Highway Safety Improvement Program

Data Driven Decisions

District Of Columbia
Highway Safety Improvement Program
2016 Annual Report

Prepared by: DC

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. 409 states "Notwithstanding any other provision of law, reports, surveys, schedules, lists, or data compiled or collected for the purpose of identifying, evaluating, or planning the safety enhancement of potential accident sites, hazardous roadway conditions, or railway-highway crossings, pursuant to sections 130, 144, and 148 of this title or for the purpose of developing any highway safety construction improvement project which may be implemented utilizing Federal-aid highway funds shall not be subject to discovery or admitted into evidence in a Federal or State court proceeding or considered for other purposes in any action for damages arising from any occurrence at a location mentioned or addressed in such reports, surveys, schedules, lists, or data."

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Executive Summary

The District of Columbia's Safety Program is the focal point of the HSIP program. The Safety Program has continued to evolve in the years 2011 to 2016. DDOT took a major initiative in the year 2010 by aligning Divisions and staff to ensure that Safety becomes the core of every activity performed by the Department of Transportation. As a result, the Safety Division has been expanded to handle the added responsibilities. The Safety Team at District Department of Transportation (DDOT) reviews all transportation planning and engineering studies, traffic control plans and design plans at all stages of design and construction. The new alignment has helped with the integration of Safety into all tasks and activities performed within the District of Columbia.

The DDOT Executive Management has adopted the Six Sigma for process improvements. Six Sigma principles have been used as a foundation in shaping the new Safety Team. Six Sigma is a proven disciplined approach for improving measurable results for any organization. Using these tools has helped with the coordination performed by in-house staff, other District of Columbia agencies and residents of the District. Using data and applying Six Sigma methodologies has positively impacted all road users by helping the Safety Team be able to address issues using the appropriate data over the last year.

The Transportation Operations Administration (TOA) has continued to operate the Transportation Safety Data Center at Howard University in the year 2015. The Safety Data Center was established to support the DDOT and Metropolitan Police Department (MPD) in developing and sustaining an effective process for providing accurate, uniform and accessible transportation data in a timely manner. Further, DDOT has completed the upgrade of the TARAS (Traffic Accident Record and Analysis System) in close coordination with the MPD. These efforts have assisted in the daily transfer and access to the critical transportation data and MPD's crash database. DDOT has also participated in all the major safety campaigns as mandated by the NHTSA.

Further, DDOT Safety Team utilizes the annual reports on Crash Statistics and Commercial Motor Vehicles (CMV) in performing safety reviews and analyses for traffic operations and crash data at intersections, corridors and construction work zones. The Safety Program has been a success in reducing the accident rate and the fatality rate for pedestrians and bicyclists in the District of Columbia by implementing the innovative approaches to traffic safety. Over overall goal is to reduce serious and fatal injuries in the District by 50% by the year 2025.

DDOT has also implemented several transportation safety initiatives in the year 2015, such as:

1. MoveDC (www.wemovedc.org)

- Develop a coordinated, multimodal long range transportation plan, addressing all modes of transportation in the District of Columbia.

- Organized numerous meetings, workshops, social media campaigns and surveys, emails and webinars pertaining to the moveDC Action Plan

2. goDCgo (www.godcgo.com)

- goDCgo website provides comprehensive information on various transportation modes, such as bikes, transit, train, cars and other resources for getting into and around DC

- Website also provide information and links to regional buses, DC Circulator, Metrobus, Metrorail, Capital Bikeshare, DC StreetCar, Carpool/Vanpool, Parking, etc. as well as information on walking and biking in the District of Columbia.

- DDOT in a collaborative effort has updated the website to include goDCgo Employer Services page which provide information on DC Commuter Benefits Law, Commuter Benefits, Seminars and Webinars for employers, etc.

3. Streetcar Safety (www.dcstreetcar.com)

- The DC Streetcar Team sends regular construction and safety updates that encompass all aspects of DC Streetcar system's functions, including Traffic Control Plans (TCP's) during construction. In addition, the DDOT Safety Team reviews plans and drawings for final design, new traffic signals, traffic signage and pavement markings for the Streetcar system.

4. Safety Matters

- Safety Matters projects are high impact, low cost improvements to neighborhood streets such as new pavement markings, signs, signals, curb changes, or lighting to improve bicycle, pedestrian, and driver safety.

5. Safe Routes to School

- The DC Safe Routes to School Program works to:

* Improve safety for students who walk and bicycle to school

* Encourage students and their parents to walk and bicycle to school fuel consumption, and reduce pollution and traffic congestion near schools

- DDOT has hired a new Safe Routes to School coordinator

6. Crash Data Improvement Program

- DDOT has established new Crash Data Improvement Program (CDIP) that would identify metrics in terms of timeliness, accuracy and completeness of the crash data

- DDOT organized CDIP workshop that included participants from DDOT agencies, MPD, FHWA, NHTSA, Highway Safety Office (HSO) and private consultants to familiarize the collectors, processors, maintainers and users with the concepts of data quality and how quality data improves safety decisions

- The CDIP workshop organized by DDOT TOA staff mainly focused on:

a. Crash Data Collection;

b. Crash Data Reporting, and,

c. Crash Data Processing

7. Traffic Incident Management Program

- DDOT has established new Traffic Incident Management (TIM) program that consists of a effectively planned and coordinated multidisciplinary process to detect, respond to and clear traffic incidents so that traffic flow may be restored as safely and quickly as possible.

- DDOT organized TIM workshop that included participants from MPD, FHWA, NHTSA, HSO, Fire, EMS, VDOT, HSEMA, MDSHA, Maryland Police, Virginia Police, Howard University, DPW and several other agencies

- TOA staff at DDOT has prepared draft legislation for Move Over Law and Memorandum of Understanding (MOU) with other participating agencies to implement and enforce laws for Traffic Incident Management program in the District.

8. Updating Traffic Accident Records Analysis System (TARAS)

- TOA staff, in coordination with the Howard University, completed updating the Traffic Accident Recording and Analysis System (TARAS) database in March, 2016; TARAS database is fully functional and operational now and conforms to the MPD's

new crash data schema

- TOA staff is also simultaneously working with the Midwestern Software Solutions, LLC (MS^2) in developing a separate crash database system that has enhanced crash data modules, additional query structures, GIS mapping features, crash

reporting functions and dashboards, portions of which will be available to the general public (online)

- DDOT has also developed new crash data repository system that directly connects to the Metropolitan Police Department' (MPD) crash database

9. Pavement Skid Testing Program

- TOA staff has completed the Pavement Skid Testing project for the year 2015. The skid resistance testing was performed in accordance with the ASTM E274-06 (Standard Test Method for Skid Resistance of Paved Surfaces Using a Full-Scale Tire)

- TOA staff has also initiated Pavement Skid Testing project for the year 2016, TOA staff has determined the top thirty (30) Wet Pavement Accident Locations for the year 2015 and has selected Consultant to perform skid resistance testing at the 30

study locations in accordance with the ASTM E274-06 standards

10. Highway Safety Improvement Program (HSIP)

- TOA staff has initiated the 2015 HSIP project for the year; five (5) Consulting firms have been selected to perform detailed investigation, analysis, and develop specific countermeasures to reduce fatalities, injury severity and crash occurrences at

the top twenty-five (25) High Crash Locations within the District of Columbia

11. Traffic Calming Assessment

- TOA staff in coordination with the Howard University has completed traffic safety assessment for over one hundred (100) traffic calming petitions submitted by the District residents. Further, TOA staff has submitted reports outlining specific

countermeasures that will be performed in response to citizen's requests for traffic calming needs

12. Traffic Data Integration

- As part of DDOT's Traffic Safety Data Center contract with the Howard University (HU), TOA staff is coordinating with the HU staff in integrating short-term and long-term traffic counts, such as Weigh-In-Motion (WIM) data, Permanent Count Stations (PCS)

data, peak turning movement counts (TMC's) data, etc. on the Traffic Safety Data Center website

13. Traffic Safety Improvements

- TOA staff has conducted safety reviews at several study intersections and corridors. Further, TOA staff has also implemented several safety improvements, related to pedestrian, bike and vehicular traffic safety, such as pedestrian crosswalks, traffic signage,

advance warning signs, Leading Pedestrian Intervals (LPI's), traffic calming measures, etc. at the study location

14. High Crash Intersections Site Visit

- As part of the ongoing Vision Zero initiative, TOA staff participated in a multi-disciplinary team effort in conducting site visits at five (5) high crash intersections. TOA staff identified issues related to traffic safety for motor vehicles, pedestrians, bikes and transit,

and suggested specific countermeasures, at five study locations

- The multidisciplinary team included internal DDOT agencies (TOA, Signals, PSA, Transit, Policy, Parking, etc.) as well as external agencies such as, MPD, Fire/EMC, DC HSEMA, OEM (Office of Executive Mayor), DC Council, etc.

- TOA staff has also participated in various webinars, peer exchanges and training programs

15. Vision Zero Initiative

- Vision Zero Initiative aims to improve pedestrian and bicycle transportation safety by showcasing effective local actions, empowering local leaders to take actions, and promoting partnerships to advance pedestrian and bicycle safety

- DDOT is partnering with more than twenty (20) District government agencies in the Vision Zero Initiative, as MPD, Fire, EMS, HSEMA, DOH, OAG, OCTO, OP, City Administrator, etc. to identify effective strategies on education, enforcement, and

engineering related to the Vision Zero Initiative

16. Traffic Safety Engineering and Support Services (TSES)

- TOA staff is also soliciting assistance from the Consultants offering engineering expertise in traffic safety, transportation engineering, transportation planning and transportation engineering design, under the Traffic Safety Engineering and Support Services (TSES) contract

- The Consultants provide engineering services and day-to-day support on several tasks, such as transportation and pedestrian safety studies, traffic engineering studies, traffic analysis and simulation, traffic signal timing and phasing, roadway design plans,

signing and marking plans, Maintenance of Traffic (MOT) plans, traffic control plans (TCP's), etc.

Further, DDOT also installed new Rapid Rectangular Flashing Beacons (RRFB) devices to improve traffic safety for pedestrians and bicyclists at the following locations

- Intersection of 14th St and Randolph St, NW

- Intersection of 15th St and Good Hope Rd, SE

- Intersection of Bladensburg Rd and T St, NE

- Intersection of Virginia Ave and G St, NW

- Intersection of Virginia Ave and 22nd St, NW

In addition, DDOT also installed new traffic signals and HAWK (High-Intensity Activated CrossWalk Beacon) signals at the following locations to improve traffic safety for all roadway users, including motorists, pedestrians, bicyclists and transit

- Intersection of Wisconsin Ave and Ingomar St, NW (new HAWK Signal)

- Intersection of Wisconsin Ave and Idaho Ave, NW (new HAWK Signal)

- Intersection of 10th St and Maryland Ave, NE (new Traffic Signal)

- Intersection of 8th St and Florida Ave, NE (new Traffic Signal)

- Intersection of Canal Rd and Reservoir Rd, NW (new Traffic Signal)

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 MAP-21 Reporting Guidance dated February 13, 2013 and consists of four sections: program structure, progress in implementing HSIP projects, progress in achieving safety performance targets, and assessment of the effectiveness of the improvements.

