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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. 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 State of Mississippi's Highway Safety Improvement Program (HSIP), operating out of the Highway Safety Division (HSD) 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:

#### Continued Focus on FHWA's Proven Safety Countermeasures

Mississippi continues to put an emphasis on countermeasures listed in the Federal Highway Administration's list of Proven Safety Countermeasures, including several new roundabouts, additional restricted crossing uturn (RCUT) locations, rumble strips/stripes, Local Road Safety Plans, etc.

#### Systemic Safety

MDOT has for years prioritized the use of systemic safety improvements such as Safety Edge and Rumble Strips/Stripe 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 strip/stripe, 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 greater rate than anticipated for its homogenous class.

#### 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 Safety Division (formerly Highway and Rail Safety Division). On a day-to-day basis, the HSIP staff works hand-in-hand with other MDOT Divisions and Districts as well as local public agencies in advancing safety on Mississippi roadways. These regular efforts include data analysis, countermeasure discussion and coordination, as well as the administration of regularly scheduled 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 regularly scheduled 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 to be 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

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

On the local road safety side, MDOT administers safety to local roads in the state through its Circuit Rider program. This program aims to provide crash data, technical assistance, countermeasure recommendations, training, and even project funding where needs are identified on public roadways. The program provides warning and advisory signage for crash reduction purposes to local public agencies for free, develops Local Road Safety Plans on behalf of LPAs in order to identify and prioritize local safety needs, and provides funding for design and construction services related to identified safety projects.

#### Where is HSIP staff located within the State DOT?

Operations

#### How are HSIP funds allocated in a State?

- SHSP Emphasis Area Data
- Other-Central Office

#### 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 Local Public Agency (LPA) 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 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, sign supports and appropriate hardware are provided free of charge to the county or municipality. During the 2023 State Fiscal Year (*July '22 - June '23*, MDOT spent \$30,481 of state funds on this program.

**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 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
- Other-Circuit Riders

# Describe coordination with internal partners.

Under current internal guidelines, 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 future 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 MDOT 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 (*Preliminary Engineering (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 involved with project planning and development meetings.

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 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

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

Yes

HSIP projects in Mississippi are identified, planned, and implemented utilizing 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. These reports are known as Safety Countermeasure Alternative Reports (*attached is a screenshot of the program where all of these are kept within MDOT*). This formal report is then submitted for review and approval by meeting attendees and senior MDOT Officials, including District Engineers, Assistant Chief Engineers, and the Chief Engineer. This ensures that HSIP projects in 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 projects beyond the five year window to ensure the countermeasure still works and/or other changes are not needed beyond the initial project.

# Select the programs that are administered under the HSIP.

• HSIP (no subprograms)

# 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

All crashes

TrafficVolume

- 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?

27

# 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
- Other-Audible Thermoplastic Striping
- Other-Rumble Stripe
- Pavement/Shoulder Widening

- **Rumble Strips** •
- Safety Edge •

For "install/improve pavement marking and/or delineation" - the state has begun to target groups of roadways with no existing edge line rumble strip/stripe to install audible edge/centerline thermoplastic striping. There has also been a concerted effort to install wider edge line stripes on local roads, as well as the audible stripe.

#### 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-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 has also completed the process of calibrating multiple Safety Performance Functions (SPFs) for Mississippi crash data for inclusion in the new crash analysis system. It also intends to take on calibration of more site types in the coming year(s).

# **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)	\$28,069,647	\$28,069,647	100%
HRRR Special Rule (23 U.S.C. 148(g)(1))	\$3,279,148	\$3,279,148	100%
VRU Safety Special Rule (23 U.S.C. 148(g)(3))	\$5,665,445	\$5,665,445	100%
Penalty Funds (23 U.S.C. 154)	\$6,824,788	\$6,824,788	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	\$5,678,285	\$5,678,285	100%
Totals	\$49,517,313	\$49,517,313	100%

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

2%

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

2%

In FFY 23, MDOT let to construction another local road safety project, implementing low-cost countermeasures on a large number of miles within the county. The state is completing design for another project of a similar type which will go to construction in FFY 24, and is beginning PE on another two similar projects. The state is also in discussions with multiple counties to put together a regional LRSP utilizing systemic safety analyses to identify areas for potential improvement for more future projects.

