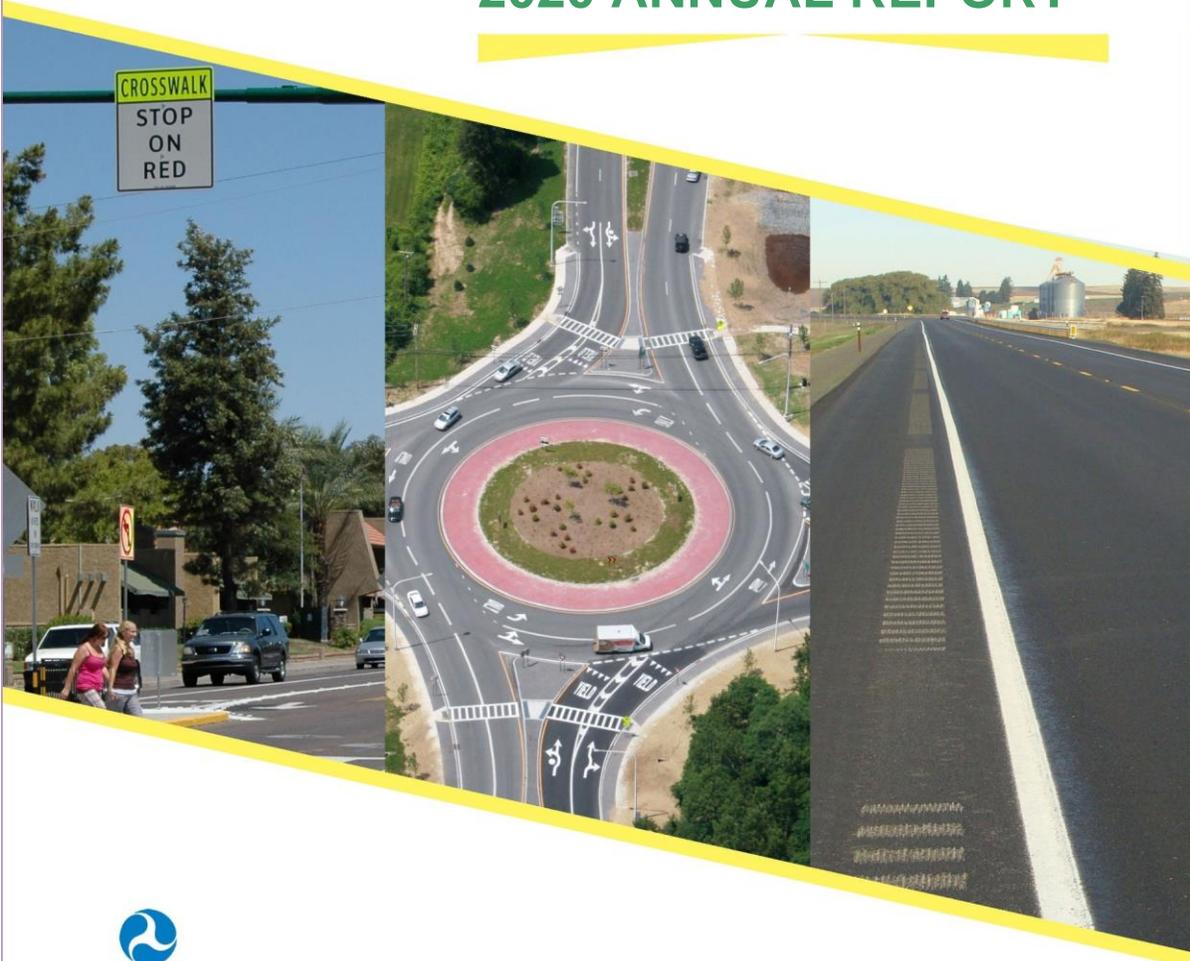




MISSISSIPPI

HIGHWAY SAFETY IMPROVEMENT PROGRAM 2020 ANNUAL REPORT



U.S. Department of Transportation
Federal Highway Administration

Photo source: Federal Highway Administration

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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

Introduction

The State of Mississippi's Highway Safety Improvement Program (HSIP), operating out of the Highway and Rail Safety Division (HRSD) within the Mississippi Department of Transportation (MDOT), has completed another year of prioritizing and programming projects that support the state's most recent Strategic Highway Safety Plan (SHSP). Over the last 12 months, the Mississippi HSIP has made great strides in supporting the goal of reducing fatal and serious injury crashes by programming safety projects that are both aggressive in reducing targeted crash types and innovative in their approach. These advancements of the last year include, but are not limited to, the following highlights:

Updated State Crash Report Form

Over the last year, Mississippi - through the Department of Public Safety - completed the process of updating the Mississippi Uniform Crash Report form. This process, which MDOT/HSIP personnel were a part of, will allow for more accurate crash reporting, leading to better data for analysis and use in programming projects to reduce injury crashes on our roadways. The update to the crash report form allowed Mississippi to become compliant with the National Highway Traffic Safety Administration (NHTSA)'s Model Minimum Uniform Crash Criteria (MMUCC) 4th edition, and will also put Mississippi in compliance with the forthcoming MMUCC 5th edition requirements, as well.

Suspected Serious Injury Definition to meet MMUCC 4th Edition Compliance

As a part of the crash report form update process, Mississippi updated its definition for a serious injury in order to be compliant with NHTSA's MMUCC 4th edition. Already, this update is having an effect - as detailed in other parts of this report - as the number of reported serious injuries have increased significantly. MDOT continues to analyze and process the trends related to this change in order to make the necessary adjustments to the program and reduce these serious injury crashes.

First Local Road Safety Plan

In the past year, Mississippi began work on its first Local Road Safety Plan, one of the Federal Highway Administration (FHWA)'s proven safety countermeasures. The plan, which is focused on the gulf coast counties of Hancock, Harrison, and Jackson, will involve stakeholders from across the three counties and their municipalities to review data trends and come up with a list of viable solutions across the 4E's - Education, EMS, Enforcement, and Engineering. Once completed, the plan will also include a list of priority locations and/or crash types/risk factors, providing a clear road map for the local road owners to program meaningful safety projects in the three counties. The state is also utilizing FHWA's State Transportation Innovation Council (STIC) Incentive Funds to develop additional Local Road Safety Plans which will be kicked off in the coming year.

Systemic Safety

MDOT has for years prioritized the use of systemic safety improvements such as Safety Edge and Rumble Stripe/Strips as a part of larger construction and mobility projects. More recently, the HSIP has worked to obligate more of its own funding towards supporting the installation of systemic measures such as cable barrier, edge line delineation enhancements (rumble stripe/strip, audible thermoplastic stripe, etc.), shoulder widening, and systemic access management.

Over the past year, Mississippi has also increased its focus on prioritizing improvements on the shoulder and beyond into the clear zone. With lane departure crashes presenting an ongoing concern in the state, Mississippi is moving more of its project focus towards those routes with higher percentages of lane departure crashes. For those locations, MDOT reviews for the presence of edge line delineation (*rumble stripe, audible thermoplastic stripe*), shoulder width and slope, and obstructions in the clear zone. The focus has been to make improvements along the entire route where narrow shoulders or clear zone hazards exist and where crash history shows patterns of vehicles leaving their lane at a higher than normal rate.

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A Culture of Safety

While MDOT has worked to address safety through quantifiable efforts such as safety projects, it has also continued its work over the past year to further institute a culture of safety across the entire department. The last year has seen MDOT Districts and its supporting Division personnel progress in how they give consideration to innovative countermeasures, as well as the mindset for safety in everyday maintenance and construction activities. More and more, the state is seeing MDOT employees looking to incorporate needed safety improvements as a part of all MDOT projects, whether they are safety funded or not. The following report for the state of Mississippi will show how MDOT has programmed its HSIP funds to continue improving safety across the state, as well as how the completed projects have been performing to support those efforts. We feel strongly that not all safety successes in the state will necessarily be captured in the report, but we know that in the last year the MDOT has worked tirelessly department-wide to ensure that Mississippi's roadways become safer for our fellow drivers than they were the year before.

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 Highway Safety Improvement Program staff includes full-time engineers as well as supporting data analysts and administrative support staff located in MDOT's Highway and Rail Safety Division. On a day-to-day basis, the HSIP staff works hand-in-hand with other MDOT Divisions in aiding the MDOT Districts towards advancing safety on Mississippi Highways. These regular efforts include data analysis, countermeasure discussion and coordination, as well as the administration of regular safety meetings to keep in contact with the Districts regarding safety matters and concerns.