Program Structure

Program Administration

How are Highway Safety Improvement Program funds allocated in a State?

Central

Describe how local roads are addressed as part of Highway Safety Improvement Program.

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

HSIP funds are Centrally administered within the District of Columbia by the Department of Transportation through our Resource Administration and our Office of the Chief Financial Officer for the District of Columbia.

Identify which internal partners are involved with Highway Safety Improvement Program planning.

Design
Planning
Maintenance
Operations
Other-Transportation Operations Admin. (TOA), Infrastructure Project Management Admin. (IPMA), Policy, Planning and Sustainability Admin. (PPSA), Progressive Transportation Services Admin. (PTSA) and Urban Forestry Admin. (UFA)

Briefly describe coordination with internal partners.

The DDOT Safety Team is an independent, multidisciplinary team with members across DDOT and other District of Columbia agencies. The DDOT Safety Team meets on bi-monthly basis and reviews the overall Safety Program. The internal DDOT Safety Team has members from following organizations at DDOT that coordinate safety issues and education:

1. Transportation Operations Administration (TOA)
   - TOA team includes designers, traffic engineers, transportation technicians, parking specialists, signal operation engineers, maintenance staff and street light specialists.
   - TOA team identifies issues related to the vehicular safety, accidents, vehicle queuing, sight

distance obstructions and other traffic safety concerns
- TOA team performs traffic analysis, engineering design and develops recommendations addressing traffic safety concerns

2. Policy, Planning and Sustainability Administration (PPSA)
- PPSA team includes ward planners, pedestrian and bicycle planners
- PPSA team identifies pedestrian and bike issues and develops recommendations to improve pedestrian and bike safety

3. Progressive Transportation Services Administration (PTSA)
- PTSA team includes transportation planners for transit and metro
- PTSA team provides estimates for transit ridership and identifies issues related to transit circulation and capacity and develops appropriate recommendations

4. Urban Forestry Administration (UFA)
- UFA team includes ward arborists
- UFA team identifies streetscaping issues and provides appropriate recommendations

5. Infrastructure Project Management Administration (IPMA)
- IPMA team consists of engineers, technicians and field operations personnel
- IPMA team is responsible for the design, engineering and construction of roadways, bridges, traffic signals and alley projects in the District of Columbia
- IPMA also manages special construction projects and all roadway assets

6. Parking Operations Branch
- Parking Operations Branch manages operations and conditions of all parking meters
- Parking Operations Branch consists of managers and technicians

7. Streetlights Operations Branch
- Streetlights Operations Branch manages operations and condition of the District's street, alley, bridge, tunnel and navigation lighting systems through a streetlight asset management contract
- Streetlights Operations Branch consists of managers, engineers, technicians and field operations personnel

8. Safe Routes to School
- DC Safe Routes to School (SRTS) program receives funding from the Federal Highway Administration (FHWA)
- DC Safe Routes to School Program works to:

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- DC Safe Routes to School Program works

* Improve safety for students who walk and bicycle to school

* Encourage students and their parents to walk and bicycle to school

* Boost student physical activity, reduce parents' fuel consumption, and reduce pollution and traffic congestion near schools

To help achieve those goals, DDOT offers Safe Routes to School planning assistance for DC Schools that are interested in improving safety for student walkers and cyclists

Identify which external partners are involved with Highway Safety Improvement Program planning.

Metropolitan Planning Organizations
Governors Highway Safety Office
Other-Metropolitan Police Department (MPD), National Highway Traffic Safety Administration (NHTSA), Federal Highway Administration (FHWA) DC Division, Washington Metro Area Transit Authority (WMATA)

Identify any program administration practices used to implement the HSIP that have changed since the last reporting period.

Multi-disciplinary HSIP steering committee

Describe any other aspects of Highway Safety Improvement Program Administration on which you would like to elaborate.

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signing and marking plans, Maintenance of Traffic (MOT) plans, traffic control plans (TCP's), etc.

Program Methodology

Select the programs that are administered under the HSIP.

Intersection	Safe Corridor	Bicycle Safety
Skid Hazard	Crash Data	Red Light Running Prevention
Low-Cost Spot Improvements	Sign Replacement And Improvement	Local Safety
Pedestrian Safety	Right Angle Crash	Other-Sight distance analysis

Program: **Intersection**
Date of Program Methodology: **10/1/2015**

What data types were used in the program methodology?

Crashes	*Exposure*	*Roadway*
All crashes	Traffic Volume	

What project identification methodology was used for this program?

Crash frequency
Crash rate

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

Yes
If yes, are local road projects identified using the same methodology as state roads?
Yes

How are highway safety improvement projects advanced for implementation?
Other-DDOT Safety Team utilizes the annual reports on Crash statistics and Commercial Motor Vehicles (CMV) in performing safety reviews and analyses for traffic operations and crash data at intersections, corridors and construction work zones

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

Number of injuries	3
Number of injury collisions	2
Total number of collisions	1

Program: **Safe Corridor**
Date of Program Methodology: **10/1/2014**

What data types were used in the program methodology?

Crashes	*Exposure*	*Roadway*
All crashes	Traffic Volume	Functional classification

What project identification methodology was used for this program?
Crash frequency
Crash rate

Are local roads (non-state owned and operated) included or addressed in this program?
Yes
If yes, are local road projects identified using the same methodology as state roads?
Yes

How are highway safety improvement projects advanced for implementation?
Other-Projects for Design are automatically implemented through Construction. These projects are advanced by "Decision Lens" and internal review of annual Crash statistics report and Commercial Motor Vehicles (CMV) 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

Total number of collisions 1

Program: **Bicycle Safety**
Date of Program Methodology: **10/1/2014**

What data types were used in the program methodology?

Crashes	*Exposure*	*Roadway*
All crashes	Traffic	Median width
	Volume	Horizontal curvature
	Lane miles	Functional classification
		Roadside features

What project identification methodology was used for this program?
Crash frequency
Crash rate

Are local roads (non-state owned and operated) included or addressed in this program?
Yes
If yes, are local road projects identified using the same methodology as state roads?
Yes

How are highway safety improvement projects 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

Total Number of Collisions 1

Program: **Skid Hazard**
Date of Program Methodology: **10/1/2014**

What data types were used in the program methodology?

Crashes	*Exposure*	*Roadway*
All crashes	Traffic Volume	Functional classification

What project identification methodology was used for this program?
Crash frequency
Crash rate

Are local roads (non-state owned and operated) included or addressed in this program?
Yes
If yes, are local road projects identified using the same methodology as state roads?
Yes

How are highway safety improvement projects advanced for implementation?
Other-Skid improvement projects are implemented by "Decision Lens" software program used by all DDOT Managers

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Rank of Priority Consideration

Total Number of Collisions	1

Program: **Crash Data**
Date of Program Methodology: **10/1/2014**

What data types were used in the program methodology?

Crashes	*Exposure*	*Roadway*
All crashes	Traffic Volume	Functional classification

What project identification methodology was used for this program?
Crash frequency
Crash rate

Are local roads (non-state owned and operated) included or addressed in this program?
Yes
If yes, are local road projects identified using the same methodology as state roads?
Yes

How are highway safety improvement projects advanced for implementation?
Other-Projects for Design are automatically implemented through Construction. These projects are advanced by "Decision Lens" and internal review of annual Crash statistics report and Commercial Motor Vehicles (CMV) report

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Rank of Priority Consideration

Total Number of Collisions	1

Program: **Red Light Running Prevention**
Date of Program Methodology: **10/1/2014**

What data types were used in the program methodology?

Crashes	*Exposure*	*Roadway*
All crashes	Traffic Volume	Functional classification

What project identification methodology was used for this program?
Crash frequency
Crash rate

Are local roads (non-state owned and operated) included or addressed in this program?
Yes
If yes, are local road projects identified using the same methodology as state roads?
Yes

How are highway safety improvement projects advanced for implementation?
Other-Projects for Design are automatically implemented through Construction. These projects are advanced by "Decision Lens" and internal review of annual Crash statistics report and Commercial Motor Vehicles (CMV) report

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Rank of Priority Consideration

Total Number of Collisions 1

Program: **Low-Cost Spot Improvements**
Date of Program Methodology: **10/1/2014**

What data types were used in the program methodology?

Crashes	*Exposure*	*Roadway*
All crashes	Traffic Volume	Functional classification

What project identification methodology was used for this program?
Crash frequency
Crash rate

Are local roads (non-state owned and operated) included or addressed in this program?
Yes
If yes, are local road projects identified using the same methodology as state roads?
Yes

How are highway safety improvement projects advanced for implementation?
Other-Projects for Design are automatically implemented through Construction. These projects are advanced by "Decision Lens" and internal review of annual Crash statistics report and Commercial Motor Vehicles (CMV) 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

Total Number of Collisions 1

Program: **Sign Replacement And Improvement**

Date of Program Methodology: 10/1/2014

What data types were used in the program methodology?

Crashes	*Exposure*	*Roadway*
All crashes	Traffic Volume	Functional classification

What project identification methodology was used for this program?
Crash frequency
Crash rate

Are local roads (non-state owned and operated) included or addressed in this program?
Yes
If yes, are local road projects identified using the same methodology as state roads?
Yes

How are highway safety improvement projects advanced for implementation?
Other-These projects are advanced by "Decision Lens" and internal review of annual Crash statistics report and Commercial Motor Vehicles (CMV) 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

Total Number of Collisions	1

Program: Local Safety
Date of Program Methodology: 10/1/2014

What data types were used in the program methodology?

Crashes	*Exposure*	*Roadway*
All crashes	Traffic Volume	Functional classification

What project identification methodology was used for this program?
Crash frequency
Crash rate

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

If yes, are local road projects identified using the same methodology as state roads?
Yes

How are highway safety improvement projects advanced for implementation?
Other-These projects are advanced by "Decision Lens" program utilized by all DDOT Managers

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

Total Number of Collisions	1

Program: **Pedestrian Safety**
Date of Program Methodology: **10/1/2014**

What data types were used in the program methodology?

Crashes	*Exposure*	*Roadway*
All crashes	Traffic Volume	Functional classification

What project identification methodology was used for this program?
Crash frequency
Crash rate

Are local roads (non-state owned and operated) included or addressed in this program?
Yes
If yes, are local road projects identified using the same methodology as state roads?
Yes

How are highway safety improvement projects advanced for implementation?
Other-These projects are advanced by "Decision Lens" program utilized by all DDOT Managers

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

Total Number of Collisions	1

Program: **Right Angle Crash**
Date of Program Methodology: **10/1/2014**

What data types were used in the program methodology?

