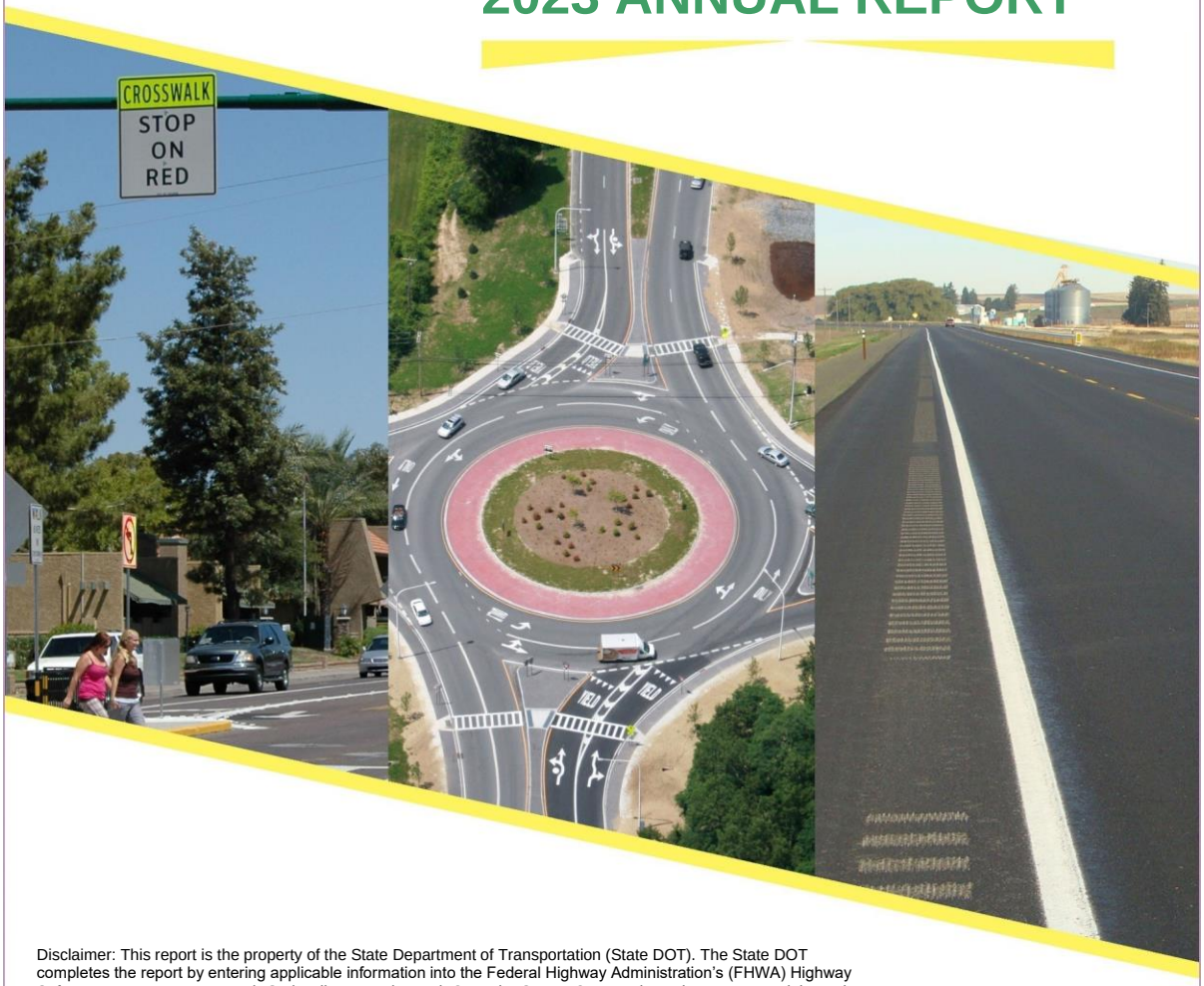
DELAWARE

HIGHWAY SAFETY IMPROVEMENT PROGRAM

2023 ANNUAL REPORT



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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 Delaware Department of Transportation (DelDOT) has prepared this Annual Report for state fiscal year 2023 (July 1, 2022 through June 30, 2023) to demonstrate the success of their safety program. During the 2023 reporting period, DelDOT continued its successful core HSIP components, including the Hazard Elimination Program (HEP), Systemic Safety Improvement Programs, Highway Rail-Grade Crossing Program (HRGX), and Strategic Highway Safety Plan (SHSP), and the High-Risk Rural Roads Program (HRRRP), re-established in 2021. During the 2023 reporting period, DelDOT continued Rectangular Rapid Flashing Beacon (RRFB) installations (approximately 10), continued implementation of pedestrian safety improvements on US 13 in Dover based on the completed pedestrian safety audit, balanced safety and congestion at flashing red arrow (FRA) locations and implemented previous years' HEP recommendations. Furthermore, DelDOT implemented a Wrong Way Detection System on SR 1 Northbound at Bay Road in Dover, continued enhancements to the Department's Crash Analysis and Reporting System (CARS), began a pedestrian safety audit on US 113 through Milford and continued to identify new safety improvements through studies within its core programs and implemented previously identified improvements.

During the 2023 reporting period, DelDOT and its safety partners continued implementation of the strategies and actions of the 2021-2025 Delaware SHSP and began development of its first Vulnerable Road User (VRU) Assessment. Notably, DelDOT completed a new design guidance memorandum supporting implementation of median barrier and completed a prioritization process for median barrier installations on non-access controlled facilities. DelDOT also continued developing a design guidance memorandum to support installation of High-Friction Surface Treatment (HFST) on projects.

In compliance with federal safety performance management regulations, DelDOT developed an HSIP Implementation Plan for Federal Fiscal Year 2024. DelDOT led efforts, in conjunction with Delaware’s Office of Highway Safety and Delaware State Police, to identify Delaware’s 2024 safety performance measure targets, which are included in this report. Based on a preliminary assessment, Delaware has met or made significant progress toward meeting zero of the five 2022 safety performance measure targets.

Although the number of fatalities and serious injuries increased in calendar year 2022, DelDOT and its safety partners are continuing to dedicate resources towards improving safety on Delaware’s roadways. Looking ahead to 2024, the development of Delaware’s next SHSP will be a primary focus of Delaware’s HSIP.

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.

DelDOT's Traffic Engineering Section leads the HSIP with support from both internal and external partners. The HSIP is comprised of several programs (and subprograms/components) that are designed to prioritize resources that target the most critical safety improvement opportunities as identified through data-driven approaches. The following programs are included in Delaware's HSIP:

· Strategic Highway Safety Plan (SHSP)

· Hazard Elimination Program (HEP)

o Segment HEP

o Intersection HEP

§ Signalized Intersection Program

§ Unsignalized Intersection Program

· Systemic Safety Improvement Programs

o Longitudinal Rumble Strips

o High Friction Surface Treatment

o Freeway Median Barrier

o Horizontal Curve signing improvements

· Highway-Rail Grade Crossing (HRGX)

· High Risk Rural Roads Program (HRRRP)

o Segment HRRRP

o Intersection HRRRP

· Automated Safety Enforcement Program (ASEP)

o Electronic Red Light Safety Program (ERLSP)

o Electronic Speed Safety Program (ESSP)

o Block-the-Box Enforcement Program (BtB)

Delaware's SHSP is a statewide-coordinated safety plan that provides a comprehensive framework, identifies specific goals and objectives, and integrates the four E's - Engineering, Education, Enforcement and Emergency Medical Services (EMS). Delaware's SHSP core agencies include DelDOT, Delaware Office of Highway Safety (OHS), and Delaware State Police (DSP). Additionally, several other stakeholders (e.g., Federal Highway Administration, National Highway Traffic Safety Administration, Federal Motor Carrier Safety Administration, Delaware Division of Motor Vehicles, Delaware Department of Justice, Delaware Office of Emergency Medical Services, Delaware Transit Corporation, WILMAPCO, Dover/Kent County MPO, Salisbury/Wicomico MPO, City of Wilmington, Delaware T2/LTAP Center, and the general public) provide input and expertise towards the development of the SHSP. Together, the SHSP core agencies and stakeholders review fatal and serious injury crash data to identify emphasis areas to focus resources with the goal of reducing fatalities and serious injuries. Delaware's current SHSP was adopted in December 2020 and serves as the state's safety plan for 2021 through 2025.