One of the primary initiatives that the Mississippi HSIP staff takes on routinely throughout the year is holding regular safety meetings with its Districts. These meetings are an informal time for HSIP staff to go out into the Districts and discuss locations of concern that are revealed through data analysis, as well as locations that the Districts are fielding calls about from the public, local law enforcement, emergency responders, community leaders, and elected officials. These meetings have proven invaluable in establishing a rapport between District staff and the HSIP staff, which has aided in the identification of locations of need that might not have been found as quickly by data analysis alone. The HSIP has also seen these relationships promote a level of trust in the selection of alternative intersection countermeasures, as well as more progressive and non-typical countermeasures that are being implemented across the United States.

The second initiative that directly impacts HSIP projects in Mississippi is the Safety Countermeasure Selection Team meetings. These meetings were established by internal policy in the last several years to ensure that applicable MDOT Divisions (*Roadway Design Division, Right of Way Division, Traffic Engineering Division, Construction Division, Environmental Division, Planning Division, etc.*) and District personnel are extensively involved in the countermeasure selection process for HSIP projects. Before any potential location or set of locations are pursued for HSIP funding, any and all possible countermeasures are discussed with this group in a formalized meeting format. Site visits are conducted as a part of the meeting, and the entire process - including supporting data, location information, countermeasure recommendations, and a benefit to cost analysis - is recorded and summarized in report format. This formal report is then submitted for review and approval by meeting attendees as well as senior MDOT Officials. This ensures that HSIP projects in the state of Mississippi are fully vetted by MDOT staff, and that MDOT utilizes its HSIP funds in the most prudent manner possible.

Once projects are selected, programmed, and constructed using HSIP funds, the MDOT ensures that their performance is tracked and reported as a part of the HSIP Reporting process. The Mississippi HSIP typically conducts a five year before and after data analysis of each project in order to provide a healthy set of data to determine the performance of the project's countermeasure(s). In many cases, the state also continues to track

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projects beyond the five year window to ensure the countermeasure still works and/or other changes are not needed beyond the initial project.

Where is HSIP staff located within the State DOT?

Operations

In late 2019, MDOT reorganized its Divisions and Assistant Chief Engineers. As a part of this, the Highway and Rail Safety Division, which operates the state's HSIP, was placed within Operations. This branch also houses Planning Division, Research Division, and Traffic Engineering Division.

How are HSIP funds allocated in a State?

- Other-Central Office

MDOT's Highway and Rail Safety Division works with each of the six Construction and Maintenance Districts to identify problematic locations, determine the appropriate countermeasures, and plan/program subsequent projects to address these.

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

As a part of Mississippi's statewide safety efforts, local roads are given consideration for Highway Safety Improvement Program funding during each federal fiscal year. Potential projects are scrutinized under the same set of criteria set forth for state highway safety projects. All HSIP local road safety projects conducted by the Mississippi Department of Transportation are administered through the Circuit Rider Program.

The Circuit Rider program, established in 2012, provides training as well as technical assistance to local road administrators and staff. As a part of the technical assistance portion of the program, Circuit Riders (*along with MDOT Highway and Rail Safety Division personnel*) review crash data for local roads and conduct site visits with local government authorities to offer countermeasure identification assistance. Solutions offered by Circuit Riders on these site visits can either be resolved by the local road authority, or can be treated under several available Circuit Rider initiatives. Projects identified in need of additional assistance through the Circuit Rider program can be treated using one of the following:

1. Sign Project: At no cost to the local authority, MDOT provides warning and advisory signage to a local government agency where crash trends - systemic or "hot spot" in nature - have been identified, and where signs and/or low-cost countermeasures are deemed an appropriate corrective measure. The local authority may be asked to provide an in-kind service as part of the agreement, such as tree trimming within the Right-of-Way; otherwise, the signs are free of charge to the county or municipality. During the 2019 State Fiscal Year (*July '19 - June '20*), MDOT spent \$10,673 of state funds on this program providing over 200 signs and reflective sign post delineators to locals. Total to date, MDOT has given away (*includes ongoing/pending projects*) over 5,800 signs and reflective sign post delineators to locals.

2. Design Project: Should a location or set of locations within a county, municipality or other local governing body's jurisdiction be deemed eligible by MDOT for HSIP funding, those projects are pursued as a part of the statewide HSIP program. If selected for funding, projects are designed and constructed through the state's Local Public Agency (LPA) Program. To date, Circuit Rider projects have mostly involved low cost mitigation strategies including re-signing and re-striping of routes, the installation of reflective sign post delineators, raised pavement marker installation, etc.; however, more robust treatments will be given consideration for funding through the program as crash data dictates. There is no application deadline currently for local projects; projects are considered throughout the entire fiscal year. All local road safety projects are considered

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alongside state highway safety projects. MDOT continues to work with local roadway officials towards developing quality local road safety projects.

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

- Design
- Districts/Regions
- Local Aid Programs Office/Division
- Maintenance
- Operations
- Planning
- Traffic Engineering/Safety
- Other-Environmental

Describe coordination with internal partners.

Under current internal policy, applicable MDOT Divisions (*District personnel, Roadway Design Division, Traffic Engineering Division, Environmental Division, Right of Way Division, Planning Division, etc.*) are extensively involved in the countermeasure selection process. Before any potential location or set of locations are pursued for HSIP funding, any and all possible countermeasures are discussed with this group in a meeting format. Site visits are conducted as a part of the meeting, and the entire process - including supporting data, location information, countermeasure recommendations, etc. - is recorded in report format and approved by meeting attendees as well as MDOT leadership. This ensures that all HSIP projects in the state of Mississippi are fully vetted by the MDOT staff, and that MDOT utilizes its HSIP funds in the most prudent manner possible.

MDOT's HSIP staff also maintains a three year plan of active and ongoing HSIP projects and the spending anticipated to occur with each. This plan, which is reviewed and approved by FHWA - Mississippi Division at the beginning of each federal fiscal year, outlines where Mississippi intends to spend all of its HSIP dollars across the state. The plan lists project locations, project details, applicable approvals achieved or in process, anticipated funding - amounts and types (PE, Rights-of-Way, Construction, etc.) - and other details. As new projects arise or ongoing projects have unforeseen changes during the fiscal year, MDOT and FHWA work to review and revise the plan as necessary. This list is another effort between the state and federal partners in Mississippi that help us accurately and effectively track and spend safety dollars in the state.

Identify which external partners are involved with HSIP planning.

- FHWA
- Law Enforcement Agency
- Local Government Agency
- Regional Planning Organizations (e.g. MPOs, RPOs, COGs)

Describe coordination with external partners.

Federal Highway Administration - Mississippi Division (MS Division) is an active and helpful partner in program planning for the HSIP here in the state. MDOT coordinates with the MS Division for development, review and approval of the three-year HSIP project planning and programming list on an annual basis. The MS Division's Area Transportation Engineers and Safety Engineer are also involved in all quarterly HSIP meetings with MDOT Districts, as well as project planning and development meetings.

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Other external partners involved in the HSIP project planning process are local government agencies, MPOs, and MDOT's Local Public Agency (LPA) Division, who is responsible for managing many federally funded projects on local roadways within the State of Mississippi. MDOT coordinates with these partners when the HSIP is developing a potential Safety Circuit Rider project within the local agency's jurisdiction.

Program Methodology

Select the programs that are administered under the HSIP.

- HSIP (no subprograms)

In addition to the HSIP, Mississippi safety staff also operate the "Survive Your Drive" Safety Education Program. The "Survive Your Drive" Safety Education Program raises awareness of highway traffic safety issues faced by Mississippi motorists, including occupant protection/seat belt use, impaired driving and distracted driving. Safety professionals provide education and outreach at schools and community events across the state. Through presentations and simulator demonstrations, the public is educated with the driving knowledge and skills to make Mississippi highways safe. The program annually reaches more than 15,000 Mississippi residents through these presentations and demonstrations. The program also provides the public with Mississippi Department of Education-approved and common core-aligned safety education lesson plans for use in middle and high school classrooms

Program: HSIP (no subprograms)

Date of Program Methodology:8/3/2015

What is the justification for this program?

- Addresses SHSP priority or emphasis area
- FHWA focused approach to safety
- Other-Addresses state's priority of advancing safety

What is the funding approach for this program?

Funding set-aside

What data types were used in the program methodology?

Crashes	Exposure	Roadway
<ul style="list-style-type: none">• All crashes	<ul style="list-style-type: none">• Traffic• Volume	<ul style="list-style-type: none">• Median width• Horizontal curvature• Roadside features

What project identification methodology was used for this program?

- Crash frequency
- Crash rate
- 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?

- 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

Ranking based on B/C:1

Available funding:2

Cost Effectiveness:3

What percentage of HSIP funds address systemic improvements?

