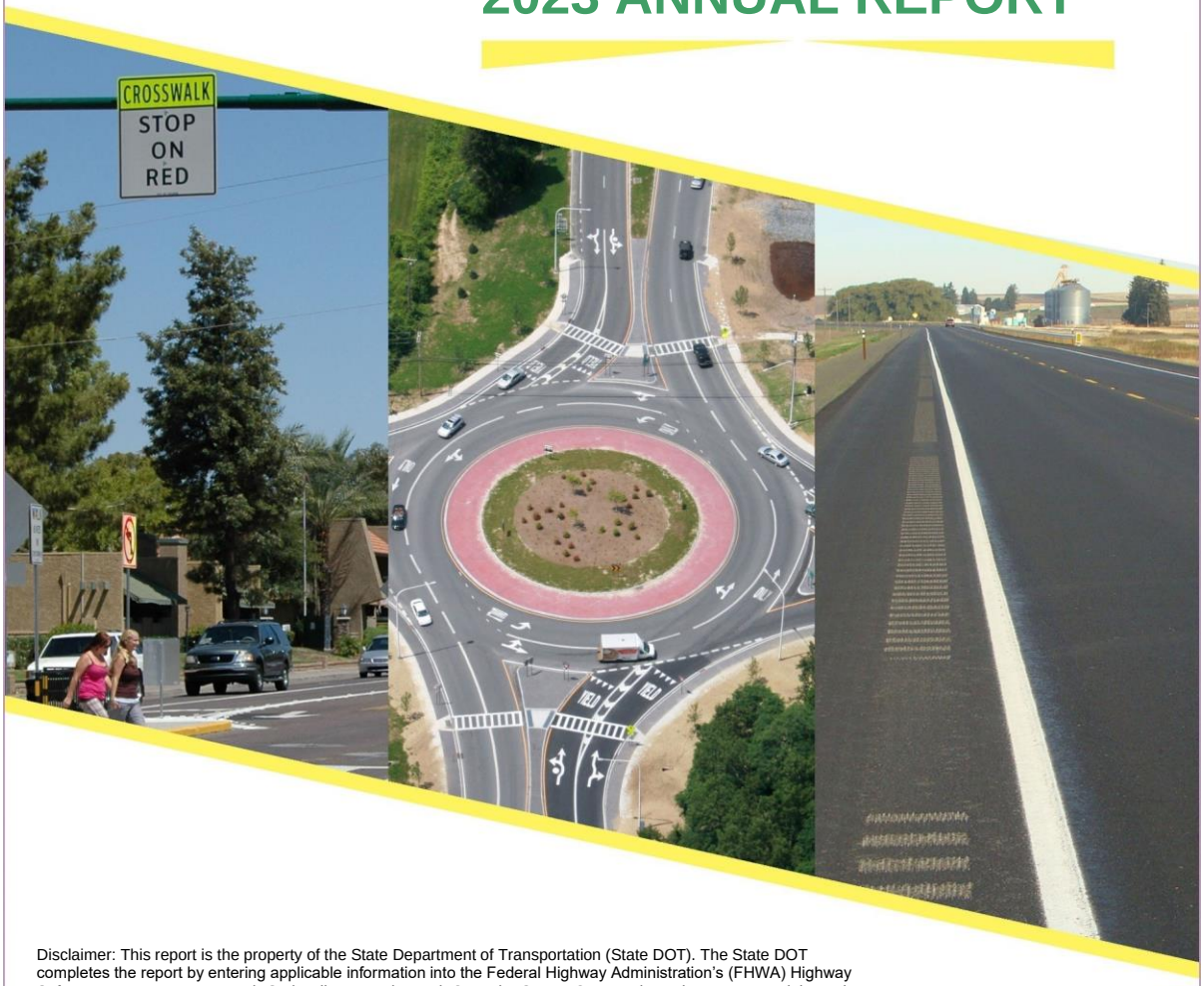
WEST VIRGINIA

HIGHWAY SAFETY IMPROVEMENT PROGRAM

2023 ANNUAL REPORT



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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 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 924.14, states are required to report annually on the progress being made to advance HSIP implementation and evaluation efforts. This report describes West Virginia's implementation and effectiveness of its Highway Safety Improvement Program from July 1, 2022 through June 30, 2023 and satisfies, the requirements of 23 U.S.C. 148(h) and 23 CFR 924.14. The established formal report consists of five sections: emphasizing program administration, progress in implementing projects, progress in achieving safety performance targets, assessment of the effectiveness of the improvements, and compliance assessment.

In 2007, West Virginia developed its first Strategic Highway Safety Plan, which focused on nine specific emphasis areas. At the time West Virginia had 432 fatalities and 5,994 serious injuries. Since then, the HSIP has primarily focused on emphasis areas identified in the SHSP.

Working through the Safety Management Task Force, West Virginia revised the SHSP in 2017. The 2017 SHSP had five specific emphasis area: Road Departure, Impaired Driving, Occupant Protection, Speeding and Aggressive Driving, and Improving Highway Safety Data. Each emphasis area included action plans that utilized the four E's of Safety to guide the implementation.

The 2022 SHSP builds upon the success and lessons learned of previous plans and will serve as the state's safety plan from 2022 through 2026. The Plan includes eight emphasis areas. Four of these are Statewide in nature: Speeding and Aggressive Driving, Roadway Departure, Occupant Protection, Older Driver Involved, and Impaired Driving. While roadway departure still remains a significant issue in West Virginia the percent of fatalities and serious injuries falling within that category have decreased significantly. As such, we have the opportunity to be proactive in some other areas that are not at the same concern as the other four but are trending upward. While not trending statewide, two emphasis areas were selected to be regionally focused; Intersections and Pedestrians. To ensure support of the SHSP, the HSIP and integrating safety into the DOT programmatically another emphasis area was selected: Improving Highway Safety Data to continue a strong concentration of effort in this area.

WVDOH has members on all emphasis are teams but is lead on infrastructure improvements. These improvements make up the majority of the HSIP projects and are mainly focused on reducing road departure crashes; however, infrastructure projects are planned which fall with the pedestrian and intersection emphasis areas too.

In the 15 years since the SHSP was adopted, West Virginia has experienced a significant drop in fatalities and serious injuries. The 25% decline in fatalities was across all road classifications and HSIP funded projects throughout the state. Even though WVDOH maintains 94% of the state's system included local roads, all routes of the system are evaluated for HSIP funding. WVDOH works with local governments as well as Metropolitan Planning Organizations to ensure the State's safety needs are being addressed.

The Railway Highway Crossing Report will be submitted as a separate document and as such is not included in within this report.

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.

West Virginia's Highway Safety Improvement Program (HSIP) is coordinated by Traffic Engineering Division. The Division is responsible for reviewing and evaluating any project that is a candidate for highway safety funds. The initial review and evaluation of a potential project will include the analysis of crash data for the location, a field review of the site (as appropriate), and the collection of any other information found appropriate to evaluate the proposed project. All projects are supported by the Strategic Highway Safety Plan and were selected using a data driven process.

Once a positive safety benefit is determined to exist for a project, the methodology discussed later is used to select the prioritize projects for the State's HSIP. Upon project selection for the HSIP, the Traffic Engineering Division is responsible for selecting an HSIP funding category for the project, submitting appropriate programming documents where HSIP funds are encumbered, and projects are assigned within the State's Statewide Transportation Improvement Program (STIP). Traffic Engineering Division monitors the use of HSIP funds and evaluating the effectiveness of a project following its completion. The annual apportionment for HSIP for West Virginia in fiscal year 2023 was approximately $34.5 million. These funds can be used either for stand-alone projects or in conjunction with other funding to partially fund the safety enhancement portion of a larger project.

Where is HSIP staff located within the State DOT?

Other-Traffic Engineering

How are HSIP funds allocated in a State?

- Central Office via Statewide Competitive Application Process
- SHSP Emphasis Area Data

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

West Virginia Department of Transportation maintains approximately ninety-four percent (94%) of the roads in the State, including all secondary or county routes. As such, all HSIP funds are typically used for highway safety projects on the State Highway System. Very few of the State's municipalities own city streets. These are typically lower volume and do not have significant numbers of fatal or serious injury crashes occurring on them; however, should a safety concern exist on a municipal street, the project would be eligible to compete for available HSIP funds. All routes, including locally owned routes, are included when annual ranking lists are

made. Ranking is based on classification so the lower AADT routes are not competing against higher multilane routes. Only routes that are higher than the state average for crashes are evaluated for countermeasures.

If a city requests safety funds for a project, it would need to contact the IMS Section of the WVDOH's Traffic Engineering Division or its local MPO. The city would need to provide the general scope of the proposed improvement and an estimated cost. The local roads listed in question #32 are all local roads include those owned by local municipalities.

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

- Design
- Districts/Regions
- Governors Highway Safety Office
- Maintenance
- Operations
- Planning
- Traffic Engineering/Safety

Describe coordination with internal partners.

