resurfacing and add centerline rumblestripes from the Kings River to Rte. 13 in Stone County and from Rte. 13	Roadway	Rumble strips – center	10	Miles	$527000	$3327000	HSIP (23 U.S.C. 148)	Rural	Multiple/Varies	4,000	55	State Highway Agency	Spot	Speed and Aggressive Driving	Lane Departures

PROJECT NAME	IMPROVEMENT CATEGORY	SUBCATEGORY	OUTPUTS	OUTPUT TYPE	HSIP PROJECT COST($)	TOTAL PROJECT COST($)	FUNDING CATEGORY	LAND USE/AREA TYPE	FUNCTIONAL CLASSIFICATION	AADT	SPEED OR SPEED RANGE	OWNERSHIP	METHOD FOR SITE SELECTION	SHSP EMPHASIS AREA	SHSP STRATEGY
to Rte. 65 in Taney Co															
8I3230 - On-call work zone enforcement at various locations in the urban Southwest District.	Miscellaneous	Work zone enforcement	1	Locations	$220000	$220000	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Interstate	0	70	State Highway Agency	Systemic	Speed and Aggressive Driving	Work Zones
8S3166 - Pavement resurfacing on Chestnut Expressway from Scenic Avenue to west of Rte. 13 (Kansas Expressway).	Roadway	Pavement surface – high friction surface	1	Curves	$72000	$590000	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Other Freeways & Expressways	19,172	40	State Highway Agency	Spot	Speed and Aggressive Driving	Lane Departures
SR0087 - Add high friction surface treatment including Rte. 76 east of Branson, Rte. 265 in Branson, Rte. 65 in Hollister, Rtes. 13 and 86 in Stone Co	Roadway	Pavement surface – high friction surface	22	Curves	$1082000	$2342000	HSIP (23 U.S.C. 148)	Rural	Multiple/Varies	30,000	65	State Highway Agency	Spot	Speed and Aggressive Driving	Lane Departures
SR0092 - Add turn lanes on Main Street at 34th Street and modify signals and intersection islands at Loop 49 (Range Line Road) and Rte. TT (Newman Roa	Intersection traffic control	Intersection traffic control - other	2	Intersections	$874000	$874000	HSIP (23 U.S.C. 148)	Urban	Multiple/Varies	0	0	State Highway Agency	Spot	Distracted Driving	Intersections

PROJECT NAME	IMPROVEMENT CATEGORY	SUBCATEGORY	OUTPUTS	OUTPUT TYPE	HSIP PROJECT COST($)	TOTAL PROJECT COST($)	FUNDING CATEGORY	LAND USE/AREA TYPE	FUNCTIONAL CLASSIFICATION	AADT	SPEED OR SPEED RANGE	OWNERSHIP	METHOD FOR SITE SELECTION	SHSP EMPHASIS AREA	SHSP STRATEGY
SR0201 - Striping upgrades from 1 mile east of Prigmor Avenue in Joplin to Rte. 360 in Greene County and on the eastbound lanes from 2 miles east of R	Roadway delineation	Longitudinal pavement markings - remarking	100	Miles	$754000	$754000	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Interstate	0	70	State Highway Agency	Systemic	Occupant Protection	Lane Departures
SR0204 - Striping upgrades from the Oklahoma State line to 1 mile east of Prigmor Avenue in Joplin and on I-49 from I-44 west junction in Joplin to Rt	Roadway delineation	Longitudinal pavement markings - remarking	22	Miles	$220000	$220000	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Interstate	0	70	State Highway Agency	Systemic	Occupant Protection	Lane Departures
SR0205 - Striping upgrades from Rte. EE near Pineville to the Arkansas State line.	Roadway delineation	Longitudinal pavement markings - remarking	8	Miles	$82000	$82000	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Interstate	11,973	70	State Highway Agency	Systemic	Occupant Protection	Lane Departures
SR0206 - Striping upgrades from 0.5 mile south of Rtes. A/B in Archie to Rte. 54 in Nevada, from Rte. 160 in Lamar to I-44, on Rte. 7 from 0.3 mile ea	Roadway delineation	Longitudinal pavement markings - remarking	174	Miles	$1295000	$1295000	HSIP (23 U.S.C. 148)	Rural	Multiple/Varies	0	0	State Highway Agency	Systemic	Occupant Protection	Lane Departures
SU0058 - Add high friction surface treatment on Rte. 60, Rte. 13 and Rte. 65 in Springfield, on Rte. NN and Rte. 125 in Christian County.	Roadway	Pavement surface – high friction surface	8	Curves	$1344000	$2298000	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Other Freeways & Expressways	0	0	State Highway Agency	Spot	Speed and Aggressive Driving	Lane Departures

PROJECT NAME	IMPROVEMENT CATEGORY	SUBCATEGORY	OUTPUTS	OUTPUT TYPE	HSIP PROJECT COST($)	TOTAL PROJECT COST($)	FUNDING CATEGORY	LAND USE/AREA TYPE	FUNCTIONAL CLASSIFICATION	AADT	SPEED OR SPEED RANGE	OWNERSHIP	METHOD FOR SITE SELECTION	SHSP EMPHASIS AREA	SHSP STRATEGY
SU0085 - Add lanes and modify signals on Kearney Street from Springfield-Branson National Airport to LeCompte Avenue.	Miscellaneous	Miscellaneous - other	7	Intersections	$16000	$1562000	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Other	32,032	0	State Highway Agency	Spot	Speed and Aggressive Driving	Intersections
SU0101 - Add J-turn at Bluegrass Road (County Road 94).	Intersection geometry	Intersection geometry - other	1	Intersections	$580000	$2611000	Penalty Funds (23 U.S.C. 154)	Urban	Principal Arterial-Other Freeways & Expressways	16,040	65	State Highway Agency	Spot	Speed and Aggressive Driving	Intersections
SU0203 - Striping upgrades from 0.1 mile east of Rte. 360 to 2 miles east of Rte. 125 in Strafford, on Rte. 65 from I-44 to Rte. 60 and on Rte. 13 fro	Roadway delineation	Longitudinal pavement markings - remarking	37	Miles	$372000	$372000	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Interstate	65,000	0	State Highway Agency	Systemic	Speed and Aggressive Driving	Lane Departures
9P3607 - Pavement resurfacing and add rumblestripes from Rte. AW to Rte. 38.	Shoulder treatments	Widen shoulder – paved or other (includes add shoulder)	7.626	Miles	$1629000	$5606000	HSIP (23 U.S.C. 148)	Rural	Minor Arterial	2,893	55	State Highway Agency	Systemic	Speed and Aggressive Driving	Lane Departures
9P3823 - On-call work zone enforcement at various locations in the Southeast District.	Miscellaneous	Work zone enforcement	1	Locations	$40000	$40000	HSIP (23 U.S.C. 148)	Rural	Multiple/Varies	0	0	State Highway Agency	Systemic	Speed and Aggressive Driving	Work Zones
9P3840 - Signalize intersections at the I-55 interchange.	Intersection traffic control	Modify control – other	3	Intersections	$509000	$509000	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Other Freeways & Expressways	14,060	45	State Highway Agency	Spot	Speed and Aggressive Driving	Intersections