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

1%

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

1%

In FFY 23, MDOT spent less than 1% of its funds on data or safety planning efforts. One project taken on was the QA/QC of SPF implementation into the new Safety Analysis Management System (SAMS). Another two projects that have gotten underway involve safety planning efforts to study the constructability of a roundabout in a specific location, and another deals with the full depth analysis of how a countermeasure new to the state would function, taken on as a part of project decision making and selection.

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

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

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

There are no impediments.

# Describe any other aspects of the State's progress in implementing HSIP projects on which the State would like to elaborate.

Over the past several years, MDOT has used the Force Account program to install low cost, quicklyimplementable safety countermeasures at multiple locations throughout the state. This process has allowed MDOT to implement certain safety solutions using HSIP funds to pay for state force installations and materials. So far, the state has installed countermeasures including Intersection Conflict Warning Systems (ICWS), Flashing Yellow Arrow (FYA), super-elevation correction with repaving, Prepare to Stop When Flashing at signals, and more. This has proven to be an invaluable tool for the state's safety program, and in certain instances (installing quick-curb delineators to directionalize an existing intersection while an RCUT is being designed and constructed), has provided a more immediate way to solve a safety issue while design and construction is ongoing for a more permanent solution.

# 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	FUNCTION	NAL CATION	AADT	SPEED	OWNERSHIP	METHOD FOR SITE SELECTION	SHSP EMPHASIS AREA	SHSP STRATEGY
102168 - MS 7 at MS 9W	Intersection traffic control	Modify control – Modern Roundabout	1	Intersections	\$234712	\$260791	HSIP (23 U.S.C. 148)	Rural	Principal Other	Arterial-	11,585	55	State Highway Agency	Spot	Intersections	4.1.1
102168 - MS 7 at MS 9W - Supplemental Roundabout Lighting	Lighting	Intersection lighting	1	Intersections	\$88684	\$98538	HSIP (23 U.S.C. 148)	Rural	Principal Other	Arterial-	11,585	55	State Highway Agency	Spot	Intersections	4.1.1
106778 - US 90 from Pascagoula Street to Chevron Drive	Intersection traffic control	Systemic improvements – signal-controlled	4.5	Miles	\$-78375	\$-87083	HSIP (23 U.S.C. 148)	Urban	Principal Other	Arterial-	28,960	45	State Highway Agency	Spot	Intersections	4.1.2
106857 - MS 25 Tishomingo County	Intersection geometry	Intersection geometry - other	38.9	Miles	\$537293	\$596992	HSIP (23 U.S.C. 148)	Rural	Principal Other	Arterial-	1,564	55	State Highway Agency	Spot	Intersections	4.1.1, 4.1.2, 4.1.3, 4.1.4, 4.1.5
107249 - US 84, Reservoir Road/Magnolia Hill Rd, MS 184	Intersection traffic control	Modify control – new traffic signal	2	Intersections	\$735616	\$817351	HSIP (23 U.S.C. 148)	Rural	Principal Other	Arterial-	17,161	65	State Highway Agency	Spot	Intersections	4.1.1
107253 (301100) - MS 25 at Longview Road - Force Account	Intersection geometry	Innovative Intersection (e.g. MUT, RCUT, QR)	1	Intersections	\$39318	\$43687	HSIP (23 U.S.C. 148)	Rural	Principal Other	Arterial-	8,466	65	State Highway Agency	Spot	Intersections	4.1.1
107253 (305400) - MS 25 at River Bend Rd - Force Account	Roadway delineation	Delineators post- mounted or on barrier	1	Intersections	\$10350	\$11500	HSIP (23 U.S.C. 148)	Rural	Principal Other	Arterial-	8,050	65	State Highway Agency	Spot	Intersections	4.1.1
107464 - US 49 fr the Stone CL to South Gate Rd	Shoulder treatments	Widen shoulder – paved or other (includes add shoulder)	19.9	Miles	\$76500	\$85000	HSIP (23 U.S.C. 148)	Rural	Principal Other	Arterial-	12,300	65	State Highway Agency	Spot	Lane Departure	4.2.5
107573 - US 82 and MS 1 in Greenville	Intersection traffic control	Systemic improvements – signal-controlled	24	Intersections	\$-499526	\$-555029	HSIP (23 U.S.C. 148)	Urban	Principal Other	Arterial-	12,500	35	State Highway Agency	Spot	Intersections	4.1.2
108069 - MS 7 at Eddie L Smith Dr	Intersection traffic control	Modify control – Modern Roundabout	1	Intersections	\$216789	\$240877	HSIP (23 U.S.C. 148)	Urban	Principal Other	Arterial-	8,790	40	State Highway Agency	Spot	Intersections	4.1.1