Crashes	*Exposure*	*Roadway*
All crashes	Traffic Volume	Functional classification

What project identification methodology was used for this program?
Crash frequency
Crash rate

Are local roads (non-state owned and operated) included or addressed in this program?
Yes
If yes, are local road projects identified using the same methodology as state roads?
Yes

How are highway safety improvement projects advanced for implementation?
Other-These projects are advanced by "Decision Lens" program utilized by all the DDOT Managers

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

Total Number of Collisions	1

Program: **Other-Sight distance analysis**
Date of Program Methodology: **10/1/2013**

What data types were used in the program methodology?

Crashes	*Exposure*	*Roadway*
All crashes	Traffic Volume	Functional classification

What project identification methodology was used for this program?

Crash frequency
Crash rate

Are local roads (non-state owned and operated) included or addressed in this program?
Yes
If yes, are local road projects identified using the same methodology as state roads?
Yes

How are highway safety improvement projects advanced for implementation?
Other-These projects are utilized by "Decision Lens" program utilized by all DDOT Managers

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

Total number of collisions	1

What proportion of highway safety improvement program funds address systemic improvements?

75%

Highway safety improvement program funds are used to address which of the following systemic improvements?

Traffic Control Device Rehabilitation
Install/Improve Signing
Install/Improve Pavement Marking and/or Delineation
Upgrade Guard Rails
Install/Improve Lighting
Add/Upgrade/Modify/Remove Traffic Signal

What process is used to identify potential countermeasures?

Engineering Study
Road Safety Assessment
Other-Design Review, Capital Project Review, Sight Distance Analysis, Roadway Geometry, Accident

Analysis

Identify any program methodology practices used to implement the HSIP that have changed since the last reporting period.

Highway Safety Manual
Road Safety audits

Describe any other aspects of the Highway Safety Improvement Program methodology on which you would like to elaborate.

The District of Columbia's Safety Program is the focal point of the HSIP program. The Safety Program has continued to evolve in the years 2011 to 2016. DDOT took a major initiative in the year 2010 by aligning Divisions and staff to ensure that Safety becomes the core of every activity performed by the Department of Transportation. As a result, the Safety Division has been expanded to handle the added responsibilities. The Safety Team at District Department of Transportation (DDOT) reviews all transportation planning and engineering studies, traffic control plans and design plans at all stages of design and construction. The new alignment has helped with the integration of Safety into all tasks and activities performed within the District of Columbia.

The DDOT Executive Management has adopted the Six Sigma for process improvements. Six Sigma principles have been used as a foundation in shaping the new Safety Team. Six Sigma is a proven disciplined approach for improving measurable results for any organization. Using these tools has helped with the coordination performed by in-house staff, other District of Columbia agencies and residents of the District. Using data and applying Six Sigma methodologies has positively impacted all road users by helping the Safety Team be able to address issues using the appropriate data over the last year.

The Transportation Operations Administration (TOA) has continued to operate the Transportation Safety Data Center at Howard University in the year 2015. The Safety Data Center was established to support the DDOT and Metropolitan Police Department (MPD) in developing and sustaining an effective process for providing accurate, uniform and accessible transportation data in a timely manner. Further, DDOT has completed the upgrade of the TARAS (Traffic Accident Record and Analysis System) in close coordination with the MPD. These efforts have assisted in the daily transfer and access to the critical transportation data and MPD's crash database.DDOT has also participated in all the major safety campaigns as mandated by the NHTSA.

Further, DDOT Safety Team utilizes the annual reports on Crash Statistics and Commercial Motor Vehicles (CMV) in performing safety reviews and analyses for traffic operations and crash

data at intersections, corridors and construction work zones. The Safety Program has been a success in reducing the accident rate and the fatality rate for pedestrians and bicyclists in the District of Columbia by implementing the innovative approaches to traffic safety. Over overall goal is to reduce serious and fatal injuries in the District by 50% by the year 2025.

DDOT has also implemented several transportation safety initiatives in the year 2015, such as:

1. MoveDC (www.wemovedc.org)

- Develop a coordinated, multimodal long range transportation plan, addressing all modes of transportation in the District of Columbia.

- Organized numerous meetings, workshops, social media campaigns and surveys, emails and webinars pertaining to the moveDC Action Plan

2. goDCgo (www.godcgo.com)

- goDCgo website provides comprehensive information on various transportation modes, such as bikes, transit, train, cars and other resources for getting into and around DC

- Website also provide information and links to regional buses, DC Circulator, Metrobus, Metrorail, Capital Bikeshare, DC StreetCar, Carpool/Vanpool, Parking, etc.as well as information on walking and biking in the District of Columbia.

- DDOT in a collaborative effort has updated the website to include goDCgo Employer Services page which provide information on DC Commuter Benefits Law, Commuter Benefits, Seminars and Webinars for employers, etc.

3. Streetcar Safety (www.dcstreetcar.com)

- The DC Streetcar Team sends regular construction and safety updates that encompass all aspects of DC Streetcar system's functions, including Traffic Control Plans (TCP's) during construction. In addition, the DDOT Safety Team reviews plans and drawings for final design, new traffic signals, traffic signage and pavement markings for the Streetcar system.

4. Safety Matters

- Safety Matters projects are high impact, low cost improvements to neighborhood streets such as new pavement markings, signs, signals, curb changes, or lighting to improve bicycle, pedestrian, and driver safety.

5. Safe Routes to School

- The DC Safe Routes to School Program works to:

* Improve safety for students who walk and bicycle to school

* Encourage students and their parents to walk and bicycle to school fuel consumption, and reduce pollution and traffic congestion near schools

- DDOT has hired a new Safe Routes to School coordinator

6. Crash Data Improvement Program

- DDOT has established new Crash Data Improvement Program (CDIP) that would identify metrics in terms of timeliness, accuracy and completeness of the crash data

- DDOT organized CDIP workshop that included participants from DDOT agencies, MPD, FHWA, NHTSA, Highway Safety Office (HSO) and private consultants to familiarize the collectors, processors, maintainers and users with the concepts of data quality and how quality data improves safety decisions

- The CDIP workshop organized by DDOT TOA staff mainly focused on:

a. Crash Data Collection;

b. Crash Data Reporting, and,

c. Crash Data Processing

7. Traffic Incident Management Program

- DDOT has established new Traffic Incident Management (TIM) program that consists of a effectively planned and coordinated multidisciplinary process to detect, respond to and clear traffic incidents so that traffic flow may be restored as safely and quickly as possible.

- DDOT organized TIM workshop that included participants from MPD, FHWA, NHTSA, HSO, Fire, EMS, VDOT, HSEMA, MDSHA, Maryland Police, Virginia Police, Howard University, DPW and several other agencies

- TOA staff at DDOT has prepared draft legislation for Move Over Law and Memorandum of Understanding (MOU) with other participating agencies to implement and enforce laws for Traffic Incident Management program in the District.

8. Updating Traffic Accident Records Analysis System (TARAS)

- TOA staff, in coordination with the Howard University, completed updating the Traffic Accident Recording and Analysis System (TARAS) database in March, 2016; TARAS database is fully functional and operational now and conforms to the MPD's

new crash data schema

- TOA staff is also simultaneously working with the Midwestern Software Solutions, LLC (MS^2) in developing a separate crash database system that has enhanced crash data modules, additional query structures, GIS mapping features, crash

reporting functions and dashboards, portions of which will be available to the general public (online)

- DDOT has also developed new crash data repository system that directly connects to the Metropolitan Police Department' (MPD) crash database

9. Pavement Skid Testing Program

- TOA staff has completed the Pavement Skid Testing project for the year 2015. The skid resistance testing was performed in accordance with the ASTM E274-06 (Standard Test Method for Skid Resistance of Paved Surfaces Using a Full-Scale Tire)

- TOA staff has also initiated Pavement Skid Testing project for the year 2016, TOA staff has determined the top thirty (30) Wet Pavement Accident Locations for the year 2015 and has selected Consultant to perform skid resistance testing at the 30

study locations in accordance with the ASTM E274-06 standards

10. Highway Safety Improvement Program (HSIP)

- TOA staff has initiated the 2015 HSIP project for the year; five (5) Consulting firms have been selected to perform detailed investigation, analysis, and develop specific countermeasures to reduce fatalities, injury severity and crash occurrences at

the top twenty-five (25) High Crash Locations within the District of Columbia

11. Traffic Calming Assessment

- TOA staff in coordination with the Howard University has completed traffic safety assessment for over one hundred (100) traffic calming petitions submitted by the District residents. Further, TOA staff has submitted reports outlining specific

countermeasures that will be performed in response to citizen's requests for traffic calming needs

12. Traffic Data Integration

- As part of DDOT's Traffic Safety Data Center contract with the Howard University (HU), TOA staff is coordinating with the HU staff in integrating short-term and long-term traffic counts, such as Weigh-In-Motion (WIM) data, Permanent Count Stations (PCS)

data, peak turning movement counts (TMC's) data, etc. on the Traffic Safety Data Center website

13. Traffic Safety Improvements

- TOA staff has conducted safety reviews at several study intersections and corridors. Further, TOA staff has also implemented several safety improvements, related to pedestrian, bike and vehicular traffic safety, such as pedestrian crosswalks, traffic signage,

advance warning signs, Leading Pedestrian Intervals (LPI's), traffic calming measures, etc. at the study location

14. High Crash Intersections Site Visit

- As part of the ongoing Vision Zero initiative, TOA staff participated in a multi-disciplinary team effort in conducting site visits at five (5) high crash intersections. TOA staff identified issues related to traffic safety for motor vehicles, pedestrians, bikes and transit,

and suggested specific countermeasures, at five study locations

- The multidisciplinary team included internal DDOT agencies (TOA, Signals, PSA, Transit, Policy, Parking, etc.) as well as external agencies such as, MPD, Fire/EMC, DC HSEMA, OEM (Office of Executive Mayor), DC Council, etc.

- TOA staff has also participated in various webinars, peer exchanges and training programs

15. Vision Zero Initiative

- Vision Zero Initiative aims to improve pedestrian and bicycle transportation safety by showcasing effective local actions, empowering local leaders to take actions, and promoting partnerships to advance pedestrian and bicycle safety

- DDOT is partnering with more than twenty (20) District government agencies in the Vision Zero Initiative, as MPD, Fire, EMS, HSEMA, DOH, OAG, OCTO, OP, City Administrator, etc. to identify effective strategies on education, enforcement, and

engineering related to the Vision Zero Initiative

16. Traffic Safety Engineering and Support Services (TSES)

- TOA staff is also soliciting assistance from the Consultants offering engineering expertise in traffic safety, transportation engineering, transportation planning and engineering design, under the Traffic Safety Engineering and Support Services (TSES) contract

- The Consultants provide engineering services and day-to-day support on several tasks, such as transportation and pedestrian safety studies, traffic engineering studies, traffic analysis and simulation, traffic signal timing and phasing, roadway design plans,

signing and marking plans, Maintenance of Traffic (MOT) plans, traffic control plans (TCP's), etc.

Progress in Implementing Projects

Funds Programmed

Reporting period for Highway Safety Improvement Program funding.