To develop, implement and review all aspects needed to maintain a successful HSIP, Traffic Engineering Division coordinates with every division within WVDOT. Any division or district can recommend a location for safety improvements. The Traffic Engineering Division also provides all divisions and districts with crash data. The Traffic Engineering Division also provides a cursory review of the crash data to identify safety concerns and trends. This review may include performing a mini-Road Safety Audit (RSA) that can be performed either at district level or a full-scale RSA involving multiple disciplines (internal and external partners). Once concerns are identified, and countermeasures are determined, an estimate to implement the countermeasures is prepared. The Traffic Engineering Division performs a benefit/cost ratio to see if project is eligible for HSIP funding. SHSP related infrastructure projects that are identified as HSIP eligible are prioritized, and preliminary coordination occurs to obtain all information needed for project programming. All projects utilizing HSIP funds must be reviewed, approved, and programmed within the Traffic Engineering Division for program consistency. As the HSIP coordinator, the Traffic Engineering Division is involved at some level in the planning, design, and construction of all projects within the program and provides safety analysis expertise and guidance to direct the program appropriately.

Identify which external partners are involved with HSIP planning.

- Academia/University
- FHWA
- Law Enforcement Agency
- Local Government Agency
- Local Technical Assistance Program
- Regional Planning Organizations (e.g. MPOs, RPOs, COGs)

Describe coordination with external partners.

For the HSIP to be productive, Traffic Engineering Division (TED) must work with several external partners as well as its internal partners. The Safety Management Task Force (SMTF) is the governing body of the SHSP implementation. The SMTF is chaired by the Traffic Engineering Division with each of its technical sections participating in work on different emphasis areas. Through the SMTF the DOH works closely with Governor's

Highway Safety Program (GHSP), FHWA, Metropolitan Planning Organizations (MPO), WVU's Local Technical Assistance Program (LTAP), Law Enforcement, and several others. TED has partnered with different universities to perform research on several emphasis areas identified in the SHSP. In addition, LTAP has been instrumental in helping TED get their Traffic Incident Management (TIM) program off the ground and provides training on DOH's behalf.

The MPO's are another external partner that TED works with closely. The MPO have been helpful in identifying potential projects throughout their urban areas. Either working through WVDOH's Planning Section, the appropriate District or contacting the TED directly, the MPO can request possible HSIP funding. The Road Safety Audit (RSA) is another key element that TED works with the MPO. Their expertise and knowledge of the area is often sought, and the MPO helps coordinate with local enforcement and officials.

Program Methodology

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

Yes

Attached is a copy of our Program Elements and Process Flow Chart. West Virginia has been working with FHWA for Roadway Departure plan and plans to incorporate it into our new processes. WVDOH was waiting until after SHSP action plans were completed to make changes.

Select the programs that are administered under the HSIP.

- HRRR
- HSIP (no subprograms)
- Intersection
- Low-Cost Spot Improvements
- Median Barrier
- Pedestrian Safety
- Roadway Departure
- Rural State Highways
- Skid Hazard

Program: HRRR

Date of Program Methodology:9/1/2014

What is the justification for this program?

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

What is the funding approach for this program?

Competes with all projects

What data types were used in the program methodology?

Crashes	Exposure	Roadway

- All crashes
- Traffic
- Functional classification

What project identification methodology was used for this program?

- Crash frequency
- Crash rate

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

Yes

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

Yes

How are projects under this program advanced for implementation?

- Competitive application process

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

Rank of Priority Consideration

Ranking based on B/C:1
Available funding:2

Program: HSIP (no subprograms)

Date of Program Methodology:9/1/2014

What is the justification for this program?

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

What is the funding approach for this program?

Competes with all projects

What data types were used in the program methodology?

Crashes

- All crashes

Exposure

- Traffic

Roadway

- Functional classification

What project identification methodology was used for this program?

- Crash frequency
- Crash rate

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

Yes

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

Yes

How are projects under this program advanced for implementation?

- Competitive application process

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

Rank of Priority Consideration

Ranking based on B/C:1
Available funding:2

Program: Intersection

Date of Program Methodology:6/28/2022

What is the justification for this program?

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

What is the funding approach for this program?

Competes with all projects

What data types were used in the program methodology?

Crashes	Exposure	Roadway
• All crashes	• Traffic	• Functional classification

What project identification methodology was used for this program?

- Crash frequency
- Crash rate

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

Yes

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

Yes

How are projects under this program advanced for implementation?

- Competitive application process

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

Rank of Priority Consideration

Ranking based on B/C:1
Available funding:2

Program: Low-Cost Spot Improvements

Date of Program Methodology:10/1/2016

What is the justification for this program?

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

What is the funding approach for this program?

Competes with all projects

What data types were used in the program methodology?

Crashes	Exposure	Roadway
• All crashes	• Traffic	• Functional classification

What project identification methodology was used for this program?

- Crash frequency
- Crash rate

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

Yes

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

Yes

How are projects under this program advanced for implementation?

- Competitive application process

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

Rank of Priority Consideration

Ranking based on B/C:1
Available funding:2

Program: Median Barrier

Date of Program Methodology:10/1/2016

What is the justification for this program?

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

What is the funding approach for this program?

Competes with all projects

What data types were used in the program methodology?

Crashes

- All crashes

Exposure

- Traffic

Roadway

- Functional classification

What project identification methodology was used for this program?

- Crash frequency
- Crash rate

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

Yes

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

Yes

How are projects under this program advanced for implementation?

- Competitive application process

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

Rank of Priority Consideration

Ranking based on B/C:1
Available funding:2

Program: Pedestrian Safety

Date of Program Methodology:6/28/2022

What is the justification for this program?

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

What is the funding approach for this program?

What data types were used in the program methodology?

Crashes

- All crashes

Exposure

- Traffic

Roadway

- Functional classification

What project identification methodology was used for this program?

- Crash frequency
- Crash rate

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

Yes

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

Yes

How are projects under this program advanced for implementation?

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

Program: Roadway Departure

Date of Program Methodology:9/1/2014

What is the justification for this program?

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

What is the funding approach for this program?

Competes with all projects

What data types were used in the program methodology?

Crashes

- All crashes

Exposure

- Traffic

Roadway

- Functional classification

What project identification methodology was used for this program?

- Crash frequency
- Crash rate

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

Yes

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

Yes

How are projects under this program advanced for implementation?

- Competitive application process

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

Rank of Priority Consideration

Available funding:1

Program: Rural State Highways

Date of Program Methodology:9/1/2014

What is the justification for this program?

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

What is the funding approach for this program?

Competes with all projects

What data types were used in the program methodology?

Crashes

- All crashes

Exposure

- Traffic

Roadway

- Functional classification

What project identification methodology was used for this program?

- Crash frequency
- Crash rate

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

Yes

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

Yes

How are projects under this program advanced for implementation?

- Competitive application process

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

Rank of Priority Consideration

Ranking based on B/C:1
Available funding:2

Program: Skid Hazard

Date of Program Methodology:9/1/2014

What is the justification for this program?

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

What is the funding approach for this program?

Competes with all projects

What data types were used in the program methodology?

Crashes

- All crashes

Exposure

- Traffic

Roadway

- Functional classification

What project identification methodology was used for this program?

- Crash frequency
- Crash rate

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

Yes

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

Yes

How are projects under this program advanced for implementation?

- Competitive application process

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

Rank of Priority Consideration

Ranking based on B/C:1
Available funding:2

What percentage of HSIP funds address systemic improvements?

46

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

- Add/Upgrade/Modify/Remove Traffic Signal
- Cable Median Barriers

- Clear Zone Improvements
- High friction surface treatment
- Horizontal curve signs
- Install/Improve Lighting
- Install/Improve Pavement Marking and/or Delineation
- Install/Improve Signing
- Pavement/Shoulder Widening
- Rumble Strips
- Safety Edge
- Traffic Control Device Rehabilitation
- Upgrade Guard Rails

What process is used to identify potential countermeasures?

- Crash data analysis
- Engineering Study
- Road Safety Assessment
- SHSP/Local road safety plan
- Stakeholder input

Does the State HSIP consider connected vehicles and ITS technologies?

Yes

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

The WVDOH currently has three safety projects programmed dealing with ITS technologies. The first project provides funds to upgrade ITS and traffic control devices throughout the state. The second provides funds for ITS update review. The third project provides funds for IDIQ for ITS, signal systems, and lighting.

The total cost for the three projects is $15,489,757 which uses $3,376,640 in safety funds.

No funding has been programmed for CV/AV Technologies.

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.

In cases when the WVDOH is considering several solutions to a safety concern, the WVDOH will use the Highway Safety Manual to see what solution should give the best reduction in fatalities and injury crashes.

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

The overall purpose of the HSIP is to achieve a significant reduction in traffic fatalities and incapacitating injuries through the implementation of infrastructure related highway safety improvements. Components of West Virginia's HSIP include the Strategic Highway Safety Program (SHSP), the Highway Safety Improvement Program (HSIP), and the Railway-Highway Grade Crossing Program. All routes in West Virginia are eligible for HSIP funding including the local routes not under WVDOH control.