14

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

- Cable Median Barriers
- Clear Zone Improvements
- Horizontal curve signs
- Install/Improve Pavement Marking and/or Delineation
- Install/Improve Signing
- Pavement/Shoulder Widening
- Rumble Strips
- Safety Edge
- Upgrade Guard Rails

Mississippi's HSIP pays for systemic pavement markings when it's either an improvement above existing conditions (*i.e. going from a 4" stripe to a 6", going from 6" stripe to 6" audible thermo stripe*) or when it complements another countermeasure (*i.e. enhanced intersection warning signage, new rumble stripe installation, etc.*)

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

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- SHSP/Local road safety plan
- Stakeholder input
- Other-Input from internal partners

Does the State HSIP consider connected vehicles and ITS technologies?

Yes

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

Mississippi HSIP projects primarily consider ITS elements when they are a complimentary component of a larger project, such as traffic cameras at a new or improved signal, fiber interconnectivity between signals, or other measures to provide advanced warning to motorists.

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.

Currently, the Mississippi HSIP uses various principles that are cited in the Highway Safety Manual (HSM), though the manual is not used extensively in day to day analysis and decision-making. We are currently developing a crash data analysis system that will wholly incorporate the principles and practices outlined in the HSM, and will fully integrate them into how Mississippi evaluates locations across the state, and potential projects.

The state is also currently working through the process of calibrating multiple Safety Performance Functions (SPFs) for Mississippi crash data in hopes that those can be used once the new crash data analysis system is online.

Project Implementation

Funds Programmed

Reporting period for HSIP funding.

Federal 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)	\$29,747,547	\$29,747,547	100%
HRRR Special Rule (23 U.S.C. 148(g)(1))	\$218,719	\$218,719	100%
Penalty Funds (23 U.S.C. 154)	\$5,831,247	\$5,831,247	100%
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	\$3,953,199	\$3,953,199	100%
HSIP Apportionment Carryover (2019 rescission)	\$8,951,611	\$8,951,611	100%
OP MOT VEH/INTOX STEA03 (H080)	\$1,072,245	\$1,072,245	100%
OP MOT VEH/INTOX-TEA21 (Q080)	\$399,851	\$399,851	100%
Totals	\$50,174,419	\$50,174,419	100%

- Mississippi is reporting a carryover of \$8,951,611 from FFY 2019. These remaining funds were reserved in anticipation of the obligation authority rescission for that year.
- Mississippi is reporting \$1,472,095 in H080/Q080 funds remaining on the books that are to be obligated this FFY.
- Mississippi is reporting \$218,719 in HRRR funds remaining on the books that are to be obligated this FFY.
- In previous reports, Mississippi has reported RHCP funds here. This was done in error, as all RHCP funds in the state are reserved for Rail Crossing purposes only and not Highway Safety purposes.

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

1%

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

1%

In the past federal fiscal year, MDOT - working with applicable partners locally and with FHWA - has begun PE work on two local road safety projects. These projects are anticipated to have a completed design and be under construction in the upcoming fiscal year. The state has also begun work on its first Local Road Safety Plan, and is in the process of starting two more Local Road Safety Plans across the state utilizing FHWA STIC incentive funding awarded to the state.

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

1%

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

1%

Mississippi is reporting spending on two non-infrastructure projects in the past fiscal year - the ongoing update to the MDOT's crash analysis tool (SAMS) as well as the previously-mentioned Local Road Safety Plan. As mentioned in Question 24, the state is also in the early stages of starting two more Local Road Safety Plans utilizing FHWA STIC incentive funding awarded to the state this year.

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.

There are no impediments.

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
106961 - Circuit Rider Sign Donation/Brite Stick Program	Roadway signs and traffic control	Roadway signs and traffic control - other	1	Statewide	\$0	\$10673.33	State and Local Funds	Multiple/Varies	Multiple/Varies	0		County and Municipality	Spot	Roadway Departure, Intersections	Section 4.1 - Strategy 4, Section 4.2 - Strategy 3
107141 - District 1 Districtwide Intersection Improvement Project	Intersection traffic control	Systemic improvements - stop-controlled	118	Intersections	\$-605316	\$-672573	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0		State Highway Agency	Systemic	Intersections	Section 4.1 - Strategy 4
106268 - US 61 at Eagle's Nest Road	Intersection geometry	Intersection geometrics - modify skew angle	1	Intersections	\$-668587	\$-742874	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Other	8,655	65	State Highway Agency	Spot	Intersections	Section 4.1 - Strategy 3
104911 - US 51 at Star Landing Road	Intersection traffic control	Intersection traffic control - other	1	Intersections	\$-81901	\$-91001	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Other	10,884	55	State Highway Agency	Spot	Intersections	Section 4.1 - Strategy 1
106777 - US 49 at MS 42	Intersection traffic control	Intersection traffic control - other	1	Intersections	\$-1184228	\$-1315809	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Other	26,650	65	State Highway Agency	Spot	Intersections	Section 4.1 - Strategy 1
106863 - MS 12, from Old Highway 12 to Sta 17+47	Access management	Raised island - install new	2.6	Miles	\$-663527	\$-737252	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Other	23,650	45	State Highway Agency	Spot	Intersections	Section 4.1 - Strategy 6
106863 - MS 12, from Sta 17+47 to Russell Street	Access management	Raised island - install new	1.2	Miles	\$-145430	\$-161589	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Other	23,650	45	State Highway Agency	Spot	Intersections	Section 4.1 - Strategy 6
108142 - I-22 WB curve at Okannatie Creek	Roadway delineation	Roadway delineation - other	1	Curves	\$180000	\$200000	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Interstate	25,000	70	State Highway Agency	Spot	Lane Departure	Section 4.2 - Strategy 8
108459 - MS 12 from MS 50 to the Alabama State Line	Shoulder treatments	Widen shoulder - paved or other	15.5	Miles	\$135000	\$150000	HSIP (23 U.S.C. 148)	Rural	Minor Arterial	3,900	55	State Highway Agency	Systemic	Lane Departure	Section 4.2 - Strategy 1
108459 - MS 69 from Fabritek Rd to the Alabama State Line	Roadway delineation	Longitudinal pavement markings - new	10	Miles	\$135000	\$150000	HSIP (23 U.S.C. 148)	Rural	Minor Arterial	3,250	55	State Highway Agency	Systemic	Lane Departure	Section 4.2 - Strategy 1

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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
106858 - MS 9 at MS 341	Intersection geometry	Auxiliary lanes - add auxiliary through lane	1	Intersections	\$1137443	\$1263826	HSIP (23 U.S.C. 148)	Rural	Minor Arterial	7,550	55	State Highway Agency	Spot	Intersections	Section 4.1 - Strategy 3
107520 - US 278 at MS 345 and Rocky Ford Road/County Road 833	Access management	Median crossover - directional crossover	2	Intersections	\$3641481	\$4046090	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Other	22,472	65	State Highway Agency	Spot	Intersections	Section 4.1 - Strategy 1
106990 - US 45 at Ripley Road	Intersection traffic control	Modify traffic signal - modify signal mounting (spanwire to mast arm)	1	Intersections	\$5786	\$6429	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Other	12,500	65	State Highway Agency	Spot	Intersections	Section 4.1 - Strategy 2
106997 - I-55 fr 1 mi S of MS 14 to the Carroll CL	Roadside	Barrier - cable	21	Miles	\$1546960	\$1718844	HSIP (23 U.S.C. 148)	Rural	Principal Interstate	14,790	70	State Highway Agency	Systemic	Lane Departure	Section 4.2 - Strategy 6
106997 - I-55 fr 1 mi S of Martinsville to 1 mi N of MS 27	Roadside	Barrier - cable	8.1	Miles	\$1546960	\$1718844	HSIP (23 U.S.C. 148)	Rural	Principal Interstate	25,510	70	State Highway Agency	Systemic	Lane Departure	Section 4.2 - Strategy 6
106997 - I-55 fr Holmes CL to 1.5 mi N of MS 35	Roadside	Barrier - cable	19.6	Miles	\$1546960	\$1718844	HSIP (23 U.S.C. 148)	Rural	Principal Interstate	14,000	70	State Highway Agency	Systemic	Lane Departure	Section 4.2 - Strategy 6
108174 - US 61 at Griffen Road/Stoneville Road/Old Highway 61	Advanced technology and ITS	Dynamic message signs	1	Intersections	\$31500	\$35000	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Other	6,500	65	State Highway Agency	Spot	Intersections	Section 4.1 - Strategy 4
108425 - US 61 at MS 553	Access management	Median crossover - directional crossover	1	Intersections	\$239647	\$266274	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Other	14,700	65	State Highway Agency	Spot	Intersections	Section 4.1 - Strategy 1
107573 - US 82 and MS 1 in Greenville	Intersection traffic control	Systemic improvements - signal-controlled	24	Intersections	\$5705800	\$6339778	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Other	12,500	35	State Highway Agency	Spot	Intersections	Section 4.1 - Strategy 2
108488 - I-110 SB at US 90 WB	Roadway	Pavement surface - high friction surface	1	Curves	\$36000	\$40000	HSIP (23 U.S.C. 148)	Urban	Principal Interstate	4,800	35	State Highway Agency	Spot	Lane Departure	Section 4.2 - Strategy 8
108426 - MS 13 from Lumberton to Marion County	Roadway	Roadway widening - curve	14.5	Miles	\$22500	\$25000	HSIP (23 U.S.C. 148)	Rural	Minor Arterial	1,550	55	State Highway Agency	Systemic	Lane Departure	Section 4.2 - Strategy 3