PROJECT NAME	IMPROVEMENT CATEGORY	SUBCATEGORY	OUTPUTS	OUTPUT TYPE	HSIP PROJECT COST($)	TOTAL PROJECT COST($)	FUNDING CATEGORY	LAND USE/AREA TYPE	FUNCTIONAL CLASSIFICATION	AADT	SPEED OR SPEED RANGE	OWNERSHIP	METHOD FOR SITE SELECTION	SHSP EMPHASIS AREA	SHSP STRATEGY
9P3850 - Wrong way striping and signing at various freeway and expressway interchange locations in the Southeast District.	Roadway signs and traffic control	Roadway signs and traffic control - other	604	Signs	$1080000	$1080000	HSIP (23 U.S.C. 148)	Rural	Multiple/Varies	0	0	State Highway Agency	Systemic	Distracted Driving	Intersections
9S3610 - Pavement resurfacing and realign curves from Rte. 67 to Rte. 21 in Pilot Knob.	Alignment	Horizontal and vertical alignment	15.77	Miles	$2163000	$6922000	Penalty Funds (23 U.S.C. 154)	Rural	Minor Arterial	13,244	55	State Highway Agency	Spot	Speed and Aggressive Driving	Lane Departures
9S3841 - Add roundabout at Rte. K.	Intersection traffic control	Modify control – Modern Roundabout	1	Intersections	$2162000	$2162000	HSIP (23 U.S.C. 148)	Rural	Major Collector	0	0	State Highway Agency	Spot	Speed and Aggressive Driving	Intersections
SE0181 - Striping upgrades from Webster County line to I-55, on Rte. 67 from Jefferson County line to Rte. 160 and on Rte. 63 from east intersection o	Roadway delineation	Longitudinal pavement markings - remarking	616.748	Miles	$2200000	$2200000	HSIP (23 U.S.C. 148)	Multiple/Varies	Principal Arterial-Other Freeways & Expressways	0	0	State Highway Agency	Systemic	Speed and Aggressive Driving	Lane Departures
ST0001 - Safety Circuit Rider statewide liaison for state fiscal year 2024.	Miscellaneous	Transportation safety planning	10	Locations	$70000	$70000	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0	0	State Highway Agency	Systemic	Speed and Aggressive Driving	Data Driven Safety Analysis

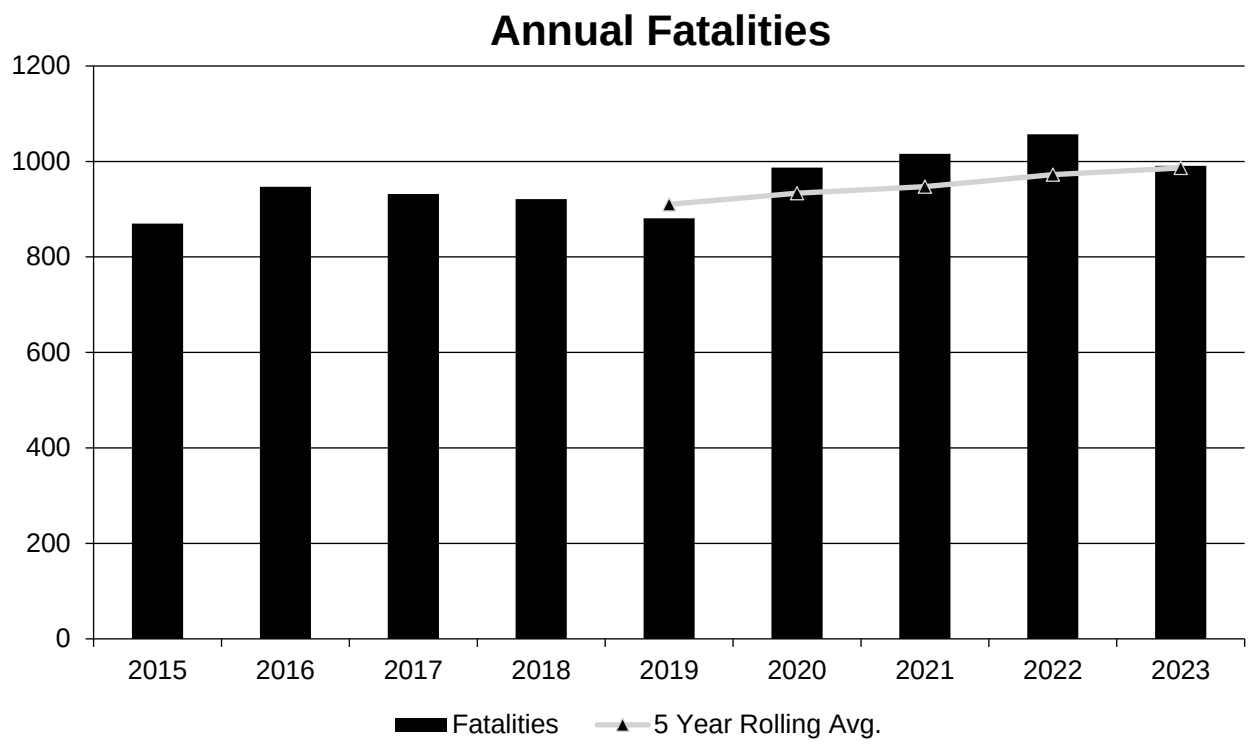
On the projects that included various routes the AADT and Speed are listed as zero for consistency.

