



DISTRICT OF COLUMBIA

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

This Fiscal Year (FY) 2023 annual report to the Federal Highway Administration (FHWA) describes the District of Columbia Department of Transportation (DDOT)'s strategic use of Fixing America's Surface Transportation Act (FAST Act) funding of the District's Highway Safety Improvement Programs (HSIP) for FY 2023.

The FAST Act requires the development of a Strategic Highway Safety Plan (SHSP) and the Railway-Highway Crossings Program (RHCP). Due to its urban nature, the District of Columbia transportation system does not contain any rural roads. All roadways within the District are functionally classified as urban roads. In the District of Columbia, most railway crossings are grade-separated from the highway and the relatively few at grade railway crossings no longer carry active railroad traffic. The District has regularly requested that funds allocated for the RHCP be made available for HSIP in the District of Columbia.

To obligate Safety funds, among other requirements, the District must have in effect a State highway safety improvement program under which the District develops, implements, and updates a Strategic Highway Safety Plan (SHSP). The SHSP identifies and analyzes highway safety problems and opportunities as described under the program. (23 U.S.C. §148(c)(1)(A)). The SHSP update was approved on March 2, 2021 for years 2020 through 2025.

The District is also required to produce a program of projects or strategies to reduce safety problems, evaluate the HSIP plan on a regular basis, and submit an annual transparency report – which is accomplished by this annual report.

The HSIP requires a data-driven, strategic approach to improving highway safety on all public roads that focuses on performance. DDOT continues to operate the Traffic Safety Data Center at Howard University, which was established to support DDOT and Metropolitan Police Department (MPD) in developing and sustaining an effective process for providing timely, accurate, complete, uniform, and accessible traffic and related transportation data. The Traffic Data Center at Howard University prepares the annual crash report for the District of Columbia, which helps to satisfy federal requirements on reporting traffic crashes, provide a resource for identifying safety trends, aid in the development of countermeasures, and evaluating the results of highway safety programs, projects, and policies. In addition, DDOT continues to upgrade the TARAS (Traffic Accident Record and Analysis System). The system underwent an update in fiscal year 2020 to further support the District's efforts to improve this crash data analysis tool, but incremental improvements to the software continue. Developed specifically for the District, TARAS automatically accesses and processes MPD crash data and extracts all pertinent variables fields, while providing visualization needs.

The HSIP program and its projects stretch across several administrations and divisions in DDOT. The core program, however, is administered by the Traffic Engineering and Safety Division (TESD) in the Project Delivery Administration (PDA). The following projects were obligated with HSIP funding in FY 2022:

- Traffic Safety Design
- Road Safety Audit Program
- Multi-modal Traffic & Safety Construction
- Traffic Safety Engineering Support Services
- TARAS Crash Analysis Support
- Constructability and Work Zone Safety Review

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- Mobile Pavement Marking Retroreflectivity Measurement and Data Collection
- Thermoplastic Pavement Markings
- Alabama Ave SE Safety Improvement Study
- Canal Road, NW Rockslope Stabilization

DDOT continually strives to ensure the application of safety analyses, knowledge, and methodologies are used to maximize the effectiveness of HSIP funds. The updated District of Columbia SHSP seeks to ambitiously reduce traffic fatalities by 69 percent—from 36 in 2020 to 11 by 2030. The District also established a fatality rate goal of 0.26 fatalities per 100 VMT by 2030, compared to 1.14 in 2020, a decrease of 77 percent.

The HSIP's safety efforts and targets are linked directly to the District's SHSP, and their preliminary 2022 outcomes suggest an upward trend in the number of fatalities and serious injuries, in line with national trends and signify shortcomings in achieving SHSP goals.

The District's 2022 HSIP target setting process established five performance measures as the five-year rolling averages to include:

1. Number of Fatalities, 29
2. Rate of Fatalities per 100 million Vehicle Miles Traveled (VMT), 1.070
3. Number of Serious Injuries, 343
4. Rate of Serious Injuries per 100 million VMT, 9.110
5. Number of Non-motorized Fatalities and Non-motorized Serious Injuries, 133

Based on preliminary data from TARAS, DDOT is estimating that it will not meet its 2022 targets. The official FARS fatality numbers, as well as the final vehicle miles traveled (VMT) numbers for 2022, are likely to become available at the time the Federal Highway Administration assesses the District's performance relative to the targets, so these numbers and the outcomes might change.

The District's safety challenges are complicated, and countermeasures -- especially for our most vulnerable road users -- must come from activities that reduce:

- Motor vehicle exposure
- Risk of crash
- Risk of injury

Mindful of these challenges, the District has paid closer attention over the past year to addressing safety through a systemic approach. The systemic approach is meant to be a data-driven safety analysis (DDSA) that is complementary and supplemental to the standard site analysis approach and provides an expanded comprehensive and proactive approach to road safety efforts. The analyses provide scientifically sound, data-driven strategies to identifying high-risk roadway features and executing the most beneficial projects with limited resources to achieve fewer fatal and serious injury crashes.

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Using a systemic analysis approach, the District has introduced a number of countermeasures and safety initiatives, including the elimination of dual-turn conflicts, left-turn hardening treatments, and the targeted prohibition of right turn on red. The District continued to identify locations and reconfigure the operations of intersections with dual-turn lanes that pose “multiple threat” risks, particularly to pedestrians. The District also kicked off the installation of backplates with retroreflective borders along several intersections and corridors that were identified through network screening analysis and determined to benefit from this treatment. As part of the District’s Annual Safety Program – an annual effort to rapidly deploy multi-modal safety improvement projects included at one hundred (100) locations across the District – HSIP projects (Traffic Safety Engineering Support Services, Traffic Safety Construction, and others) were used to identify locations that would benefit from low cost/high impact interventions that advance the safety of all modes. These projects included pedestrian flashers at 25 high pedestrian risk intersections to improve pedestrian safety at uncontrolled crossings, driver speed feedback signs at 29 locations to improve pedestrian and bike safety, and pedestrian and bicycle safety improvement projects at 21 locations from past Livability studies, including but not limited to improved signs, marking, signal hardware, Rectangular Rapid Flashing Beacons (RRFB), Americans with Disabilities Act (ADA) ramps, APS (accessible pedestrian signals), installation of curb extensions, median, channelization, etc. primarily to improve pedestrian traffic safety. In addition, 25 HSIP project (Traffic Safety Design) intersections were selected using DDOT’s HSIP Project Selection Process which ensures that the proposed projects are consistent with DDOT’s SHSP Critical Emphasis Areas (e.g., Bicyclists, Pedestrians, Intersections) and are ranked appropriately in terms of priority (e.g., estimated reduction in fatalities and serious injuries). From a final list of HSIP projects, suitable countermeasures are developed, designed, and constructed.