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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
102186 - MS 43 between Picayune and Henleyfield	Alignment	Horizontal curve realignment	3	Curves	\$1424569	\$1582854	HSIP (23 U.S.C. 148)	Rural	Minor Arterial	3,570	55	State Highway Agency	Spot	Lane Departure	Section 4.2 - Strategy 4
107901 - MS 53 from S of Cuevas Gravel Pit Road to I-59	Roadway	Rumble strips - center	7.5	Miles	\$1789492	\$1988324	HSIP (23 U.S.C. 148)	Rural	Minor Arterial	2,950	55	State Highway Agency	Systemic	Lane Departure	Section 4.2 - Strategy 2
107464 - US 49 fr the Stone CL to South Gate Rd	Shoulder treatments	Widen shoulder - paved or other	19.9	Miles	\$16488833	\$18320926	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Other	12,300	65	State Highway Agency	Spot	Lane Departure	Section 4.2 - Strategy 5
106994 - US 49 from Peps Point Road to US 98	Intersection traffic control	Systemic improvements - signal-controlled	13	Intersections	\$1223011	\$1358901	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Other	23,900	45	State Highway Agency	Spot	Intersections	Section 4.1 - Strategy 2
107249 - US 84 at Reservoir Road/Magnolia Hill Road	Intersection traffic control	Intersection traffic control - other	1	Intersections	\$476523	\$529470	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Other	7,311	65	State Highway Agency	Spot	Intersections	Section 4.1 - Strategy 1
107249 - US 84 at MS 184 (west of Waynesboro)	Access management	Change in access - close or restrict existing access	1	Intersections	\$476523	\$529470	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Other	9,850	65	State Highway Agency	Spot	Intersections	Section 4.1 - Strategy 3
106778 - US 90 from Pascagoula Street to Chevron Drive	Intersection traffic control	Systemic improvements - signal-controlled	4.5	Miles	\$6149146	\$6832384	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Other	28,960	45	State Highway Agency	Spot	Intersections	Section 4.1 - Strategy 2
108247 - US 49 at MS 35	Intersection traffic control	Intersection traffic control - other	1	Intersections	\$135000	\$150000	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Other	18,980	65	State Highway Agency	Spot	Intersections	Section 4.1 - Strategy 2
107181 - US 49 SB Fr Main St in Mt. Olive to Walter Lott Rd. in Seminary	Shoulder treatments	Widen shoulder - paved or other	24.2	Miles	\$1919108	\$2132342	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Other	11,050	65	State Highway Agency	Spot	Lane Departure	Section 4.2 - Strategy 5
107181 - US 49 Covington County Intersection Improvements	Intersection geometry	Intersection geometry - other	3	Intersections	\$1127229	\$1252477	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Other	22,900	65	State Highway Agency	Spot	Intersections	Section 4.1 - Strategy 3
107253 (307400) - US 84 at MS 556	Roadway	Superelevation / cross slope	0.5	Miles	\$153000	\$170000	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Other	4,900	65	State Highway Agency	Spot	Lane Departure	Section 4.2 - Strategy 4

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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
106699 - US 84 at Auburn Road	Intersection traffic control	Intersection traffic control - other	1	Intersections	\$1716554	\$1907282	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Other	9,840	65	State Highway Agency	Spot	Intersections	Section 4.1 - Strategy 1
108048 - Coastal County Strategic Highway Safety Plan	Non-infrastructure	Transportation safety planning	1	Three Counties	\$180000	\$200000	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0		County Highway Agency	Systemic	Roadway Departure, Intersections	Section 4.1 - Strategy 7, Section 4.2 - Strategy 9
108122 - Lauderdale County Safety Circuit Rider Project	Roadway signs and traffic control	Curve-related warning signs and flashers	8	Locations	\$73048	\$81164	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0		County Highway Agency	Systemic	Lane Departure	Section 4.2 - Strategy 3
106856 - SAMS Version 2	Non-infrastructure	Data/traffic records	1	Crash Analysis Program	\$471666	\$524073	HSIP (23 U.S.C. 148)	N/A	N/A	0		State Highway Agency	Upgrades to crash analysis system necessary to facility HSIP program effectively	Data	This project supports all relevant SHSP strategies

- Funding values as shown above include both obligated expenditures so far this year for HSIP projects, as well as anticipated obligations for the remainder of this federal fiscal year (FFY). This information represents the best available data at this time for how Mississippi's HSIP funds are to be obligated this FFY.

- Any negative values provided for funding represent the return of funds to the program for one of the following reasons:

- > A decreased project cost based on received bids
- > Funds released at a project's close
- > Funds released due to project not moving forward within the HSIP

- Any "AADT" or "Speed" fields either with a 0 or that appear blank above are to be considered N/A - Not Applicable due to multiple routes or locations, or being non-infrastructure projects

- Some projects listed above as being HSIP (23 U.S.C 148) funded may also be partially funded with Penalty Funds (23 U.S.C. 154).