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
108100LPA - Warren County Safety Circuit Rider Project (ten routes)	Roadway delineation	Longitudinal pavement markings – new	47.9	Miles	\$1292826	\$1292826	HSIP (23 U.S.C. 148)	Rural	Multiple/Varies	99,999	99999	County Highway Agency	Systemic	Lane Departure	4.2.3
108142 - I-22 WB curve at Okannatie Creek	Roadway	Superelevation / cross slope	1	Curves	\$-58931	\$-65479	HSIP (23 U.S.C. 148)	Rural	Principal Arterial- Interstate	25,000	70	State Highway Agency	Spot	Lane Departure	4.2.4
108174 - US 61 at Stoneville Rd/Elizabeth Rd/Old US 61	Advanced technology and ITS	Intersection Conflict Warning System (ICWS)	1	Intersections	\$4169	\$4632	HSIP (23 U.S.C. 148)	Rural	Principal Arterial- Other	6,500	65	State Highway Agency	Spot	Intersections	4.1.4
108247 - US 49 at MS 35	Intersection traffic control	Intersection traffic control - other	4	Intersections	\$2025000	\$2250000	HSIP (23 U.S.C. 148)	Rural	Principal Arterial- Other	18,980	65	State Highway Agency	Spot	Intersections	4.1.2
108426 - MS 13 from Lumberton to Marion County	Roadway	Roadway widening - curve	14.5	Miles	\$127573	\$141748	HSIP (23 U.S.C. 148)	Rural	Minor Arterial	1,550	55	State Highway Agency	Spot	Lane Departure	4.2.3
108619 - Local Road Safety Plans - Copiah, Warren Counties	Miscellaneous	Local road safety plans	2	Counties	\$-78451	\$-87168	HSIP (23 U.S.C. 148)	N/A	N/A	99,999	99999	County Highway Agency	Systemic	Lane Departure	4.2.9
108641 - MS 302 at Braybourne Main	Intersection traffic control	Modify control – new traffic signal	3	Intersections	\$4556364	\$5062627	HSIP (23 U.S.C. 148)	Urban	Principal Arterial- Other Freeways & Expressways	32,950	65	State Highway Agency	Spot	Intersections	4.1.1
108646 - US 82 fr US 45 to Military Rd	Roadway	Pavement surface – high friction surface	5.8	Miles	\$5057562	\$5619513	HSIP (23 U.S.C. 148)	Urban	Principal Arterial- Other Freeways & Expressways	25,250	60	State Highway Agency	Spot	Lane Departure	4.2.8
108667 - MS 583 fr Topisaw Dr to US 84	Shoulder treatments	Widen shoulder – paved or other (includes add shoulder)	5.6	Miles	\$-48898	\$-54331	HSIP (23 U.S.C. 148)	Rural	Major Collector	2,600	55	State Highway Agency	Spot	Lane Departure	4.2.1
108800 - MS 9 from MS 12 to the Webster County Line	Roadway	Rumble strips – edge or shoulder	15.3	Miles	\$23894	\$26549	HSIP (23 U.S.C. 148)	Rural	Minor Arterial	2,070	55	State Highway Agency	Systemic	Lane Departure	4.2.1
108806 - District 5 Districtwide Intersection	Intersection traffic control	Systemic improvements – stop-controlled	84	Intersections	\$-1655170	\$-1839078	HSIP (23 U.S.C. 148)	Rural	Multiple/Varies	99,999	99999	State Highway Agency	Spot	Intersections	4.1.4