In January 2023, DDOT implemented additional improvements to its public-facing Traffic Safety Input (TSI). The new program utilizes a quarterly prioritization model that considers objective factors such as roadway characteristics, crash patterns, proximity to Vision Zero High Injury Network corridors, and locations with vulnerable road users, as well as equity factors on race, income, and disability. DDOT identifies 200 locations per quarter (i.e., 800 annually) and develops short-term, high-impact measures to improve multi-modal safety and manage and/or calm traffic flow in areas where problems are observed following field investigations and traffic data collection. Through this program, DDOT rapidly investigates, designs, and deploys various traffic safety improvements including but not limited to vertical traffic calming devices, all-way stop control, driver feedback signs, automated traffic enforcement (i.e., speed, red light running, and stop sign cameras), pedestrian flashers, Rectangular Rapid-Flashing Beacon (RRFB) devices, curb extensions, signs and pavement marking enhancements, roadway conversion (e.g., one-way to two-way), sight distance enhancement, etc. The desired outcome is reduction in vehicular speeds, discouraging diversion traffic, and improving safety for bikes, pedestrians, and motorists.

Introduction

The Highway Safety Improvement Program (HSIP) is a core Federal-aid program with the purpose of achieving a significant reduction in fatalities and serious injuries on all public roads. As per 23 U.S.C. 148(h) and 23 CFR 924.15, States are required to report annually on the progress being made to advance HSIP implementation and evaluation efforts. The format of this report is consistent with the HSIP Reporting Guidance dated December 29, 2016 and consists of five sections: program structure, progress in implementing highway safety improvement projects, progress in achieving safety outcomes and performance targets, effectiveness of the improvements and compliance assessment.

Program Structure

Program Administration

Describe the general structure of the HSIP in the State.

The core HSIP program is administered by DDOT's Resource Allocation Division (RAD). HSIP funded projects include both intersections and roadway segments, and generally the targeted locations have either a high severe crash frequency or are considered high risk locations for future severe crashes. HSIP projects originate from both proactive and reactive sources. Proactively, HSIP staff produce lists of intersections and roadway segments with a history of severe crashes using annual crash reports and a network screening process that accounts for engineering emphasis areas included in the District's Strategic Highway Safety Plan (SHSP). The network screening process considers the entire network, including all functional classifications of roads. This process is used to identify existing and emerging safety problems and trends while also serving as a tool for evaluating the District's progress in achieving their safety goals. Reactively, locations are identified through various citizen and road user requests or post-fatal/serious injury reviews.

Priority SHSP emphasis area maps, tables, and matrices are generated to rank intersection-related crash locations and corridors. The ranked locations are identified based on traffic crash data, exposure, and location characteristics and are ranked using metrics such as crash frequency, crash rate, crash severity, and crash trends (i.e., change over time). The District also employs an injury composite crash index (CCI), which involves a weighted combination of injury crash rate, severity, and frequency of crashes at a specific location. DDOT also employs a similar index exclusively for pedestrian and bicyclist injury crashes, ped/bike CCI. This data-driven approach is used to identify and initiate engineering studies of the locations with high injury experience. After identifying, programming, and allocating funds, HSIP staff across different administrations monitor project progress from scoping through construction.

Where is HSIP staff located within the State DOT?

Other-Transportation Engineering and Safety Division and Maintenance Division

How are HSIP funds allocated in a State?

- SHSP Emphasis Area Data

The SHSP Emphasis Area, derived from fatalities and serious injury trends, drives the funding allocations of the HSIP. The District allocates HSIP funds using a combination of systemic, site-specific, and hybrid project approaches with the goal of leveraging HSIP funds to achieve the maximum impact on SHSP emphasis areas, thereby reducing fatal and serious injury crashes.

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

The District of Columbia does not have a local or Tribal roads program. All roads are considered for HSIP and Safety Improvement projects.

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

- Governors Highway Safety Office
- Maintenance
- Operations
- Planning
- Traffic Engineering/Safety
- Other-Resource Allocation Division (RAD), Vision Zero, Infrastructure Project Management Administration

Describe coordination with internal partners.

The HSIP effort requires extensive coordination among many groups within DDOT, which is primarily accomplished through internal meetings. DDOT holds weekly “SafetyStat” meetings at which numerous safety projects and issues are discussed and organized. At these meetings, various groups from different divisions within DDOT provide updates on their safety projects. In addition to these meetings, Ward-based project meetings are held on a weekly basis to provide updates on design and construction-related projects.

Identify which external partners are involved with HSIP planning.

- Academia/University
- FHWA
- Law Enforcement Agency
- Regional Planning Organizations (e.g. MPOs, RPOs, COGs)
- Other-NHTSA

Describe coordination with external partners.

External partners are involved in various planning and operations-related issues via scheduled meetings to discuss goals, milestones, safety targets, and progress in achieving safety targets. The meetings are arranged by DDOT’s Transportation Safety Manager. External partners also provide input into the preparation of, and updates to, the SHSP. Some partners include the Fatal Crash Review Group, Traffic Records Coordinating Committee (TRCC), and Major Crash Review Task Force.

Program Methodology

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

Yes

The District HSIP Program Handbook serves as the tool that supports the HSIP project selection process. This document was finalized in September 2020.

Select the programs that are administered under the HSIP.

- Bicycle Safety
- Intersection
- Left Turn Crash
- Low-Cost Spot Improvements
- Pedestrian Safety
- Red Light Running Prevention
- Sign Replacement And Improvement

Program: Bicycle Safety

Date of Program Methodology: 10/1/2021

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
<ul style="list-style-type: none">• All crashes• Other-Bicycle crashes	<ul style="list-style-type: none">• Traffic• Volume• Lane miles• Other-Speed	<ul style="list-style-type: none">• Functional classification• Other-Cross section

What project identification methodology was used for this program?

- Crash frequency
- Probability of specific crash types

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

No

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

How are projects under this program advanced for implementation?

- Other-Separate funds are allocated to implement bike safety projects

Select the processes used to prioritize projects for implementation. For the methods selected, indicate the relative importance of each process in project prioritization.

Enter either the weights or numerical rankings. If weights are entered, the sum must equal 100. If ranks are entered, indicate ties by giving both processes the same rank and skip the next highest rank (as an example: 1, 2, 2, 4).

Rank of Priority Consideration

Other-Total number of collisions:1

Bicyclists represent a large and growing share of road users in The District. Bicyclists are vulnerable to fatal and serious injury crashes.

Program: Intersection

Date of Program Methodology:10/1/2020

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
- Other-Intersection crashes

Exposure

- Traffic
- Volume

Roadway

- Median width
- Functional classification
- Other-Cross section

What project identification methodology was used for this program?

- Crash frequency
- Crash rate
- 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?

- Other-Projects are advanced by network screening and internal review of annual Crash Statistics report

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

Other-Rank of injury crash frequency:25

Other-Rank of injury crash rate:25

Other-Rank of injury crash severity:50

Total Relative Weight:100

Program: Left Turn Crash

Date of Program Methodology:1/31/2019

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-vehicles crashes
- Other-Left-turn crashes

Exposure

- Traffic
- Volume
- Other-Pedestrian activity and interaction with vehicles

Roadway

- Functional classification
- Other-General intersection geometry

What project identification methodology was used for this program?

- Crash frequency
- Probability of specific crash types

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

No

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

How are projects under this program advanced for implementation?