For the HEP, twenty spot locations throughout the state are typically chosen for safety studies each year. Ten sites are selected using the Critical Ratio methodology to identify high crash locations and ten intersection sites (5 signalized; 5 unsignalized) are selected using a crash index methodology. For each site selected, DelDOT's Traffic Engineering Section reviews crash data, performs a field review, and identifies potential safety improvement alternatives. Results of the HEP safety studies are distributed to the HEP stakeholder committee, which includes representatives from DelDOT (Traffic, Planning, Project Development, and the Maintenance Districts), Delaware State Police, FHWA, MPOs, and the relevant counties and municipalities; to solicit feedback regarding the recommended safety improvements. Traffic control device improvements (i.e., signing, striping, lighting, and traffic signal upgrades) are then designed by DelDOT's Traffic Section and/or implemented by DelDOT's maintenance forces and/or on-call contractors. Projects requiring detailed design, public involvement, or resulting in right-of-way or environmental impacts are forwarded to DelDOT's Project Development section for prioritization and inclusion in the Capital Transportation Program (CTP).

Delaware began implementing systemic safety improvements in 2015 targeting the reduction of fatal and serious injury roadway departure crashes. This was a change on how Delaware approached roadway safety by focusing on implementing proven safety countermeasures at high-risk locations rather than by implementing spot treatments. Each of Delaware's systemic safety improvement programs use a data-driven approach based on several factors, including traffic volumes, roadway characteristics, functional classification, and crash history to identify and prioritize locations for implementing proven countermeasures. Delaware has implemented systemic safety improvements in the following areas:

· Longitudinal Rumble Strips: project selection considers both centerline and shoulder rumble strips, prioritizing arterials, collectors, and local roadways statewide based on curvature, shoulder width, lane width and ADT. Other considerations include noise impacts, presence of bicycle traffic, and pavement condition. Recently, Delaware adopted sinusoidal rumble strips as a standard practice on non-freeway applications. Previous three-year open-end contracts were established for implementing rumble strips using HSIP, HRRRP, and Section 154 Penalty Transfer Funds. A new open-end rumble strip installation contract is currently being developed.

· High-Friction Surface Treatment (HFST): project selection prioritizes all roadways statewide based on roadway departure crash rates on wet pavements, focusing primarily on (but not limited to) horizontal curves and high frequency wet-weather crash locations. Implementation has occurred using HSIP, HRRRP, and

Section 154 Penalty Transfer Funds. A new contract that includes installation of HFST at new locations statewide was completed during FY2022 and is currently out for bid.

· Freeway Median Barrier: project selection considers both high-tension cable barrier and double-faced guardrail, prioritizing unprotected medians along I-95 and SR 1 based on daily traffic volumes, horizontal curvature, median width, and head-on and cross-median crash rates. Installation of freeway median barrier along I-95 and SR 1 was recently completed with over 40 miles of median barrier installed. Remaining sections of I-95 are currently in design as well as the limits of US 301. A contract for median barrier installation along a 15-mile portion of non-access controlled SR 1 is also currently out to bid, which will extend barrier southward into Sussex County. DelDOT is continuing to prioritize non-freeway median sections on divided principal arterials.

Delaware's HRGX Program serves as its Rail-Highway Crossing Program. For its HRGX, DelDOT uses FRA's GradeDec.NET software to calculate benefit/cost ratios for all of Delaware's public highway-rail grade crossings. The benefit/cost ratios take into account the most recent five years of crash data, train speeds, the number of trains per day, and AADT, in addition to several other factors. The benefit/cost ratios at each crossing are then calculated for various upgrade alternatives. Then, all at-grade crossings statewide are ranked according to their benefit/cost ratios to identify candidate locations for safety upgrades.

In December 2018, Delaware was identified as a state that experienced an increase in the rural road fatality rate, triggering the MAP-21 Special Rule and the requirement to obligate a portion of HSIP funding to high-risk rural road safety projects. In conformance with the Special Rule, DelDOT obligated $900,000 in FFY2020 to develop and execute a high-risk rural roads program. A site selection process was developed and modeled upon DelDOT's Hazard Elimination Program (HEP), using the critical ratio methodology to identify segment locations and the crash severity index methodology to identify intersection locations (with a few rural road-specific modifications). The segment site selection process is consistent with the HEP segment site selection process but with two modifications: 1) The HRRRP reduces the minimum number of fatality and personal injury (all severities) crashes within a site from five to two along a 0.3-mile segment; and 2) The HRRRP only considers roadways identified as rural major collector, rural minor collector or rural local. The intersection site selection process utilizes the HEP intersection site selection process with three modifications: 1) While the HEP process identifies intersections from separate lists for signalized and unsignalized intersections, a single ranked list of all intersections (signalized and unsignalized) is used for HRRRP; 2) The HRRRP applies a criterion of a minimum of five fatal, personal injury (all severities), and/or property damage only crashes during a three-year period (no minimum was established for HEP); and 3) only considers intersections consisting of rural major collector, rural minor collector; and/or rural local roadways based on data contained in DelDOT's Transportation System Data Management. DelDOT is continuing to implement improvements identified through the HRRRP such as all-way stop control designs at several intersections.

Where is HSIP staff located within the State DOT?

Engineering

HSIP staff are located in DelDOT's Division of Transportation Solutions – Traffic Engineering Section.

How are HSIP funds allocated in a State?

- Other-Central Office via Formula

DelDOT's Central Office distributes HSIP funds to cover general HSIP program and subprogram activities, the installation of low-cost countermeasures (signing, marking, signals, etc.) identified through both the HSIP and projects designed through DelDOT's Project Development group.

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

All roadways throughout the state are eligible for safety funding; however, the calculations used to identify high crash locations for the Hazard Elimination Program (HEP) include state roadways in DelDOT's road inventory where traffic volumes are available. DelDOT maintains approximately 85 percent of all roads in Delaware. Based on a review of statewide crash data on all public roadways from 2015 through 2019, less than 0.5 percent of fatal and serious injuries were the result of crashes that occurred on roadways not maintained by DelDOT, indicating that crashes reported on these roadways would not likely meet the minimum crash criteria for the various HSIP elements.

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

- Design
- Districts/Regions
- Maintenance
- Operations
- Planning
- Traffic Engineering/Safety

Describe coordination with internal partners.

Representatives from DelDOT's Traffic, Planning, Project Development, Transit, and Maintenance and Operations divisions participate in the HSIP as part of the HEP and SHSP committees.

Identify which external partners are involved with HSIP planning.

- FHWA
- Governors Highway Safety Office
- Law Enforcement Agency
- Local Government Agency
- Local Technical Assistance Program
- Regional Planning Organizations (e.g. MPOs, RPOs, COGs)
- Other-National Highway Traffic Safety Administration
- Other-Delaware State Police
- Other-Department of Justice
- Other-Delaware Office of Emergency Medical Services
- Other-Federal Motor Carrier Safety Administration

Describe coordination with external partners.

Representatives from DelDOT’s external partners participate in the HSIP via the HEP and/or SHSP committees. Together, DelDOT and these agencies work together to focus resources with the goal of reducing fatalities and serious injuries on Delaware's transportation system.

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

During FY 2023 (July 1, 2022 - June 30, 2023), components of Delaware’s HSIP included the Strategic Highway Safety Plan (SHSP), the Hazard Elimination Program (HEP), the Systemic Safety Improvement Program, Highway-Rail Grade Crossing Safety Program (HRGX), and High Risk Rural Roads Program (HRRRP). Additional administration accomplishments for the FY 2022 reporting period include:

· Continued Rectangular Rapid Flashing Beacon (RRFB) installations.

· Continued to balance safety and congestion improvements at flashing red arrow (FRA) locations.

· Continued enhancements to the Crash Analysis and Reporting System (CARS)

· Implemented a Wrong Way Detection System on SR 1 Northbound at Bay Road in Dover.

· Continued implementation of pedestrian safety improvements recommended from the US 13 Dover Pedestrian Safety Audit.

· Began pedestrian safety audit on US 113 through Milford.

· Completed FFY2024 HSIP Implementation Plan.

Program Methodology

Select the programs that are administered under the HSIP.

- Horizontal Curve
- HRRR
- Intersection
- Median Barrier
- Pedestrian Safety
- Segments
- Other-Longitudinal Rumble Strips
- Other-High Friction Surface Treatment

In addition to the programs selected herein, DelDOT continues to place a high priority on red light running prevention through its Electronic Red Light Safety Program, which historically has fallen outside the HSIP umbrella.

Program: Horizontal Curve

Date of Program Methodology:8/1/2022

What is the justification for this program?

- Addresses SHSP priority or emphasis area

What is the funding approach for this program?

Other-Competes with HSIP projects

What data types were used in the program methodology?

Crashes

- Other-Hot Spots by Request

Exposure

- Volume

Roadway

- Horizontal curvature
- Functional classification

What project identification methodology was used for this program?

- Other-All horizontal curves.

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

No

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

How are projects under this program advanced for implementation?

- selection committee

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

Rank of Priority Consideration

Available funding:1

Program: HRRR

Date of Program Methodology:4/1/2021

What is the justification for this program?

- Other-MAP-21 Special Rule

What is the funding approach for this program?

Funding set-aside

What data types were used in the program methodology?

Crashes	Exposure	Roadway
• Other-Fatal and Injury Crashes Only	• Volume	• Functional classification

What project identification methodology was used for this program?