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
Improvement Project															
108823 - US 61 at Hambrick Rd	Intersection geometry	Innovative Intersection (e.g. MUT, RCUT, QR)	1	Intersections	\$1800000	\$2000000	HSIP (23 U.S.C. 148)	Rural	Principal Arterial- Other	10,700	65	State Highway Agency	Spot	Intersections	4.1.1
108839 - US 49W fr Belzoni to Isola - WB lanes	Shoulder treatments	Widen shoulder – paved or other (includes add shoulder)	7.6	Miles	\$-51031	\$-56701	HSIP (23 U.S.C. 148)	Rural	Principal Arterial- Other	5,800	65	State Highway Agency	Systemic	Lane Departure	4.2.1
108882 - MS 39 fr Dale Dr to N Hills St	Access management	Median crossover - directional crossover	1	Miles	\$6370476	\$7078307	HSIP (23 U.S.C. 148)	Urban	Principal Arterial- Other	23,000	45	State Highway Agency	Spot	Intersections	4.1.6
108883 - I-20 fr the Natchez Trace to Robinson Rd; I-55 fr MS 463 to the Big Black River	Roadside	Barrier – cable	12.7	Miles	\$5498760	\$6109733	HSIP (23 U.S.C. 148)	Urban	Principal Arterial- Interstate	43,100	70	State Highway Agency	Systemic	Lane Departure	4.2.6
108900 - District 2 Districtwide Intersection Improvement Project	Intersection traffic control	Systemic improvements – stop-controlled	83	Intersections	\$7168477	\$7964974	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	99,999	99999	State Highway Agency	Spot	Intersections	4.1.4
108902 - I-55 SB at I-20 WB HFST	Roadway	Pavement surface – high friction surface	1	Curves	\$-222078	\$-246753	HSIP (23 U.S.C. 148)	Urban	Principal Arterial- Interstate	32,000	70	State Highway Agency	Spot	Lane Departure	4.2.8
108983 - MS 540 from US 49 to MS 541	Roadway delineation	Roadway delineation - other	6.3	Miles	\$438075	\$486750	HRRR Special Rule (23 U.S.C. 148(g)(1))	Rural	Major Collector	1,300	55	State Highway Agency	Spot	Lane Departure	4.2.1
109119 - US 49 at Siloam Road and MS 149	Access management	Median crossover - directional crossover	2	Intersections	\$225000	\$250000	HSIP (23 U.S.C. 148)	Rural	Principal Arterial- Other	21,000	45	State Highway Agency	Spot	Intersections	4.1.1
109120 - I-55 at Brookway Blvd	Interchange design	Interchange improvements	1	Interchanges	\$225000	\$250000	HSIP (23 U.S.C. 148)	Urban	Principal Arterial- Interstate	15,260	70	State Highway Agency	Spot	Intersections	4.1.1
109138 - US 49 fr MS 13 to MS 149 (includes MS	Intersection geometry	Intersection geometry - other	3	Intersections	\$202500	\$225000	HSIP (23 U.S.C. 148)	Rural	Principal Arterial- Other	21,500	65	State Highway Agency	Spot	Intersections	4.1.1