Federal Fiscal Year

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

Funding Category	Programmed*		Obligated	
HSIP (Section 148)	$19,954,573.93	96 %	$14,710,462.47	94 %
Penalty Transfer - Section 154	$900,000.00	4 %	$900,000.00	6 %
Totals	$20,854,573.93	100%	$15,610,462.47	100%

How much funding is programmed to local (non-state owned and operated) safety projects?
0 %
How much funding is obligated to local safety projects?
$0.00

How much funding is programmed to non-infrastructure safety projects?
0 %
How much funding is obligated to non-infrastructure safety projects?
$0.00

How much funding was transferred in to the HSIP from other core program areas during the reporting period?
0 %
How much funding was transferred out of the HSIP to other core program areas during the reporting period?
$0.00

Discuss impediments to obligating Highway Safety Improvement Program funds and plans to overcome this in the future.

As part of the ongoing HSIP program, Transportation Operations Administration (TOA) continues to work with the Safety Consultants in analyzing crash data, traffic operations, roadway geometry, parking, etc. and developing appropriate mitigation countermeasures at the High Hazard Locations. Since, District is different from other States, DDOT is required to address all the safety issues, and not just the High Hazard Locations. Hence, TOA has also hired Consultant services, via the Traffic Safety and Engineering Support (TSES) project, to provide engineering services and day-to-day technical support in conducting transportation and safety studies, traffic engineering studies, traffic signal timing and phasing, review roadway design plans, signage and marking plans, maintenance of traffic (MOT) plans, etc.

DDOT also utilizes "Safety Matters" program to address traffic safety issues, utilizing data driven approach, at locations other than High Hazard Locations. The "Safety Matters" program is not funded and is being conducted through coordination with the Pavement Rehabilitation and Reconstruction Program and Maintenance Program, which is not sufficient. Hence, we would like to have our complete Safety Program included for the HSIP funding. DDOT Is also coordinating with the SHSO to ensure data-driven approaches are utilized to establish the performance targets for the HSIP and SHSP program.

Further, TOA staff in coordination with the Howard University staff has completed updating the TARAS database. TARAS database is now fully functional and operational now and conforms to the MPD's new crash data schema.

Describe any other aspects of the general Highway Safety Improvement Program implementation progress on which you would like to elaborate.

DDOT annually solicits assistance of Consultant services to analyze the top high hazard intersections within the District. Consultants perform analysis of traffic volumes (motorists, bike, pedestrians, transit), crash data, traffic operations, signal timing, geometric design, etc. and develop most effective countermeasures, based on the cost/benefit analyses, at the top high hazard intersections. Further, Consultant prepares Draft HSIP Reports, summarizing analyses and recommendations for each intersection, and submits to DDOT Safety Team. DDOT Safety Team reviews the HSIP reports and provides comments on the Draft HSIP reports. The Consultant incorporates all the comments and submits the Final HSIP Reports to Safety Team. The Safety Team sends the Final HSIP Reports to DDOT Signals and ITS Team for constructing the recommended roadway improvements at the top high hazard intersections. For the year 2015, DDOT has selected five (5) Consulting firms to conduct analyses of crash data, traffic operations, traffic volumes, signal timing and phasing, roadway geometry, parking, etc. and develop appropriate countermeasures at twenty five (25) High Hazard Locations.

In addition, DDOT also seeks Consultant services and/or day-to-day support in the following disciplines: traffic safety, transportation engineering, transportation planning and transportation engineering design.

General Listing of Projects

List each highway safety improvement project obligated during the reporting period.

Project	Improvement Category	Output	HSIP Cost	Total Cost	Funding Category	Functional Classification	AADT	Speed	Roadway Ownership	Relationship to SHSP	
										Emphasis Area	Strategy
Canal Rd, Chain Bridge Rd to M St (Design)	Roadway Roadway - other	3.1 Miles	1000000	1000000	HSIP (Section 148)	Urban Principal Arterial - Other	39200		District of Columbia		
New Jersey Ave, Mass Ave to N St (Construction)	Roadway Roadway - other	0.6 Miles	10000000	10000000	HSIP (Section 148)	Urban Minor Arterial	3000		District of Columbia		
New Jersey Ave, Mass Ave to N St (CE)	Roadway Pavement surface - miscellaneous	0.6 Miles	2500000	2500000	HSIP (Section 148)	Urban Minor Arterial	3000		District of Columbia		
Safety & Geometric Imp I-295/DC 295 (Design)	Roadway Roadway - other	Miles	2000000	2000000	HSIP (Section 148)	Urban Principal Arterial - Other Freeways and Expressways	49200		Federal		
Upgrade/Replace Guardrails & Attenuators	Roadway Roadway - other	Numbers	125000	125000	HSIP (Section 148)	Citywide			District of Columbi		

(Design)									a		
Upgrade/Replace Guardrails & Attenuators (Constrn)	Roadway Roadway - other	Numbers	2250000	2250000	HSIP (Section 148)	Citywide			District of Columbia		
Upgrade/Replace Guardrails & Attenuators (CE)	Roadway Roadway - other	Numbers	500000	500000	HSIP (Section 148)	Citywide			District of Columbia		
Constructability & Work Zone Safety Review Design	Work Zone	Miles	359000	359000	HSIP (Section 148)	Citywide			District of Columbia		
Pavement Skid Testing (Design)	Roadway Pavement surface - high friction surface	30 Numbers	60000	60000	HSIP (Section 148)	Citywide			District of Columbia		
Pavement Skid Testing (Constrn)	Roadway Pavement surface - high friction surface	30 Numbers	50000	50000	HSIP (Section 148)	Citywide			District of Columbia		
Pavement Skid Testing (CE)	Roadway Pavement surface - high friction surface	30 Numbers	15000	15000	HSIP (Section 148)	Citywide			District of Columbia		
Traffic Safety Data Center at Howard Univ (Design)	Miscellaneous		500000	500000	HSIP (Section 148)	District of Columbia					
Traffic Safety Design HSIP Program	Miscellaneous		500000	500000	HSIP (Section 148)	District of Columbia			District of Columbi		

									a		
Traffic Signal UPS (Construction)	Intersection traffic control Modify traffic signal - miscellaneous/other/unspecified	Numbers	500000	500000	HSIP (Section 148)	District of Columbia					
Citywide Traffic Safety (Construction)	Miscellaneous		400000	400000	HSIP (Section 148)	District of Columbia					
Citywide Traffic Safety (CE)	Roadway Roadway - other		100000	100000	HSIP (Section 148)	Citywide			District of Columbia		
Security audity for Traffic Signals & ITS (Plannin	Miscellaneous		150000	150000	HSIP (Section 148)	Citywide			District of Columbia		

Progress in Achieving Safety Performance Targets

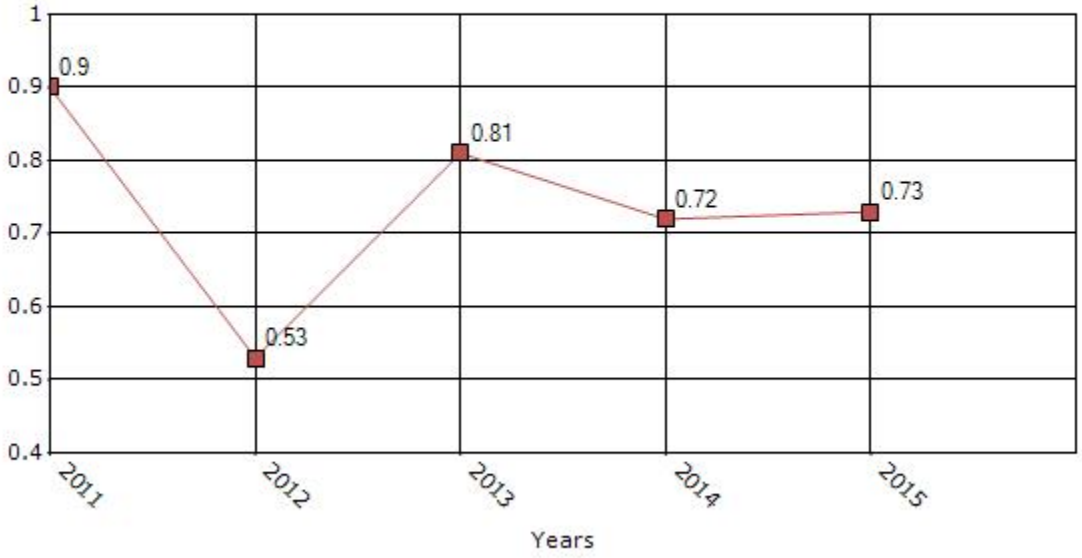
Overview of General Safety Trends

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

Performance Measures*	2011	2012	2013	2014	2015
Number of fatalities	32	19	29	26	26
Number of serious injuries					
Fatality rate (per HMVMT)	0.9	0.53	0.81	0.72	0.73
Serious injury rate (per HMVMT)					

*Performance measure data is presented using a five-year rolling average.

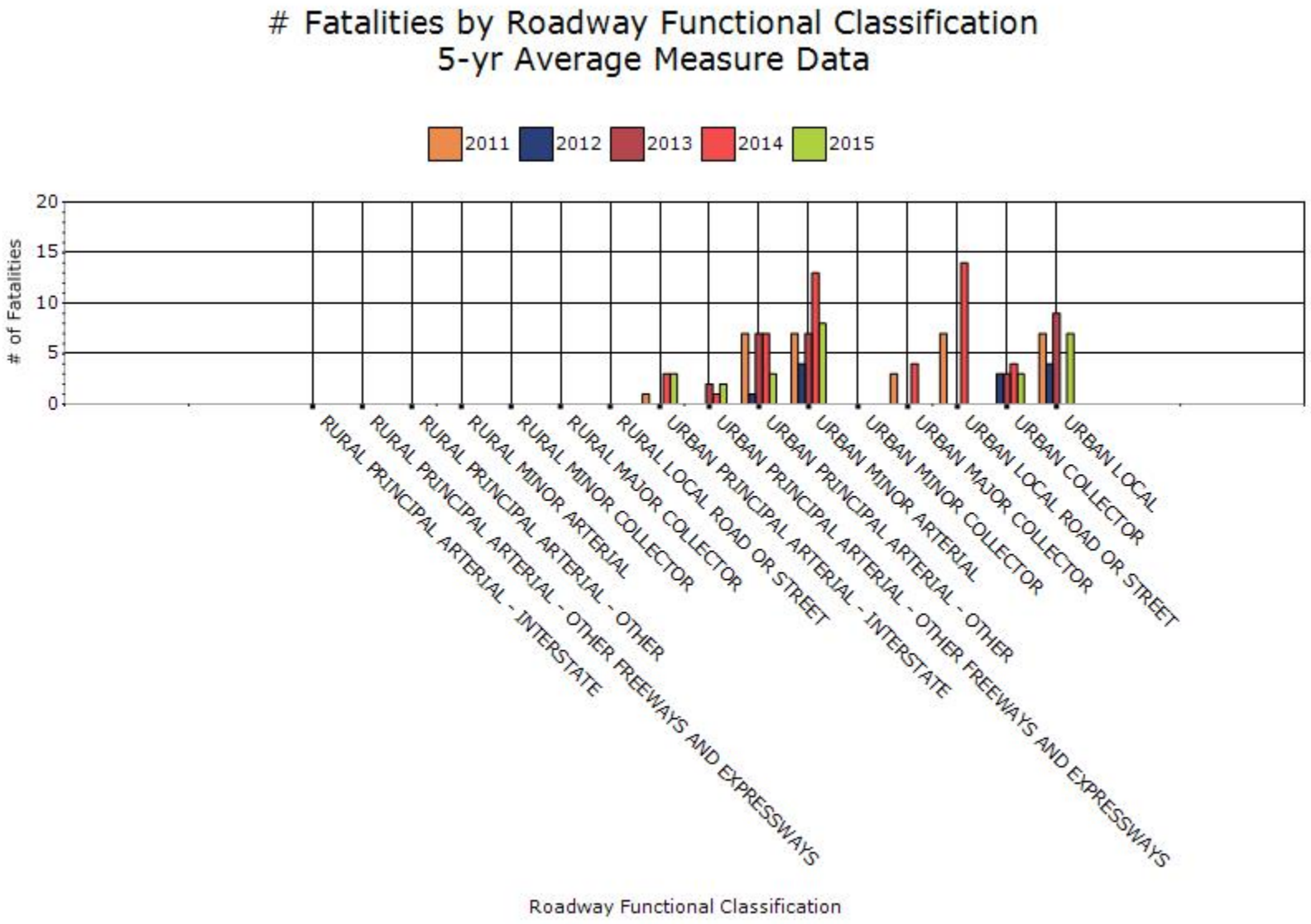
Rate of Fatalities for the Last Five Years
5-yr Average Measure Data