- selection committee

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

Relative Weight in Scoring

Ranking based on net benefit:50

Cost Effectiveness:50

Total Relative Weight:100

Program: Low-Cost Spot Improvements

Date of Program Methodology:1/6/2023

What is the justification for this program?

- Addresses SHSP priority or emphasis area

What is the funding approach for this program?

Competes with all projects

What data types were used in the program methodology?

Crashes

- All crashes
- Other-Pedestrian crashes
- Other-Left-turn, angle, and head-on crashes
- Other-Injury crashes

Exposure

- Traffic
- Volume
- Other-Speed
- Other-VRU generators

Roadway

- Functional classification
- Other-Cross section

What project identification methodology was used for this program?

- Crash frequency
- Crash rate
- 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?

- Other-Citizen and road user requests and prioritized based on safety and equity criteria

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- Other-Projects are advanced by network screening and internal review of annual Crash Statistics report

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

Other-Rank of injury crash frequency:25
 Other-Rank of injury crash rate:25
 Other-Rank of injury crash severity:50
 Total Relative Weight:100

Program: Pedestrian Safety

Date of Program Methodology:10/1/2020

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
<ul style="list-style-type: none"> • All crashes • Other-Pedestrian crashes 	<ul style="list-style-type: none"> • Traffic • Volume • Other-Speed 	<ul style="list-style-type: none"> • Functional classification • Other-Cross section

What project identification methodology was used for this program?

- Crash frequency
- Crash rate
- 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?

- Other-Projects are advanced by network screening and internal review of annual Crash Statistics report

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

Rank of Priority Consideration

Other-Total number of collisions:1

Program: Red Light Running Prevention

Date of Program Methodology:10/1/2020

What is the justification for this program?

- Addresses SHSP priority or emphasis area

What is the funding approach for this program?

Competes with all projects

What data types were used in the program methodology?

Crashes

- All crashes
- Other-Red light running crashes

Exposure

- Traffic
- Volume

Roadway

- Functional classification

What project identification methodology was used for this program?

- Crash frequency
- Crash rate
- 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?

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- Other-Projects are advanced by network screening and internal review of annual Crash Statistics report
- Other-Projects for Design are automatically implemented through Construction

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

Rank of Priority Consideration

Other-Total number of collisions:1

Program: Sign Replacement And Improvement

Date of Program Methodology:10/1/2020

What is the justification for this program?

- Addresses SHSP priority or emphasis area

What is the funding approach for this program?

Competes with all projects

What data types were used in the program methodology?

Crashes

- All crashes

Exposure

- Traffic
- Volume

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?

No

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

How are projects under this program advanced for implementation?

- Other-citizen and road user requests and prioritized based on safety criteria
- Other-Projects are advanced by network screening and internal review of annual Crash Statistics report

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

Rank of Priority Consideration

Other-Total number of collisions:1

Traffic signs provide critical information, legal requirements, and guidance for drivers and other road users. Missing or damaged devices, such as STOP signs, can create a potential safety hazard. Maintaining traffic signs is, thus, essential for helping to prevent fatal and serious injury crashes.

What percentage of HSIP funds address systemic improvements?

42

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

- Add/Upgrade/Modify/Remove Traffic Signal
- Install/Improve Lighting
- Install/Improve Pavement Marking and/or Delineation
- Install/Improve Signing
- Other-Driver Speed Feedback Signs
- Other-No Turn on Red
- Other-Pedestrian and traffic calming improvements
- Other-Pedestrian flashers
- Other-Retroreflective backplates

What process is used to identify potential countermeasures?

- Crash data analysis
- Data-driven safety analysis tools (HSM, CMF Clearinghouse, SafetyAnalyst, usRAP)
- Engineering Study
- Road Safety Assessment
- SHSP/Local road safety plan
- Stakeholder input
- Other-Design Review, Capital Project Review, Sight Distance Analysis, Roadway Geometry, Accident Analysis

Does the State HSIP consider connected vehicles and ITS technologies?

Yes

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

The District has been implementing ITS projects and improving its ITS infrastructure primarily through the use of non-HSIP funds. These projects include live CCTV cameras, dynamic message boards, traffic signal controller upgrades, and other ITS infrastructure improvements. HSIP funds have not been specifically targeted toward other connected vehicle 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.

DDOT has formalized the use of the HSM predictive method within the HSIP Intersection program. This represents a change from the prior use of benefit-cost methodology as the preferred method of analysis for prior years of the HSIP Intersection project.

This approach calculates predicted and expected crashes to determine the number of crashes for the base conditions of the intersection and compare the safety of alternatives should conditions change. The *HSM* predictive method offers a process to assess intersection safety that considers intersection characteristics in addition to crash history. Safety performance functions (SPFs) are used to calculate the predicted number of crashes based on intersection type and AADT. Crash modification factors (CMFs) are then applied to the predicted crashes to adjust the number of crashes based on site-specific intersection components that could either increase or decrease certain crash types.

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)	\$11,106,862	\$11,106,862	100%
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)	\$0	\$0	0%
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	\$11,106,862	\$11,106,862	100%

The above numbers reflect the transfer of RHCP funds to the HSIP funds.

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%

The District does not contain local roads that are non-State owned.

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

12%

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

12%

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

22%

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.

District of Columbia obligation staff work with various DDOT administrations and divisions to ensure HSIP funds are obligated in a timely manner. DDOT conducts regular obligation meetings with various internal stakeholders to continually improve the obligation process and provide help to engineers and managers where needed.

DDOT has not met four of the five safety performance targets in 2021 and is required to develop a Highway Safety Improvements Program (HSIP) Implementation Plan for fiscal year (FY) 2024. An analysis showed that DDOT may have underinvested in their SHSP emphasis areas (i.e., Pedestrians, Bicyclists, Signalized Intersections, and Unsignalized Intersections) and will use this opportunity to redirect HSIP funds to better reflect fatal and serious injury trends.

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
Multi-modal Traffic & Safety Construction	Intersection geometry	Intersection geometry - other		Locations	\$1475000	\$1475000	HSIP (23 U.S.C. 148)	Urban	Multiple/Varies	0		State Highway Agency	Spot	Intersections, Pedestrian and Bicyclist	
Traffic Safety Engineering Support Services (TSES)	Intersection traffic control	Intersection signing –other		Locations	\$2947500	\$2947500	HSIP (23 U.S.C. 148)	Urban	Multiple/Varies	0		State Highway Agency	Spot	Intersections, Pedestrian	
TARAS Crash Analysis Support	Miscellaneous	Data analysis		N/A	\$63000	\$63000	HSIP (23 U.S.C. 148)	Urban	N/A	0		State Highway Agency	Systemic	Data	
Traffic Safety Design	Roadway signs and traffic control	Roadway signs and traffic control - other		Locations	\$1485000	\$1485000	HSIP (23 U.S.C. 148)	Urban	Multiple/Varies	0		State Highway Agency	Spot	Intersections, Pedestrian	
Road Safety Audit Program	Roadway signs and traffic control	Roadway signs and traffic control - other		Locations	\$900000	\$900000	HSIP (23 U.S.C. 148)	Urban	Multiple/Varies	0		State Highway Agency	Systemic	Intersections, Pedestrian	
Thermoplastic Pavement Markings	Roadway delineation	Roadway delineation - other		Miles	\$2499000	\$2499000	HSIP (23 U.S.C. 148)	Urban	Multiple/Varies	0		State Highway Agency	Systemic	Intersections, Pedestrian and Bicyclist	
Alabama Ave SE Safety Improvement Study	Pedestrians and bicyclists	Pedestrians and bicyclists – other		Locations	\$938553	\$938553	HSIP (23 U.S.C. 148)	Urban	Minor Arterial	0		State Highway Agency	Spot	Intersections, Pedestrian and Bicyclist	
Mobile Pavement Marking Retroreflectivity Measurement and Data Collection	Miscellaneous	Data collection		N/A	\$338839	\$338839	HSIP (23 U.S.C. 148)	Urban	N/A	0		State Highway Agency	Systemic	Data	
Constructability and Work Zone Safety Review	Roadway	Roadway - other		Locations	\$374286	\$374286	HSIP (23 U.S.C. 148)	Urban	Multiple/Varies	0		State Highway Agency	Systemic	Intersections, Pedestrian and Bicyclist	
Canal Road NW Rockslope Stabilization	Roadside	Roadside grading		Locations	\$285162	\$285162	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Other	0		State Highway Agency	Spot	Intersections	