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
540 and East St)															
109143 - MS 15 fr N of CR 561 to the Winston CL	Roadway	Rumble strips – center	8.8	Miles	\$-305809	\$-339788	HSIP (23 U.S.C. 148)	Rural	Minor Arterial	5,300	55	State Highway Agency	Spot	Lane Departure	4.2.1,4.2.2
109145 - US 45 at MS 184/Central Ave and US 45 at Landfill/Patton Creek Rd	Intersection geometry	Innovative Intersection (e.g. MUT, RCUT, QR)	2	Intersections	\$2160000	\$2400000	HSIP (23 U.S.C. 148)	Rural	Principal Arterial- Other	6,950	65	State Highway Agency	Spot	Intersections	4.1.1
109154 - US 49 fr St Charles St to Orange Grove Rd	Access management	Median crossover - directional crossover	2	Intersections	\$1800000	\$2000000	HSIP (23 U.S.C. 148)	Urban	Principal Arterial- Other	45,000	50	State Highway Agency	Spot	Intersections	4.1.6
109188LPA - Tate County Safety Circuit Rider Project (eight routes)	Roadway delineation	Longitudinal pavement markings – new	57.8	Miles	\$52956	\$52956	HRRR Special Rule (23 U.S.C. 148(g)(1))	Rural	Multiple/Varies	99,999	99999	County Highway Agency	Systemic	Lane Departure	4.2.3
109195 - MS 3 at Willie Morris Parkway	Intersection traffic control	Modify control – Modern Roundabout	1	Intersections	\$22500	\$25000	HSIP (23 U.S.C. 148)	Urban	Principal Arterial- Other	6,153	55	State Highway Agency	Spot	Intersections	4.1.1
109197 - US 49 Gulfport fr Creosote Rd to Turkey Creek	Pedestrians and bicyclists	Install sidewalk	1	Miles	\$5710445	\$6344939	HSIP (23 U.S.C. 148)	Urban	Principal Arterial- Other	41,000	50	State Highway Agency	Spot	VRU requirement	
109199 - District 5 Audible Stripe (MS 13, MS 16, MS 19, MS 22, MS 43, MS 481, MS 493)	Roadway delineation	Roadway delineation - other	67	Miles	\$-373871	\$-415412	HSIP (23 U.S.C. 148)	Rural	Multiple/Varies	99,999	55	State Highway Agency	Systemic	Lane Departure	4.2.1,4.2.2
109216 - District 6 Audible Stripe (MS 44, MS 589, MS 590, MS 42, MS 18)	Roadway delineation	Roadway delineation - other	61.6	Miles	\$1600717	\$1778574	HSIP (23 U.S.C. 148)	Rural	Multiple/Varies	99,999	55	State Highway Agency	Systemic	Lane Departure	4.2.1,4.2.2
109274 - MS 27 at West	Intersection traffic control	Modify control – Modern Roundabout	1	Intersections	\$315000	\$350000	HSIP (23 U.S.C. 148)	Rural	Minor Arterial	4,422	55	State Highway Agency	Spot	Intersections	4.1.1

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
Thomas E Jolly Drive															
109314 - District 7 Districtwide Intersection Improvement Project	Intersection traffic control	Systemic improvements – stop-controlled	1	Intersections	\$307800	\$342000	HSIP (23 U.S.C. 148)	Rural	Multiple/Varies	99,999	99999	State Highway Agency	Systemic	Intersections	4.1.4
109323 - US 49 at E Wortham Rd and Desoto Park Rd	Intersection traffic control	Modify control – new traffic signal	2	Intersections	\$186300	\$207000	HSIP (23 U.S.C. 148)	Rural	Principal Arterial- Other	14,745	65	State Highway Agency	Spot	Intersections	4.1.2
109324 - MS 15 at MS 485 - Feasibility Study	Miscellaneous	Transportation safety planning	1	Intersections	\$171000	\$190000	HSIP (23 U.S.C. 148)	Rural	Minor Arterial	7,621	55	State Highway Agency	Spot	Intersections	4.1.1
109325 - District 6 Audible Stripe (MS 533, MS 29, MS 588, MS 510, MS 533, MS 594, MS 13, MS 43)	Roadway delineation	Roadway delineation - other	68	Miles	\$1635356	\$1817062	HRRR Special Rule (23 U.S.C. 148(g)(1))	Rural	Multiple/Varies	99,999	55	State Highway Agency	Systemic	Lane Departure	4.2.1,4.2.2
109326 - District 5 Audible Stripe (MS 21, MS 19, MS 492, MS 39, MS 21/39)	Roadway delineation	Roadway delineation - other	116	Miles	\$2648899	\$2943221	HSIP (23 U.S.C. 148)	Rural	Multiple/Varies	99,999	55	State Highway Agency	Systemic	Lane Departure	4.2.1,4.2.2
109334 - SAMSv2 SPF Calibration Integration	Miscellaneous	Data analysis	1	Statewide	\$45000	\$50000	HSIP (23 U.S.C. 148)	N/A	N/A	99,999	99999	Data	Data	Data	
109338 - MS 42 from I-59 to Sunrise Road	Access management	Median crossover - directional crossover	13	Intersections	\$270000	\$300000	HSIP (23 U.S.C. 148)	Urban	Principal Arterial- Other	18,000	55	State Highway Agency	Spot	Intersections	4.1.1
109363 - US 84 at MS 184 and MS 588	Intersection geometry	Innovative Intersection (e.g. MUT, RCUT, QR)	2	Intersections	\$270000	\$300000	HSIP (23 U.S.C. 148)	Rural	Principal Arterial- Other	21,396	65	State Highway Agency	Spot	Intersections	4.1.1
109367 - MS 569 from MS	Roadway	Rumble strips – edge or shoulder	10	Miles	\$423000	\$470000	HRRR Special Rule	Rural	Major Collector	920	55	State Highway Agency	Systemic	Lane Departure	4.2.1