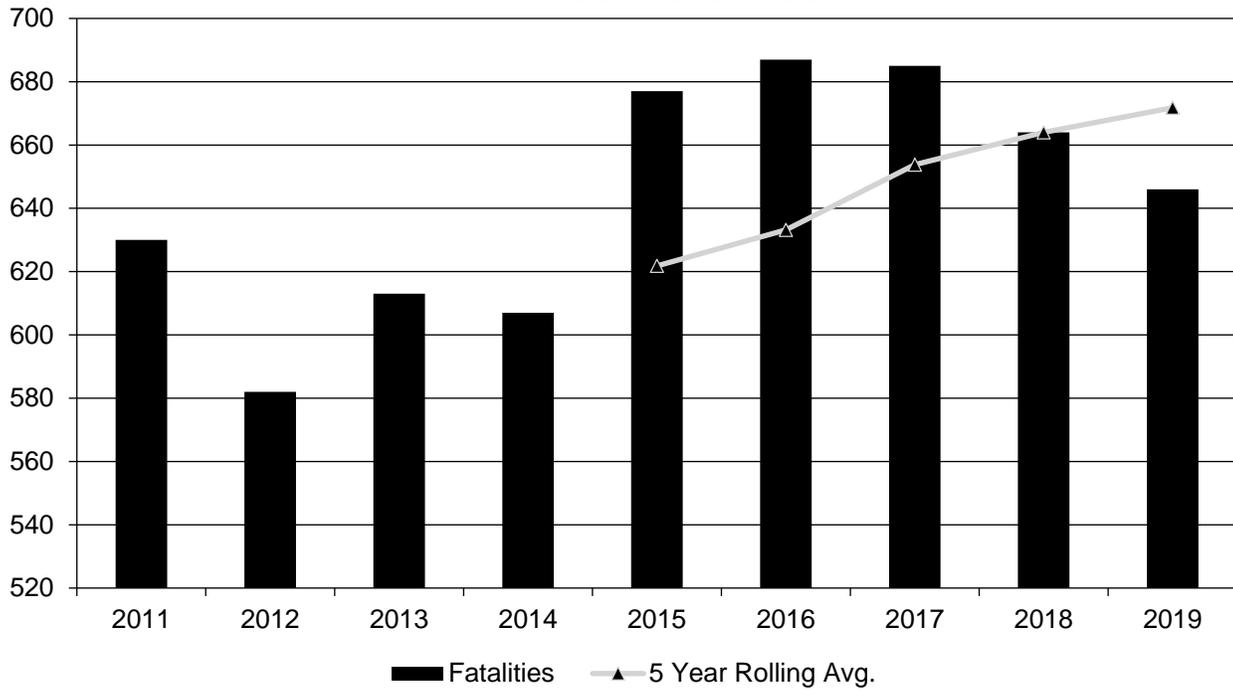
Safety Performance

General Highway Safety Trends

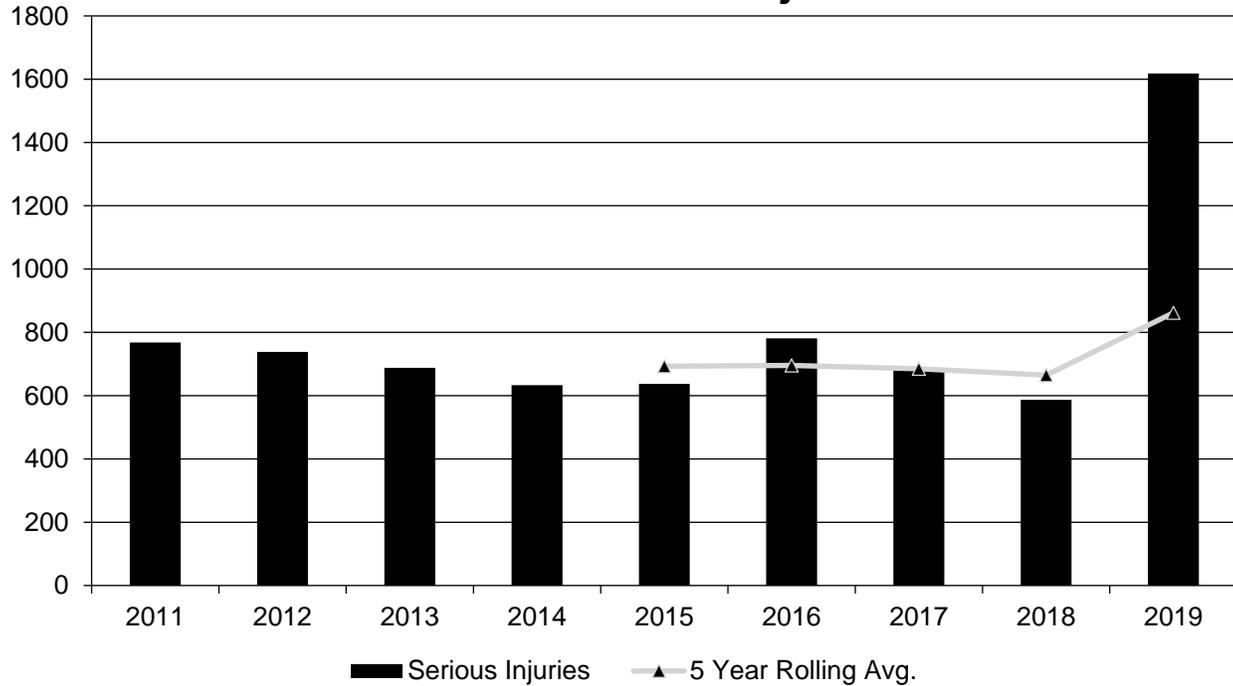
Present data showing the general highway safety trends in the State for the past five years.

PERFORMANCE MEASURES	2011	2012	2013	2014	2015	2016	2017	2018	2019
Fatalities	630	582	613	607	677	687	685	664	646
Serious Injuries	768	738	688	633	637	781	686	587	1,618
Fatality rate (per HMVMT)	1.620	1.510	1.580	1.540	1.700	1.690	1.680	1.630	1.570
Serious injury rate (per HMVMT)	1.980	1.910	1.780	1.600	1.600	1.920	1.680	1.440	3.940
Number non-motorized fatalities	60	58	60	68	75	72	80	96	78
Number of non-motorized serious injuries	36	49	46	44	41	58	59	50	109