- Critical rate
- Relative severity index

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

No

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

How are projects under this program advanced for implementation?

- selection committee

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

Relative Weight in Scoring

Available funding:50
Cost Effectiveness:50
Total Relative Weight:100

Program: Intersection

Date of Program Methodology:12/17/2018

What is the justification for this program?

- Addresses SHSP priority or emphasis area

What is the funding approach for this program?

Competes with all projects

What data types were used in the program methodology?

Crashes	Exposure	Roadway
• Other-Fatal and Injury Crashes Only		

What project identification methodology was used for this program?

- Relative severity index

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

No

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

How are projects under this program advanced for implementation?

- selection committee

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

Relative Weight in Scoring

Available funding:50
Cost Effectiveness:50
Total Relative Weight:100

Program: Median Barrier

Date of Program Methodology:7/1/2018

What is the justification for this program?

- Addresses SHSP priority or emphasis area

What is the funding approach for this program?

Other-Competes with HSIP projects

What data types were used in the program methodology?

Crashes

- Other-All roadway departure crashes, head-on crashes, and cross-median crashes

Exposure

- Volume
- Other-Roadway Miles

Roadway

- Median width
- Horizontal curvature
- Functional classification
- Roadside features

What project identification methodology was used for this program?

- Crash frequency
- Crash rate
- Relative severity index

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

No

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

How are projects under this program advanced for implementation?

- Other-Based on prioritization and funding availability

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).

Relative Weight in Scoring

Available funding:50
Ranking based on net benefit:50
Total Relative Weight:100

Program: Pedestrian Safety

Date of Program Methodology:1/1/2010

What is the justification for this program?

- Addresses SHSP priority or emphasis area

What is the funding approach for this program?

Competes with all projects

What data types were used in the program methodology?

Crashes

- Other-Pedestrian Crashes

Exposure

Roadway

- Other-Adjacent Land Uses

What project identification methodology was used for this program?

- Crash frequency
- Excess proportions of specific crash types
- Probability of specific crash types

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

No

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

How are projects under this program advanced for implementation?

- selection committee

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

Rank of Priority Consideration

Available funding:2
Ranking based on net benefit:1

Program: Segments

Date of Program Methodology:12/17/2018

What is the justification for this program?

- Addresses SHSP priority or emphasis area

What is the funding approach for this program?

Competes with all projects

What data types were used in the program methodology?

Crashes

- Other-Fatal and Injury Crashes Only

Exposure

- Volume
- Other-Roadway Miles

Roadway

- Other-Roadway Type

What project identification methodology was used for this program?

- Critical rate

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

No

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

How are projects under this program advanced for implementation?

- selection committee

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

Relative Weight in Scoring

Ranking based on B/C:25
Available funding:25
Ranking based on net benefit:25
Cost Effectiveness:25
Total Relative Weight:100

Program: Other-Longitudinal Rumble Strips

Date of Program Methodology:7/1/2018

What is the justification for this program?

What is the funding approach for this program?

What data types were used in the program methodology?

Crashes **Exposure** **Roadway**

What project identification methodology was used for this program?

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

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

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).

Program: Other-High Friction Surface Treatment

Date of Program Methodology:7/1/2018

What is the justification for this program?

- Addresses SHSP priority or emphasis area

What is the funding approach for this program?

Funding set-aside

What data types were used in the program methodology?

Crashes	Exposure	Roadway
• Other-All wet weather roadway departure crashes	• Volume • Other-Roadway Miles	

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?

No

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

How are projects under this program advanced for implementation?

- Other-Based on prioritization and funding availability

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 net benefit:1

What percentage of HSIP funds address systemic improvements?

9

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

- Cable Median Barriers
- Wrong way driving treatments

What process is used to identify potential countermeasures?

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

Does the State HSIP consider connected vehicles and ITS technologies?

Yes

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

As part of the national SPaT Challenge, DelDOT has equipped intersections along US 13 in Smyrna as well as intersections in Dover with dedicated short-range communication (DSRC) roadside equipment. As vehicle manufacturers increase deployment of connected vehicles, the implementation of red light violation warnings and other associated applications at traffic signals via DSRC will be supportive of safety initiatives related to the “Intersections” emphasis area of the SHSP. Although the HSIP may not be the direct catalyst, DelDOT has undertaken and implemented many ITS solutions to improve safety that are in alignment with its SHSP. A few examples include the installation of a dilemma zone detection system, queue detection systems for the I-95 Wilmington Viaduct project, Variable Speed Limit signs, pilot deployments of dynamic chevrons, and wrong way entry detection (SR 1 NB off-ramp at Bay Road), dynamic all-red protection and RR crossing blockages widespread public awareness notifications. Also, DelDOT recently launched a service that allows commercial drivers to get real-time notifications of upcoming traffic congestion and sudden slowdowns. Moving ahead, we expect to have a higher level of coordination between CAV/ITS initiatives and HSIP/SHSP initiatives than we have had in the past.

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.

DelDOT uses the HSM to compare alternatives and countermeasures under consideration for its HSIP. DelDOT is continuing to investigate and consider the use of HSM methodologies for various site selection processes under the HSIP umbrella.

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)	$12,375,300	$21,774,404	175.95%
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)	$2,086,800	$2,086,807	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)	$19,966,200	$0	0%
State and Local Funds	$0	$0	0%
Totals	$34,428,300	$23,861,211	69.31%

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?

$0

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

$1,070,556

Non-Infrastructure Safety Projects included FY2023 HSIP administration and HEP-related pedestrian safety studies and implementation.

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.

No impediments at this time.

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
T200711201 - HSIP SR24 @ Mount Joy Road and SR24 at Bay Farm Road Intersection	Intersection geometry	Add/modify auxiliary lanes	2	Intersections	$5719655	$19449165	HSIP (23 U.S.C. 148)	Urban	Major Collector	18,200	50	State Highway Agency	Spot	Intersections	Intersection 1.0: Reduce the frequency and severity of intersection crashes through operational, geometric and traffic control device improvements.
T200900704 - HSIP NCC, SR273 Appleby Rd to Airport Rd	Intersection geometry	Add/modify auxiliary lanes	1	Intersections	$881864	$15908410	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Other	27,600	45	State Highway Agency	Spot	Intersections	Intersection 1.0: Reduce the frequency and severity of intersection crashes through operational, geometric and traffic control device improvements.
T201500201 - HEP KC, SR8 & SR15 Intersection Improvement	Intersection geometry	Intersection geometry - other	1	Intersections	$4308253	$10250529	HSIP (23 U.S.C. 148)	Urban	Minor Arterial	20,600	40	State Highway Agency	Spot	Intersections	Intersection 1.0: Reduce the frequency and severity of intersection crashes through operational, geometric and traffic control device improvements.
T201900901 - HSIP SR24 Corridor Projects Coordination	Miscellaneous	Transportation safety planning	1	Locations	$1104022	$3527372	HSIP (23 U.S.C. 148)	Urban	Multiple/Varies	0		State Highway Agency			
T201904201 - HEP KC, US113 @ SR14	Intersection geometry	Add/modify auxiliary lanes	1	Intersections	$2923787	$4403507	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Other	57,171	40	State Highway Agency	Spot	Intersections	Intersection 1.0: Reduce the frequency and severity of intersection

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
Intersection Improvements															crashes through operational, geometric and traffic control device improvements.
T202100401 - 2019 Hazard Elimination Program - Traffic Control Device Improvement	Roadway signs and traffic control	Roadway signs and traffic control - other	1	Statewide	$1102500	$1225000	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0		State Highway Agency	Spot	Multiple/Varies	Multiple/Varies
2022 NCC Safety Projects, Various Locations	Intersection traffic control	Intersection traffic control - other	1	County	$2884221	$3026921	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0		State Highway Agency	Spot	Intersections	Multiple/Varies
T201200902 - HSIP SC, SR24 at Camp Arrow Head Rd and SR24 at Angola Rd	Intersection geometry	Add/modify auxiliary lanes	2	Intersections	$39845	$1364884	HSIP (23 U.S.C. 148)	Urban	Major Collector	19,250	45	State Highway Agency	Spot	Intersections	Intersection 1.0: Reduce the frequency and severity of intersection crashes through operational, geometric and traffic control device improvements.
T201200903 - HSIP SR24 at SR5/SR23 Intersection Improvements	Intersection geometry	Add/modify auxiliary lanes	1	Intersections	$94500	$13480742	HSIP (23 U.S.C. 148)	Urban	Major Collector	14,900	45	State Highway Agency	Spot	Intersections	Intersection 1.0: Reduce the frequency and severity of intersection crashes through operational, geometric and traffic control device improvements.
Bay Road & SR10 Wrong Way ITS	Advanced technology and ITS	Wrong-way Driving Detection System	1	Intersections	$18000	$129048	HSIP (23 U.S.C. 148)	Urban	Minor Arterial	27,675	40	State Highway Agency	Spot	Intersections	Intersection 2.0: Reduce the frequency and severity of intersection crashes using