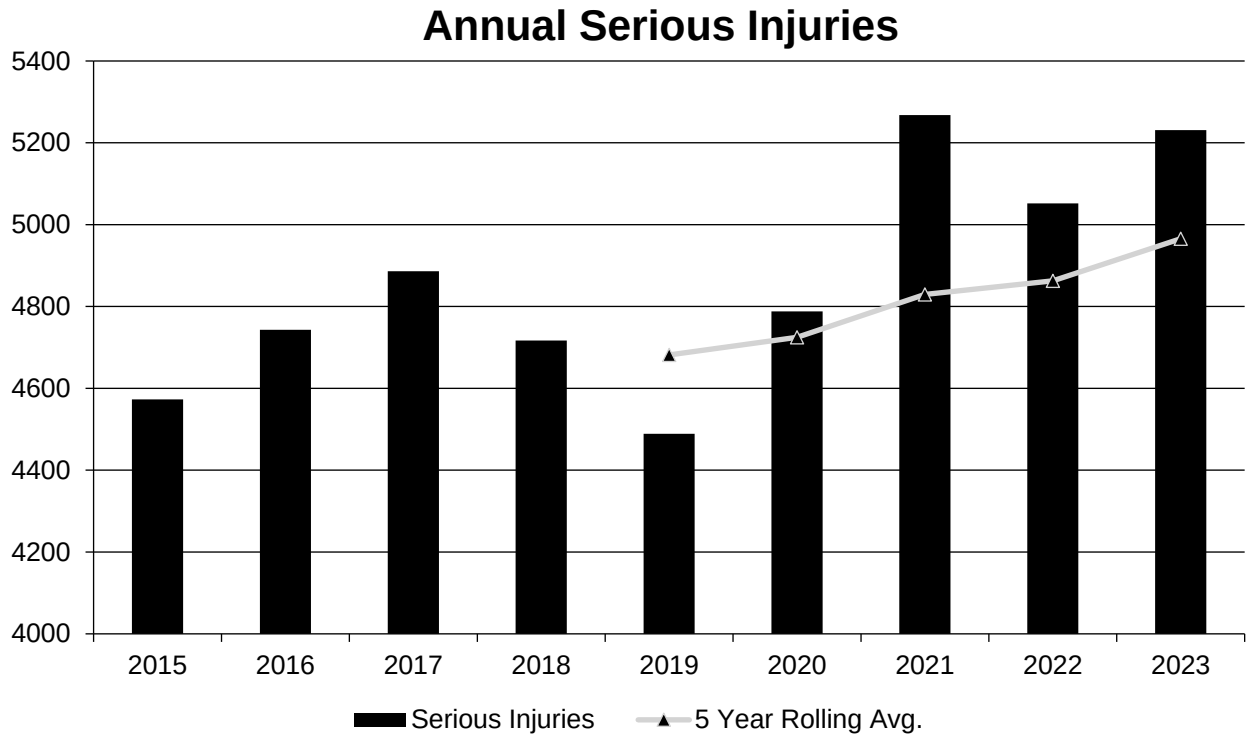
Safety Performance

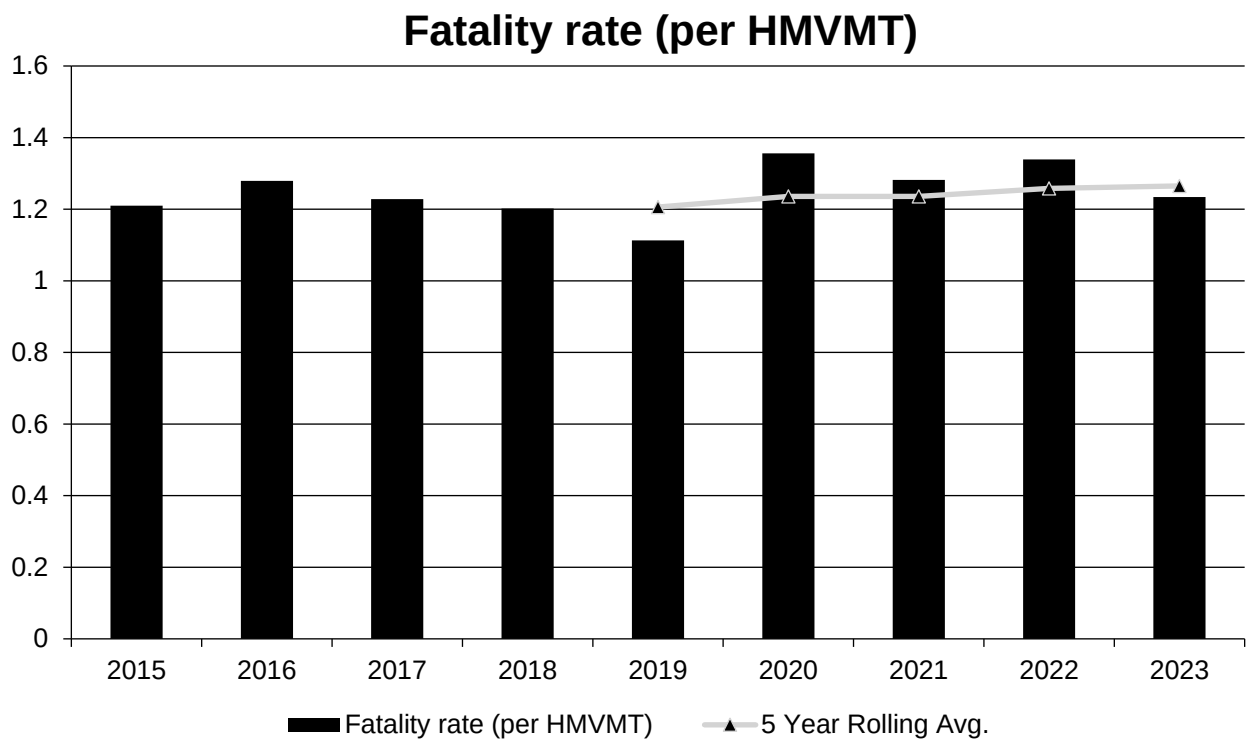
General Highway Safety Trends

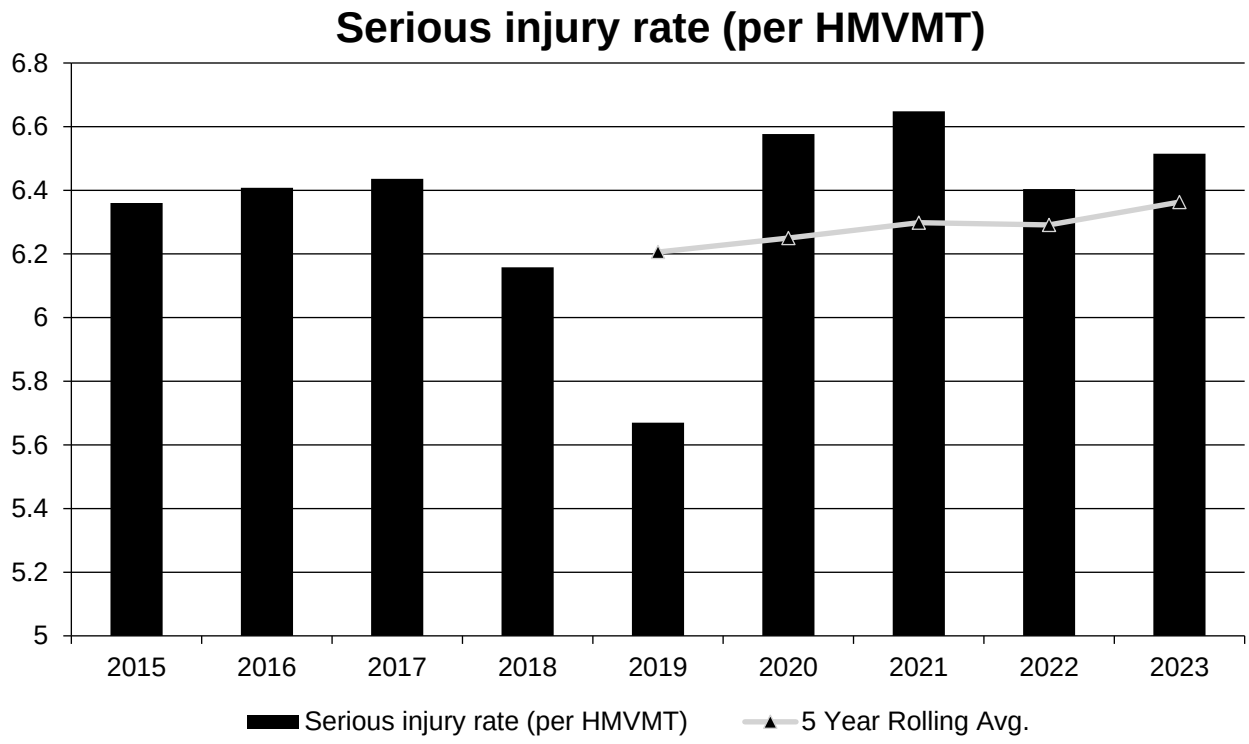
Present data showing the general highway safety trends in the State for the past five years.

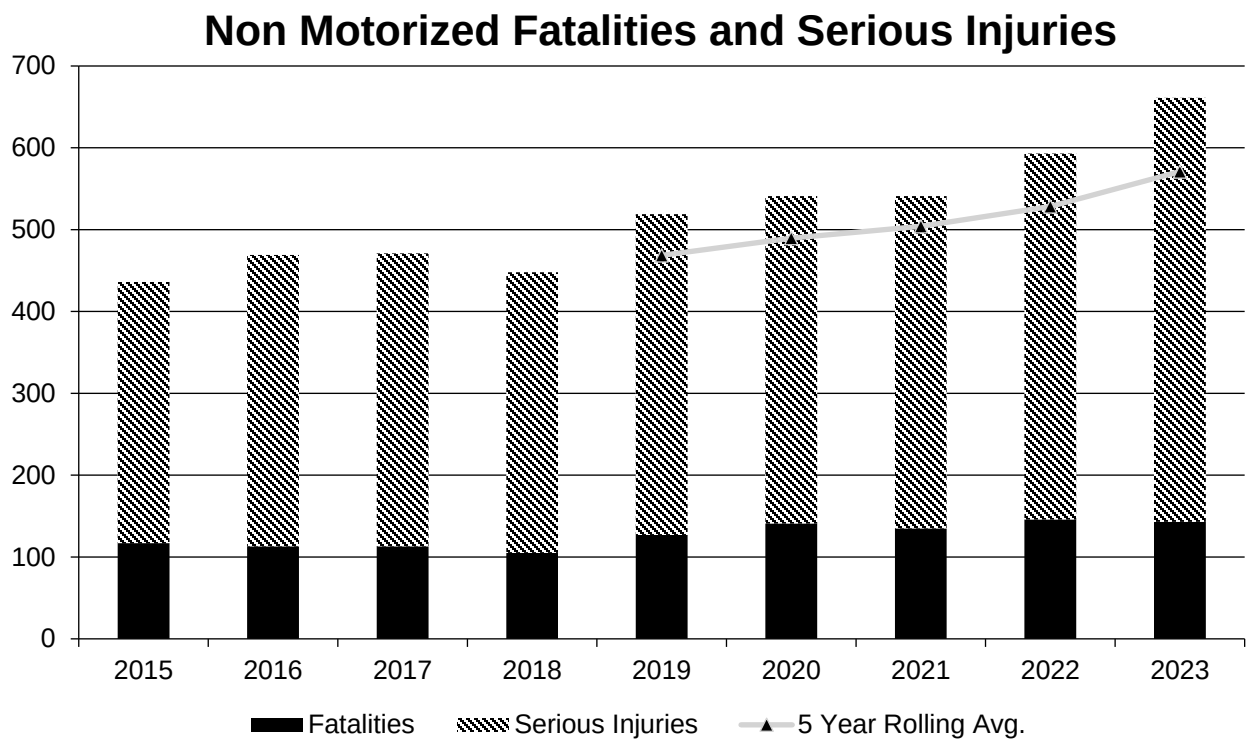
PERFORMANCE MEASURES	2015	2016	2017	2018	2019	2020	2021	2022	2023
Fatalities	870	947	932	921	881	987	1,016	1,057	991
Serious Injuries	4,573	4,743	4,886	4,717	4,489	4,788	5,268	5,052	5,231
Fatality rate (per HMVMT)	1.210	1.279	1.228	1.202	1.113	1.356	1.282	1.339	1.234
Serious injury rate (per HMVMT)	6.360	6.408	6.436	6.158	5.670	6.577	6.648	6.404	6.515
Number non-motorized fatalities	117	113	113	105	127	141	135	146	143
Number of non-motorized serious injuries	319	356	358	343	392	400	406	447	518


Annual Fatalities
1200
1000
800
600
400
200
0
2015
2016
2017
2018
2019
2020
2021
2022
2023
Fatalities
5 Year Rolling Avg.