DDOT determined that it would be most accurate to report FY 22 obligated funds as the funding year was closed and all amounts final. Under prior reporting of the current fiscal year (i.e., in 2021 HSIP report and prior), obligations in later funding tranches may not have been received and therefore reporting was only reflecting a partial picture of obligated funds.

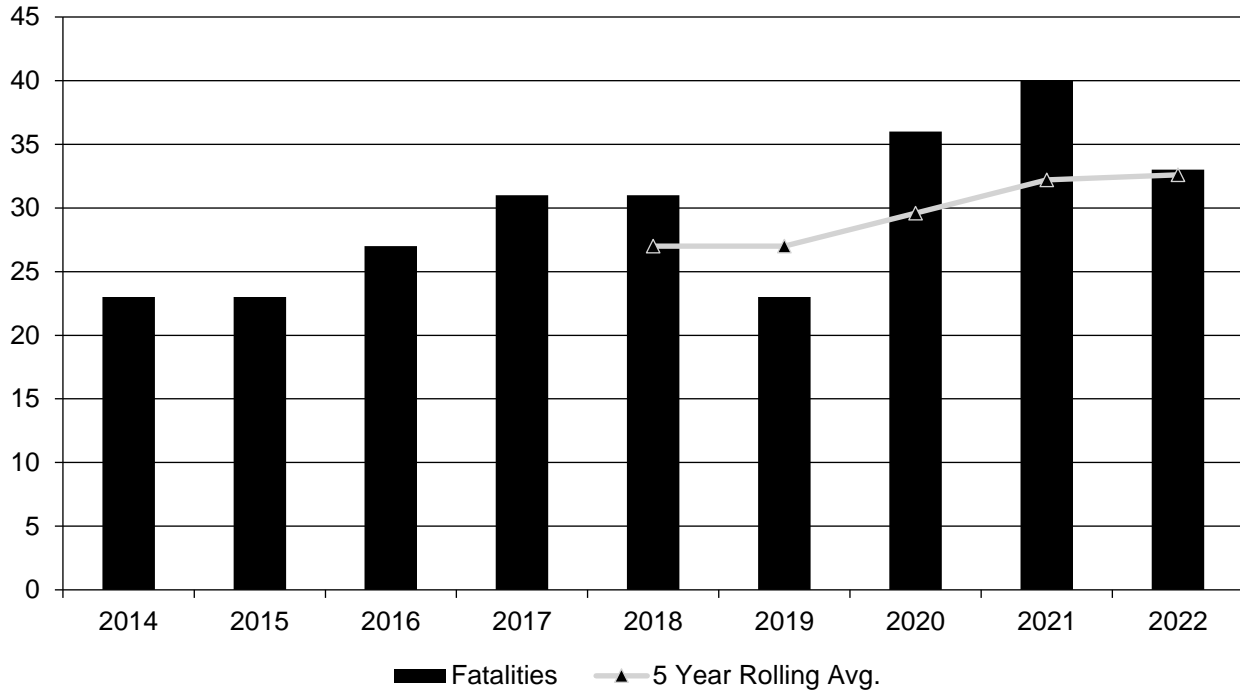
Safety Performance

General Highway Safety Trends

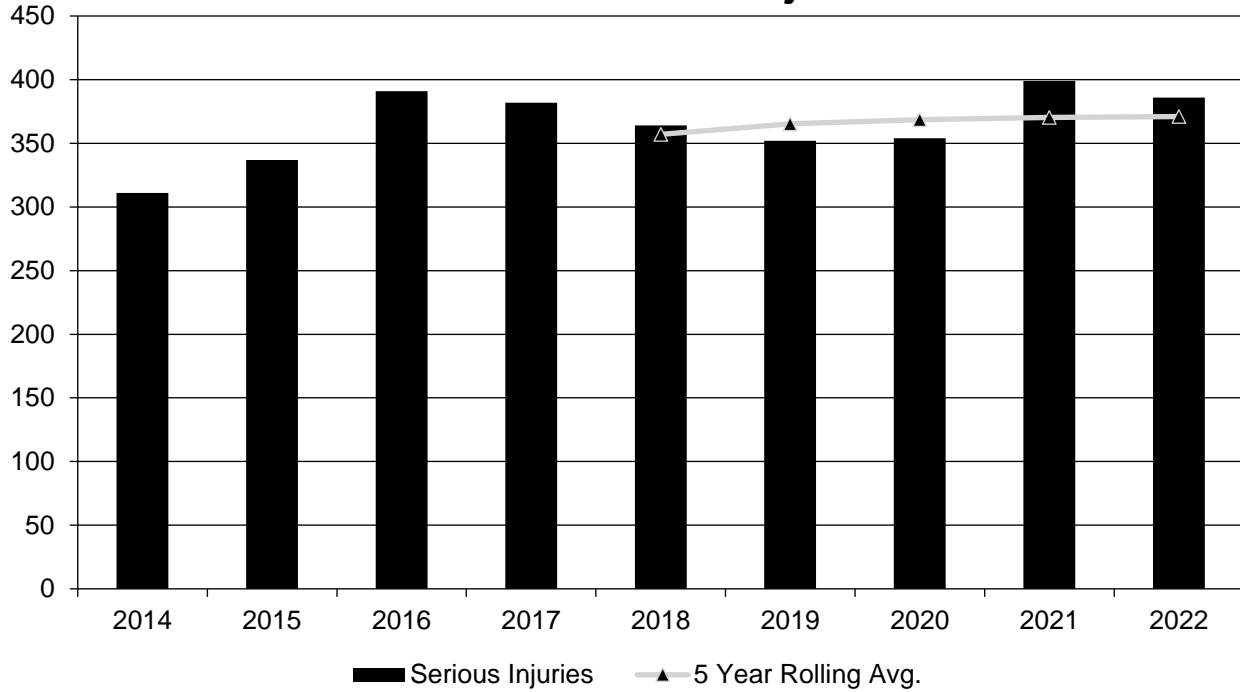
Present data showing the general highway safety trends in the State for the past five years.