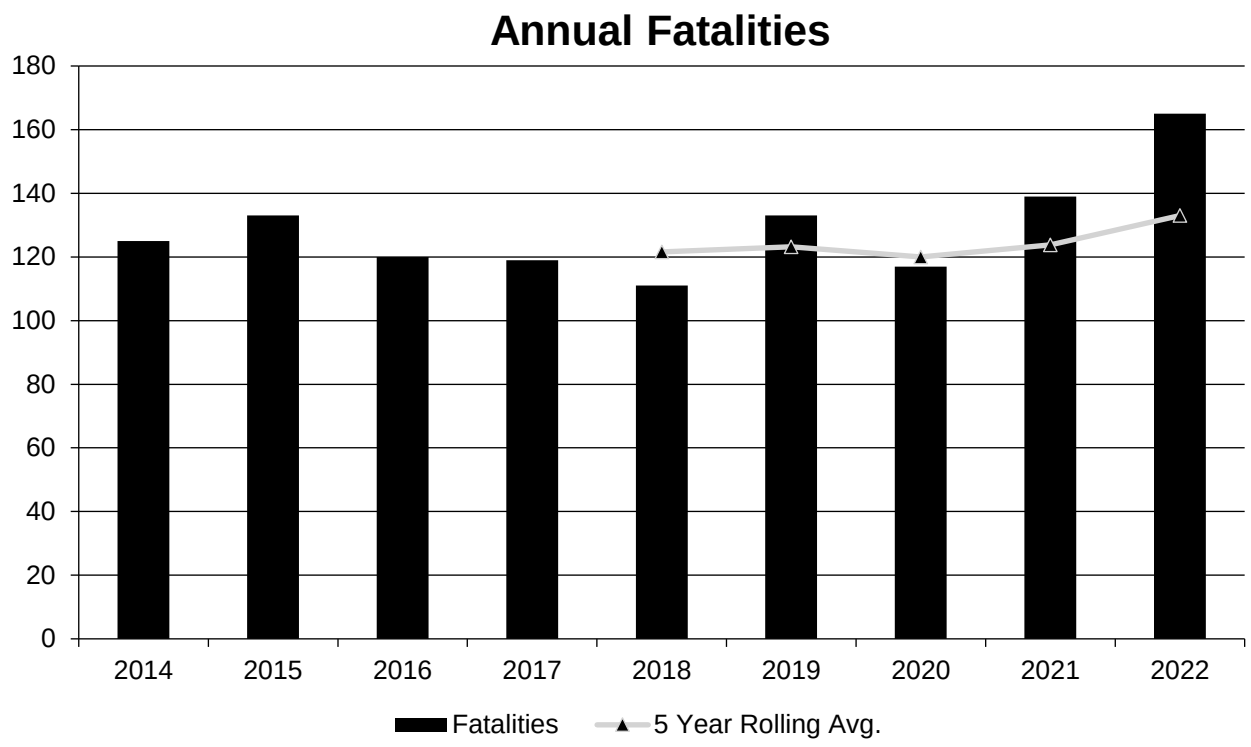
PROJECT NAME	IMPROVEMENT CATEGORY	SUBCATEGORY	OUTPUTS	OUTPUT TYPE	HSIP PROJECT COST($)	TOTAL PROJECT COST($)	FUNDING CATEGORY	LAND USE/AREA TYPE	FUNCTIONAL CLASSIFICATION	AADT	SPEED	OWNERSHIP	METHOD FOR SITE SELECTION	SHSP EMPHASIS AREA	SHSP STRATEGY
															innovative technology and automated enforcement practices.
Hazard Elimination Program - Traffic Control Device Improvement	Roadway signs and traffic control	Roadway signs and traffic control - other	1	Statewide	$1627200	$1808000	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0		State Highway Agency	Spot	Multiple/Varies	Multiple/Varies
FY2023 Highway Safety Improvement Program (Other)	Miscellaneous	Transportation safety planning	1	Statewide	$980556	$1089507	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0		State Highway Agency	Spot and Systemic	Multiple/Varies	Multiple/Varies
HEP, Pedestrian Safety Studies and Implemenation	Pedestrians and bicyclists	Pedestrians and bicyclists – other	1	Statewide	$90000	$200000	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0		State Highway Agency	Spot	Pedestrians	Various
T201901002 - Median Barrier Installation, Statewide Open End	Roadside	Barrier - other	14	Miles	$2086807	$2086807	Penalty Funds (23 U.S.C. 154)	Urban	Principal Arterial-Other Freeways & Expressways	42,000	65		Systemic	Roadway Departure	Roadway Departure 2.0 Minimize the consequence of leaving the roadway by improving the roadside environment.