Annual Serious Injuries
5400
5200
5000
4800
4600
4400
4200
4000
2015
2016
2017
2018
2019
2020
2021
2022
2023
Serious Injuries
5 Year Rolling Avg.


Fatality rate (per HMVMT)
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
2015
2016
2017
2018
2019
2020
2021
2022
2023
Fatality rate (per HMVMT)
5 Year Rolling Avg.


Serious injury rate (per HMVMT)
6.8
6.6
6.4
6.2
6
5.8
5.6
5.4
5.2
5
2015
2016
2017
2018
2019
2020
2021
2022
2023
Serious injury rate (per HMVMT)
5 Year Rolling Avg.



In previous reports, low power electric bicycles were not included in the non-motorized fatalities and serious injuries. These motorized bikes that do not meet motorcycle status (such as mopeds) are now included in the non-motorized totals starting in the 2016 data. Data for this report was compiled in August 2024.

Describe fatality data source.

State Motor Vehicle Crash Database

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

Year 2023

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	45.8	159.2	0.61	2.15
Rural Principal Arterial (RPA) - Other Freeways and Expressways	51.4	198.4	0.97	3.75
Rural Principal Arterial (RPA) - Other	66.4	242.8	2.03	7.43
Rural Minor Arterial	96.4	358.4	2.64	9.8
Rural Minor Collector	23.2	90.8	3.32	12.97
Rural Major Collector	137.8	598	2.65	11.45
Rural Local Road or Street	78.8	410.4	0.82	4.3
Urban Principal Arterial (UPA) - Interstate	100.2	451.4	0.73	3.28
Urban Principal Arterial (UPA) - Other Freeways and Expressways	55.2	234	1	4.21
Urban Principal Arterial (UPA) - Other	125	713.8	2.32	13.2
Urban Minor Arterial	117.8	769.2	1.91	12.43
Urban Minor Collector	3.6	30.2	1.64	13.84
Urban Major Collector	37.2	296.6	1.25	9.98
Urban Local Road or Street	45.6	396	0.54	4.7

Year 2023

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				
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				
Private (Other than Railroad)				
Railroad				
State Toll Authority				
Local Toll Authority				
Other Public Instrumentality (e.g. Airport, School, University)				
Indian Tribe Nation				
State System	694.6	3,076.8	1.35	5.97
City & County	291.8	1,888.8	1.11	7.19

Provide additional discussion related to general highway safety trends.

While Missouri had been making progress in reducing the number of fatalities and serious injuries over the last few years, a significant spike in severe crashes was seen from the impact of the COVID-19 pandemic. It appears that with the reduction in crashes for 2023 that the trend is heading in a more positive direction. However, there have been over 100 non-motorized fatalities each year, over the last 6 years and last year alone Missouri experienced 146 fatalities.

Safety Performance Targets

Safety Performance Targets

Calendar Year 2025 Targets *

Number of Fatalities:968.7

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

Targets are based on an annual reduction needed to reach Zero fatalities by 2030. This reduction assumes larger decreases in future years as new safety technologies are implemented, such as autonomous vehicles. This target is in line with the SHSP to reduce the number of fatalities on Missouri's roadways.

Number of Serious Injuries:4961.4

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

Targets are based on an annual reduction needed to reach Zero serious injuries by 2040. An exception is made for instances where the baseline 5-year rolling average (2019-2023) is less than the calculated target. In this instance, the baseline is less than the calculated performance target, and so the baseline was used as the target. This target is in line with the SHSP to reduce the number of fatalities and serious injuries on Missouri's roadways. This target is in line with the SHSP to reduce the number of serious injuries on Missouri's roadways.

Fatality Rate:1.212

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

The fatality rate was calculated by taking a 5-year rolling average of historical and forecasted annual fatality rates. Historical fatality rates were derived from observed fatality totals and estimated Annual Vehicle Miles Traveled (VMT). Forecasted rates were determined by using the number of fatalities performance target and dividing by the estimated Annual VMT. The VMT dropped significantly in 2020, by nearly 10%. In 2021 the VMT rebounded more than anticipated such that it is just slightly higher than 2019. It is anticipated that the typically estimated 1% growth per year will be sufficient moving forward. This target is in line with the SHSP to reduce the number of fatalities on Missouri's roadways.

Serious Injury Rate:6.259

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

The serious injury rate was calculated by taking a 5-year rolling average of historical and forecasted annual serious injury rates. Historical serious injury rates were derived from observed serious injury totals and estimated Annual Vehicle Miles Traveled (VMT). Forecasted rates were determined by using the number of serious injuries performance target and dividing by the estimated Annual VMT. The VMT dropped significantly in 2020, by nearly 10%. In 2021 the VMT rebounded more than anticipated such that it is just slightly higher than 2019. It is anticipated that the typically estimated 1% growth per year will be sufficient moving forward. This target is in line with the SHSP to reduce the number of serious injuries on Missouri's roadways.

Total Number of Non-Motorized Fatalities and Serious Injuries:567.0

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

The non-motorized fatalities and serious injuries performance target was based on the performance targets for number of fatalities (Zero by 2030) and number of serious injuries (Zero by 2040). An exception is made for instances where the baseline 5-year rolling average (2019-2023) is less than the calculated target. In this instance, the baseline is less than the calculated performance target, and so the baseline was used as the target. This target is in line with the SHSP to reduce the number of fatalities and serious injuries on Missouri's roadways.

Performance Measures for Fatalities, Fatality Rate, and Serious Injuries were set based on what was reported in the Highway Safety Plan.

Performance Measures for Serious Injury Rate and Non-Motorized Fatalities and Serious Injuries were set based on crash data available in August 2024 for use in the Highway Safety Improvement Program Annual Report

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

Missouri's Highway Safety Office is located within MoDOT which promotes a collaborative environment between engineering and safety staff. MoDOT updated its Strategic Highway Safety Plan (SHSP) using a collaborative, team approach. The team included external partners from emergency management, FHWA, FMCSA, hospitals, law enforcement, Missouri Department of Revenue, MPOs, NHTSA, Regional Planning Commissions (RPCs), and universities. Revisions to the SHSP were shared periodically with the MPOs and RPCs.

