

Highway Safety Improvement Program Data Driven Decisions

New Jersey Highway Safety Improvement Program 2016 Annual Report

Prepared by: NJ

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."

Table of Contents

Disclaimer	ii
Executive Summary	1
Introduction	6
Program Structure	6
Program Administration	6
Program Methodology	8
Progress in Implementing Projects	14
Funds Programmed	14
General Listing of Projects	17
Progress in Achieving Safety Performance Targets	24
Overview of General Safety Trends	24
Application of Special Rules	
Assessment of the Effectiveness of the Improvements (Program Evaluation)	41
SHSP Emphasis Areas	44
Groups of similar project types	
Systemic Treatments	53
Project Evaluation	60
Glossary	62

Executive Summary

The Fixing America's Surface Transportation Act (FAST Act) went into effect on December 4, 2015. The FAST Act continues the Highway Safety Improvement Program (HSIP) as a core Federal-aid program to achieve a significant reduction in traffic fatalities and serious injuries on all public roads, including non-State-owned public roads.

The FAST Act requires the development of a Strategic Highway Safety Plan (SHSP), a High Risk Rural Roads Program (HRRRP) and the Railway-Highway Crossings Program (RHXP). In order to obligate HSIP funds, states are required to (1) develop, implement and update a SHSP; (2) produce a program of projects or strategies to reduce identified safety problems; (3) evaluate the plan on a regular basis, and (4) submit an annual transparency report.

HSIP requires a data-driven, strategic approach to improving highway safety on all public roads that focuses on performance.

New Jersey has analyzed roadway safety performance as described in the table "Overview of General Safety Trends". Over the five year period, 2011- 2015, the New Jersey's five-year rolling average for the fatalities as well as fatality rates dropped approximately 7% and 8% respectively. Similarly, for the number of serious injuries and serious injury rates, the five-year rolling average dropped approximately 29% and 30% respectively. However, over the same five-year period, the actual number of crashes resulting in fatalities and incapacitating injuries in each year has fluctuated.

NJDOT has a broad spectrum of safety programs designed to reduce the frequency and severity of crashes as follows:

- Intersection Improvement Program;
- Crash Reduction Program (Road Departure and Corridor Segment);
- Utility Pole Mitigation Program;
- Pedestrian Safety Improvement Program;
- Rail Highway Grade Crossing Program (State);
- Rail Highway Grade Crossing Program (Federal);
- High Risk Rural Roads Program; and the
- Local Safety Program

NJDOT continued to employ a data-driven systemic safety improvement approach that concentrated our resources and focused our energies on high risk roadway features that correlate with specific severe crash types. Using crash data, NJDOT screened New Jersey roadways for center line cross over, head-on crashes. A systemic Center Line Rumble Stripes Program was developed in 2014. At this time centerline

rumble stripes continue to be installed on all the state roads that meet the criteria to mitigate these head-on crashes. NJDOT also encourages and supports, the local partners for the installation of centerline rumble stripes on their roadways.

New Jersey continued to expand its use of systemic safety improvements with respect to roadway departure crashes. In 2015, New Jersey developed a pilot program to provide high friction surface treatment on roadway curves which experience high roadway departure crashes such as fixed object and overturn crashes. Two projects, Interstate Ramps Pilot Project and Land Service Roads Pilot Project, are currently in the design process. In addition, in late 2015, the systemic pilot program was developed for intersection improvements which has been identified by FHWA as a Focus Approach to Safety category and is an identified emphasis area for New Jersey. Under this program, counties and municipalities are encouraged to construct roundabouts, where feasible, as this is one of the FHWA proven countermeasures for intersections. This is also done to get the New Jersey residents familiar with the safety benefits of roundabout who are resistance to incorporating design with modern roundabout due to New Jersey's history with wide use of traffic circles. The program has been well received and NJDOT has already received eight applications for roundabout projects.