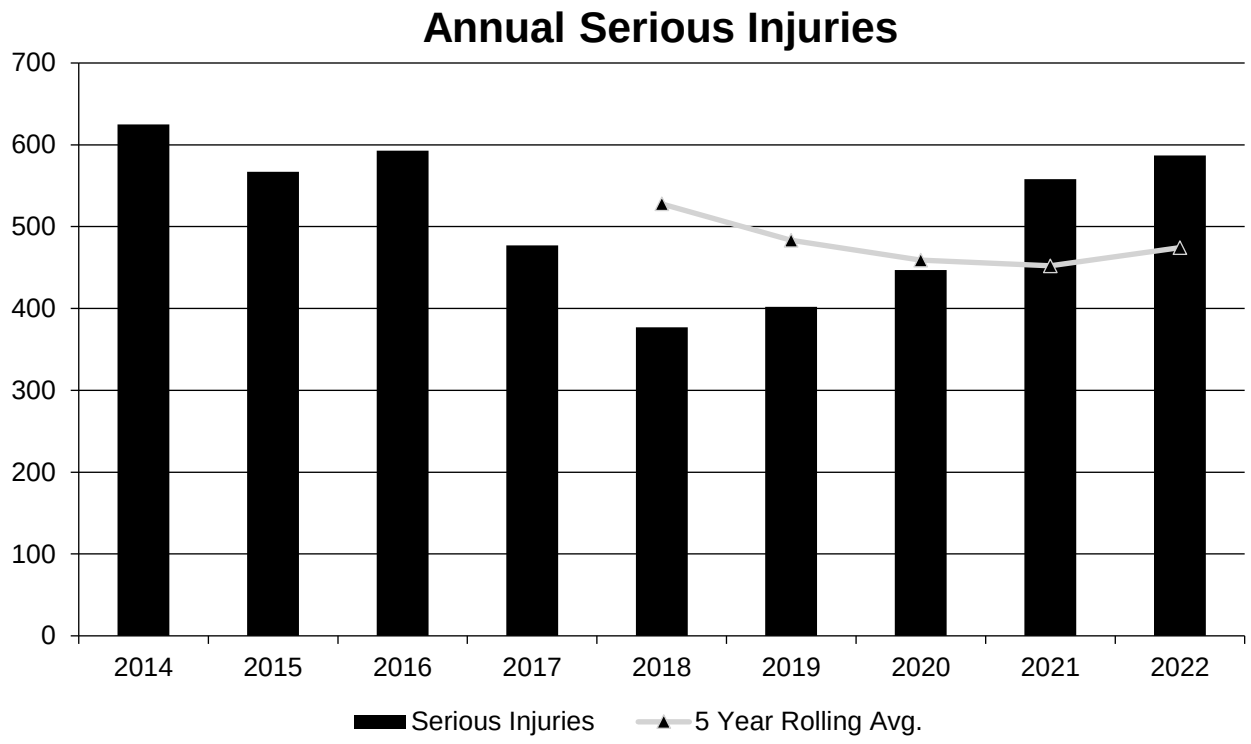
Safety Performance

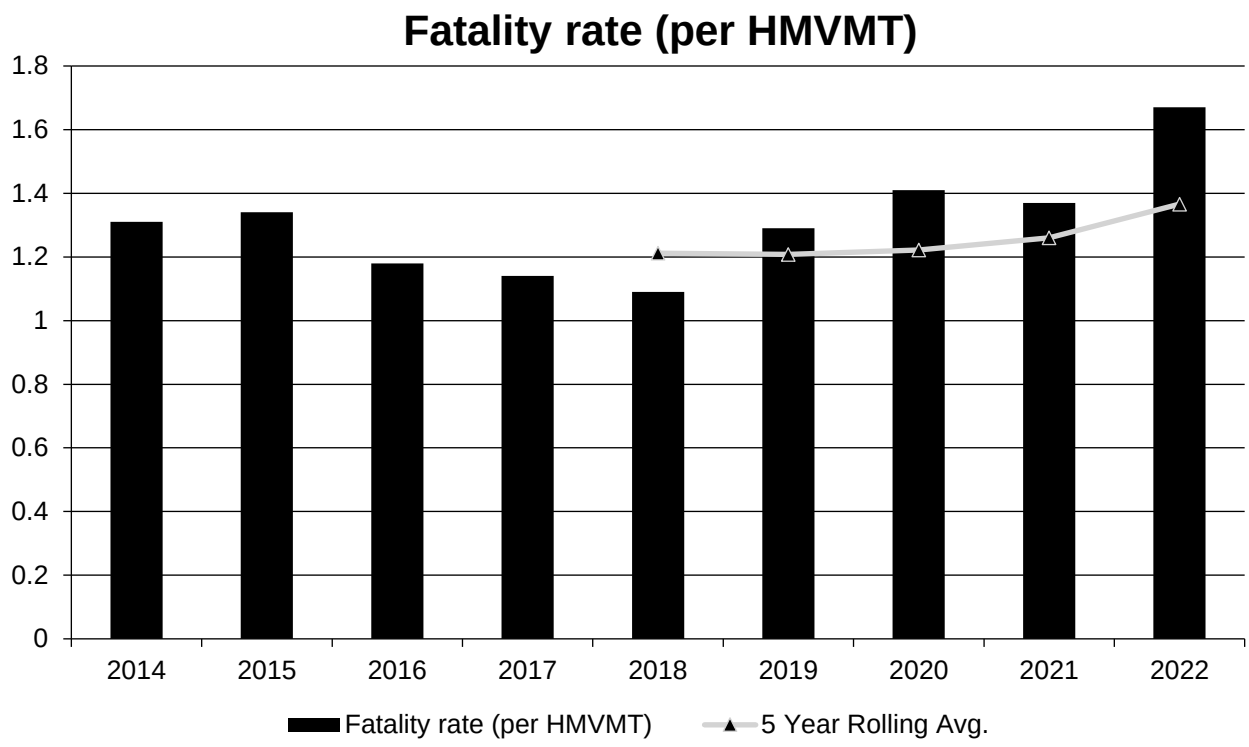
General Highway Safety Trends

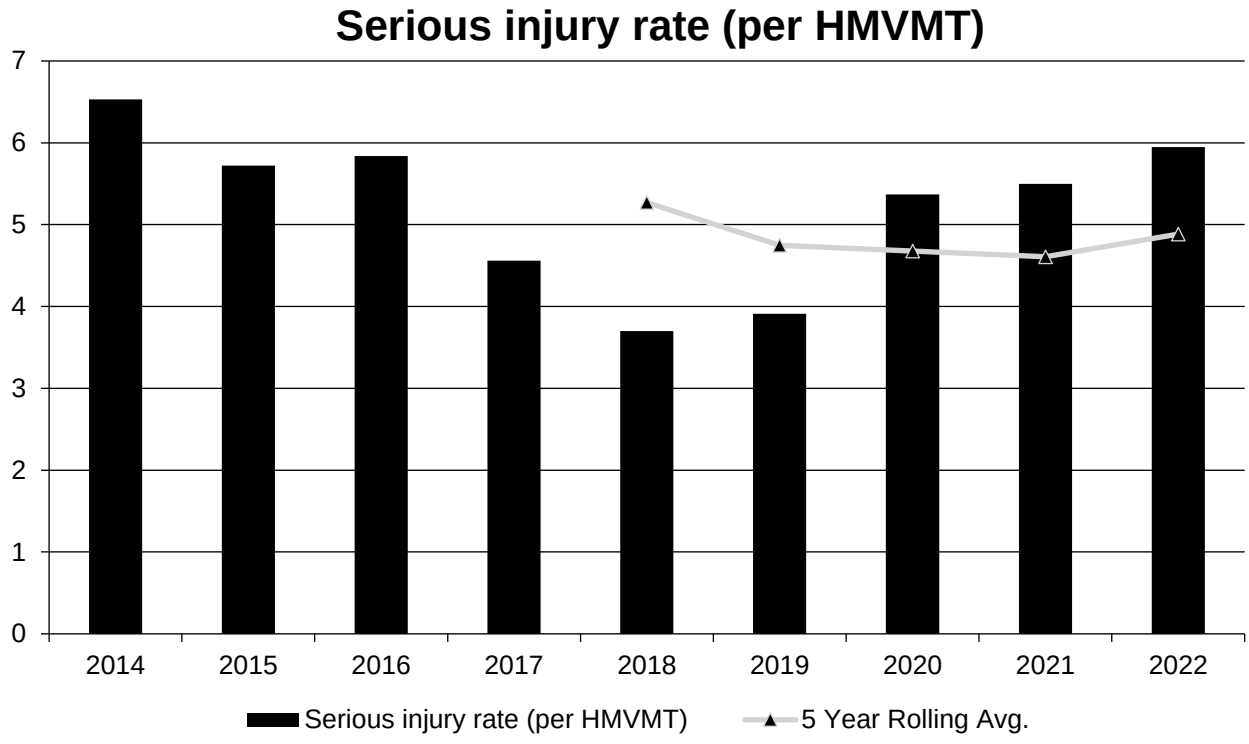
Present data showing the general highway safety trends in the State for the past five years.

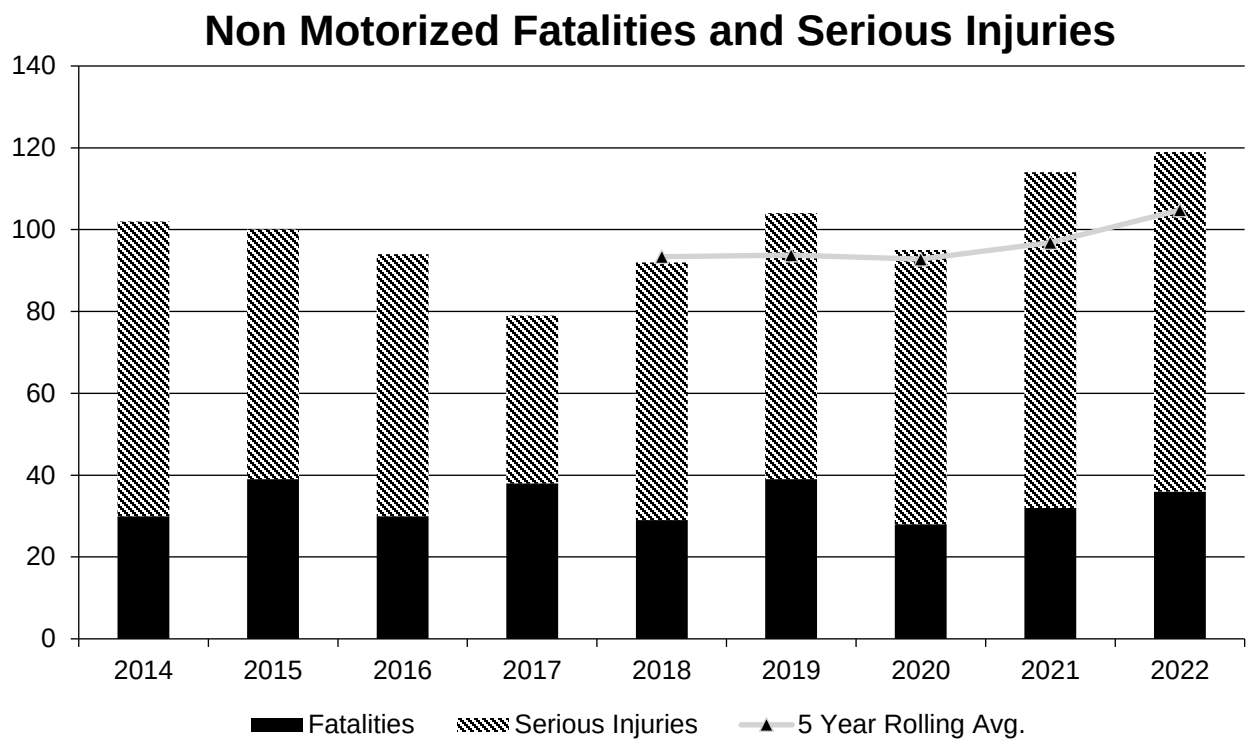
PERFORMANCE MEASURES	2014	2015	2016	2017	2018	2019	2020	2021	2022
Fatalities	125	133	120	119	111	133	117	139	165
Serious Injuries	625	567	593	477	377	402	447	558	587
Fatality rate (per HMVMT)	1.310	1.340	1.180	1.140	1.090	1.290	1.410	1.370	1.670
Serious injury rate (per HMVMT)	6.530	5.720	5.840	4.560	3.700	3.910	5.370	5.500	5.950
Number non-motorized fatalities	30	39	30	38	29	39	28	32	36
Number of non-motorized serious injuries	72	61	64	41	63	65	67	82	83


Annual Fatalities
180
160
140
120
100
80
60
40
20
0
2014
2015
2016
2017
2018
2019
2020
2021
2022
Fatalities
5 Year Rolling Avg.