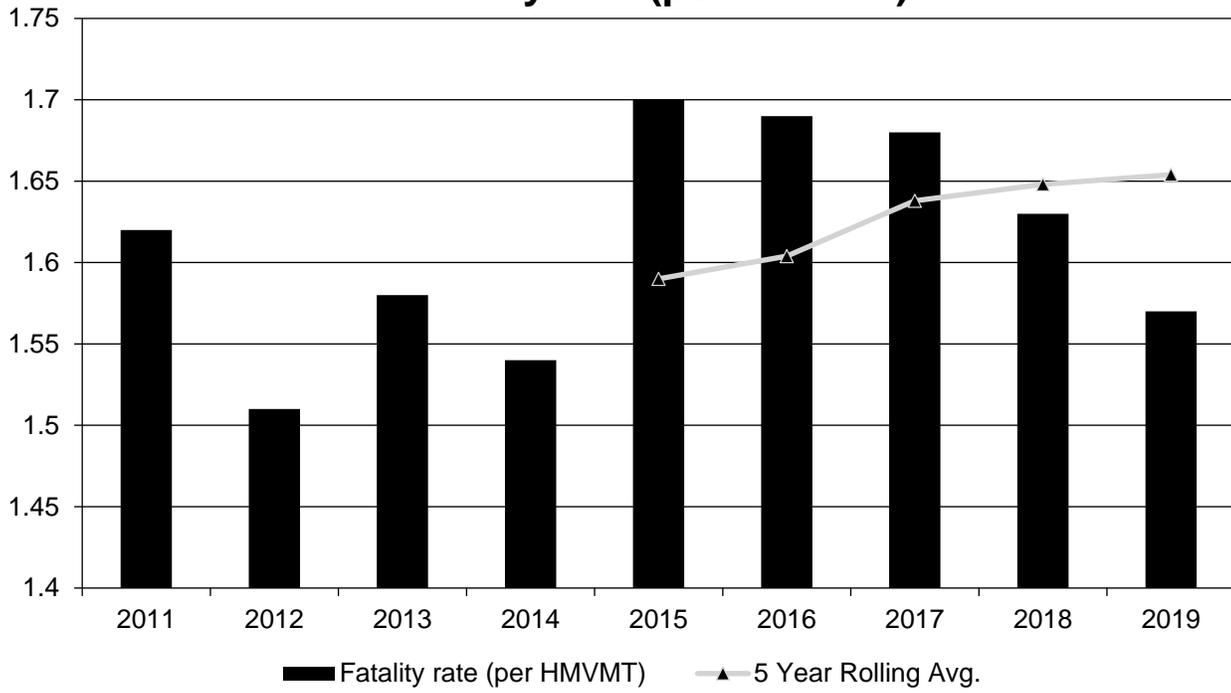
Annual Fatalities



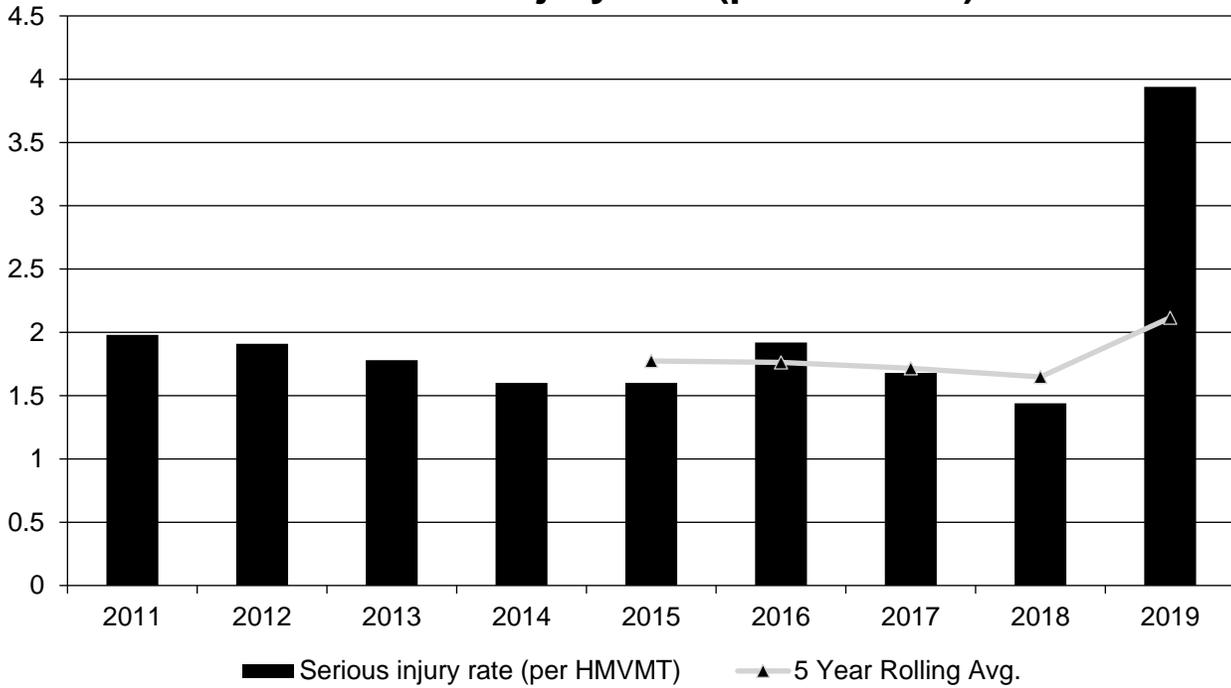
Annual Serious Injuries



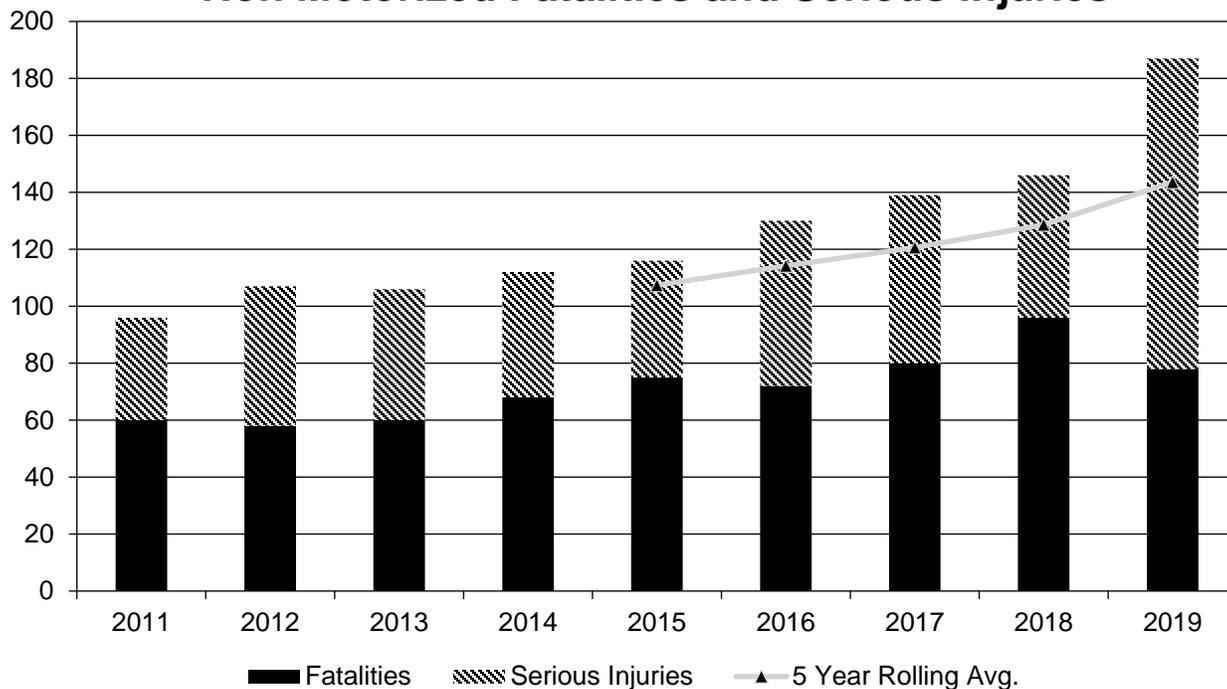
Fatality rate (per HMVMT)



Serious injury rate (per HMVMT)



Non Motorized Fatalities and Serious Injuries



- The 2019 reported traffic fatalities for the state of Mississippi is an accurate representation of what we in the Mississippi HSIP anticipate the number to be based upon our own analyses as well as conversations with the state's FARS Analyst, the Department of Public Safety, and other applicable officials within the state. That number is not yet certified, though, and therefore may be subject to change before final admission into the FARS Public Database. This same note applies to the reported number of non-motorized fatalities for 2019.

- Serious Injuries are reported using Mississippi's Safety Analysis Management System (SAMS).

- Serious Injuries recorded in 2019 have experienced a significant increase from annual recorded Serious Injuries as shown in the previous 8 years included in the above table. This is due to the state crash reporting form being changed in September of 2019, which included the state adopting a MMUCC 4th edition-compliant definition of suspected serious injury. The previous Injury A was defined as:

"Life Threatening - Injuries where there is a high probability of the loss of life". Compare that with the new definition, which is:

"Suspected serious injury: A suspected serious injury is any injury other than fatal which results in one or more of the following: • Severe laceration resulting in exposure of underlying tissues/muscle/organs or resulting in significant loss of blood • Broken or distorted extremity (arm or leg) • Crush injuries • Suspected skull, chest or abdominal injury other than bruises or minor lacerations • Significant burns (second and third degree burns over 10% or more of the body) • Unconsciousness when taken from the crash scene • Paralysis"

These definitions are clearly different, with the updated definition substantially increasing the type and total number of injuries that were not captured in previous Injury A crashes. Because specific information on injury types is not collected on the crash form, the state is also unable to extrapolate the data to do a true comparison of serious injury crashes: old definition versus new. Early data analysis suggests that Serious Injuries will increase by a multiple of 5 to 7 times previously-reported Life Threatening injury figures. The new serious injury definition went into effect September 2019 which only covered the last four months of 2019.

2020 Mississippi Highway Safety Improvement Program

Based on the increase in serious injury crashes that occurred over that four month span, we anticipate an even greater increase forthcoming in 2020.

Describe fatality data source.

FARS

- Mississippi relies wholly on FARS data for fatal crashes when available; however, we do use data from our Safety Analysis Management System (SAMS) as an interim measure when FARS data is not available and/or finalized when needed for analysis.

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

Year 2019

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	50	45	1.1	0.97
Rural Principal Arterial (RPA) - Other Freeways and Expressways	0	0	0	0
Rural Principal Arterial (RPA) - Other	105.4	120.8	2.03	2.31
Rural Minor Arterial	112	103.8	3.17	2.93
Rural Minor Collector	12.4	22.2	3.01	5.4
Rural Major Collector	127.2	142.2	3.17	3.55
Rural Local Road or Street	49.6	78.8	0.89	1.4
Urban Principal Arterial (UPA) - Interstate	37.4	36.8	0.89	0.87
Urban Principal Arterial (UPA) - Other Freeways and Expressways	4	5.4	0.82	1.08
Urban Principal Arterial (UPA) - Other	76.6	110.4	1.49	2.14
Urban Minor Arterial	31.4	52	1.21	2
Urban Minor Collector	24	31.8	1.24	1.65
Urban Major Collector	0			

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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 Local Road or Street	18	40.4	0.6	1.44

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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	447.6	382.2	1.82	1.56
County Highway Agency	137.6	168.4	1.56	1.91
Town or Township Highway Agency				
City of Municipal Highway Agency	55.8	68.4	0.83	1.02
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)	8.6	8		
Railroad				
State Toll Authority				
Local Toll Authority				
Other Public Instrumentality (e.g. Airport, School, University)				
Indian Tribe Nation				

- Due to changes in the state crash report form over the last year, Mississippi was unable to provide ownership information for 2019. The latest data provided for ownership is from 2018. Mississippi anticipates being able to provide this data again starting with the 2021 report.

Safety Performance Targets

Safety Performance Targets

Calendar Year 2021 Targets *

Number of Fatalities:685.4

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

MDOT's performance target for number of fatalities is based on a five year rolling average developed using 11 years' (2009-2019) worth of historical crash data. Prediction models are developed using Excel's FORECAST.ETS exponential triple smoothing formula. While we always maintain a target of zero fatalities, historical trends in the state are more in line with what is presented as the "target" for the state.

Number of Serious Injuries:2178.4

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

MDOT's performance target for number of serious injuries is based on a five year rolling average developed using 11 years' (2009-2019) worth of historical crash data. Prediction models are developed using Excel's FORECAST.ETS exponential triple smoothing formula. Mississippi's performance target submitted for 2021 is substantially higher than it has been in previous years. This is due to a change in 2019 to how the state defines serious injury. An update was made in order to meet national standards and requirements for MMUCC 4th edition. With this change in place, Mississippi is already seeing a significant rise in reported serious injuries, and anticipates that number to grow in 2020. Though we maintain a true target of lowering serious injuries to zero, the state must set its target in line with historical trends - including accounting for the recent rise due to the definition change.

Fatality Rate:1.690

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

MDOT's performance target for number of fatalities is based on a five year rolling average developed using 11 years' (2009-2019) worth of historical crash data. The volumes used to calculate the rates are provided by MDOT's Planning Division.

Serious Injury Rate:5.410

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

MDOT's performance target for number of serious injuries is based on a five year rolling average developed using 11 years' (2009-2019) worth of historical crash data. The volumes used to calculate the rates are provided by MDOT's Planning Division.

Total Number of Non-Motorized Fatalities and Serious Injuries:181.7

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

MDOT's performance target for number of non-motorized fatalities and serious injuries is based on a five year rolling average developed using 11 years' (2009-2019) worth of historical crash data. Prediction models are developed using Excel's FORECAST.ETS exponential triple smoothing formula. While we always maintain a target of zero fatalities, historical trends in the state are more in line with what is presented.

2020 Mississippi Highway Safety Improvement Program

While developing performance targets, MDOT's HSIP personnel met virtually numerous times with the Mississippi Office of Highway Safety (MOHS), who is responsible for the state's NHTSA Highway Safety Plan (HSP). Our offices worked hand in hand to determine the appropriate performance targets regarding fatalities, fatality rate, and serious injuries that are included in both the HSP as well as the HSIP Report. Our offices agreed to the three targets, and MOHS reported the joint targets as a part of their 2020 HSP.