New Jersey has completed the first update to their Strategic Highway Safety Plan. As per the updated 2015 Strategic Highway Safety Plan, New Jersey has adopted the national vision for highway safety - Toward Zero Deaths: A National Strategy on Highway Safety (Toward Zero Deaths). This calls for a national goal of reducing the number of traffic fatalities by half by the year 2030. As a part of New Jersey's updated SHSP, New Jersey's crash reduction goal is to reduce serious injuries and fatalities by 2.5 percent annually with the support of all safety partners. The SHSP is linked to the New Jersey Highway Safety Plan, prepared by the New Jersey Division of Highway Traffic Safety (NJDHTS), and the New Jersey Comprehensive Statewide Freight Plan, prepared by the New Jersey Department of Transportation. Both agencies, in collaboration with their safety partners, are committed to implementing the SHSP. This is evidenced in the identified emphasis areas and strategies. The plan provides NJDOT Infrastructure related direction and focuses on lane departure, intersections, and pedestrians as a top priority.

New Jersey's commitment to an effective data driven program is evidenced in fiscal goals established in the SHSP update. The update provides direction to focus approximately 40 percent of the annual HSIP funding on state highways and 60 percent on county and municipal network in line with the current distribution of serious injuries and fatalities. In the current reporting period, NJDOT has supported approximately \$23 million out of approximate \$42.5 million anticipated obligated funds for projects on the local system, which nearly aligns with the percentage of fatal and serious injury crashes on local roadways.

New Jersey continues to be proactive with respect to implementation and use of New Jersey's updated SHSP. While a complete update to the SHSP is required every 4 years, NJDOT, along with the New Jersey Division of Highway Traffic Safety (NJDHTS) will review progress against the plan on an annual basis. To

aid in this task, NJDOT is in the process of developing a 5 year outlook HSIP Action Plan incorporating emphasis area, agency, strategy/action (project), performance objective, investment level and resource. Also, NJDOT is in the process of developing Safety Performance Targets for next year's HSIP. NJDOT is coordinating with NJDHTS to help develop these Safety Performance Targets prior to next year's submission of Highway Safety Plan (HSP).

The NJDOT's vision is shared by safety stakeholders, involved State agencies, each of the three regional Metropolitan Planning Organizations (MPOs) covering New Jersey, counties and municipalities through their respective safety advisory committees. Also, New Jersey recognizes the benefits of collaboration in achieving overall safety. Over the last year, NJDOT has attended numerous peer exchanges to share and obtain knowledge to help better our program. FHWA resource center provides continued technical support to NJDOT and MPOs with the use and understanding of AASHTO's Highway Safety Manual to perform project analyses. The NJDOT along with the MPOs have utilized these resources to provide the support to counties and municipalities. NJDOT has made design assistance funding available to all MPOs and has increased technical support provided to the MPOs with the performing/assisting of HSM analyses as well as other activities related to the HSIP program. NJDOT also provides support and encouragement to MPOs to use innovative techniques for intersection design under EDC-2 initiative and Data-Driven Safety Analysis (DDSA) and Road Diets under EDC-3. New Jersey was featured in an EDC-3 DDSA high level video (https://www.fhwa.dot.gov/innovation/everydaycounts/edc-3/ddsa.cfm) along with a New Jersey Case Study video (https://www.youtube.com/watch?v=cHv086TQ2LI) for its use of innovative approaches to solve safety issues. Going forward, NJDOT will assist the MPOs in the monitoring and investigation of evaluated projects that, at this time, did not meet expectations.

NJTPA

The North Jersey Transportation Planning Authority (NJTPA) is the MPO serving the 13-county northern New Jersey region. NJTPA continues to work with its federal partners, the New Jersey Department of Transportation (NJDOT), NJ TRANSIT, member counties and cities and other state and local agencies to make travel safer and more reliable for all users of the region's transportation system.

The NJTPA is proactive when it comes to safety, actively engaging in Safety Conscious Planning. While traditional safety planning is reactive—a problem is identified through crash data analysis and then the appropriate engineering, enforcement and/or education countermeasures are implemented—Safety Conscious Planning integrates safety into all phases of transportation improvement planning and development so that safety is an integral part of all decision-making.

FY 2016 marked the 11th year of the Local Safety Program (LSP) and 6th year of the High Risk Rural Roads Program (HRRRP). Prior to FY 2014, the NJTPA had an annual apportionment of \$3 million for both programs combined. This apportionment was subsequently increased by NJDOT, and in FY 2014 \$16.3 million was obligated followed, by \$18.3 million in FY 2015. In January 2015, The NJTPA Board of

Trustees approved a FY 2016-2017 LSP/HRRRP program of over \$32 Million. \$10 million is anticipated to be obligated in FY 2016, with the balance anticipated to be authorized in FY 2017.