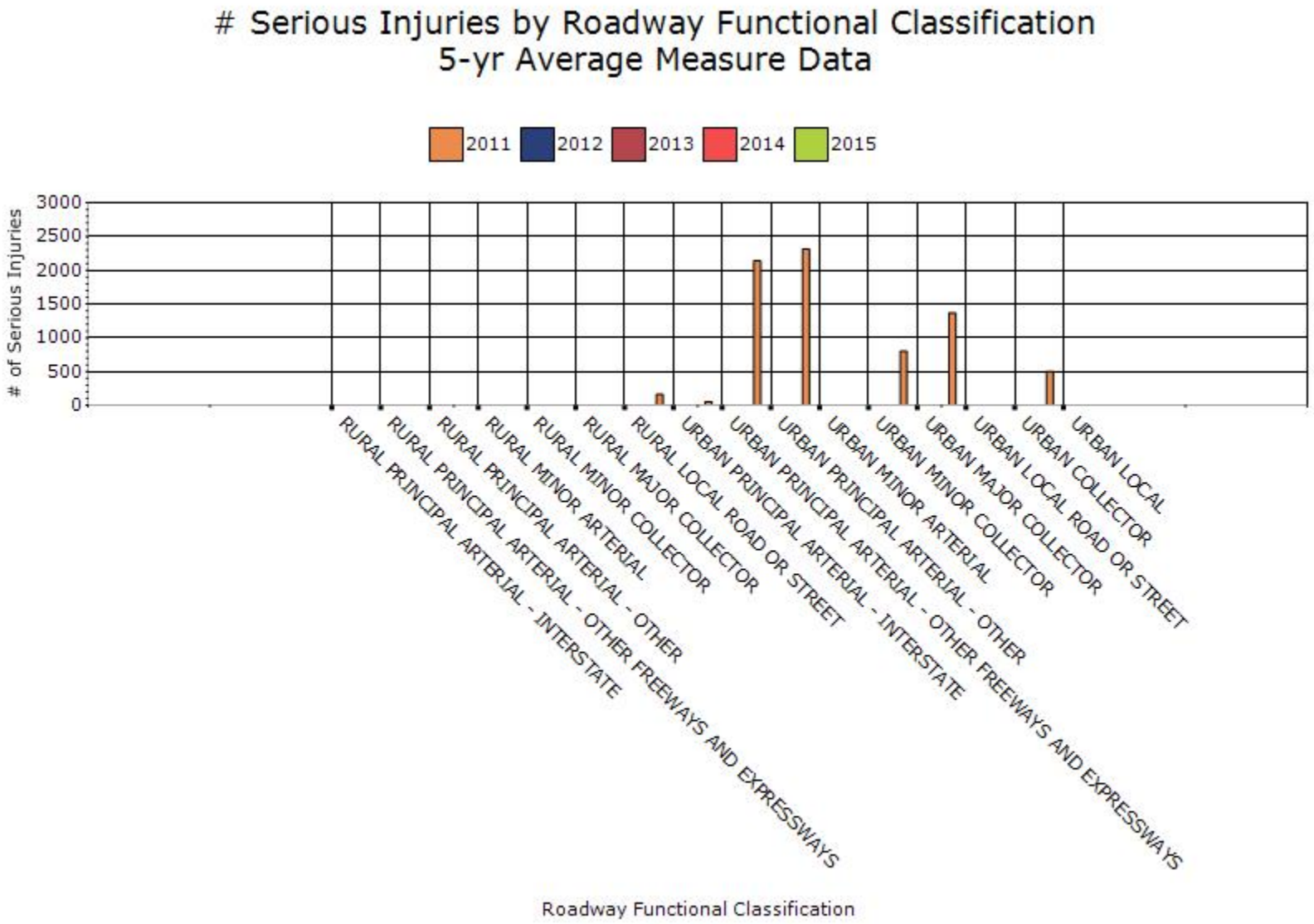


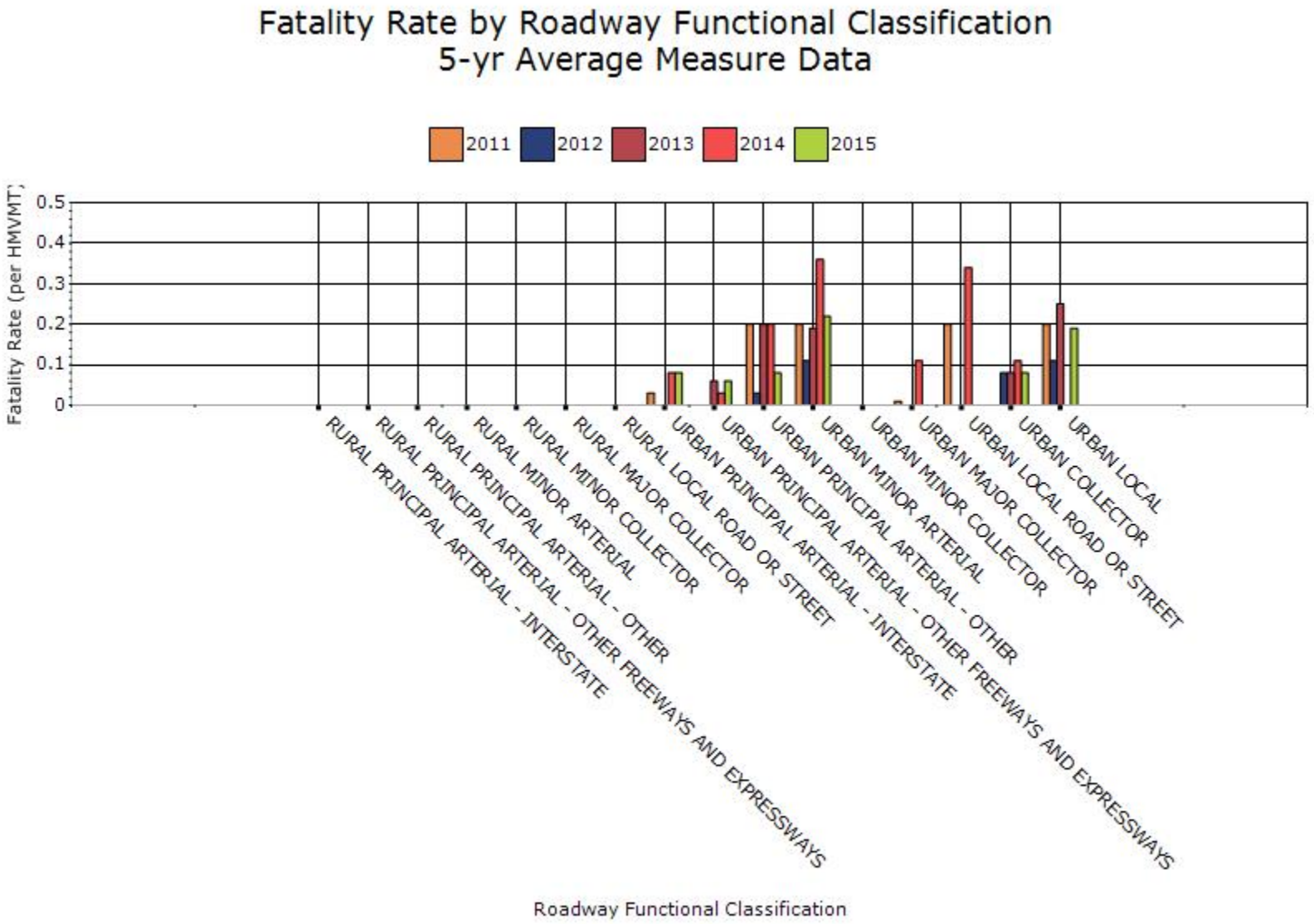
To the maximum extent possible, present performance measure* data by functional classification and ownership.