Annual Serious Injuries
700
600
500
400
300
200
100
0
2014
2015
2016
2017
2018
2019
2020
2021
2022
Serious Injuries
5 Year Rolling Avg.


Fatality rate (per HMVMT)
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
2014
2015
2016
2017
2018
2019
2020
2021
2022
Fatality rate (per HMVMT)
5 Year Rolling Avg.


Serious injury rate (per HMVMT)
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.



For the purposes of this reporting, state data was used for both the number of fatalities and serious injuries.

Describe fatality data source.

State Motor Vehicle Crash Database

For the purposes of reporting the most recent statewide crash data trends, crash data from Delaware's Crash Analysis Reporting System (CARS) was used. It should be noted that safety performance measure targets relied on FARS data as required by the SPM Final Rule. The difference between the number of fatalities reported in FARS and CARS is typically no more than one, so data interpretations are unaffected.

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				
Rural Principal Arterial (RPA) - Other Freeways and Expressways	2.8	8.2	0.73	2.13

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) - Other	10.6	29.4	1.49	4.17
Rural Minor Arterial	5.2	18.2	2.14	7.51
Rural Minor Collector	6.6	21.8	4.13	13.15
Rural Major Collector	12.2	46	2.26	8.33
Rural Local Road or Street	11	34.8	2.53	8.12
Urban Principal Arterial (UPA) - Interstate	11	27	0.79	1.95
Urban Principal Arterial (UPA) - Other Freeways and Expressways	4.8	9	0.69	1.28
Urban Principal Arterial (UPA) - Other	32.8	103.8	1.55	4.86
Urban Minor Arterial	15.6	69	1.43	6.49
Urban Minor Collector	1.8	6.4		9.91
Urban Major Collector	10.8	53.4	1.3	6.48
Urban Local Road or Street	7	49.2	0.67	4.71

Year 2019

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	0			
County Highway Agency				
Town or Township Highway Agency				
City or Municipal Highway Agency				
State Park, Forest, or Reservation Agency				
Local Park, Forest or Reservation Agency				
Other State Agency				
Other Local Agency				
Private (Other than Railroad)				
Railroad				
State Toll Authority				
Local Toll Authority				
Other Public Instrumentality (e.g. Airport, School, University)				
Indian Tribe Nation				

Since DelDOT maintains approximately 85 percent of all roads in Delaware, Delaware does not report on roadway ownership at this time. DelDOT is aware that the 2022 total number of fatalities and serious injuries reported in this question do not match totals reported elsewhere (i.e., Question 30) in this report. This discrepancy is due to some fatal/serious injury crash reports that have not yet fully been finalized by police. DelDOT expects to correct this in future HSIP annual reports.

Provide additional discussion related to general highway safety trends.

The number of fatalities (based on 5-year rolling averages) per year remained relatively steady from 2018 to 2021, ranging from 119.4 to 122.8; however, increased to 132.0 in 2022 due to a spike in fatalities during CY

2022. During the same period, the number of serious injuries (based on 5-year rolling averages) per year have steadily declined annually from 527.8 in 2018 to 452.2 in 2021 before increasing to 474.2 in 2022.

In 2020, statewide vehicle miles traveled (VMT) decreased approximately 20 percent to 83.22 HMVMT in 2020 due to travel restrictions implemented for the COVID-19 pandemic. However, statewide VMT increased in CY 2021 and 2022 to levels seen before 2020, which is an indication that travel is returning to pre-COVID levels. As a result of the reduced VMT, the fatality and serious injury rates for calendar year 2020 were 20 and 19 percent greater than the annual average for the preceding four years. Unfortunately, CY 2021 and 2022 fatality and serious injury rates have held consistent with the increased CY 2020 rates.

The raw number of fatalities and serious injuries per year for the State of Delaware are relatively low; therefore, there is greater potential for larger fluctuations in fatality rates and serious injury rates as compared to other larger states and national rates, even though the raw number of fatalities and serious injuries may only differ by a few on a year-to-year basis.

Safety Performance Targets

Safety Performance Targets

Calendar Year 2024 Targets *

Number of Fatalities:108.2

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

During 2020, DelDOT and OHS and other statewide safety partners (including FHWA and NHTSA) collaborated to develop the *2021-2025 Delaware Strategic Highway Safety Plan: Toward Zero Deaths (2021-2025 SHSP),* which provides a framework to reduce fatalities and serious injuries resulting from crashes on Delaware's roadways. As part of the plan's development, several trendlines were reviewed to establish an aggressive, yet achievable, overall objective. Through a comparison of these trendlines, the reduction of combined fatalities and serious injuries ranged from 2.6 to 4.4 percent annually or 12 to 20 percent over five years. Based on these historic trends, the *2021-2025 SHSP* established a five-year overall objective to reduce fatalities and serious injuries by 15 percent (a 3.2 percent annual reduction) as measured from the 2015-2019 five-year rolling average.

In Spring 2023, DelDOT and OHS coordinated to set Delaware's 2023 safety performance measure targets and agreed to align the annual SPM targets with the *2021-2025 SHSP's* five-year overall objective with one modification. 2023 Targets will not be met due, in part, to increases in the number of observed fatalities and serious injuries in calendar year 2022; therefore, the 2023 Targets will be utilized as 2024 Targets. The objectives outlined in the *2021-2025 SHSP* are frequency-based using five-year rolling averages; therefore, 2023 SPM targets 1, 3, and 5 were calculated using projections based on the *2021-2025 SHSP's* objective to reduce fatalities and serious injuries by 15 percent over 5 years. Projected fatality and serious injury numbers were combined with projected vehicle miles traveled (VMT) to calculate the two rate-based SPM targets (i.e., 2 and 4). The table below shows the historical performance for 2018 to 2022, 2022 Baseline, 2024 Targets, and the CY2023 and CY2024 average values required to match the 2022 Baseline and 2024 Targets. FWHA determines a state has met or made significant progress when actual performance matches the established target or is better than the baseline for at least four of the five SPM targets.

Number of Serious Injuries:424.3

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

See response for number of fatalities.

Fatality Rate:1.104

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

See response for number of fatalities.

Serious Injury Rate:4.328

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

See response for number of fatalities.

Total Number of Non-Motorized Fatalities and Serious Injuries:82.4

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

See response for number of fatalities.

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

After coordinating with the Delaware Office of Highway Safety (OHS) in Spring 2023, DelDOT distributed the draft of agreed-upon safety performance measures to statewide stakeholders for their comment via email. Members of Delaware's SHSP committee accounted for a majority of the stakeholders included in the distribution of the draft targets. This includes, but is not limited to, the representatives from Delaware's MPOs, Delaware State Police, and Delaware's Office of Emergency Medical Services. DelDOT did not receive any objections to the draft safety performance measure targets.

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	111.8	133.0
Number of Serious Injuries	438.3	474.2
Fatality Rate	1.074	1.366
Serious Injury Rate	4.212	4.886
Non-Motorized Fatalities and Serious Injuries	85.1	104.8

2022 SPM targets were established in Spring 2021 to consider safety performance through the end of calendar year 2022. Per FHWA guidelines, fatality data from the Fatality Analysis Reporting System (FARS) and traffic volume data from the Highway Performance Monitoring System (HPMS) will be used to officially assess whether a state met or made significant progress towards meeting its annual SPM targets. As previously noted, crash data from Delaware's Crash Analysis Reporting System (CARS) was used instead of FARS data for this report. The difference between the number of fatalities reported in FARS and CARS is typically no more than one. The actual observed data in this question is generated using CARS data; however, the descriptions below are based on FARS data if available, which results in minor rounding differences. Based on this preliminary assessment (described below), Delaware has met or made significant progress toward meeting zero of the five 2022 Safety Performance Measure Targets.

1. Number of Fatalities – Delaware's 2018-2022 5-year rolling average value is 132.0 or 20.2 fatalities greater than the 111.8 target and 12.6 fatalities greater than the 119.4 2016-2020 baseline. In 2021, fatalities increased to 139 (State data)/136 (FARS data), the highest since 2006. This trend continued in 2022 when fatalities increased to 165. Since actual performance is greater than the SPM target and baseline, this SPM target is NOT MET.

2. Number of Serious Injuries – Delaware's 2018-2022 5-year rolling average value is 474.2 or 35.9 serious injuries greater than the 438.3 target and 15.0 greater than the 459.2 2016-2020 baseline. In 2021 and 2022, serious injuries increased to 558 and 587, respectively, which represents an increase of approximately 34 percent from the prior 4 years (2017-2020) performance. Since actual performance is greater than the SPM target and baseline, this SPM target is NOT MET.

3. Rate of Fatalities – Delaware's 2018-2022 5-year rolling average value is 1.362, which is higher than the 1.074 target and 1.216 2016-2020 baseline. As a result of reduced VMT in 2020 due to COVID-19 restrictions, the fatality rate for 2020 was 20 percent greater than the annual average for the preceding four years. In 2021 and 2022, annual VMT returned to levels consistent with pre-2020 periods; however, increases in the number of fatalities have resulted in higher fatality rates. Since actual performance is greater than the SPM target and baseline, this SPM target is NOT MET.