PERFORMANCE MEASURES	2014	2015	2016	2017	2018	2019	2020	2021	2022
Fatalities	23	23	27	31	31	23	36	40	33
Serious Injuries	311	337	391	382	364	352	354	399	386
Fatality rate (per HMVMT)	0.650	0.650	0.750	0.830	0.840	0.610	1.190	1.230	1.020
Serious injury rate (per HMVMT)	8.790	9.520	10.860	10.230	9.860	9.340	11.700	12.280	11.880
Number non-motorized fatalities	10	14	9	13	14	11	11	20	20
Number of non-motorized serious injuries	141	119	141	146	146	144	104	131	136

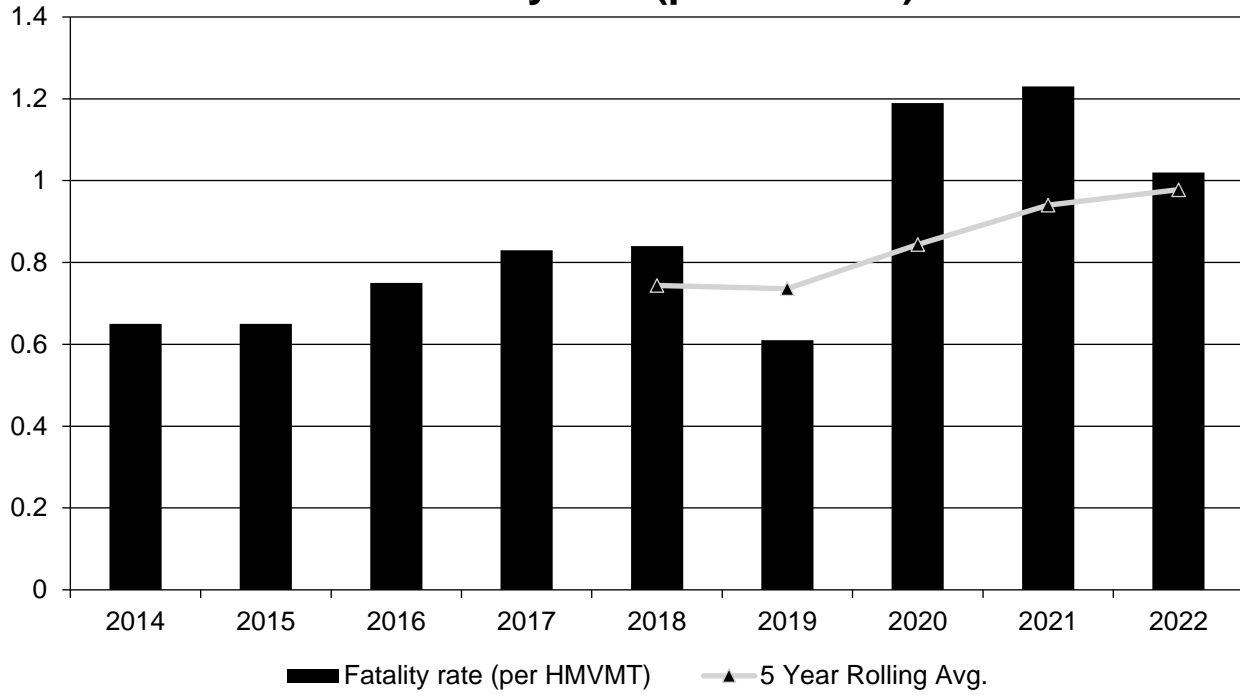
Annual Fatalities



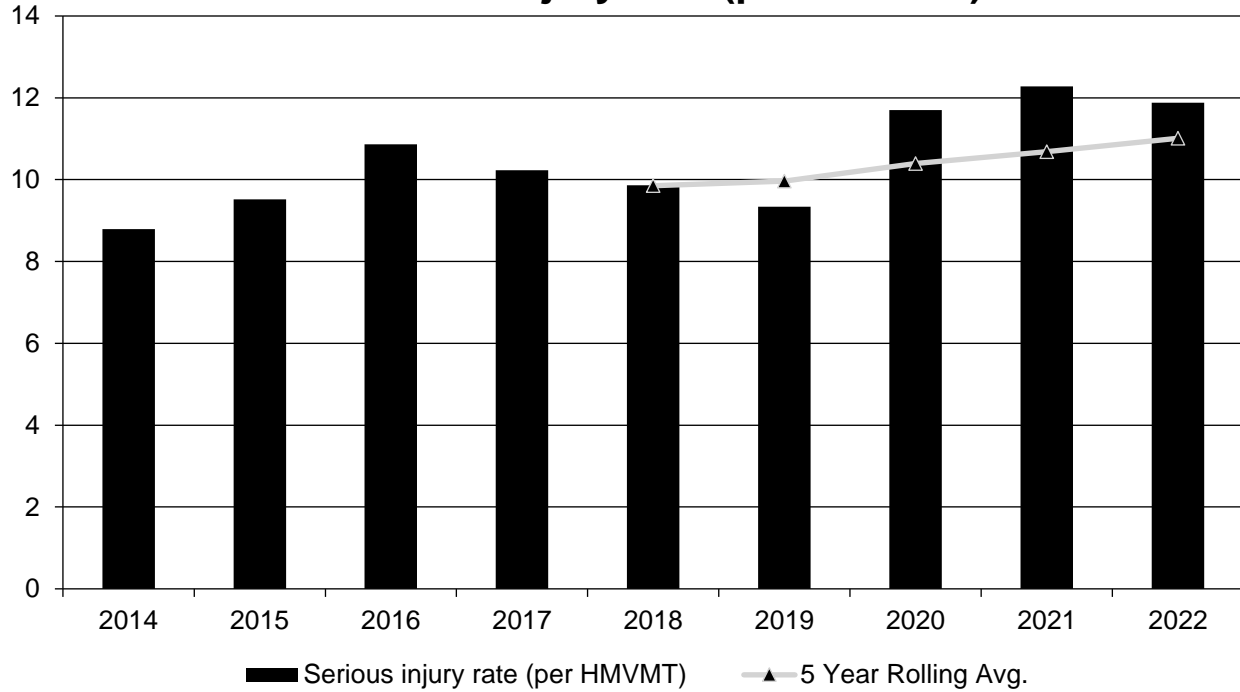
Annual Serious Injuries



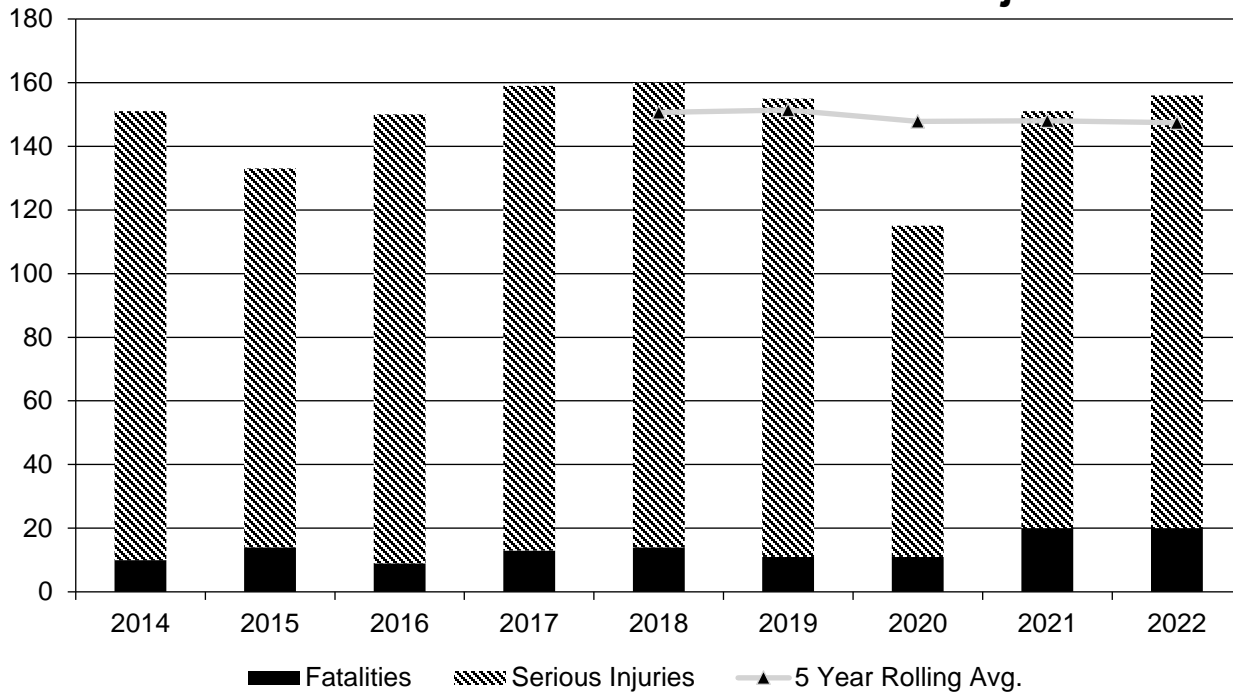
Fatality rate (per HMVMT)



Serious injury rate (per HMVMT)



Non Motorized Fatalities and Serious Injuries



Describe fatality data source.

FARS

FARS and estimation from 2022 TARAS data.

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				
Rural Principal Arterial (RPA) - Other				
Rural Minor Arterial				
Rural Minor Collector				

2023 District Of Columbia Highway Safety Improvement Program

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 Major Collector				
Rural Local Road or Street				
Urban Principal Arterial (UPA) - Interstate	0.8	16.6	0.17	3.41
Urban Principal Arterial (UPA) - Other Freeways and Expressways	1.4	1.4	0.41	0.38
Urban Principal Arterial (UPA) - Other	9.8	103.4	1.09	11.12
Urban Minor Arterial	12.6	121	2.06	19.27
Urban Minor Collector				
Urban Major Collector	2.4	41.2	1	16.53
Urban Local Road or Street	5.4	81.8	0.71	10.97

2023 District Of Columbia Highway Safety Improvement Program

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	32.6	0.98	371	11.01
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				

Safety Performance Targets

Safety Performance Targets

Calendar Year 2024 Targets *

Number of Fatalities:26.0

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

2023 District Of Columbia Highway Safety Improvement Program

Using the 5-year rolling average and a power model, the District has the 2024 goal to maintain the number of fatalities at 26 by December 31, 2024.

Number of Serious Injuries:316.0

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

Using the 5-year rolling average and a power model, the District 2024 goal would be to keep the number of traffic-related serious injuries to 316 by December 31, 2024.

Fatality Rate:0.700

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

Using the 5-year rolling average and a power model, the District 2024 goal would be to maintain the fatality rate to 0.70 by December 31, 2024.

Serious Injury Rate:8.460

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

Using the 5-year rolling average and a power model, the District 2024 goal will be to reduce the serious injury rate to 8.46.

Total Number of Non-Motorized Fatalities and Serious Injuries:136.6

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