FAST ACT removed the requirement for a formal set aside for High Risk Rural Roads, and the funding was absorbed by the larger HSIP. Roads that were traditionally reviewed in the HRRR Program are still being reviewed and ranked in the HSIP. Rural collectors or rural local roads generally correlate to the county route highway class and WVDOH maintains all of the State's more than 28,000 miles in county routes. The State has been able to allocate HSIP funds to the routes that have a crash rate higher than state average for that classification.

Seven data-driven Emphasis Areas were selected: Speeding and Aggressive Driving, Roadway Departure, Occupant Protection, Older Driver (65+) Involved, Alcohol or Drug Impaired Driving, Intersections, and Pedestrians. The seven data-drive Emphasis Areas account for 98 percent of all fatalities and 95 percent of all serious injuries. All have become a major focus of the HSIP. Projects dealing with areas of the SHSP are reviewed and funded if funds are available and the benefit/cost ratio is above 1.

Project Implementation

Funds Programmed

Reporting period for HSIP funding.

State Fiscal Year

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

FUNDING CATEGORY	PROGRAMMED	OBLIGATED	% OBLIGATED/PROGRAMMED
HSIP (23 U.S.C. 148)	$29,995,342	$28,299,342	94.35%
HRRR Special Rule (23 U.S.C. 148(g)(1))	$0	$0	0%
VRU Safety Special Rule (23 U.S.C. 148(g)(3))	$0	$0	0%
Penalty Funds (23 U.S.C. 154)	$1,935,338	$1,935,338	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	$0	$0	0%
Totals	$31,930,680	$30,234,680	94.69%

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

$0

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

$0

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

$1,870,000

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

$1,620,000

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.

In 2016, West Virginia became a focus state for run off the road accidents. FHWA contracted TTI to review West Virginia's crash data and develop a plan for 2018-2019 funding. This plan complimented the route selection West Virginia used in 2017 to develop the run off the road projects currently being developed and constructed.

In 2017, West Virginia initiated a program focused on reducing road departure crashes. With this program, West Virginia used available safety funds to upgrade existing cable guardrail to high tension four strand, install new cable guardrail, fund guardrail IDIQ projects, install high friction throughout the state, fund ITS, and install new lighting at interchanges and intersections.

The WVDOH began working with the AASHTOWare Safety Numetrics to be used for the state of West Virginia. AASHTOWare Safety is a software specifically designed to meet the unique needs of state transportation agencies in the area of highway traffic safety management. This system will enable WVDOH to analyze safety data and make recommendations. The system is tentatively planned to go fully online during the fall of 2023.

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
Cove Road - South Main Street	Intersection traffic control	Modify traffic signal – add backplates with retroreflective borders	5	Intersections	$70625	$963899	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Other	6,800	25	State Highway Agency	Spot	Intersections	
2023 District 2 HFST	Roadway	Pavement surface – high friction surface	0.33	Miles	$175877	$195419	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0		State Highway Agency	Spot	Roadway Departure	
Stickney - Neoma	Roadside	Barrier- metal	4.48	Miles	$100000	$1687879	HSIP (23 U.S.C. 148)	Rural	Major Collector	1,300	55	State Highway Agency	Spot	Roadway Departure	
Meadow Lane Traffic Signal	Intersection traffic control	Modify traffic signal – modernization/replacement	1	Intersections	$36000	$40000	HSIP (23 U.S.C. 148)	Rural	Major Collector	6,200	45	State Highway Agency	Spot	Intersections	
Warm Springs Avenue Traffic Signal	Intersection traffic control	Modify traffic signal – modernization/replacement	1	Intersections	$237953	$264392	HSIP (23 U.S.C. 148)	Urban	Minor Arterial	6,200	35	State Highway Agency	Spot	Intersections	
2023 Wirt HFST +2	Roadway	Pavement surface – high friction surface	1.91	Miles	$372460	$413844	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0		State Highway Agency	Spot	Roadway Departure	
Athens - Speedway	Roadside	Barrier- metal	4.47	Miles	$277672	$2014806	HSIP (23 U.S.C. 148)	Urban	Minor Arterial	7,400	45	State Highway Agency	Spot	Roadway Departure	
Stumptown - Linn Guardrail	Roadside	Barrier- metal	24.57	Miles	$1983422	$2203803	HSIP (23 U.S.C. 148)	Rural	Minor Arterial	350	55	State Highway Agency	Spot	Roadway Departure	
2023 Taylor HFST +2	Roadway	Pavement surface – high friction surface	1	Miles	$547418	$608243	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0		State Highway Agency	Spot	Roadway Departure	
2023 APD Striping	Roadway delineation	Longitudinal pavement markings - remarking	379.4	Miles	$6524387	$7249318	HSIP (23 U.S.C. 148)	Multiple/Varies	Principal Arterial-Other	0		State Highway Agency	Systemic	Roadway Departure	
2023 District 6 HFST North +5	Roadway	Pavement surface – high friction surface	1.39	Miles	$824041	$915601	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0		State Highway Agency	Spot	Roadway Departure	
I-70 DMS	Advanced technology and ITS	Dynamic message signs	1	Signs	$796625	$885139	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Interstate	32,600	70	State Highway Agency	Spot	System	

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
I-79 Lighting	Lighting	Continuous roadway lighting	4.99	Miles	$450000	$500000	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Interstate	23,100	70	State Highway Agency	Spot	Roadway Departure	
2023 D-6 HFST South +3	Roadway	Pavement surface – high friction surface	1.15	Miles	$762806	$847563	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0		State Highway Agency	Spot	Roadway Departure	
US 119 and CR 119/90 Old Logan Rd Traffic Signal	Intersection traffic control	Modify traffic signal –other	1	Intersections	$328237	$364708	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Other	10,400	65	State Highway Agency	Spot	Intersections	
Danville HFST	Roadway	Pavement surface – high friction surface	0.25	Miles	$186297	$206997	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Other	14,700	65	State Highway Agency	Spot	Roadway Departure	
2023 Nicholas HFST +1	Roadway	Pavement surface – high friction surface	0.18	Miles	$127960	$142178	HSIP (23 U.S.C. 148)	Rural	Major Collector	0		State Highway Agency	Spot	Roadway Departure	
Patteson Drive RRFB	Pedestrians and bicyclists	Rapid Rectangular Flashing Beacons (RRFB)	1	Locations	$374697	$416330	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Other	14,900	35	State Highway Agency	Spot	Pedestrians	
Statewide RWIS Renovation	Advanced technology and ITS	Advanced technology and ITS - other	40	Numbers	$360000	$400000	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0		State Highway Agency	Spot	Data	
Vulnerable User Study	Miscellaneous	Data collection	1	Study	$382500	$425000	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0		State Highway Agency	Systemic	Data	
Traffic Engineering Manual Updates	Miscellaneous	Training and workforce development	1	Manual	$337500	$375000	HSIP (23 U.S.C. 148)	N/A	N/A	0		State Highway Agency	Systemic	Data	
Speed Enforcement in Workzones	Miscellaneous	Work zone enforcement	1	Statewide	$900000	$1000000	Penalty Funds (23 U.S.C. 164)	Multiple/Varies	Multiple/Varies	0		State Highway Agency	Systemic	Work Zones	
D-5 Recall Striping 2023	Roadway delineation	Longitudinal pavement markings - remarking	1	District	$100000	$373190	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0		State Highway Agency	Systemic	Roadway Departure	
D-4 Recall Striping 2023	Roadway delineation	Longitudinal pavement markings - remarking	1	District	$100000	$373190	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0		State Highway Agency	Systemic	Roadway Departure	
D-3 Recall Striping 2023	Roadway delineation	Longitudinal pavement markings - remarking	1	District	$100000	$439083	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0		State Highway Agency	Systemic	Roadway Departure	