Extensive coordination occurred between FHWA, MoDOT, MPO, and NHTSA staff when setting the Safety Targets. Missouri safety data was reviewed for trends, along with assumptions and challenges. MoDOT conducts monthly calls with planning stakeholders. In 2016, a target coordinating process was presented with feedback and consensus from the MPOs. In March, MoDOT calculated statewide and MPO data trends for each safety performance measure. This information was shared and discussed with MoDOT's Executive Team, MPOs FHWA, and NHTSA. After review of feedback from partner groups, the methods and assumptions used to develop the performance targets were finalized in April. MoDOT then applied the agreed upon methodology to develop the safety performance targets and communicated them with the partners.

Does the State want to report additional optional targets?

No

Describe progress toward meeting the State's 2023 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	948.2	986.4
Number of Serious Injuries	4848.7	4965.6
Fatality Rate	1.212	1.265
Serious Injury Rate	6.205	6.363
Non-Motorized Fatalities and Serious Injuries	499.2	571.0

Based on the data available at the time of reporting, the actual 2023 performance was worse than the 2023 targets, for each of the safety performance targets. This is primarily due to an increase in fatalities and serious injuries which occurred within the five-year average reporting period. This is consistent with what was experienced nationally during this timeframe, meaning there were external factors, beyond the HSIP program, that were influencing the increase in fatalities.

Although previous years (2020, 2021, and 2022) saw increases in fatalities and serious injuries there was a reduction in 2023 of over 6%. However, this has still not recovered to the point that the severe crashes are below what was seen before 2020. This can most likely can be attributed to the increase in speeding and aggressive driving observed throughout the state. Additionally, Missouri's Fall 2020 state legislature repealed a helmet law for motorcyclists, which can be correlated to an increase in motorcycle fatalities.

MoDOT will continue to work with the Missouri Coalition for Roadway Safety to attempting to change the safety culture of Missouri's motorists, specifically as it relates to the 4 emphasis areas identified in Missouri's SHSP: Occupant Protection, Distracted Driving, Speed and Aggressive Driving, and Impaired Driving.

Applicability of Special Rules

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

No

Does the VRU Safety Special Rule apply to the State for this reporting period?

No

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	2017	2018	2019	2020	2021	2022	2023
Number of Older Driver and Pedestrian Fatalities	135	143	121	148	153	184	164
Number of Older Driver and Pedestrian Serious Injuries	369	426	378	368	432	484	465

Data for this was compiled in August 2024.

Evaluation

Program Effectiveness

How does the State measure effectiveness of the HSIP?

- Benefit/Cost Ratio
- Change in fatalities and serious injuries
- Lives saved
- Other-Evaluation of individual HSIP projects and programs

MoDOT reports on the safety benefits, such as benefit/cost ratio, and lives saved, for all projects utilizing HSIP funds as part of an internal assessment of their HSIP program. This assessment is used as part of a vetting process for planned safety projects to be incorporated into the State Transportation Improvement Program.

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

MoDOT will evaluate specific HSIP projects to assess their effectiveness at reducing fatal and serious injury crashes. This information is then used to promote or discourage the use of a particular safety countermeasure. For systemic improvements, MoDOT tracks the change in the number of fatalities as the amount of a safety improvement is further deployed. This allows MoDOT to monitor the safety benefits returned on its continued investment of a systemic strategy. One systemic strategy evaluated was the implementation of chevrons on curves where advisory speeds are at least 15 mph less than posted speeds. Between 2014 and 2019, horizontal curve fatalities and serious injuries on minor roads decreased from 622 to 474.

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

- HSIP Obligations

MoDOT's planning office tracks the programming of safety funds to ensure they do not lapse on HSIP funds. There are other success indicators where MoDOT has seen some improvement , but they are not currently being reported on. These indicators include:

· Increased awareness of safety and data-driven process

· Increased focus on local road safety

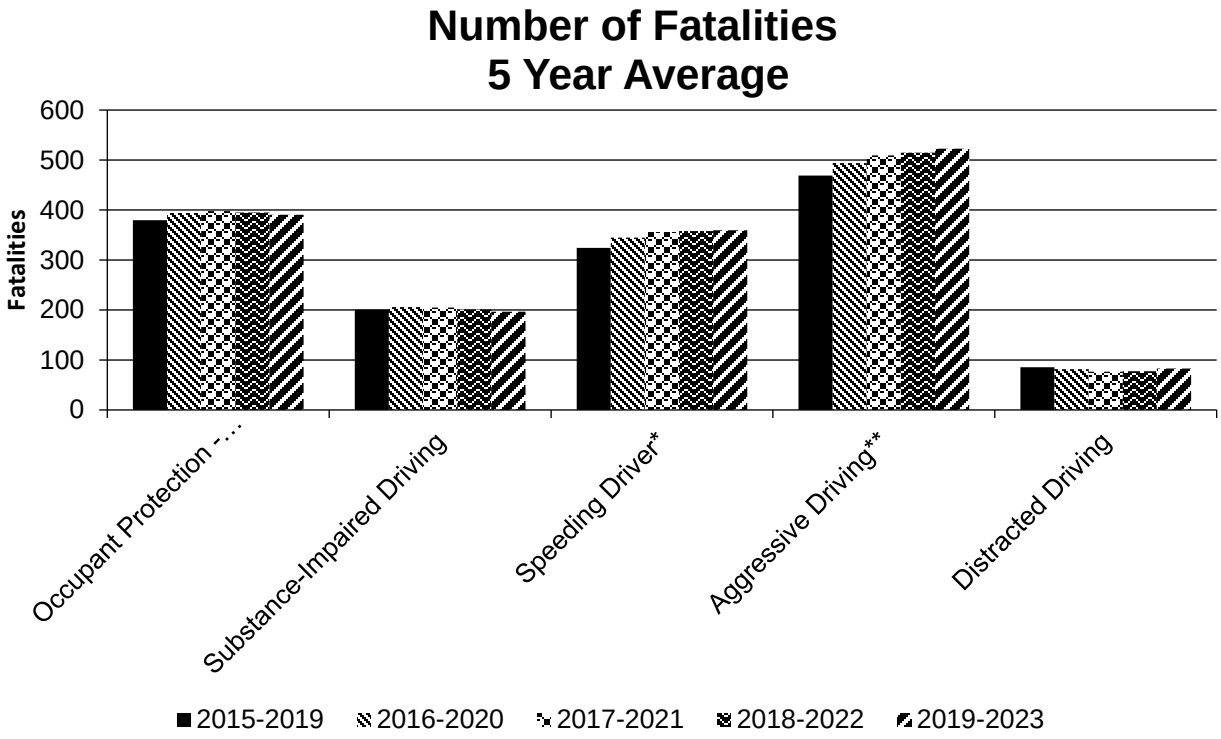
· More systemic programs

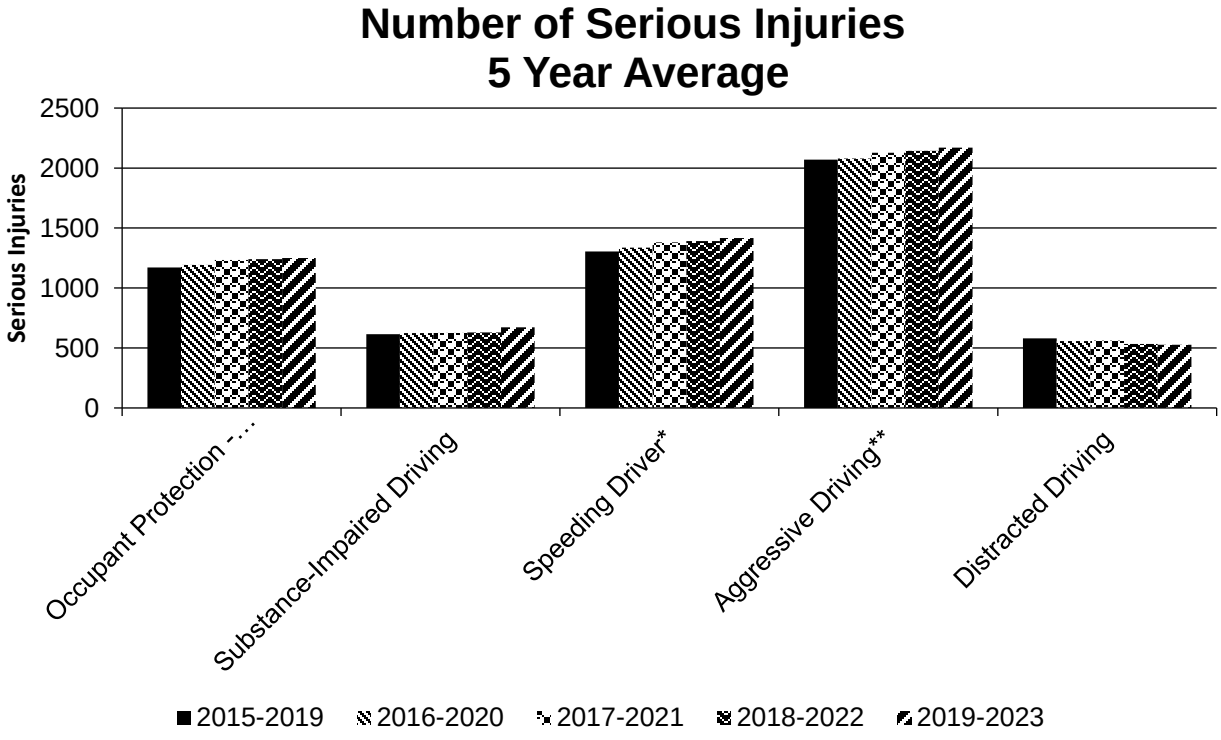
Effectiveness of Groupings or Similar Types of Improvements

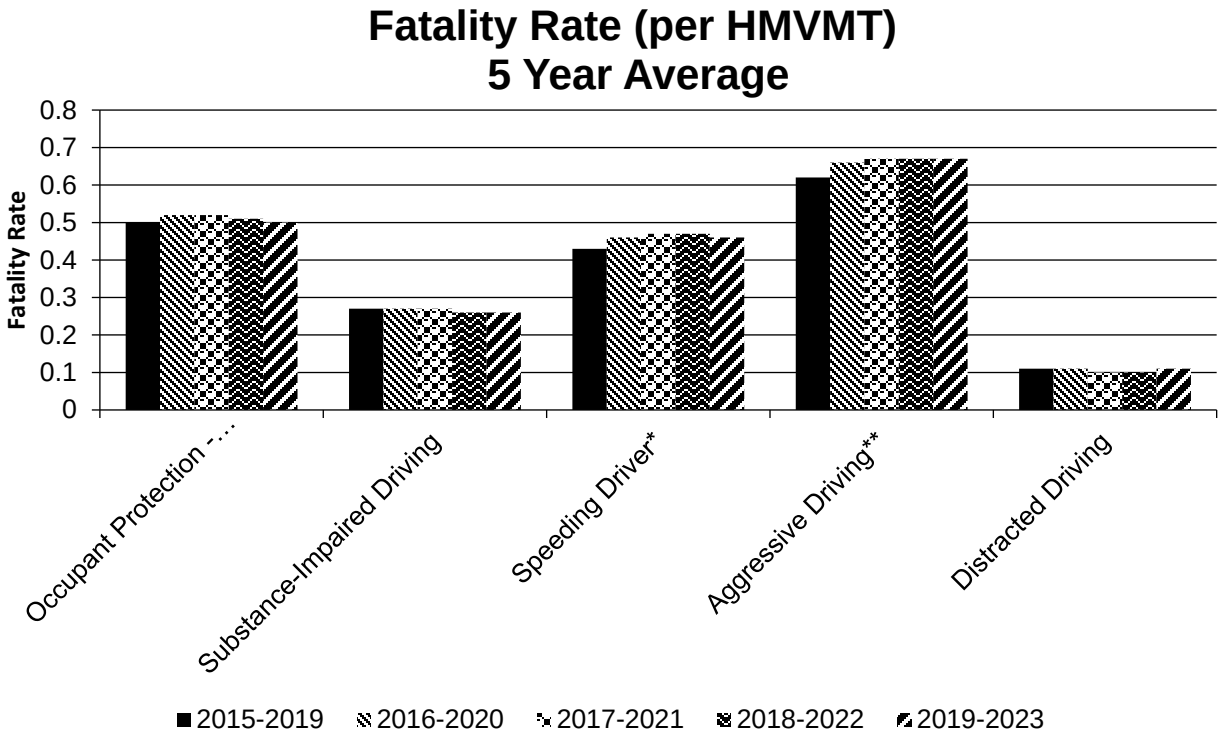
Present and describe trends in SHSP emphasis area performance measures.