4. Rate of Serious Injuries – Delaware's 2018-2022 5-year rolling average value is 4.886, which is greater than the 4.212 target and the 4.676 2016-2020 baseline. As a result of reduced VMT in 2020 due to COVID-19 restrictions, the serious injury rate for 2020 was 19 percent greater than the annual average for the preceding four years. In 2021 and 2022, annual VMT returned to levels consistent with pre-2020 periods; however, increases in the number of serious injuries have resulted in higher serious injury rates. Since actual performance is greater than the SPM target and baseline, this SPM target is NOT MET.

5. Combined Number of Non-Motorized Fatalities and Serious Injuries – Delaware's 2018-2022 5-year rolling average value is 103.2, which is higher than the 85.1 target and higher than the 92.8 2016-2020 baseline. Since actual performance is greater than both the target and baseline, this SPM target is NOT MET.

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?

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	17	19	16	27	22	23	25
Number of Older Driver and Pedestrian Serious Injuries	42	46	27	31	28	49	63

As required, the number of fatalities is based on FARS data and the number of serious injuries is based on State data. At the time of reporting, 2022 FARS data is unavailable; therefore, State data is reported for CY 2022.

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.

See response to Question 33 (General Highway Safety Trends Description) for discussion of the change in fatalities and serious injuries.

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

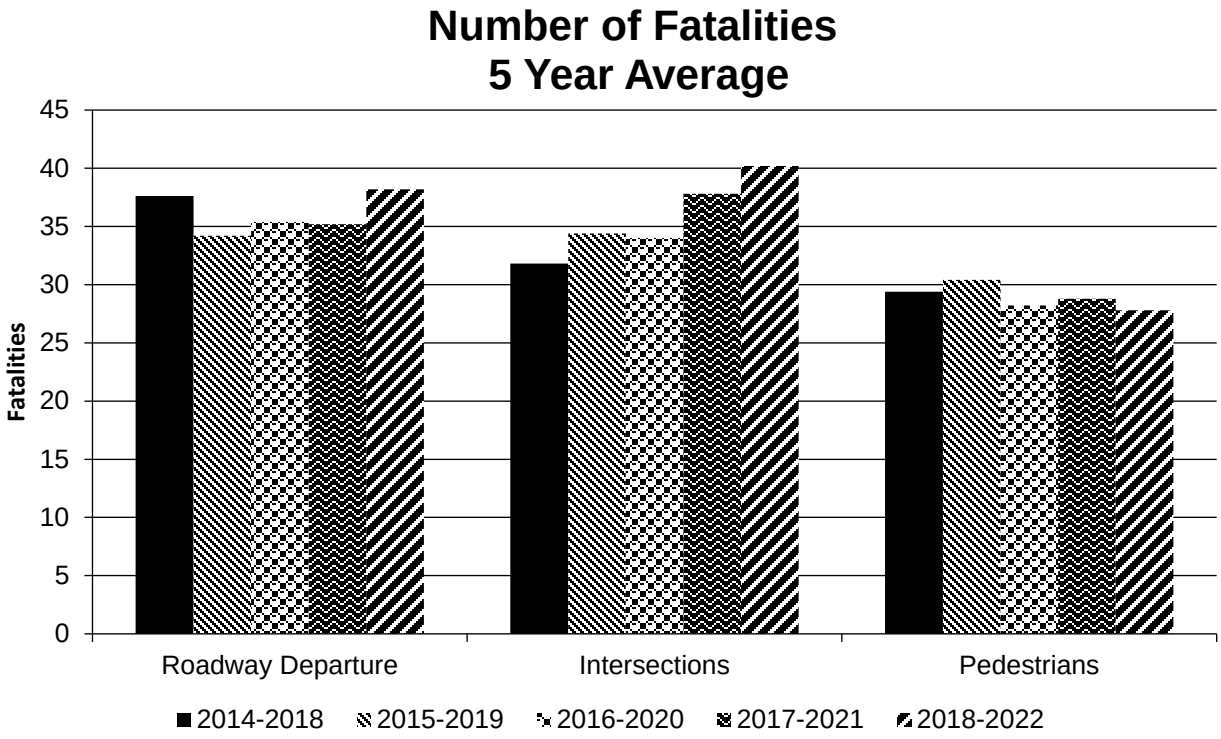
- # miles improved by HSIP
- # RSAs completed
- Other-Implementation of crash countermeasures at additional locations under systemic programs

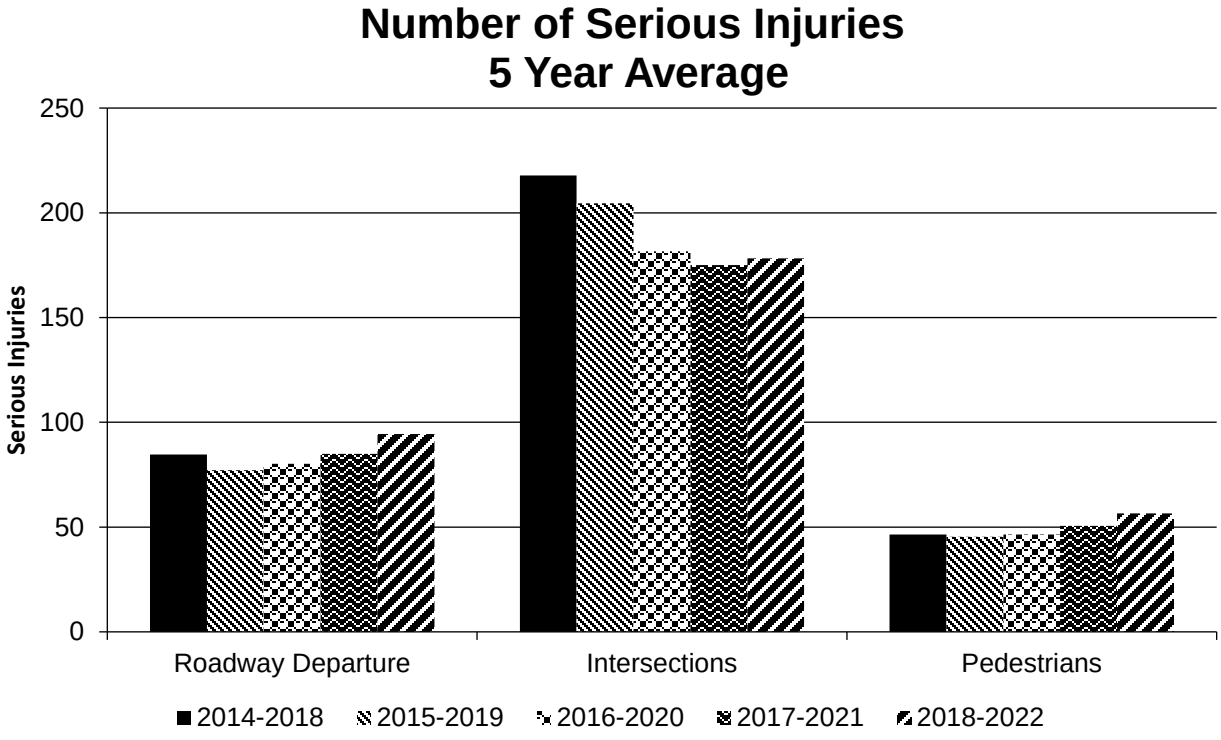
Effectiveness of Groupings or Similar Types of Improvements