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
D-2 Recall Striping 2023	Roadway delineation	Longitudinal pavement markings - remarking	1	District	$100000	$439083	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0		State Highway Agency	Systemic	Roadway Departure	
D-1 Recall Striping 2023	Roadway delineation	Longitudinal pavement markings - remarking	1	District	$100000	$398216	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0		State Highway Agency	Systemic	Roadway Departure	
D-10 Recall Striping 2023	Roadway delineation	Longitudinal pavement markings - remarking	1	District	$100000	$479930	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0		State Highway Agency	Systemic	Roadway Departure	
D-9 Recall Striping 2023	Roadway delineation	Longitudinal pavement markings - remarking	1	District	$100000	$479930	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0		State Highway Agency	Systemic	Roadway Departure	
D-8 Recall Striping 2023	Roadway delineation	Longitudinal pavement markings - remarking	1	District	$141175	$368412	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0		State Highway Agency	Systemic	Roadway Departure	
D-6 Recall Striping 2023	Roadway delineation	Longitudinal pavement markings - remarking	1	District	$149116	$439458	HSIP (23 U.S.C. 148)	Multiple/Varies	Local Road or Street	0		State Highway Agency	Systemic	Roadway Departure	
D-7 Recall Striping 2023	Roadway delineation	Longitudinal pavement markings - remarking	1	District	$100000	$408518	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0		State Highway Agency	Systemic	Roadway Departure	
D-7 Guardrail End Terminal Replacement	Roadside	Barrier end treatments (crash cushions, terminals)	1	District	$1869464	$2077182	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0		State Highway Agency	Systemic	Roadway Departure	
2023 RPM	Roadway delineation	Raised pavement markers	3	District	$880502	$978335	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0		State Highway Agency	Systemic	Roadway Departure	
Roadway Striping (D1)	Roadway delineation	Longitudinal pavement markings - remarking	1	District	$387452	$2571935	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0		State Highway Agency	Systemic	Roadway Departure	
Roadway Striping (D2)	Roadway delineation	Longitudinal pavement markings - remarking	1	District	$446837	$3103282	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0		State Highway Agency	Systemic	Roadway Departure	
Roadway Striping (D3)	Roadway delineation	Longitudinal pavement markings - remarking	1	District	$374991	$2460447	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0		State Highway Agency	Systemic	Roadway Departure	
Roadway Striping (D4)	Roadway delineation	Longitudinal pavement markings - remarking	1	District	$454355	$3170541	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0		State Highway Agency	Systemic	Roadway Departure	
Roadway Striping (D5)	Roadway delineation	Longitudinal pavement markings - remarking	1	District	$465351	$3268930	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0		State Highway Agency	Systemic	Roadway Departure	

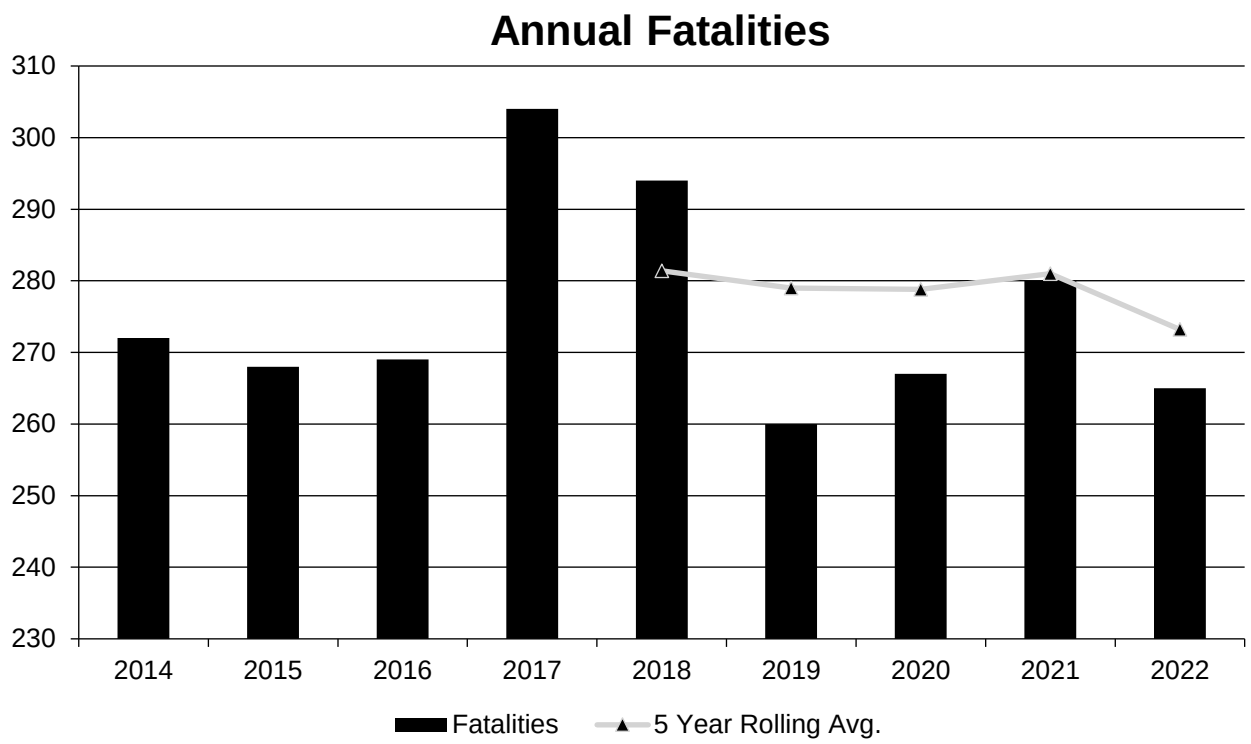
PROJECT NAME	IMPROVEMENT CATEGORY	SUBCATEGORY	OUTPUTS	OUTPUT TYPE	HSIP PROJECT COST($)	TOTAL PROJECT COST($)	FUNDING CATEGORY	LAND USE/AREA TYPE	FUNCTIONAL CLASSIFICATION	AADT	SPEED	OWNERSHIP	METHOD FOR SITE SELECTION	SHSP EMPHASIS AREA	SHSP STRATEGY
Roadway Striping (D6)	Roadway delineation	Longitudinal pavement markings - remarking	1	District	$321904	$1985453	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0		State Highway Agency	Systemic	Roadway Departure	
Roadway Striping (D7)	Roadway delineation	Longitudinal pavement markings - remarking	1	District	$387945	$2576350	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0		State Highway Agency	Systemic	Roadway Departure	
Roadway Striping (D8)	Roadway delineation	Longitudinal pavement markings - remarking	1	District	$335011	$2102730	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0		State Highway Agency	Systemic	Roadway Departure	
Roadway Striping (D9)	Roadway delineation	Longitudinal pavement markings - remarking	1	District	$389699	$2592040	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0		State Highway Agency	Systemic	Roadway Departure	
Roadway Striping (D10)	Roadway delineation	Longitudinal pavement markings - remarking	1	District	$405208	$2730800	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0		State Highway Agency	Systemic	Roadway Departure	
D5 Districtwide IDIQ Guardrail	Roadside	Barrier- metal	1	District	$1075387	$1194875	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0		State Highway Agency	Systemic	Roadway Departure	
Interstate Striping	Roadway delineation	Longitudinal pavement markings - remarking	1	Statewide	$5193809	$5770898	HSIP (23 U.S.C. 148)	Multiple/Varies	Principal Arterial-Interstate	0		State Highway Agency	Systemic	Roadway Departure	