Year - 2015

Function Classification	Number of fatalities	Number of serious injuries	Fatality rate (per HMVMT)	Serious injury rate (per HMVMT)
URBAN PRINCIPAL ARTERIAL - INTERSTATE	3		0.08	
URBAN PRINCIPAL ARTERIAL - OTHER FREEWAYS AND EXPRESSWAYS	2		0.06	
URBAN PRINCIPAL ARTERIAL - OTHER	3		0.08	
URBAN MINOR ARTERIAL	8		0.22	
URBAN COLLECTOR	3		0.08	
URBAN LOCAL	7		0.19	

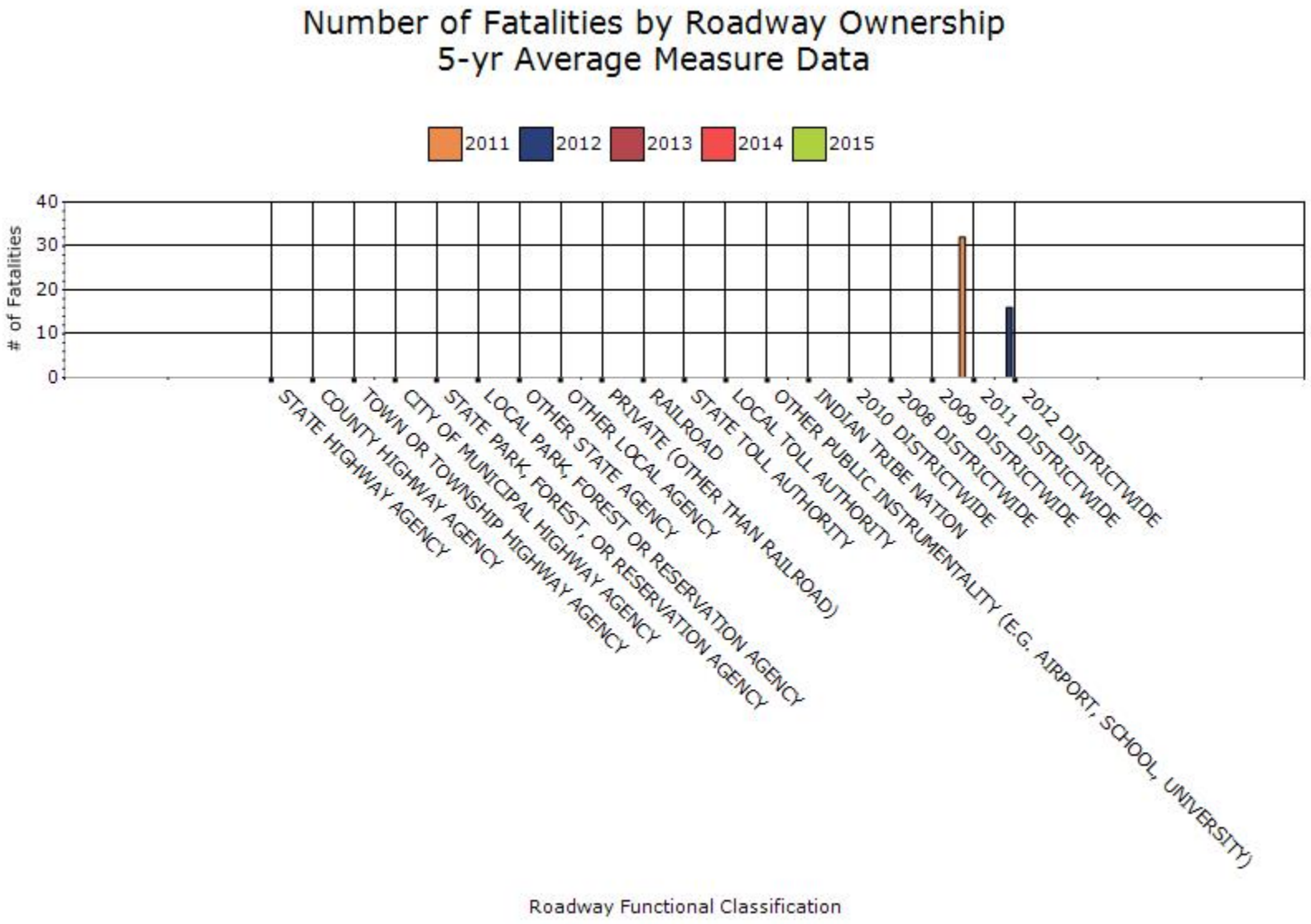

Fatalities by Roadway Functional Classification
5-yr Average Measure Data
2011
2012
2013
2014
2015
# of Fatalities
20
15
10
5
0
RURAL PRINCIPAL ARTERIAL - INTERSTATE
RURAL PRINCIPAL ARTERIAL - OTHER FREEWAYS AND EXPRESSWAYS
RURAL PRINCIPAL ARTERIAL - OTHER
RURAL MINOR ARTERIAL
RURAL MINOR COLLECTOR
RURAL MAJOR COLLECTOR
RURAL LOCAL ROAD OR STREET
URBAN PRINCIPAL ARTERIAL - INTERSTATE
URBAN PRINCIPAL ARTERIAL - OTHER FREEWAYS AND EXPRESSWAYS
URBAN PRINCIPAL ARTERIAL - OTHER
URBAN MINOR ARTERIAL
URBAN MINOR COLLECTOR
URBAN MAJOR COLLECTOR
URBAN LOCAL ROAD OR STREET
URBAN COLLECTOR
URBAN LOCAL
Roadway Functional Classification

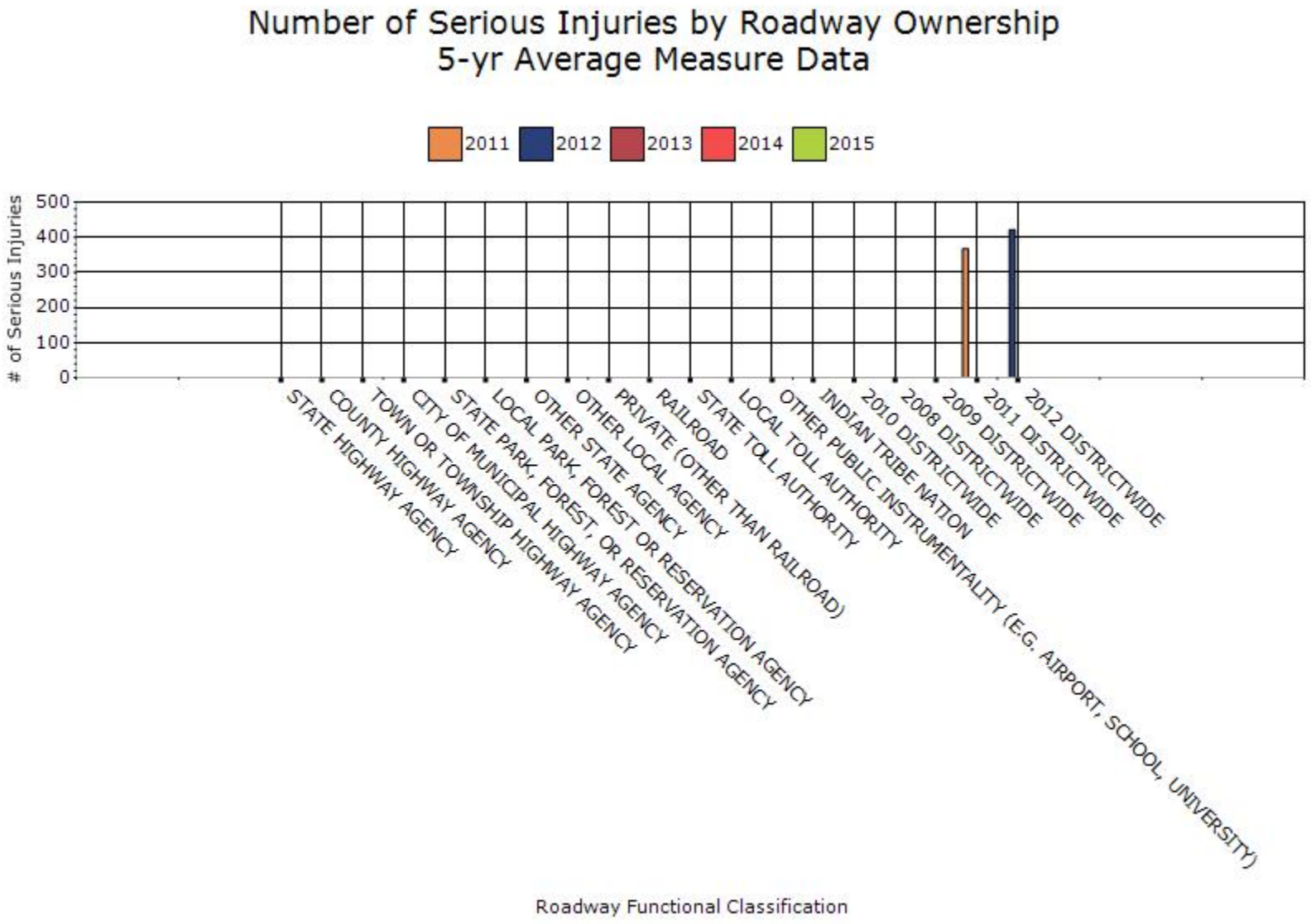

Serious Injuries by Roadway Functional Classification
5-yr Average Measure Data
2011
2012
2013
2014
2015
# of Serious Injuries
3000
2500
2000
1500
1000
500
0
RURAL PRINCIPAL ARTERIAL - INTERSTATE
RURAL PRINCIPAL ARTERIAL - OTHER FREEWAYS AND EXPRESSWAYS
RURAL PRINCIPAL ARTERIAL - OTHER
RURAL MINOR ARTERIAL
RURAL MINOR COLLECTOR
RURAL MAJOR COLLECTOR
RURAL LOCAL ROAD OR STREET
URBAN PRINCIPAL ARTERIAL - INTERSTATE
URBAN PRINCIPAL ARTERIAL - OTHER FREEWAYS AND EXPRESSWAYS
URBAN PRINCIPAL ARTERIAL - OTHER
URBAN MINOR ARTERIAL
URBAN MINOR COLLECTOR
URBAN MAJOR COLLECTOR
URBAN LOCAL ROAD OR STREET
URBAN COLLECTOR
URBAN LOCAL
Roadway Functional Classification