The NJTPA recognizes the need to assist member counties and cities in preparing plans, specs & estimates (PS&E) for construction authorization of projects in both programs. In FY2013, the NJTPA created the Local Safety Engineering Assistance Program (LSEAP). This annual program has grown from 38% of the projects in the program year requesting engineering assistance in FY 2013 to 75% requesting assistance in FY 2016. In another measure, the program has increased from one consultant and five design projects to four consultants and sixteen projects. This engineering assistance program has resulted in high levels of timely, high quality documentation submitted for authorization and has improved the state's ability to successfully address safety issues on local roads, where 60% of crashes occur. For more information on the location safety program, visit the webpage: http://www.njtpa.org/local-safety.

Another recent NJTPA initiative, Street Smart NJ is a public education, awareness and behavioral change pedestrian safety campaign first piloted in 2013 by five New Jersey municipalities. The program has been expanded to run vigorous campaigns in 12 partner communities in 2016, as well as to encourage and support additional communities and the Transportation Management Associations (TMAs) to run their own campaigns. Street Smart NJ uses outdoor, transit and online advertising, along with grassroots public awareness efforts and law enforcement to address pedestrian safety. Street Smart NJ emphasizes educating drivers and pedestrians through mass media, as well as targeted enforcement. It complements, but doesn't replace, other state and local efforts to build safer streets and sidewalks, enforce laws and train better roadway users. The Street Smart NJ program was expanded in 2016 to include six new partner communities — Elizabeth, Passaic, Toms River, Lakewood, Red Bank, Metuchen and Franklin Borough in Sussex County. Throughout March 2016, every partner — with the exception of Long Beach Island, which runs summer campaigns —participated in the Street Smart NJ program. In addition, several New Jersey shore communities (Asbury Park, Belmar, Bradley Beach, and Manasquan) conducted campaigns over the summer, reaching thousands of beach goers. For more information, visit the campaign website www.bestreetsmartnj.org.

In addition, the NJTPA worked with Newark to develop the City of Newark Pedestrian and Bicycle Safety Action Plan, which was completed in February 2016 and adopted by the City Council in May 2016. The plan's intent is two-fold: to serve as a guide for city staff to prioritize locations of greatest concern and also to inform the public where the city intends to focus its efforts. The plan has identified specific treatments for high crash locations which will provide the city with the data needed for future HSIP project applications. For more information, visit the webpage: http://njtpa.org/planning/regionalstudies/bicycle-pedestrian/newark-safety-action-plan.

DVRPC

The Delaware Valley Regional Planning Commission (DVRPC) is the MPO that serves four counties in central New Jersey: Burlington, Camden, Gloucester and Mercer.

DVRPC conducted a formal project application solicitation in January of 2016 for the Local Federal HSIP and HRRR Programs, offering design assistance (for completion of final PS&E packages by a consultant and paid for with HSIP) and construction funds. Though no completed applications were received, DVRPC worked with Camden, Gloucester and Burlington Counties on potential candidates. Progress was made in the advancement of two earlier applications. Specifically, the Mt Ephraim Avenue Corridor-wide Pedestrian Safety Improvements application was granted HSIP for Concept Development. Also advanced was preliminary engineering for the Mercer County Brunswick Circle Extension Roundabout. Consultant selection process was conducted in July and August for these two projects.

In addition, under the systemic pilot program for intersection improvements on local roadways, the Gloucester County roundabout, at the intersection of Auburn Road (CR 551) and High Hill Road (CR 662), was the first roundabout funded. Since, two more roundabouts have been identified as candidates for this program.

Lastly, DVRPC along with Burlington County was featured in the EDC-3 Data Driven Safety Analysis video (https://www.youtube.com/watch?v=cHv086TQ2LI) for its use of innovative intersections as well as data driven approaches to safety. Burlington County implemented a roundabout at a data-driven location which was the scene of a fatal crash earlier this decade. This project was paid for with HSIP and the HSM was used to measure the project benefit. DVRPC facilitated this collaborative effort which involved NJDOT and FHWA, with assistance from SJTPO.