The remaining two targets - serious injury rate and non-motorized fatalities and serious injuries - were set using the same analysis tools and procedures as the three shared goals with MOHS.

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

MDOT worked hand-in-hand alongside the Mississippi Office of Highway Safety (MOHS) in reviewing the data necessary to develop the three shared safety performance targets: Fatalities, Fatality Rate, and Serious Injuries. MDOT - more specifically the staff responsible for management of the state's HSIP - worked from there to review data available and develop the two remaining performance targets: Serious Injury Rate and Non-Motorized Fatalities and Serious Injuries.

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	697.0	671.8
Number of Serious Injuries	556.0	861.8
Fatality Rate	1.706	1.654
Serious Injury Rate	1.356	2.116
Non-Motorized Fatalities and Serious Injuries	131.4	143.6

In September 2019, the Mississippi Department of Public Safety (DPS) updated its statewide crash report. As a part of that effort, the Mississippi DPS also updated its definition for "serious injury" in order to meet NHTSA's MMUCC 4th edition and be in compliance. As mentioned in detail in Question 30, the previous injury A definition was defined as "Life Threatening" and did not include injuries that are now include under the national "Serious Injury" definition (i.e. broken bone, non-life threatening lacerations, etc.) As a result of this, **Mississippi saw its reported serious injuries increase by 5 to 7 times previous year values** in the last 3-4 months of the year. This, as can be expected, completely voided any ability by the state to meet its previously-set performance target for any performance measure involving serious injuries; Mississippi missed its serious injury target by over 300 injuries, as well those set for serious injury rate and non-motorized fatalities and serious injuries. This is quite a juxtaposition from the fatality categories (*number of fatalities; fatality rate*) where our target-setting methodology allowed us to meet both measures. Mississippi is never satisfied with simply meeting these measures; our true target and goal is always zero fatalities and serious injuries on our roadways.

Even with foreknowledge that the state intended to change its serious injury definition, it was always going to be an uphill battle for Mississippi to set an achievable performance target using the existing definitions for

2020 Mississippi Highway Safety Improvement Program

injuries at the time that the performance measures were developed as required. The state has relied heavily on historical data, trends and a long-established sense of how officers in the state choose to identify and code life threatening injuries as a result of a crash. With this change, there was no way to account for how officers from 82 counties, the Mississippi Highway Patrol, as well as thousands of municipalities would choose to code crashes under this new definition without first establishing at least several months' worth of known values. Even then, anomalies and variances in month by month totals are likely to make it difficult for Mississippi to responsibly project its future trends and goals, at least through the end of 2020.

With all of this in mind, Mississippi is requesting that the three performance measures involving serious injury - Serious Injuries, Serious Injury Rate, and Non-Motorized Fatalities and Serious Injuries - be withheld from the evaluation of the state's performance for 2019. The FHWA - Mississippi Division has also been contacted to make this request as well.

Applicability of Special Rules

Does the HRRR 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	2013	2014	2015	2016	2017	2018	2019
Number of Older Driver and Pedestrian Fatalities	60	66	68	97	90	92	107
Number of Older Driver and Pedestrian Serious Injuries	40	25	33	47	57	41	130

Evaluation

Program Effectiveness

How does the State measure effectiveness of the HSIP?

- Other-Before and After Crash Analysis

- The state measures the true effectiveness of the projects it programs and constructs by the reduction of targeted crashes.

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

Mississippi tracks crash data - before construction begins as well as after construction is completed - for all projects in the state which utilize HSIP funds in any way (*excludes planning projects as well as PE-only expenditures*). The state tracks project area crash data for a five year time period for before and after construction is completed. While it does begin post-construction tracking immediately, Mississippi does not begin reporting project performance in the report until at least three years of post-construction data is available.

A significant program update is that the state is more closely tracking the effectiveness of these projects at **reducing targeted crash types** as well as the more severe (*fatal and serious injury*) crashes present at the location. This moves away from an older practice of tracking project effectiveness by comparing all crashes in the project area in the before and after periods. Mississippi believes that this will give a better sense of the true effectiveness of our projects, as well as aid in the state's long-term goal of developing state-specific Crash Reduction Factors based on Mississippi projects.

In reviewing the project tracking matrix provided as an attachment to the report and the data included therein, Mississippi noted several points of interest as they relate to the overall data trends. Of the 47 project locations that Mississippi is reporting on, **66% have produced a per-year reduction in the targeted crash type**. This is a good indicator that overall, the projects selected are producing the kind of crash reductions that the state hopes to achieve. On the other side of things, some projects have seen an increase in the targeted crash type. A large portion of the projects producing an increase in targeted crash type involve installation of a new traffic signal or modification of an existing traffic signal. Though disappointing, this information is incredibly useful as it can help Mississippi better assess a countermeasure's effectiveness at certain locations involving certain road characteristics and potentially remove or de-prioritize those that aren't as well-performing as a part of its overall program.

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

- # miles improved by HSIP
- HSIP Obligations
- Increased awareness of safety and data-driven process
- Increased focus on local road safety
- More systemic programs
- Organizational change
- Policy change

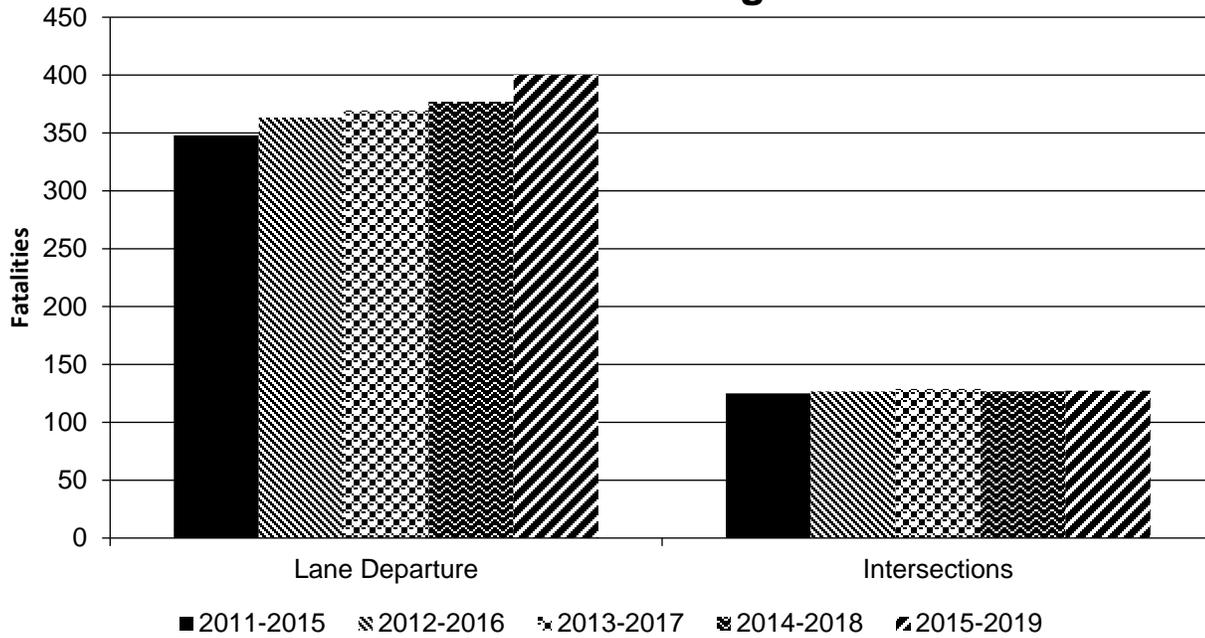
Effectiveness of Groupings or Similar Types of Improvements

Present and describe trends in SHSP emphasis area performance measures.