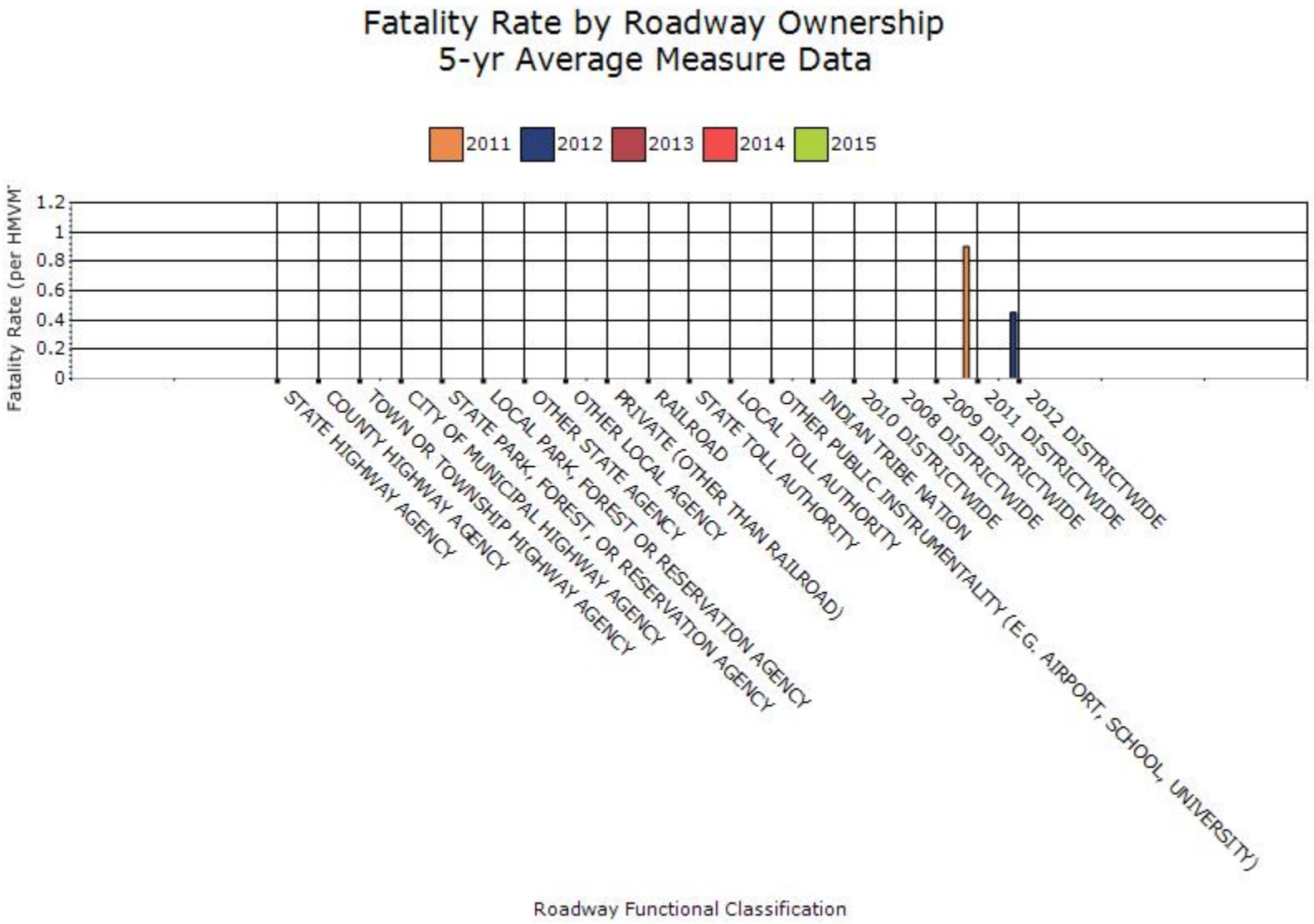

Fatality Rate by Roadway Functional Classification
5-yr Average Measure Data
2011
2012
2013
2014
2015
Fatality Rate (per HMVMT)
0.5
0.4
0.3
0.2
0.1
0
RURAL PRINCIPAL ARTERIAL - INTERSTATE
RURAL PRINCIPAL ARTERIAL - OTHER FREEWAYS AND EXPRESSWAYS
RURAL PRINCIPAL ARTERIAL - OTHER
RURAL MINOR ARTERIAL
RURAL MINOR COLLECTOR
RURAL MAJOR COLLECTOR
RURAL LOCAL ROAD OR STREET
URBAN PRINCIPAL ARTERIAL - INTERSTATE
URBAN PRINCIPAL ARTERIAL - OTHER FREEWAYS AND EXPRESSWAYS
URBAN PRINCIPAL ARTERIAL - OTHER
URBAN MINOR ARTERIAL
URBAN MINOR COLLECTOR
URBAN MAJOR COLLECTOR
URBAN LOCAL ROAD OR STREET
URBAN COLLECTOR
URBAN LOCAL
Roadway Functional Classification

Year - 2012

Roadway Ownership	Number of fatalities	Number of serious injuries	Fatality rate (per HMVMT)	Serious injury rate (per HMVMT)
2012 DISTRICTWIDE	16	421	0.45	


Number of Fatalities by Roadway Ownership
5-yr Average Measure Data
2011
2012
2013
2014
2015
# of Fatalities
40
30
20
10
0
STATE HIGHWAY AGENCY
COUNTY HIGHWAY AGENCY
TOWN OR TOWNSHIP HIGHWAY AGENCY
CITY OF 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
2010 DISTRICTWIDE
2008 DISTRICTWIDE
2009 DISTRICTWIDE
2011 DISTRICTWIDE
2012 DISTRICTWIDE
Roadway Functional Classification


Number of Serious Injuries by Roadway Ownership
5-yr Average Measure Data
2011
2012
2013
2014
2015
# of Serious Injuries
500
400
300
200
100
0
STATE HIGHWAY AGENCY
COUNTY HIGHWAY AGENCY
TOWN OR TOWNSHIP HIGHWAY AGENCY
CITY OF 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
2010 DISTRICTWIDE
2008 DISTRICTWIDE
2009 DISTRICTWIDE
2011 DISTRICTWIDE
2012 DISTRICTWIDE
Roadway Functional Classification


Fatality Rate by Roadway Ownership
5-yr Average Measure Data
2011
2012
2013
2014
2015
Fatality Rate (per HMVM)
1.2
1
0.8
0.6
0.4
0.2
0
STATE HIGHWAY AGENCY
COUNTY HIGHWAY AGENCY
TOWN OR TOWNSHIP HIGHWAY AGENCY
CITY OF 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
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INDIAN TRIBE NATION
2010 DISTRICTWIDE
2008 DISTRICTWIDE
2009 DISTRICTWIDE
2011 DISTRICTWIDE
2012 DISTRICTWIDE
Roadway Functional Classification

Describe any other aspects of the general highway safety trends on which you would like to elaborate.

Year	VMT	Fatalities		Disabling Injuries		Injuries	
		Total	Rate	Total	Rate	Total	Rate
2010	3,590,870,000	25	0.696	303	8.438	7,068	1.968
2011	3,567,875,000	32	0.891	305	8.494	7,335	2.043
2012	3,567,875,000	19	0.529	336	9.357	7,268	2.024
2013	3,567,875,000	29	0.808	305	8.494	7,505	2.090
2014	3,567,875,000	26	0.724	311	8.661	8,030	2.236
2015	3,567,875,000	26	0.724	276	7.686	8,341	2.323

Application of Special Rules

Present the rate of traffic fatalities and serious injuries per capita for drivers and pedestrians over the age of 65.

Older Driver Performance Measures	2010	2011	2012	2013	2014
Fatality rate (per capita)	0.01	0.012	0.012	0.008	0.006
Serious injury rate (per capita)					
Fatality and serious injury rate (per capita)					

*Performance measure data is presented using a five-year rolling average.

Fatality rate per capita (r) is the ratio of the total number of fatalities of drivers and pedestrians at the age of 65 or over (f) per 1,000 resident population (N) for the District of Columbia. Below are the calculations of fatality rate per capita (r) for years 2008 to 2015:

2008

- Total number of fatalities for drivers and pedestrians at the age of 65 or over (f) in 2008 = 16

- Total population for the District of Columbia (N) in the year 2008 = 595,130 residents

- Fatality rate per capita (r) = f/N*1000 = **0.027**

2009

- Total number of fatalities for drivers and pedestrians at the age of 65 or over (f) in 2009 = 5

- Total population for the District of Columbia (N) in the year 2009 = 598,426 residents

- Fatality rate per capita (r) = f/N*1000 = **0.008**

2010

- Total number of fatalities for drivers and pedestrians at the age of 65 or over (f) in 2010 = 7

- Total population for the District of Columbia (N) in the year 2010 = 601,723 residents

- Fatality rate per capita (r) = f/N*1000 = **0.012**

2011

- Total number of fatalities for drivers and pedestrians at the age of 65 or over (f) in 2011 = 7

- Total population for the District of Columbia (N) in the year 2011 = 601,723 residents

- Fatality rate per capita (r) = f/N*1000 = **0.012**

2012

- Total number of fatalities for drivers and pedestrians at the age of 65 or over (f) in 2012 = 0

- Total population for the District of Columbia (N) in the year 2012 = 632,323 residents

- Fatality rate per capita (r) = f/N*1000 = **0.000**

2013

- Total number of fatalities for drivers and pedestrians at the age of 65 or over (f) in 2013 = 8

- Total population for the District of Columbia (N) in the year 2013 = 646,449 residents

- Fatality rate per capita (r) = f/N*1000 = **0.012**

2014

- Total number of fatalities for drivers and pedestrians at the age of 65 or over (f) in 2014 = 2

- Total population for the District of Columbia (N) in the year 2014 = 658,893 residents

- Fatality rate per capita (r) = f/N*1000 = **0.0030**

2015

- Total number of fatalities for drivers and pedestrians at the age of 65 or over (f) in 2014 = 5

- Total population for the District of Columbia (N) in the year 2014 = 672,228 residents

- Fatality rate per capita (r) = f/N*1000 = **0.00743**

Does the older driver special rule apply to your state?

No

Assessment of the Effectiveness of the Improvements (Program Evaluation)

What indicators of success can you use to demonstrate effectiveness and success in the Highway Safety Improvement Program?

Other-Total number of crashes, Injury crashes, Fatal crashes, number of Fatalities, number of Disabling Injuries

What significant programmatic changes have occurred since the last reporting period?

Shift Focus to Fatalities and Serious Injuries
Organizational Changes
Other-DDOT has established Performance Targets in the HSIP and SHSP program

Briefly describe significant program changes that have occurred since the last reporting period.

DDOT has hired personnel for following main positions:

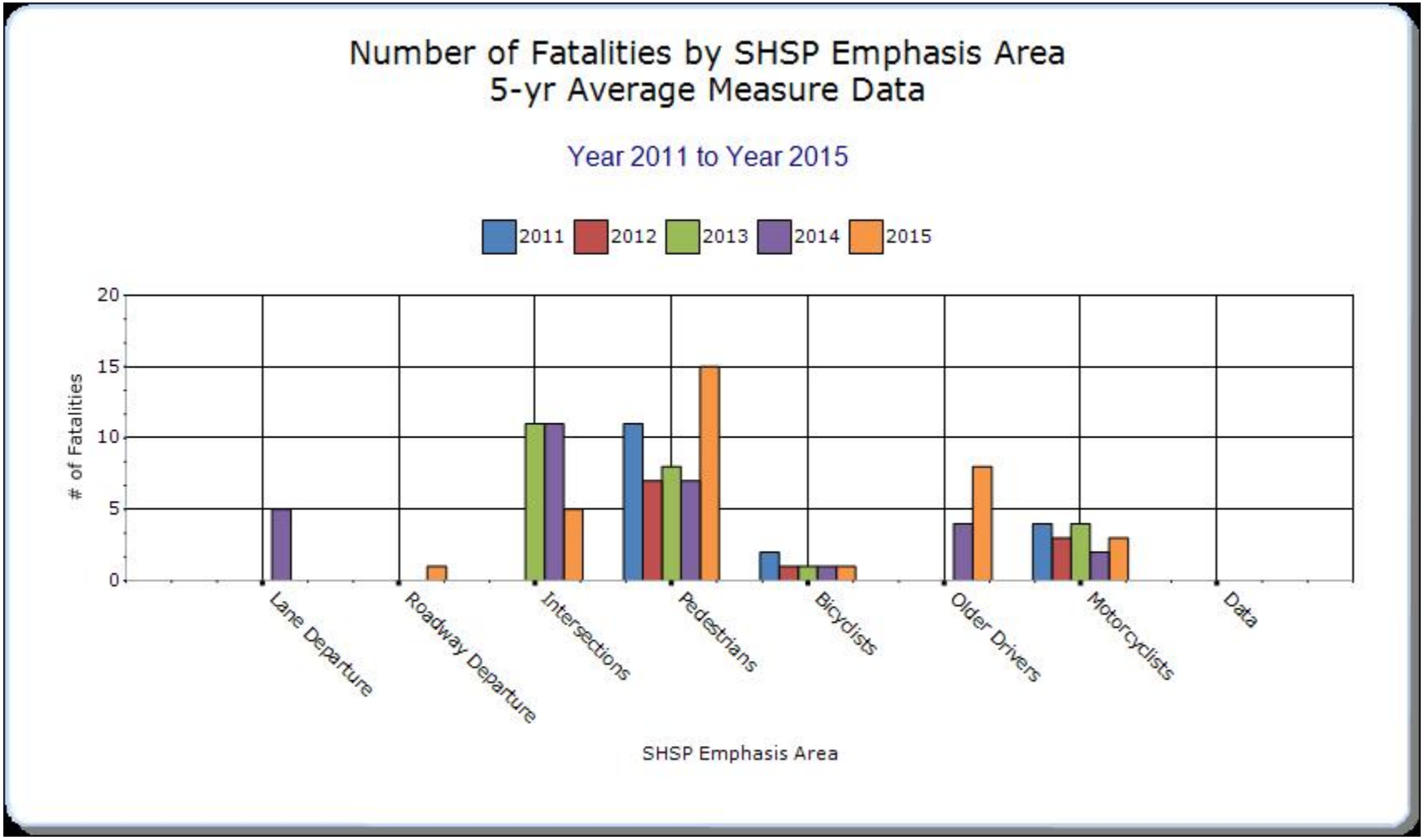
- One (1) Safe Routes to School Coordinator
- One (1) Citywide Transportation Planner
- New Chief Operations Officer (COO)
- New Chief Finance Officer (CFO)
- New Chief of Staff and Deputy Chief of Staff