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
24 to Coleman Road							(23 U.S.C. 148(g)(1))								
109394 - MS 302 at Alexander Rd	Miscellaneous	Transportation safety planning	1	Intersections	\$135000	\$150000	HSIP (23 U.S.C. 148)	Urban	Principal Arterial- Other	35,900	50	State Highway Agency	Spot	Intersections	4.1.1
109395 - MS 43 fr MS 13 to MS 28	Shoulder treatments	Widen shoulder – paved or other (includes add shoulder)	7.6	Miles	\$213579	\$237310	HRRR Special Rule (23 U.S.C. 148(g)(1))	Rural	Major Collector	1,750	55	State Highway Agency	Systemic	Lane Departure	4.2.5
109456 - District 3 Audible Stripe (MS 16, MS 432, MS 433)	Roadway delineation	Roadway delineation - other	36.5	Miles	\$900000	\$1000000	HRRR Special Rule (23 U.S.C. 148(g)(1))	Rural	Multiple/Varies	99,999	55	State Highway Agency	Systemic	Lane Departure	4.2.1,4.2.2

- 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. - There is no VRU Special Rule code available in the table template; however, 109197 - US 49 Gulfport fr Creosote Rd to Turkey Creek provided in the project listing is VRU eligible and anticipated to expend the entirety of Mississippi's required 15% of HSIP funds in accordance with requirements set forth under BIL for states meeting for that special rule in a given FFY. - Any negative values provided for funding represent the return of funds to the program for one of the following reasons: greater than A decreased project cost based on received bids greater than Funds released at the project's close greater than Funds released due to the project not moving forward within the HSIP - Any "AADT" or "Speed" fields either with a 99999 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	2014	2015	2016	2017	2018	2019	2020	2021	2022
Fatalities	607	677	687	685	663	642	748	772	729
Serious Injuries	633	637	781	686	587	1,579	3,630	3,562	3,344
Fatality rate (per HMVMT)	1.540	1.700	1.690	1.680	1.630	1.560	1.910	1.880	1.820
Serious injury rate (per HMVMT)	1.600	1.600	1.920	1.680	1.440	3.840	9.180	8.630	8.370
Number non-motorized fatalities	68	75	72	80	96	78	117	107	96
Number of non- motorized serious injuries	44	41	58	59	50	109	208	180	194



# **Annual Serious Injuries**





# Serious injury rate (per HMVMT)





# Non Motorized Fatalities and Serious Injuries

- The 2022 reported fatalities for the state of Mississippi are 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 2022.

- 2020 and 2021's listed fatality figures were revised due to an amendment made in the certified FARS data for Mississippi.

- Serious Injuries are reported using a combination of Mississippi's Safety Analysis Management System (SAMS) and direct queries against the Mississippi Department of Public Safety's (DPS) eCrash database.

- Serious Injuries recorded in 2022 have, as anticipated, experienced a significant increase from annual recorded Serious Injuries as shown in the previous years from 2018 prior. This is due to the state uniform 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 vastly 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.

#### Describe fatality data source.

FARS

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

Year 2022								
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	54.8	126.4	1.15	2.64				
Rural Principal Arterial (RPA) - Other Freeways and Expressways			0	0				
Rural Principal Arterial (RPA) - Other	106.4	308.6	2.02	5.86				
Rural Minor Arterial	114	331.8	3.19	9.29				
Rural Minor Collector	12.2	48.2	2.99	11.8				
Rural Major Collector	120.2	420.4	3.05	10.72				
Rural Local Road or Street	63.6	240.6	1.09	4.15				
Urban Principal Arterial (UPA) - Interstate	41	121	0.97	2.89				
Urban Principal Arterial (UPA) - Other Freeways and Expressways	13	33.2	2.49	6.33				
Urban Principal Arterial (UPA) - Other	81.8	407.4	1.63	8.2				
Urban Minor Arterial	34.2	200	1.34	7.88				
Urban Minor Collector	25.2	144.8	1.47	8.5				
Urban Major Collector			0	0				
Urban Local Road or Street	23.8	148.4	0.92	5.79				