In the District of Columbia, Non-motorists account for a majority of traffic fatalities and a significant proportion of serious injuries. The District's goal for 2024 is to keep the number of non-motorized fatalities and serious injuries to 136.6 by December 31st, 2024.

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

In addition to the involvement of numerous administrations and offices within DDOT, multiple external stakeholders are actively engaged in the safety performance target setting process in the District of Columbia, including the Metropolitan Police Department, the Metropolitan Washington Council of Governments (MPO), the District of Columbia Department of Health, and the FHWA Division Office.

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
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2023 District Of Columbia Highway Safety Improvement Program

Number of Fatalities	29.0	32.6
Number of Serious Injuries	343.0	371.0
Fatality Rate	1.070	0.978
Serious Injury Rate	9.110	11.012
Non-Motorized Fatalities and Serious Injuries	133.0	147.4

The five-year rolling average target for the Number of Fatalities was set at 29 for calendar year 2022. At the time of this report, the official FARS fatality numbers for 2021 were not yet available; however, based on the 33 fatalities reported on TARAS, the District expects the Number of Fatalities in FARS for 2022 will exceed the target.

The five-year rolling average target for the Rate of Fatalities per hundred million vehicle miles traveled (HMVMT) was set at 1.07 for 2022. The Rate of Fatalities is estimated at 1.02 and which meets the 2022 target.

The 2022 targets for the Number of Serious Injuries and the Rate of Serious Injuries per 100 HMVMT were 343 and 9.110, respectively. Based on serious injury data there were 386 serious injuries in the District, which exceeds the target. The Rate of Serious Injuries is estimated at 11.88 which also exceeds the 2022 target.

The 2022 targets for the Number of Non-motorized Fatalities and Serious Injuries were 133. The District expects to exceed these targets based on the 156 non-motorized fatality and serious injury data queried in TARAS.

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

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

Yes

Provide the number of older driver and pedestrian fatalities and serious injuries 65 years of age and older for the past seven years.

PERFORMANCE MEASURES	2016	2017	2018	2019	2020	2021	2022
Number of Older Driver and Pedestrian Fatalities	1	5	3	2	2	4	7
Number of Older Driver and Pedestrian Serious Injuries	26	17	22	30	21	19	26

Evaluation

Program Effectiveness

How does the State measure effectiveness of the HSIP?

- Change in fatalities and serious injuries

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

The District has generally found that infrastructure safety improvements are associated with reductions in targeted crashes or improvements in road user behavior, such as conflicts.