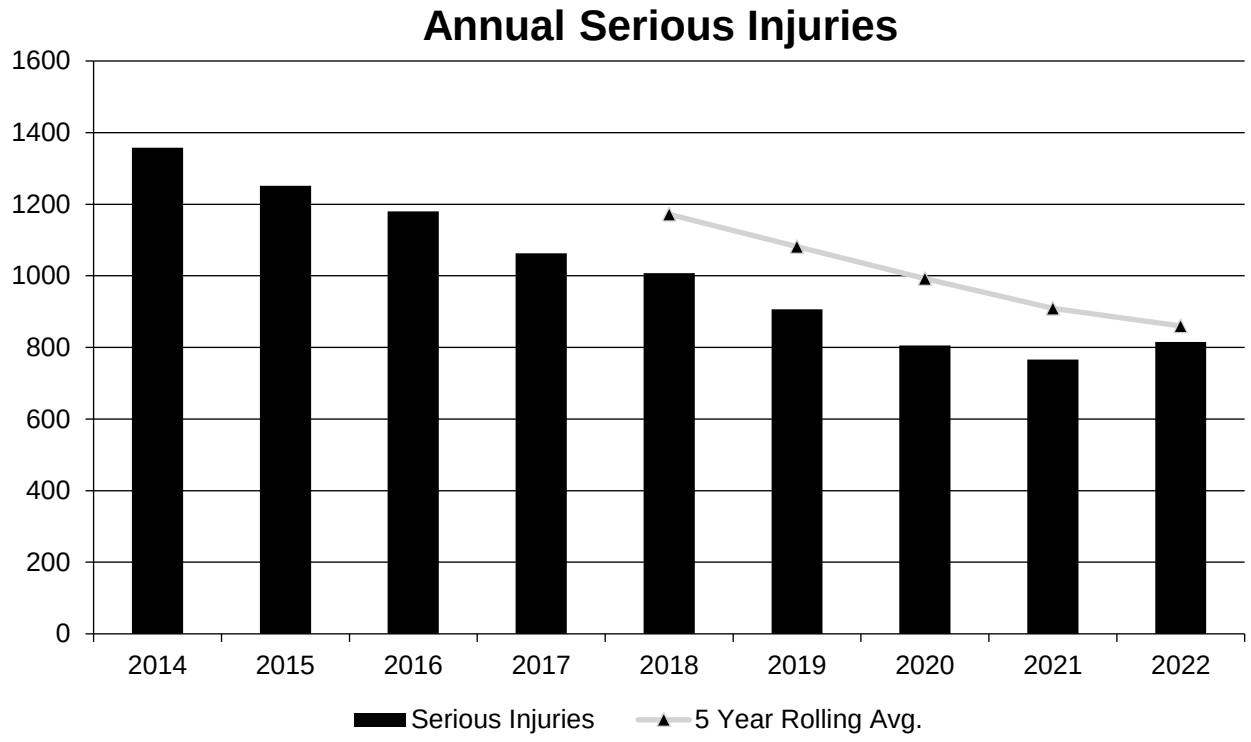
Safety Performance

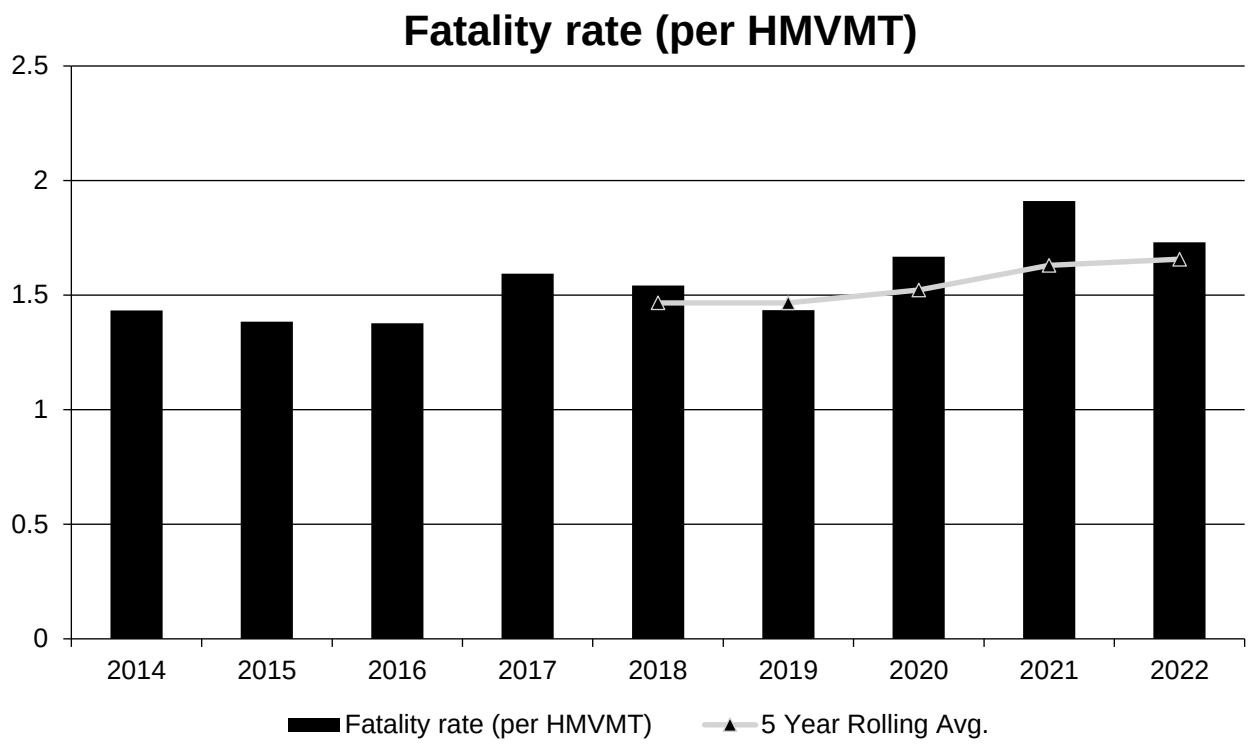
General Highway Safety Trends

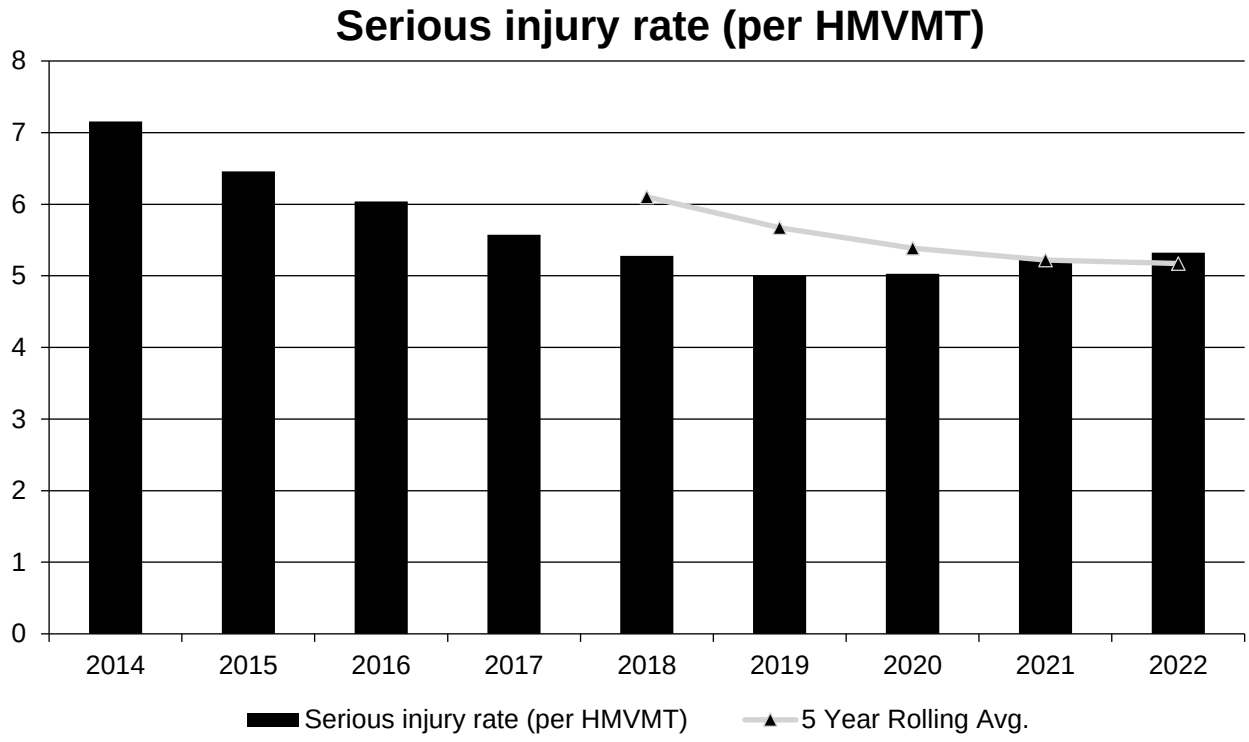
Present data showing the general highway safety trends in the State for the past five years.

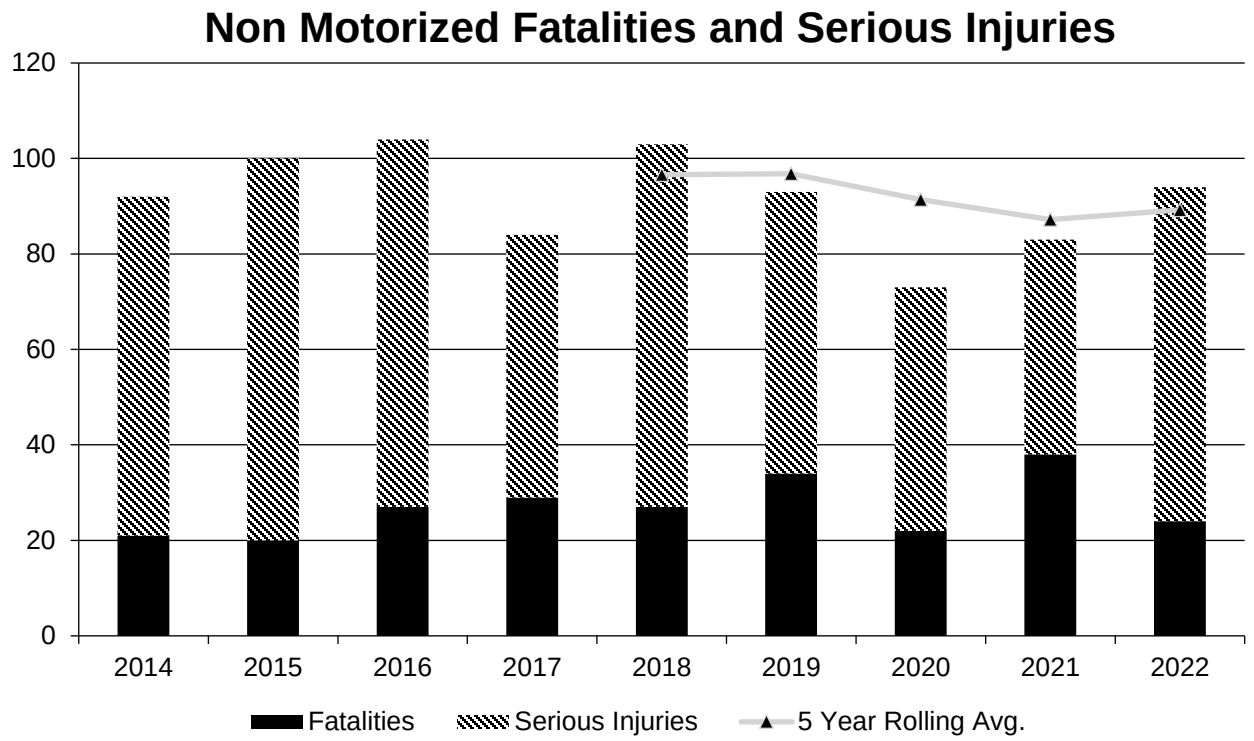
PERFORMANCE MEASURES	2014	2015	2016	2017	2018	2019	2020	2021	2022
Fatalities	272	268	269	304	294	260	267	280	265
Serious Injuries	1,358	1,251	1,180	1,063	1,007	906	805	766	815
Fatality rate (per HMVMT)	1.433	1.384	1.377	1.594	1.542	1.435	1.668	1.910	1.731
Serious injury rate (per HMVMT)	7.157	6.459	6.039	5.574	5.280	5.000	5.028	5.226	5.324
Number non-motorized fatalities	21	20	27	29	27	34	22	38	24
Number of non-motorized serious injuries	71	80	77	55	76	59	51	45	70


Annual Fatalities
310
300
290
280
270
260
250
240
230
2014
2015
2016
2017
2018
2019
2020
2021
2022
Fatalities
5 Year Rolling Avg.