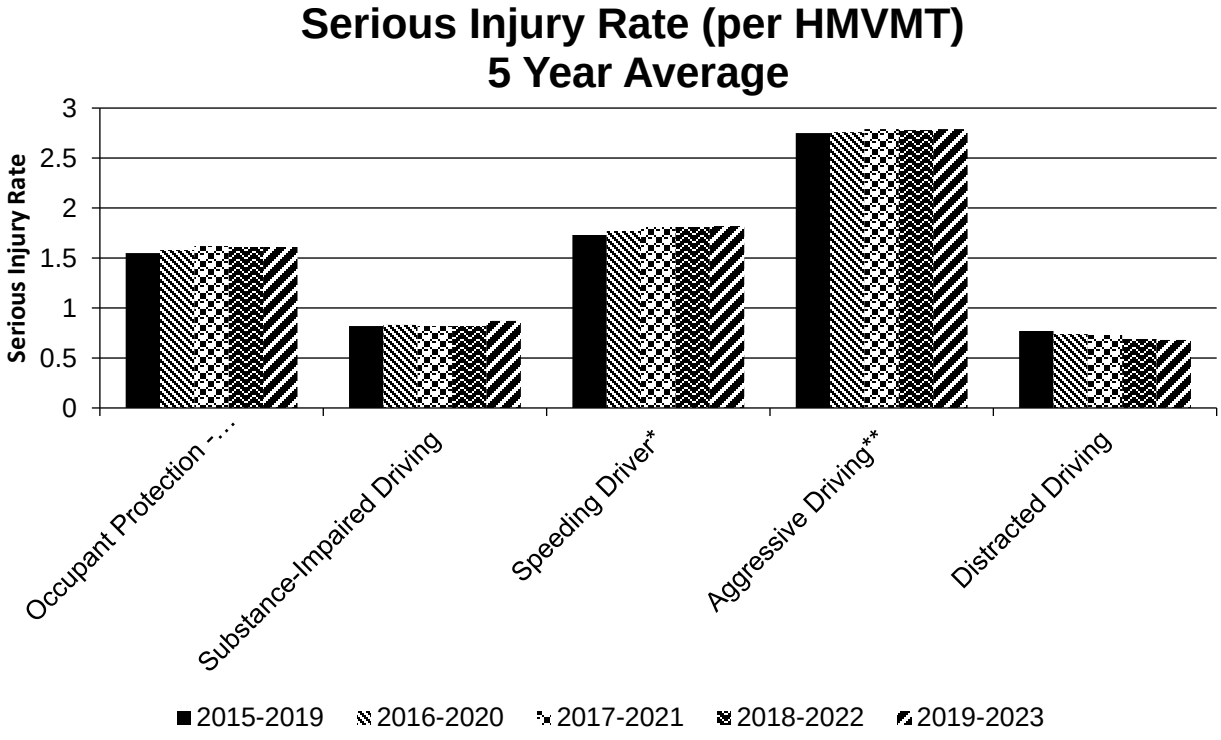
Year 2023

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)
Occupant Protection - Unbelted Vehicle Occupants		390.6	1,249.2	0.5	1.61
Substance-Impaired Driving		196.6	672	0.26	0.87
Speeding Driver*		359.6	1,416.4	0.46	1.82
Aggressive Driving**		522.6	2,170	0.67	2.79
Distracted Driving		82.8	526.4	0.11	0.68


Number of Fatalities
5 Year Average
Fatalities
600
500
400
300
200
100
0
Occupant Protection -…
Substance-Impaired Driving
Speeding Driver*
Aggressive Driving**
Distracted Driving
2015-2019
2016-2020
2017-2021
2018-2022
2019-2023


Number of Serious Injuries
5 Year Average
Serious Injuries
2500
2000
1500
1000
500
0
Occupant Protection -…
Substance-Impaired Driving
Speeding Driver*
Aggressive Driving**
Distracted Driving
2015-2019
2016-2020
2017-2021
2018-2022
2019-2023





*Speeding driving includes the contributing circumstances: speed exceeded limit and too fast for conditions.

**Aggressive driving includes the following contributing circumstances: speed exceeded limit, too fast for conditions, improper passing, following too close, and improper lane usage/change.

Project Effectiveness

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

Compliance Assessment

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

09/29/2020

What are the years being covered by the current SHSP?

From: 2021 To: 2025

When does the State anticipate completing its next SHSP update?

2025

Missouri's Strategic Highway Safety Plan, Show-Me ZERO, can be found on the Missouri Coalition for Roadway Safety's website. https://www.savemolives.com/mcrs/show-me-zero

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					100	50		
	Begin Point Segment Descriptor (10) [10]	100	100					100	100	100	100
	End Point Segment Descriptor (11) [11]	100	100					100	100	100	100
	Segment Length (13) [13]	100	100								
	Direction of Inventory (18) [18]	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
	Functional Class (19) [19]	100	100					100	100	100	100
	Median Type (54) [55]	30	30								
	Access Control (22) [23]	100	80								
	One/Two Way Operations (91) [93]	100	80								
	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					100	100	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	80						
	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				

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
	Location Identifier for Roadway at Beginning of Ramp Terminal (197) [187]					100	100				
	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):		**96.11**	**93.89**	**100.00**	**97.50**	**100.00**	**100.00**	**100.00**	**94.44**	**100.00**	**100.00**

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

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.

MoDOT will use multiple methods over the next several years to meet the requirements for the collection of FDE's on all public roads. MoDOT will prioritize these needs by addressing the Non-Local Paved roads data gaps first.

Surface Type/Number of Lanes/one-two way operations/access control/Median Type – These data items will be addressed through the cooperative program we have with our local authorities that ensures we have complete and correct geospatial network. As we continue these reviews in the future, we will ask them to provide these additional four items. Also, much of this data can be collected through other sources such as aerial photography and video logging.

The second priority will be the Local Paved Roads.

Surface Type/Number of through lanes – These items will be collected at the same time they are collected on Non-Local Paved roads. Since geospatial reviews include all public roads, this data will have already been collected.

AADT – It is estimated that an additional 80,000 traffic count locations will be needed to fulfill this requirement. MoDOT has attempted to work with several local agencies to share traffic data, but there has been little success. Few agencies collect traffic data in a manner that allows the calculation of AADT. Local governments collect traffic data, often one time only, for specific purposes like signal timing. Local agencies do not have permanent sites, or a history of short term counts available to create AADT data.

Optional Attachments

Program Structure:

Project Implementation:

Safety Performance:

Evaluation:

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.