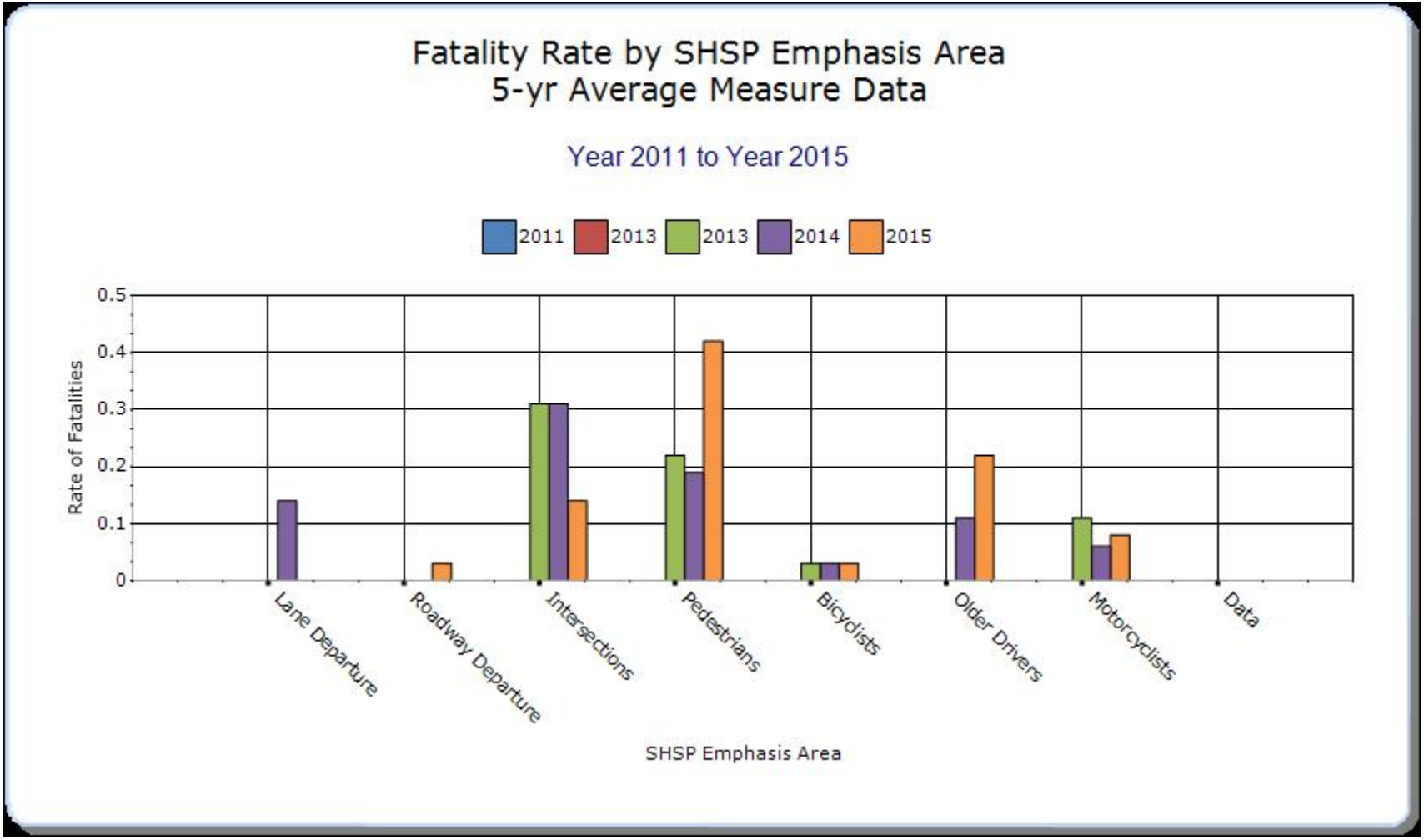
SHSP Emphasis Areas

For each SHSP emphasis area that relates to the HSIP, present trends in emphasis area performance measures.

Year - 2015

HSIP-related SHSP Emphasis Areas	Target Crash Type	Number of fatalities	Number of serious injuries	Fatality rate (per HMVMT)	Serious injury rate (per HMVMT)	Other-1	Other-2	Other-3
Lane Departure								
Roadway Departure		1		0.03				
Intersections		5		0.14				
Pedestrians		15		0.42				
Bicyclists		1		0.03				
Older Drivers		8		0.22				
Motorcyclists		3		0.08				


Number of Fatalities by SHSP Emphasis Area
5-yr Average Measure Data
Year 2011 to Year 2015
2011
2012
2013
2014
2015
# of Fatalities
20
15
10
5
0
Lane Departure
Roadway Departure
Intersections
Pedestrians
Bicyclists
Older Drivers
Motorcyclists
Data
SHSP Emphasis Area



Groups of similar project types

Present the overall effectiveness of groups of similar types of projects.

Year - 2015

HSIP Sub-program Types	Target Crash Type	Number of fatalities	Number of serious injuries	Fatality rate (per HMVMT)	Serious injury rate (per HMVMT)	Other-1	Other-2	Other-3
Red Light Running Prevention								
Other-Sight distance analysis								
Right Angle Crash		1		0.03				
Pedestrian Safety		15		0.42				
Intersection		5		0.14				
Bicycle Safety		1		0.03				

Systemic Treatments

Present the overall effectiveness of systemic treatments.

Year - 2014

Systemic improvement	Target Crash Type	Number of fatalities	Number of serious injuries	Fatality rate (per HMVMT)	Serious injury rate (per HMVMT)	Other-1	Other-2	Other-3
Install/Improve Lighting	Other Defects							
Install/Improve Pavement Marking and/or Delineation	Road Defects							

Describe any other aspects of the overall Highway Safety Improvement Program effectiveness on which you would like to elaborate.

DDOT has installed new Rapid Rectangular Flashing Beacons (RRFB) devices to improve traffic safety for pedestrians and bicyclists at the following locations

- Intersection of 14th St and Randolph St, NW

- Intersection of 15th St and Good Hope Rd, SE

- Intersection of Bladensburg Rd and T St, NE

- Intersection of Virginia Ave and G St, NW

- Intersection of Virginia Ave and 22nd St, NW

In addition, DDOT also installed new traffic signals and HAWK (High-Intensity Activated CrossWalk Beacon) signals at the following locations to improve traffic safety for all roadway users, including motorists, pedestrians, bicyclists and transit

- Intersection of Wisconsin Ave and Ingomar St, NW (new HAWK Signal)

- Intersection of Wisconsin Ave and Idaho Ave, NW (new HAWK Signal)

- Intersection of 10th St and Maryland Ave, NE (new Traffic Signal)

- Intersection of 8th St and Florida Ave, NE (new Traffic Signal)

- Intersection of Canal Rd and Reservoir Rd, NW (new Traffic Signal

A qualitative comparison of Before-and-After crashes showed decrease in total crashes and injury-related crashes at the study locations:

Crashes	Before	After
Total Crashes	38	25
Injuries	15	6

In addition, DDOT is also initiating a new Citywide Traffic Safety Construction contract. The proposed new contract would implement transportation and highway engineering improvements and countermeasures at the High Hazard Locations. The improvements and countermeasures are determined from the traffic engineering and safety studies conducted by DDOT at the High Hazard Locations, as part of the annual HSIP Design program.

Project Evaluation

Provide project evaluation data for completed projects (optional).

Location	Functional Class	Improvement Category	Improvement Type	Bef-Fatal	Bef-Serious Injury	Bef-All Injuries	Bef-PDO	Bef-Total	Aft-Fatal	Aft-Serious Injury	Aft-All Injuries	Aft-PDO	Aft-Total	Evaluation Results (Benefit/ Cost Ratio)
Intersection of 14th St and Randolph St NW	Urban Minor Arterial	Intersection traffic control	Install new Rapid Rectangular Flashing Beacon (RRFB)			2	7	9			1	7	8	
Intesection of Bladensburg Rd and T St NE	Rural Minor Arterial	Intersection traffic control	Install new Rapid Rectangular Flashing Beacon (RRFB)			6	8	14				4	4	

Intersection of Virginia Ave and G St NW	Urban Minor Collector	Intersection traffic control	Install new Rapid Rectangular Flashing Beacon (RRFB)			2	2	4				1	1	
Intersection of 8th St and Florida Ave NW	Urban Minor Arterial	Intersection traffic control	Install new Traffic Signal			1	9	10				6	6	
Intersection of Canal Rd & Reservoir Rd NW	Urban Minor Arterial	Intersection traffic control	Install new Traffic Signal			3	8	11			4	5	9	
Intersection of Wisconsin Ave and Idaho St NW	Urban Principal Arterial - Other	Intersection traffic control	Install new Traffic Signal				2	2			1	1	2	

Intersection of Wisconsin Ave and Ingomar St NW	Urban Principal Arterial - Other	Intersection traffic control	Install new Traffic Signal			1	2	3				1	1	

Optional Attachments

Sections	Files Attached

Glossary

5 year rolling average means the average of five individual, 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.