Annual Serious Injuries
1600
1400
1200
1000
800
600
400
200
0
2014
2015
2016
2017
2018
2019
2020
2021
2022
Serious Injuries
5 Year Rolling Avg.


Fatality rate (per HMVMT)
2.5
2
1.5
1
0.5
0
2014
2015
2016
2017
2018
2019
2020
2021
2022
Fatality rate (per HMVMT)
5 Year Rolling Avg.


Serious injury rate (per HMVMT)
8
7
6
5
4
3
2
1
0
2014
2015
2016
2017
2018
2019
2020
2021
2022
Serious injury rate (per HMVMT)
5 Year Rolling Avg.



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	16.2	27.4	0.88	1.46
Rural Principal Arterial (RPA) - Other Freeways and Expressways	0	0	0	0
Rural Principal Arterial (RPA) - Other	33.2	95.8	1.54	4.44
Rural Minor Arterial				
Rural Minor Collector	7.4	21.4	4.2	11.09
Rural Major Collector	56	158.2	3.78	9.35

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 Local Road or Street	19.8	65.6	2.53	8.5
Urban Principal Arterial (UPA) - Interstate	15.2	39.6	0.47	1.22
Urban Principal Arterial (UPA) - Other Freeways and Expressways	0.8	0.8	0.43	0.43
Urban Principal Arterial (UPA) - Other	29	80.6	12.56	34.15
Urban Minor Arterial	25.8	93.8	1.49	5.49
Urban Minor Collector	6.6	1.2	11.23	5.87
Urban Major Collector	8.8	33.6	1.21	4.44
Urban Local Road or Street	3.6	16.4	0.97	4.38

Year 2022

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	261.8	810	1.62	4.97
County Highway Agency				
Town or Township Highway Agency				
City or Municipal Highway Agency	8.4	49.2	3.04	17.03
State Park, Forest, or Reservation Agency				
Local Park, Forest or Reservation Agency				
Other State Agency	3		60.06	
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				

Safety Performance Targets

Safety Performance Targets

Calendar Year 2024 Targets *

Number of Fatalities:262.7

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

West Virginia's SHSP established the overall goal of achieving zero fatalities by the year 2050 through a 4% annual reduction of fatalities from 2021.

Number of Serious Injuries:791.2

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

West Virginia SHSP established the overall goal of 66% reduction in serious injuries by the year 2050 through a 4% annual reduction from 2021.

Fatality Rate:1.682

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

West Virginia's SHSP established the overall goal of achieving zero fatalities by the year 2050 through a 4% annual reduction of fatalities from 2021.

Serious Injury Rate:5.030

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

West Virginia SHSP established the overall goal of 66% reduction in serious injuries by the year 2050 through a 4% annual reduction from 2021.

Total Number of Non-Motorized Fatalities and Serious Injuries:86.0

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

West Virginia SHSP established the overall goal of 66% reduction in fatal and serious injuries by the year 2050 through a 4% annual reduction from 2021.

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

In the mid-1990's, various officials with highway safety responsibilities in West Virginia recognized the value of banding together to advance highway safety. This resulted in the creation of the State's first Highway Safety Management Task Force. After a brief hiatus, the renamed Safety Managment Task Force (SMTF) reconvened in late 2001 and met regularly to coordinate highway safety-related activities and programs and allowed participants to speak with one voice for greater safety impacts. The Task Force continued this mission as its more than 30 members provided oversight in the plan development, implementation, and evaluation of the State's current SHSP.

More than 50 members have been invited to provide oversight of the new SHSP, including plan development, implementation and evaluation. Members of the SMTF include the Division of Highways, Division of Motor Vehicles, Governor's Highway Safety Section, West Virginia State Police along with representative from local law enforcement agencies, Department of Education, Alcohol Beverage Control Administration, Office of the Insurance Commissioner, West Virginia Parkways Authority, West Virginia Association of Metropolitan Organizations, West Virginia Commission of Drunk Driving Prevention, Federal Highway Administration, Federal Motor Carrie Safety Administration, National Highway Traffic Safety Administration and many more highway safety mined agencies, organization and commissions.

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	262.1	273.2
Number of Serious Injuries	926.4	859.8
Fatality Rate	1.558	1.657
Serious Injury Rate	5.634	5.172
Non-Motorized Fatalities and Serious Injuries	80.9	89.2

West Virginia met its safety performance target in 2022 for the number of serious injuries. West Virginia came close to the safety target in number of fatalities, fatality rate, serious injury rate, and non-motorized fatalities and serious injuries. The five-year average for number of fatalities, fatality rate, serious injury rate, and non-motorized fatalities and serious was 273.2, 1.657, 5.172, and 89.2 and the target was 262.1, 1.558, 5.634 and 80.9 respectively.

Applicability of Special Rules

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

No

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	2016	2017	2018	2019	2020	2021	2022
Number of Older Driver and Pedestrian Fatalities	41	43	65	43	57	63	56
Number of Older Driver and Pedestrian Serious Injuries	89	104	117	95	98	90	103

Evaluation

Program Effectiveness

How does the State measure effectiveness of the HSIP?

- Benefit/Cost Ratio
- Change in fatalities and serious injuries
- Economic Effectiveness (cost per crash reduced)

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

West Virginia has focused on Road Departure with its HSIP since it has the best chance of reducing the fatality and injury rates. With the new SHSP, West Virginia will focus in addition to road departure, speeding and aggressive driving, occupant protection, older driver, alcohol and drug impaired, intersection and pedestrians.

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

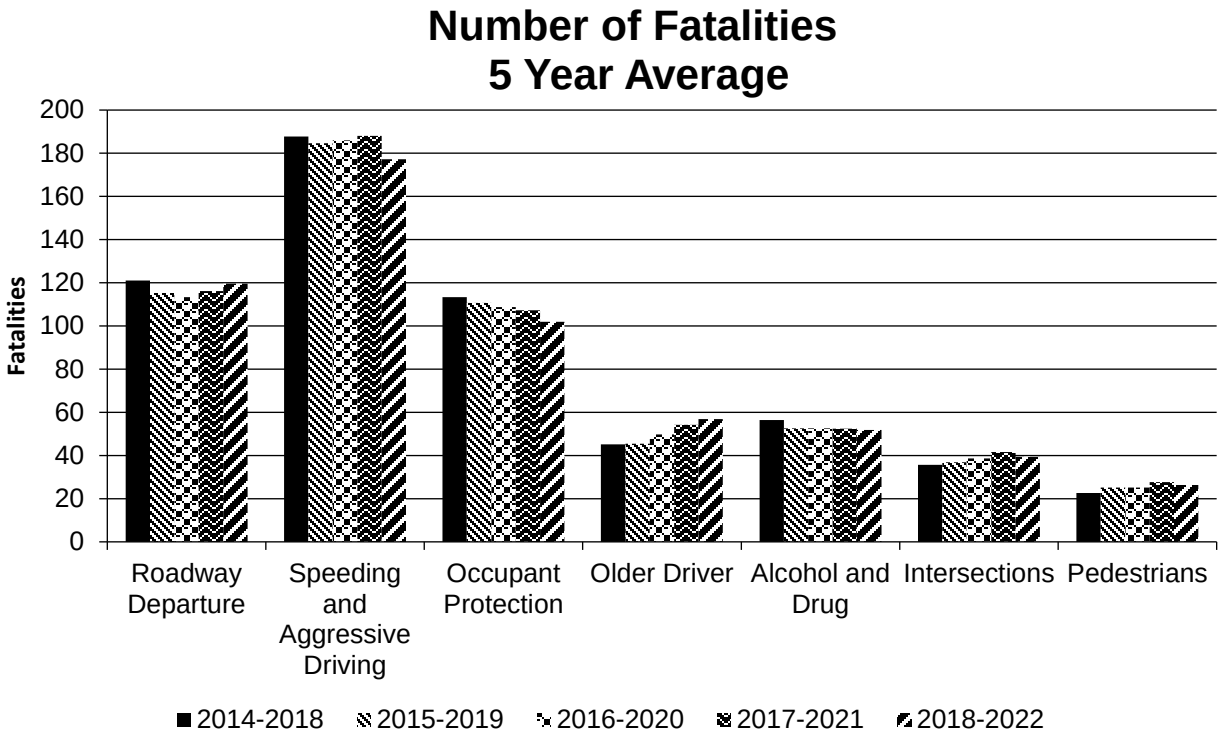
- HSIP Obligations
- More systemic programs