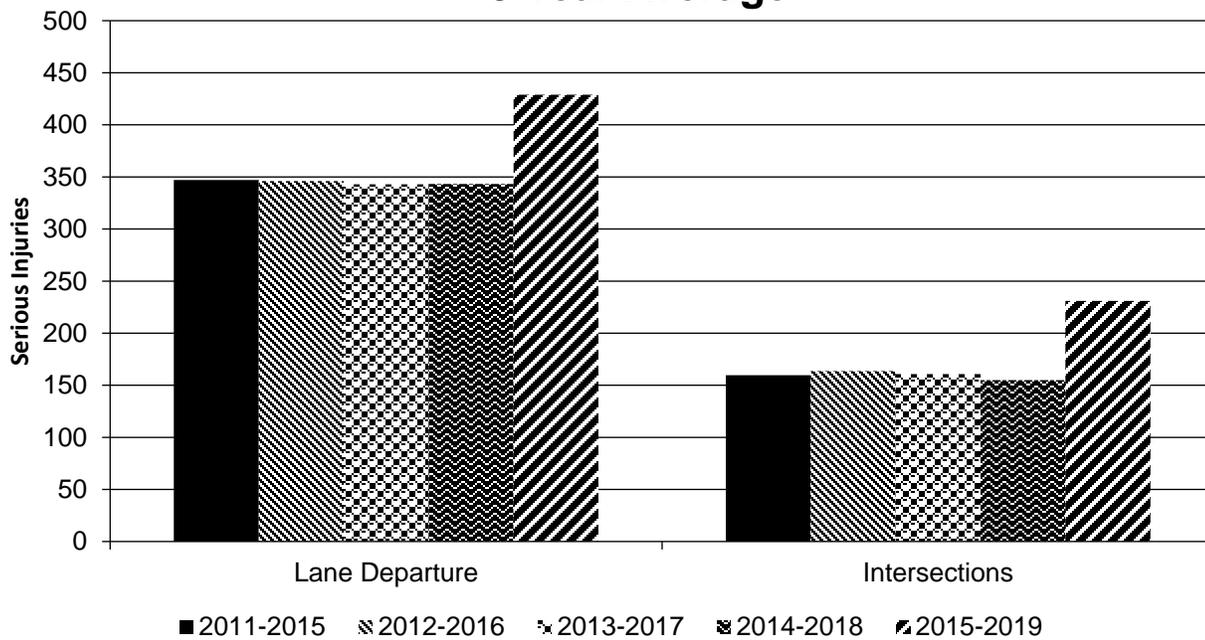
Year 2019

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		400.2	429	0.98	1.05
Intersections		127.4	231		

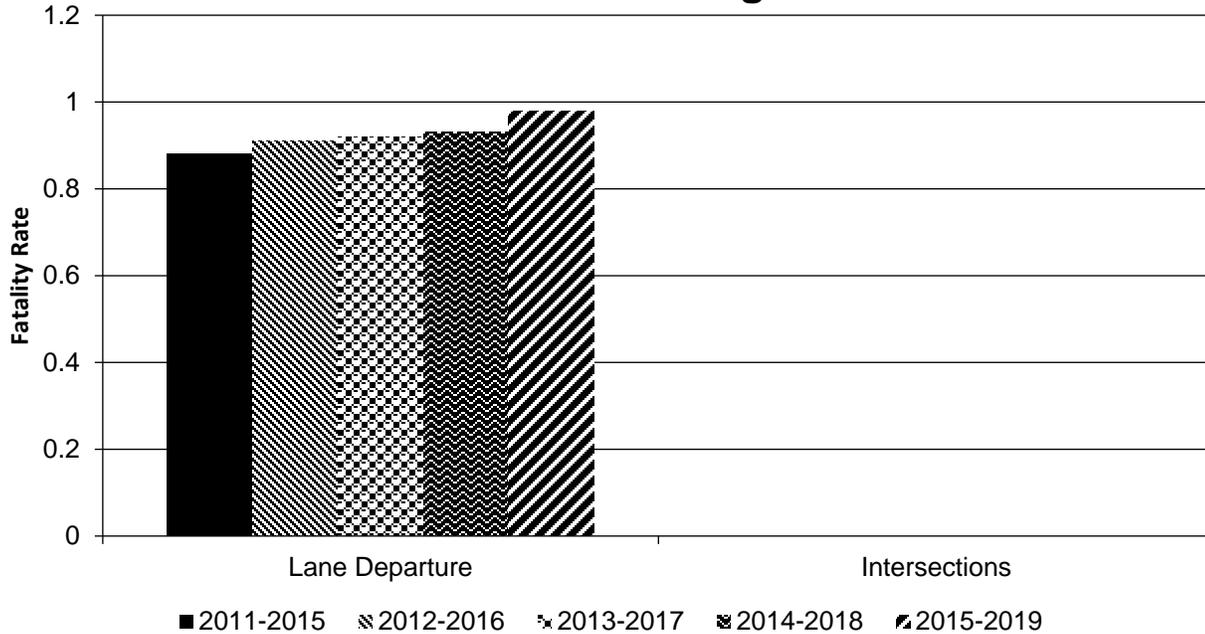
Number of Fatalities 5 Year Average



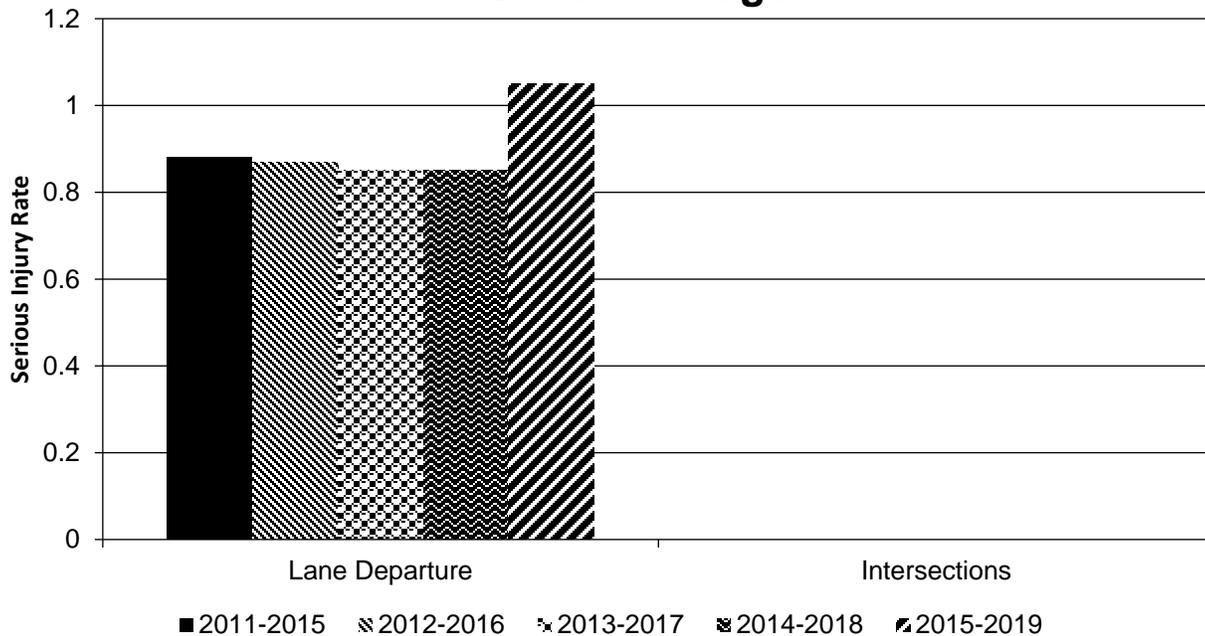
Number of Serious Injuries 5 Year Average



Fatality Rate (per HMVMT) 5 Year Average



Serious Injury Rate (per HMVMT) 5 Year Average



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

No

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As the state has just begun more extensive efforts to track countermeasure effectiveness and targeted crash type reduction, it does not yet have any results or evaluations to report. As more projects are programmed and the state is able to gather more data on different countermeasures, it is anticipated that there will be more to report here in the next several years.

Project Effectiveness

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

Mississippi has attached to this report a PDF copy of its project tracking matrix. This matrix includes the following for each project:

- Project Number
- Functional Classification
- Project Description (including additional details as necessary)
- "Before" period years, "After" period years
- Total crashes and crash severity, "Before" and "After"
- Targeted crashes and crash severity, "Before" and "After" (*targeted crashes include those intended to be treated by the project-specific countermeasure(s)*)

Compliance Assessment

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

01/03/2019

What are the years being covered by the current SHSP?

From: 2019 To: 2024

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

2024

Mississippi has added funding to its three year HSIP Project Listing to begin the process of developing the new plan in Federal Fiscal Year 2023 with the plan to be approved and in place in January 2024.

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	100		
	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								
Functional Class (19) [19]	100	100					100	100	100	100	

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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					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]			98	98						
	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				

2020 Mississippi Highway Safety Improvement Program

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	99.75	99.75	100.00	100.00	100.00	100.00	100.00	100.00

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

While MDOT has reviewed traffic control for 100% of the state, traffic control for several locations remains indeterminate. The state will continue working towards 100% completion of this effort as available data allows.

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 state is in the final stages of completing this assessment with only intersection traffic control remaining. As critical data becomes accessible to aid in this effort, the state intends to finish these remaining items in time to meet the 2026 deadline.

Optional Attachments

Program Structure:

Project Implementation:

Safety Performance:

Q46 - Before and After Tracking.pdf

Evaluation:

Q46 - Before and After Tracking.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.