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

- Increased awareness of safety and data-driven process
- More systemic programs
- Organizational change
- Policy change
- Other-Before and after studies

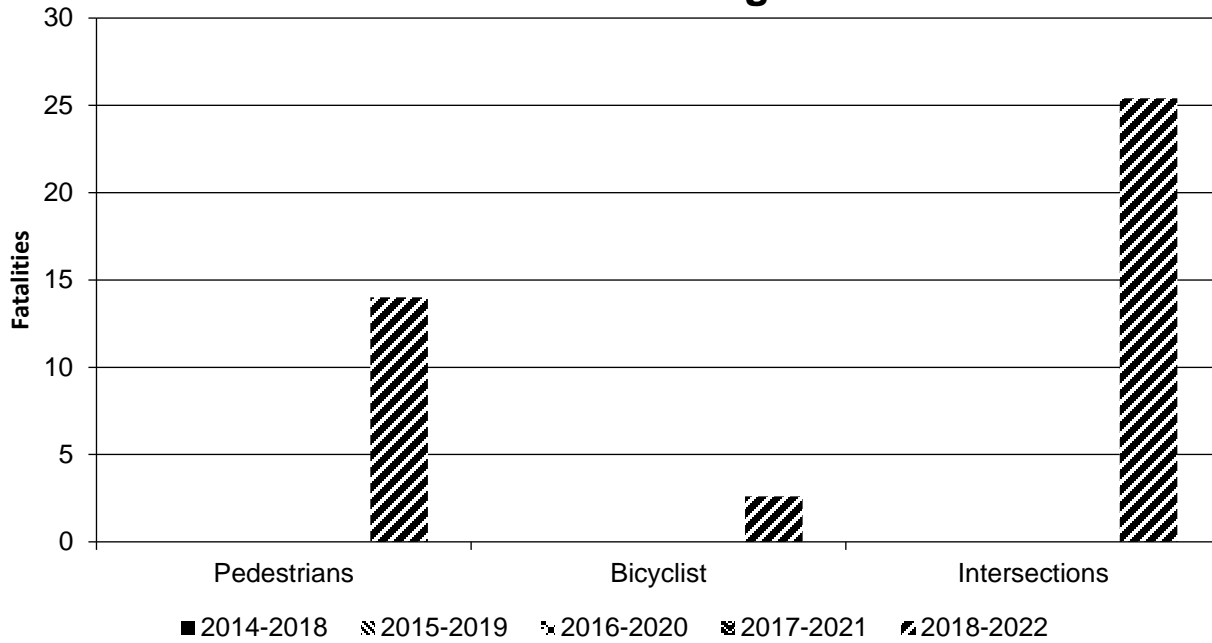
Effectiveness of Groupings or Similar Types of Improvements

Present and describe trends in SHSP emphasis area performance measures.

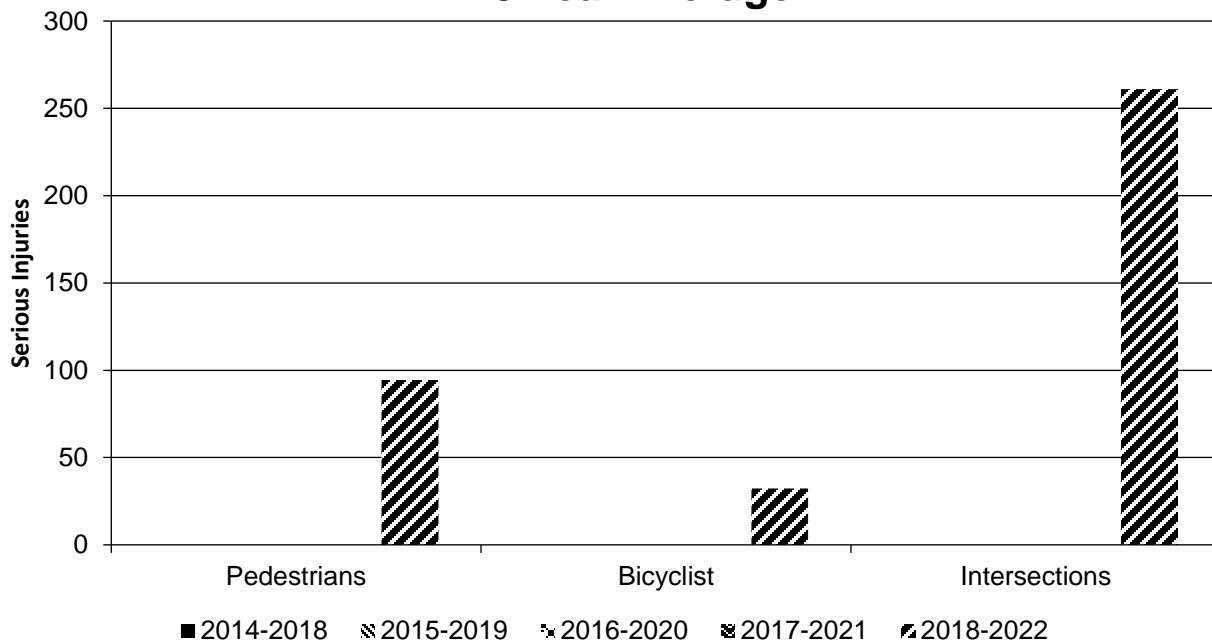
Year 2022

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)
Pedestrians	All	14	94.4	0.42	2.78
Bicyclist	All	2.6	32.2	0.08	0.94
Intersections	All	25.4	261	0.76	7.72