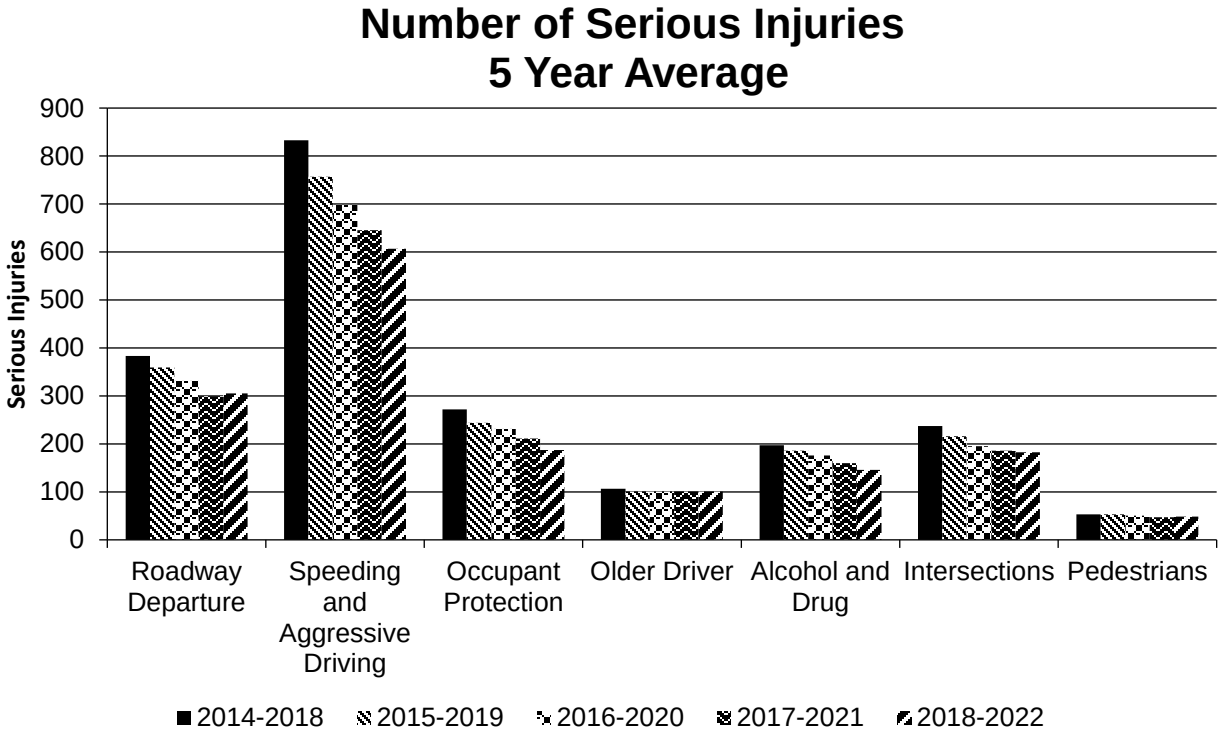
Effectiveness of Groupings or Similar Types of Improvements

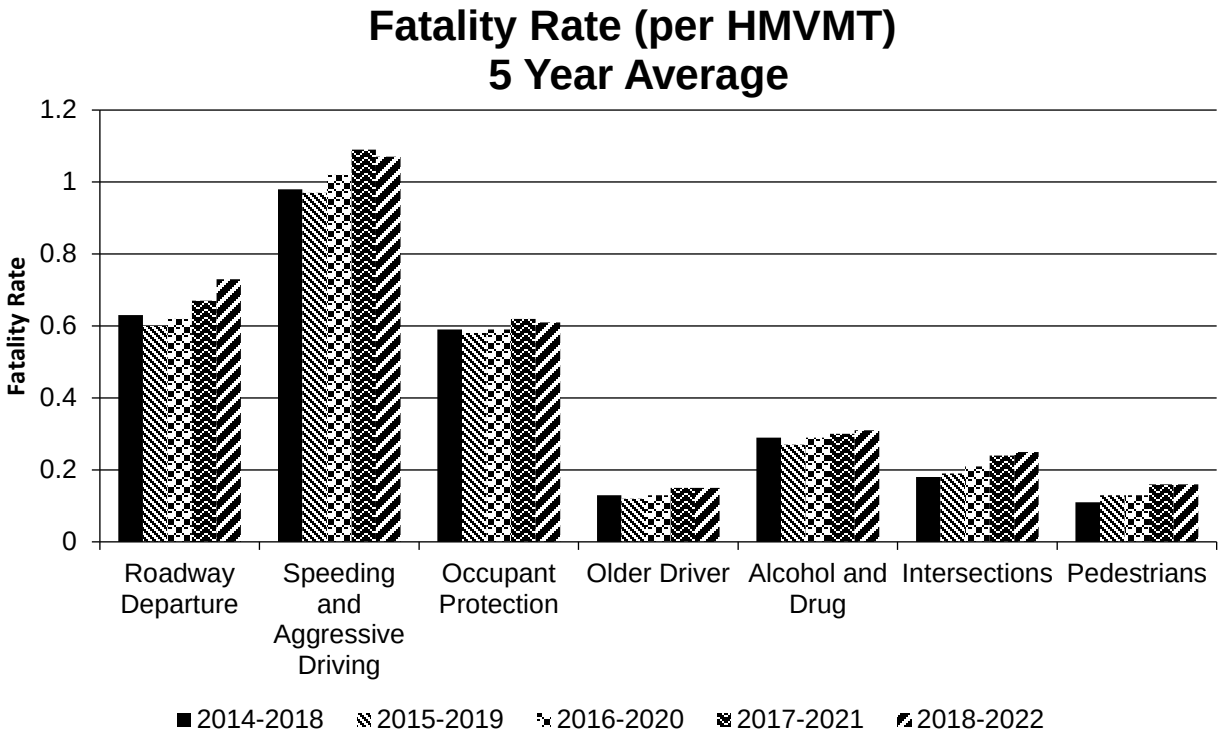
Present and describe trends in SHSP emphasis area performance measures.

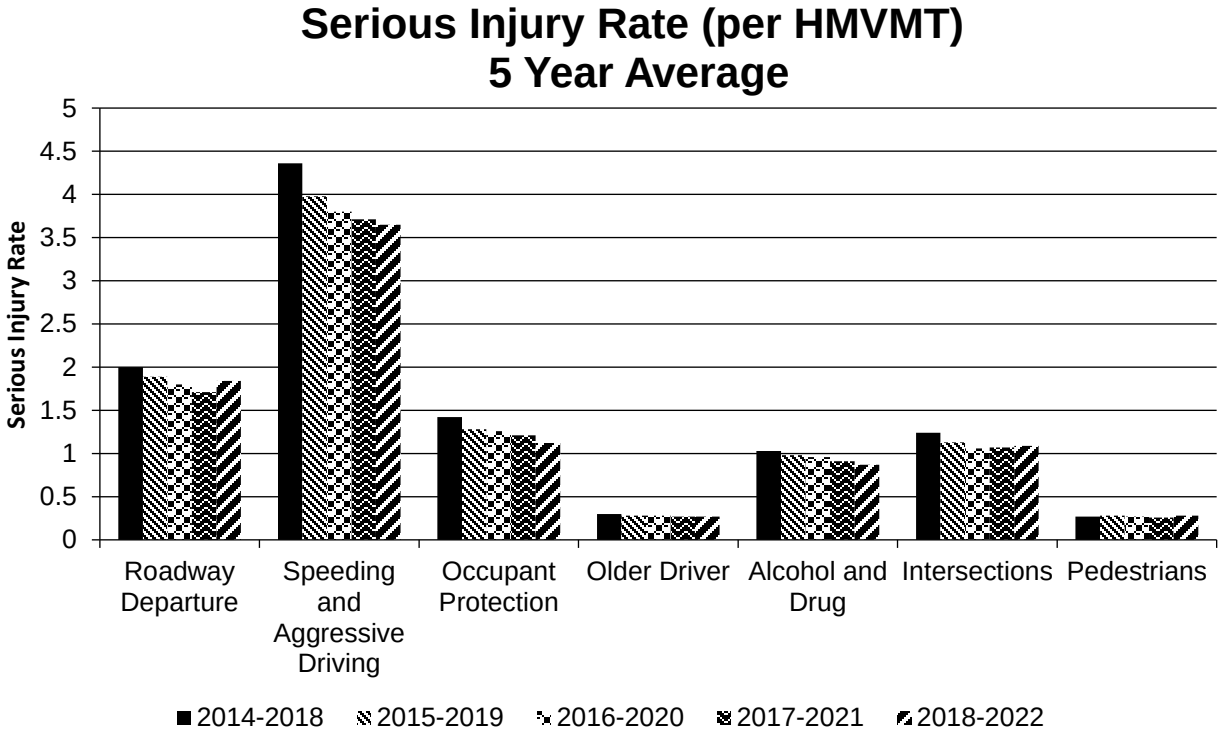
Year 2022

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)
Roadway Departure		119.6	305.6	0.73	1.84
Speeding and Aggressive Driving		177.2	606.6	1.07	3.65
Occupant Protection		102	187	0.61	1.12
Older Driver		56.8	100.6	0.15	0.27
Alcohol and Drug		51.8	145.8	0.31	0.87
Intersections		39.4	182.8	0.25	1.09
Pedestrians		26.4	48.4	0.16	0.28