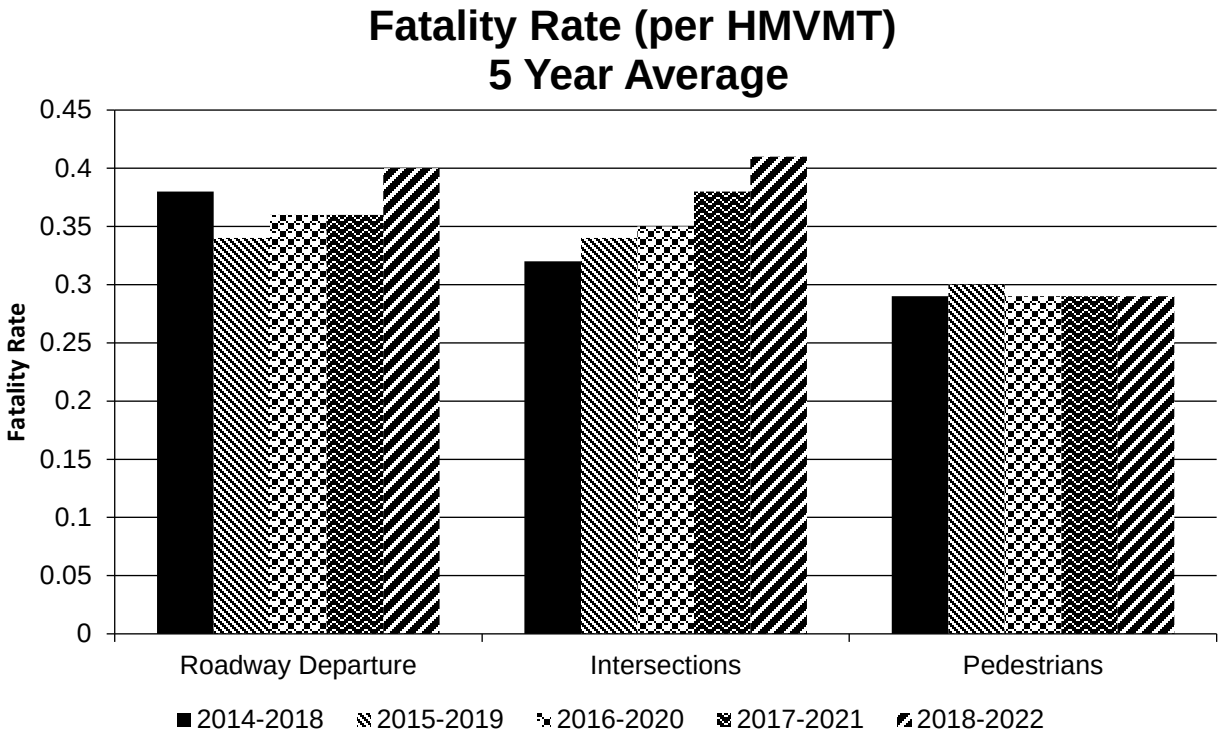
Present and describe trends in SHSP emphasis area performance measures.

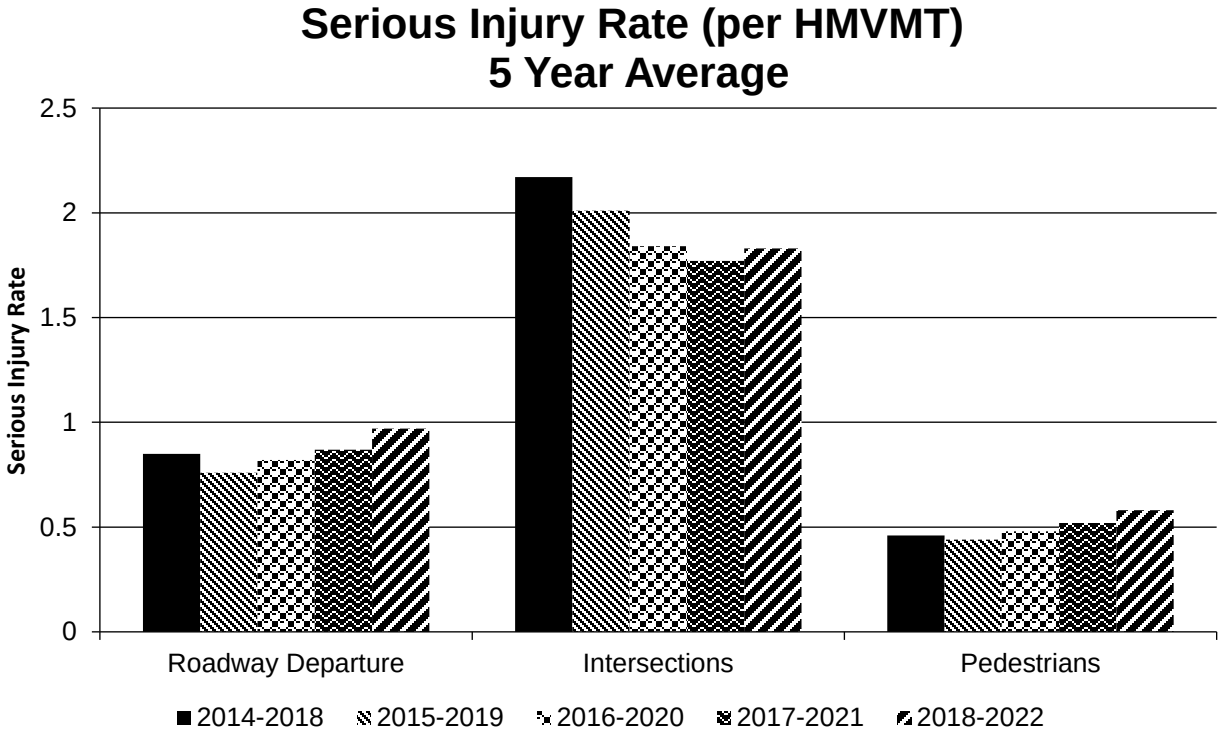
Year 2022

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		38.2	94.4	0.4	0.97
Intersections		40.2	178.2	0.41	1.83
Pedestrians		27.8	56.6	0.29	0.58


Number of Fatalities
5 Year Average
Fatalities
45
40
35
30
25
20
15
10
5
0
Roadway Departure
Intersections
Pedestrians
2014-2018
2015-2019
2016-2020
2017-2021
2018-2022


Number of Serious Injuries
5 Year Average
Serious Injuries
250
200
150
100
50
0
Roadway Departure
Intersections
Pedestrians
2014-2018
2015-2019
2016-2020
2017-2021
2018-2022





Delaware's 2021-2025 SHSP includes 8 data-driven emphasis areas. Crash statistics for emphasis areas related to driver behavior (i.e., Distracted Driving, Impaired Driving, Unrestrained Motorists, Speeding) are reported in Delaware's annual Highway Safety Plan.

As shown, the number and rate of roadway departure fatalities and serious injuries (based on 5-year rolling averages) have remained relatively steady from 2018 to 2022. The number and rate of intersection fatalities (based on 5-year rolling averages) has generally increased from 2018 to 2022; however, the number and rate of intersection serious injuries has generally decreased during the same time period. The number and rate of pedestrian fatalities and serious injuries (based on 5-year rolling averages) has remained relatively steady from 2018 to 2022; however, there has been an uptick in serious injuries in 2021 and 2022.

Project Effectiveness

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

A before and after crash data analysis was completed on Delaware's 44 High-Friction Surface Treatment (HFST) locations. The results of the analysis showed approximately an 80% decrease in wet weather crashes at locations where HFST was installed. Given these promising results, the Department is looking to continue installing HFST statewide at high-risk locations.

DelDOT also evaluated crashes at intersections recently converted to All-Way Stop Control (AWSC) and developed crash modification factors (CMFs) for several scenarios including speeds, volumes, and MUTCD warrants.

Compliance Assessment

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

12/31/2020

What are the years being covered by the current SHSP?

From: 2021 To: 2025

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

2025

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

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

ROAD TYPE	*MIRE NAME (MIRE NO.)	NON LOCAL PAVED ROADS - SEGMENT		NON LOCAL PAVED ROADS - INTERSECTION		NON LOCAL PAVED ROADS - RAMPS		LOCAL PAVED ROADS		UNPAVED ROADS	
		STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE
ROADWAY SEGMENT	Segment Identifier (12) [12]	100	100					100	100	100	100
	Route Number (8) [8]	100	100								
	Route/Street Name (9) [9]	100	100								
	Federal Aid/Route Type (21) [21]	100	100								
	Rural/Urban Designation (20) [20]	100	100					100	100		
	Surface Type (23) [24]	100						100			
	Begin Point Segment Descriptor (10) [10]	100	100					100	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
	Median Type (54) [55]	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
	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]			100	100						
	AADT for Each Intersecting Road (79) [81]			100	100						
	AADT Year (80) [82]			100	100						
	Unique Approach Identifier (139) [129]			100	100						
INTERCHANGE/RAMP	Unique Interchange Identifier (178) [168]					100	100				
	Location Identifier for Roadway at Beginning of Ramp Terminal (197) [187]					100	100				

ROAD TYPE	*MIRE NAME (MIRE NO.)	NON LOCAL PAVED ROADS - SEGMENT		NON LOCAL PAVED ROADS - INTERSECTION		NON LOCAL PAVED ROADS - RAMPS		LOCAL PAVED ROADS		UNPAVED ROADS	
		STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE
	Location Identifier for Roadway at 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				
	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**	**94.44**	**100.00**	**100.00**	**90.91**	**100.00**	**100.00**	**88.89**	**100.00**	**100.00**

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

There are no non-state maintained interchanges/ramps in the state; therefore, the non-state maintained interchange/ramp section is not applicable. A value of 100 % was entered for the purposes of reporting.

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.

DelDOT is working towards meeting the FDE requirement by September 2026.

Optional Attachments

Program Structure:

Project Implementation:

Safety Performance:

Evaluation:

Compliance Assessment:

Glossary

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

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

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

HMVMT: means hundred million vehicle miles traveled.

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

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

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

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

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

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

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

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

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