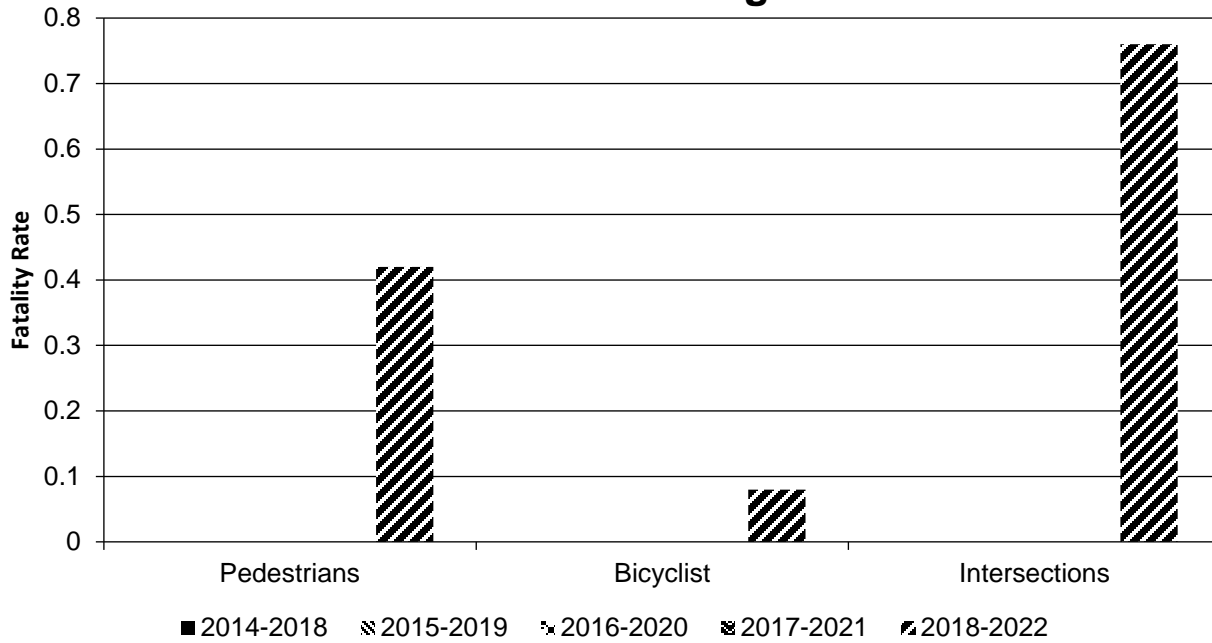
Number of Fatalities 5 Year Average



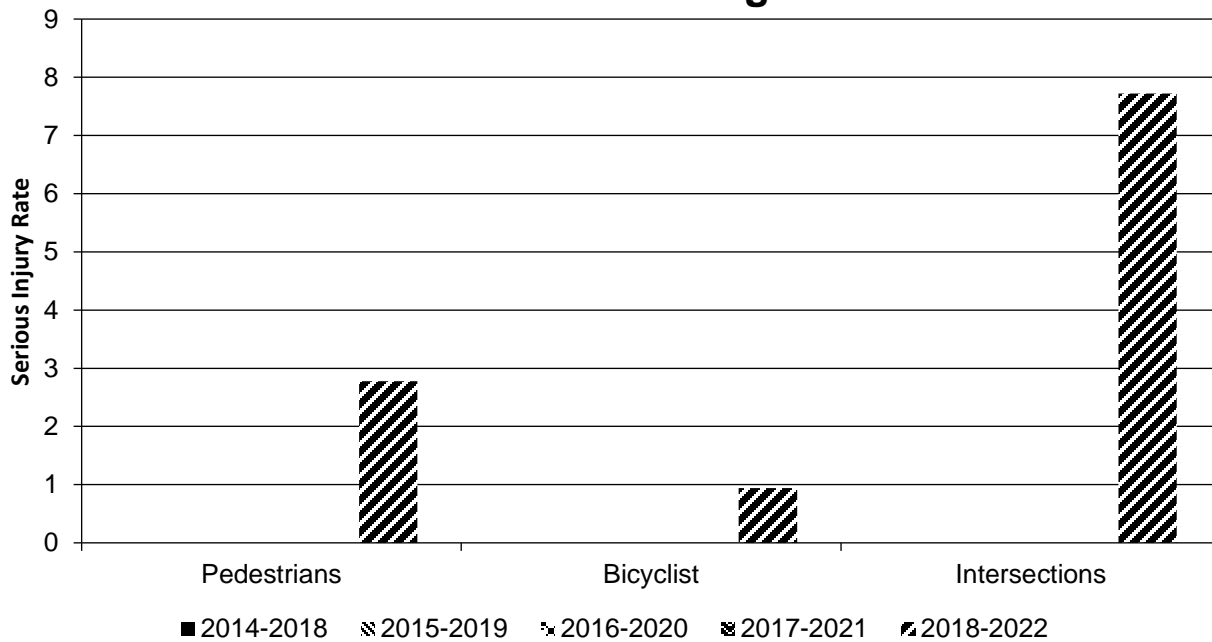
Number of Serious Injuries 5 Year Average



Fatality Rate (per HMVMT) 5 Year Average



Serious Injury Rate (per HMVMT) 5 Year Average



Project Effectiveness

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

Compliance Assessment

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

03/02/2021

What are the years being covered by the current SHSP?

From: 2020 To: 2025

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

2026

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

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

ROAD TYPE	*MIRE NAME (MIRE NO.)	NON LOCAL PAVED ROADS - SEGMENT		NON LOCAL PAVED ROADS - INTERSECTION		NON LOCAL PAVED ROADS - RAMPS		LOCAL PAVED ROADS		UNPAVED ROADS	
		STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE
ROADWAY SEGMENT	Segment Identifier (12) [12]	100	100					100	100	100	100
	Route Number (8) [8]	100	100								
	Route/Street Name (9) [9]	100	100								
	Federal Aid/Route Type (21) [21]	100	100								
	Rural/Urban Designation (20) [20]	100	100					100	100		
	Surface Type (23) [24]	100	100					100	100		
	Begin Point Segment Descriptor (10) [10]	100	100					100	100	100	100
	End Point Segment Descriptor (11) [11]	100	100					100	100	100	100
	Segment Length (13) [13]	100	100								
	Direction of Inventory (18) [18]	100	100								
Functional Class (19) [19]	100	100					100	100	100	100	

2023 District Of Columbia Highway Safety Improvement Program

ROAD TYPE	*MIRE NAME (MIRE NO.)	NON LOCAL PAVED ROADS - SEGMENT		NON LOCAL PAVED ROADS - INTERSECTION		NON LOCAL PAVED ROADS - RAMPS		LOCAL PAVED ROADS		UNPAVED ROADS	
		STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE
	Median Type (54) [55]	100	100								
	Access Control (22) [23]	100	100								
	One/Two Way Operations (91) [93]	100	100								
	Number of Through Lanes (31) [32]	100	100					100	100		
	Average Annual Daily Traffic (79) [81]	100	100					100	100		
	AADT Year (80) [82]	100	100								
	Type of Governmental Ownership (4) [4]	100	100					100	100	100	100
	INTERSECTION	Unique Junction Identifier (120) [110]			100	100					
	Location Identifier for Road 1 Crossing Point (122) [112]			100	100						
	Location Identifier for Road 2 Crossing Point (123) [113]			100	100						
	Intersection/Junction Geometry (126) [116]			100	100						
	Intersection/Junction Traffic Control (131) [131]			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]										
	Location Identifier for Roadway at					100	100				

2023 District Of Columbia Highway Safety Improvement Program

ROAD TYPE	*MIRE NAME (MIRE NO.)	NON LOCAL PAVED ROADS - SEGMENT		NON LOCAL PAVED ROADS - INTERSECTION		NON LOCAL PAVED ROADS - RAMPS		LOCAL PAVED ROADS		UNPAVED ROADS	
		STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE
	Beginning of Ramp Terminal (197) [187]										
	Location Identifier for Roadway at Ending Ramp Terminal (201) [191]					100	100				
	Ramp Length (187) [177]					100	100				
	Roadway Type at Beginning of Ramp Terminal (195) [185]					100	100				
	Roadway Type at End Ramp Terminal (199) [189]					100	100				
	Interchange Type (182) [172]										
	Ramp AADT (191) [181]					100	100				
	Year of Ramp AADT (192) [182]					100	100				
	Functional Class (19) [19]					100	100				
	Type of Governmental Ownership (4) [4]					100	100				
Totals (Average Percent Complete):		100.00	100.00	100.00	100.00	81.82	81.82	100.00	100.00	100.00	100.00

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

Describe actions the State will take moving forward to meet the requirement to have complete access to the MIRE fundamental data elements on all public roads by September 30, 2026.

The District of Columbia's Traffic Records Coordinating Committee (TRCC) is working with multidisciplinary partners, including the Metropolitan Police Department, DDOT, and our crash data consultant team to meet the requirement to have complete access to the MIRE fundamental data elements on all public roads by September 30, 2026.

Optional Attachments

Program Structure:

HSIP Handbook.pdf

Project Implementation:

Safety Performance:

Evaluation:

Compliance Assessment:

Glossary

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

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

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

HMVMT: means hundred million vehicle miles traveled.

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

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

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

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

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

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

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

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

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