Number of Fatalities
5 Year Average
Fatalities
200
180
160
140
120
100
80
60
40
20
0
Roadway Departure
Speeding and Aggressive Driving
Occupant Protection
Older Driver
Alcohol and Drug
Intersections
Pedestrians
2014-2018
2015-2019
2016-2020
2017-2021
2018-2022


Number of Serious Injuries
5 Year Average
Serious Injuries
900
800
700
600
500
400
300
200
100
0
Roadway Departure
Speeding and Aggressive Driving
Occupant Protection
Older Driver
Alcohol and Drug
Intersections
Pedestrians
2014-2018
2015-2019
2016-2020
2017-2021
2018-2022


Fatality Rate (per HMVMT)
5 Year Average
Fatality Rate
1.2
1
0.8
0.6
0.4
0.2
0
Roadway Departure
Speeding and Aggressive Driving
Occupant Protection
Older Driver
Alcohol and Drug
Intersections
Pedestrians
2014-2018
2015-2019
2016-2020
2017-2021
2018-2022


Serious Injury Rate (per HMVMT)
5 Year Average
Serious Injury Rate
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
Roadway Departure
Speeding and Aggressive Driving
Occupant Protection
Older Driver
Alcohol and Drug
Intersections
Pedestrians
2014-2018
2015-2019
2016-2020
2017-2021
2018-2022

Project Effectiveness

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

LOCATION	FUNCTIONAL CLASS	IMPROVEMENT CATEGORY	IMPROVEMENT TYPE	PDO BEFORE	PDO AFTER	FATALITY BEFORE	FATALITY AFTER	SERIOUS INJURY BEFORE	SERIOUS INJURY AFTER	ALL OTHER INJURY BEFORE	ALL OTHER INJURY AFTER	TOTAL BEFORE	TOTAL AFTER	EVALUATION RESULTS (BENEFIT/COST RATIO)
Monongalia County I-68	Urban Principal Arterial (UPA) - Interstate	Lighting	Interchange lighting							1.00		1.00		
Lewis County I-79	Rural Principal Arterial (RPA) - Interstate	Roadside	Barrier – cable	362.00	251.00	2.00		13.00	3.00	88.00	72.00	465.00	326.00	
Wayne County I-64	Urban Principal Arterial (UPA) - Interstate	Roadside	Barrier – cable	533.00	368.00	12.00	2.00	9.00	6.00	180.00	116.00	734.00	492.00	
Wood County WV 2	Rural Principal Arterial (RPA) - Other	Intersection geometry	Add/modify auxiliary lanes	11.00	4.00			1.00		8.00	2.00	20.00	6.00	
Monongalia County US 19	Urban Principal Arterial (UPA) - Other	Intersection geometry	Add/modify auxiliary lanes	155.00	119.00			2.00	1.00	56.00	40.00	213.00	160.00	
Cabell County I-64	Urban Principal Arterial (UPA) - Interstate	Lighting	Continuous roadway lighting	269.00	207.00	8.00		5.00	5.00	128.00	64.00	410.00	276.00	
Lincoln County US 119	Rural Principal Arterial (RPA) - Other	Roadside	Barrier end treatments (crash cushions, terminals)	11.00	15.00		1.00			6.00	14.00	17.00	30.00	
Morgan County CR 1	Rural Major Collector	Roadside	Barrier- metal	29.00	53.00			2.00	2.00	9.00	19.00	40.00	74.00	
Jefferson County WV 51	Rural Major Collector	Intersection traffic control	Intersection flashers –sign-mounted or overhead	16.00	13.00			1.00	2.00	7.00	4.00	24.00	19.00	
Putnam County WV 62	Rural Major Collector	Intersection traffic control	Modify control – new traffic signal	10.00	2.00				1.00	4.00		14.00	3.00	
Berkeley County WV 45	Urban Minor Arterial	Intersection traffic control	Modify traffic signal –other	33.00	26.00					11.00	2.00	44.00	28.00	

LOCATION	FUNCTIONAL CLASS	IMPROVEMENT CATEGORY	IMPROVEMENT TYPE	PDO BEFORE	PDO AFTER	FATALITY BEFORE	FATALITY AFTER	SERIOUS INJURY BEFORE	SERIOUS INJURY AFTER	ALL OTHER INJURY BEFORE	ALL OTHER INJURY AFTER	TOTAL BEFORE	TOTAL AFTER	EVALUATION RESULTS (BENEFIT/COST RATIO)
various counties various routes	Rural Minor Arterial	Roadway	Pavement surface – high friction surface	9.00		1.00				5.00		15.00		

Compliance Assessment

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

06/30/2022

What are the years being covered by the current SHSP?

From: 2022 To: 2026

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

2027

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
	Route Number (8) [8]	100									
	Route/Street Name (9) [9]	100									
	Federal Aid/Route Type (21) [21]	100									
	Rural/Urban Designation (20) [20]	100						100			
	Surface Type (23) [24]	100						100			
	Begin Point Segment Descriptor (10) [10]	100						100	95	100	95
	End Point Segment Descriptor (11) [11]	100						100	95	100	95
	Segment Length (13) [13]	100									
	Direction of Inventory (18) [18]	100									
	Functional Class (19) [19]	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]	80									
	Access Control (22) [23]	100									
	One/Two Way Operations (91) [93]	100									
	Number of Through Lanes (31) [32]	100						100			
	Average Annual Daily Traffic (79) [81]	100						100			
	AADT Year (80) [82]	100									
	Type of Governmental Ownership (4) [4]	100						100	100	100	100
INTERSECTION	Unique Junction Identifier (120) [110]			50	50						
	Location Identifier for Road 1 Crossing Point (122) [112]			50	50						
	Location Identifier for Road 2 Crossing Point (123) [113]			50	50						
	Intersection/Junction Geometry (126) [116]			20	20						
	Intersection/Junction Traffic Control (131) [131]										
	AADT for Each Intersecting Road (79) [81]			50							
	AADT Year (80) [82]			50							
	Unique Approach Identifier (139) [129]			50	50						
INTERCHANGE/RAMP	Unique Interchange Identifier (178) [168]					100					
	Location Identifier for Roadway at					100					

ROAD TYPE	*MIRE NAME (MIRE NO.)	NON LOCAL PAVED ROADS - SEGMENT		NON LOCAL PAVED ROADS - INTERSECTION		NON LOCAL PAVED ROADS - RAMPS		LOCAL PAVED ROADS		UNPAVED ROADS	
		STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE
	Beginning of Ramp Terminal (197) [187]										
	Location Identifier for Roadway at Ending Ramp Terminal (201) [191]					100					
	Ramp Length (187) [177]					100					
	Roadway Type at Beginning of Ramp Terminal (195) [185]					100					
	Roadway Type at End Ramp Terminal (199) [189]					100					
	Interchange Type (182) [172]										
	Ramp AADT (191) [181]					100					
	Year of Ramp AADT (192) [182]					100					
	Functional Class (19) [19]					100					
	Type of Governmental Ownership (4) [4]					100					
Totals (Average Percent Complete):		**98.89**	**0.00**	**40.00**	**27.50**	**90.91**	**0.00**	**100.00**	**43.33**	**100.00**	**78.00**

*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.

Based on the Safety Data Assessment performed in 2018, West Virginia ranked low in data quality and collection in the area of Minimum Inventory of Roadway Elements (MIRE). As such, West Virginia has been selected as a pilot or focus state allowing for additional technical assistance. West Virginia staff has participated in a peer exchange and is developing a plan to prioritize key data element definitions and collections. Our Strategic Data Management and Technology Division as the Roadway Inventory manager and the Traffic Engineering Division as the primary user in managing highway safety analysis are coordinating to ensure the MIRE FDE full meets or exceeds the national standard. In 2023, a MIRE committee was formed to help ensure West Virginia meets the requirements to have complete access to the MIRE FDE on all public roads.

Optional Attachments

Program Structure:

WV HSIP Process.docx
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.