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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	491	1,580.2	1.95	6.29
County Highway Agency	141.8	531.4	1.61	6.05
Town or Township Highway Agency				
City or Municipal Highway Agency	80	476	1.3	7.82
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				

Year 2022

Functional classification fatality information is derived from SAMS when not available in NHTSA's Fatality and Injury Reporting System (FIRST). For 2022, these values are still unofficial, and thus may not equal the total fatality values reported elsewhere. The state also utilizes unofficial counts from FARS analysts as well as the DPS' eCrash system in its estimations.

# Safety Performance Targets

# Safety Performance Targets

# Calendar Year 2024 Targets \*

# Number of Fatalities:711.0

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

A requirement of the HSIP's Safety Performance Targets is to match DPS's Safety Performance Measures in the annual Highway Safety Plan. In a joint effort, MDOT and DPS began development of targets by utilizing realized data trends within the state to project future numbers for fatalities, fatality rate and serious injuries. For this year, in order to meet requirements outlined by NHTSA in 23 CFR 1300.11(b)(3)(ii)(B)(2), MDOT and DPS agreed to show a constant rate of fatal and serious injury performance rather than strictly following trendlines as was done in years past. This was done in order to satisfy language in the above listed CFR that states that... "the State shall provide - ... Quantifiable performance targets that show constant or improved performance compared to the safety levels..." For congruity, the remaining safety targets are developed in the same manner (serious injury rate and non-motorized fatal and serious injuries).

# Number of Serious Injuries:2520.0

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

See Above

#### Fatality Rate:1.760

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

See Above

#### Serious Injury Rate:6.260

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

See Above

#### Total Number of Non-Motorized Fatalities and Serious Injuries:247.0

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

See Above

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

MDOT works hand-in-hand each year 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 the management of the state's HSIP -

worked from there to review the 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 2022 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	723.0	710.8
Number of Serious Injuries	2905.0	2540.4
Fatality Rate	1.810	1.760
Serious Injury Rate	7.300	6.292
Non-Motorized Fatalities and Serious Injuries	349.6	247.0

Based on reported values provided in this year's HSIP report, it appears Mississippi will meet for all five performance measurement categories as listed above. Though many factors play a role in this, the dip in fatalities from 2021 to 2022 likely aided in the state coming in under the set figure.

The same can likely be said for serious injuries as, after two consecutive years of increases, the state saw a moderate decrease in the number of suspected serious injuries from 2021 to 2022.

# Applicability of Special Rules

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

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

Yes

# 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	2016	2017	2018	2019	2020	2021	2022
Number of Older Driver and Pedestrian Fatalities	97	90	92	107	77	100	78
Number of Older Driver and Pedestrian Serious Injuries	47	57	41	130	257	318	370

# Evaluation

# Program Effectiveness

## How does the State measure effectiveness of the HSIP?

• Other-Before and After Crash Analysis

# 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 219 project locations that Mississippi is reporting on, there has been a 29% overall reduction in targeted crash types, or 969 overall targeted crashes. 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 the use of countermeasures 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.

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)
Intersections		128.8	816.8		
Lane Departure		417.4	1,301.8	1.03	3.24







# Serious Injury Rate (per HMVMT) 5 Year Average



# 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?

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

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

ROAD TYPE	*MIRE NAME (MIRE	NON LOCAL PAVED ROADS - SEGMENT		NON LOCAL PAVED ROADS - INTERSECTION		NON LOCAL PAVED ROADS - RAMPS		LOCAL PAVED ROADS		UNPAVED ROADS	
	NO.)	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

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				

ROAD TYPE	*MIRE NAME (MIRE	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]

# 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 has very little left to collect and should have no issues completing all required MIRE tasks by the given deadline.

# **Optional Attachments**

Program Structure:

SCAR Home Page.pdf 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.