SJTPO

The South Jersey Transportation Planning Organization (SJTPO) is the MPO serving four counties in southern New Jersey.

Building off activities to strengthen its Local Safety Program in recent years, SJTPO continues to engage their local partners in an effort to reduce the number of fatal injury crashes and fatalities. SJTPO utilizes a robust yet intuitive, project application, which guides applicants through a five-step process: selecting a location; identifying the problem; determining an appropriate safety improvement; measuring its effectiveness, and checking for barriers to implementation. This process ensures a well-supported, data-driven approach to project selection.

In working towards authorization of our FY 2016 projects, SJTPO continued to partner with NJDOT Traffic Data & Safety in the State to understand and incorporate the Highway Safety Manual (HSM) safety performance analysis. Together with benefit/cost analysis, these analyses were utilized to

evaluate the effectiveness of the proposed hot spot projects.

As New Jersey is a focus state for both intersection and pedestrian crashes, network screening lists developed for each of the MPO regions including both County and Municipal owned roadways, include a focus on "At Intersection", pedestrian corridor, pedestrian spot crashes utilizing a weighted severity scale. These lists are shared with the local governments and guides hot spot project location selection. Additionally, SJTPO has worked closely with NJDOT staff, FHWA-NJ Division, and the other MPOs to develop two pilot projects for the installation of roundabouts and road diets. As both FHWA Proven Safety Countermeasures are not widely used in the State, the partners felt it was crucial to encourage their use. SJTPO staff is working with their subregions to select good candidate for both pilot projects and hopes to have several roundabouts installed in their region, which has been historically opposed to their installation because of their experience with traffic circles and the counterintuitive nature of road diets.

With our FY 2016 projects, SJTPO has worked to invest HSIP funding through a mix of hot spot locations and systemic installations of centerline rumble strips; installing approximately 165 miles of centerline rumble strip in both Cumberland and Salem Counties. Along with their State partners, SJTPO is excited to investigate other systemic applications addressing lane departure and pedestrian crashes in the upcoming year.

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.

Local Roadways are eligible for HSIP improvements through application with the respective MPOs. All Local Roadways in New Jersey are covered by one of three MPOs – NJTPA, SJTPO, or DVRPC. NJDOT oversees the production of network screening lists for each of the MPO regions, including both County and Municipal owned roadways, which help the MPOs prioritize their projects. As New Jersey is a focus state for both intersection and pedestrian crashes, screening lists include a focus on Intersection, Pedestrian Corridor, High Risk Rural Roads, and Pedestrian Intersection crashes utilizing a weighted severity scale. These lists were shared with local roadway owners and government officials in order to help select regional priority locations to development HSIP funded projects, and better invest the increased local system funding efforts.

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

Design Planning Operations Other-Project Management

Briefly describe coordination with internal partners.

NJDOT's Bureau of Transportation Data and Safety, under the Assistant Commissioner of Capital Investment Planning and Grant Administration is responsible for crash data compilation, analysis and program development. The Division of Project Management under the Assistant Commissioner of Capital Program Management is responsible for final design and implementation of improvements. New Jersey's HSIP Manual identifies the process for coordination and delivery of HSIP projects for roadways under state jurisdiction. This manual has been recently updated. Regular meetings are conducted between Capital Investment Planning & Grant Administration and staff from Division of Program Management under Division of Project Management to monitor and assist as the projects move through project development to advertisement. NJDOT supports the advancement of projects. The Technical Assistance Team consist of NJDOT's Safety, Environmental, and Local Aid staff. NJDOT's Division of Local Aid, under the Assistant Commissioner of Capital Investment Planning and Grant Administration is responsible for coordinating with the MPOs in the selection, authorization and oversight of projects implemented on the local road network.

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

Metropolitan Planning Organizations

Governors Highway Safety Office Local Government Association

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

Other-NJDOT continues to refine the transition to the revised program delivery process. NJDOT is additionally increasing the portfolio of projects identified using the systemic approach. Other-all projects whether under state or local jurisdiction now include a Highway Safety Manual evaluation to ensure that invested HSIP funds maximize the return on investment to improved safety performance.

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

The Assistant Commissioner of Capital Investment Planning and Grant Administration continues to conduct quarterly collaboration meetings with all three MPOs along with subject matter experts at the NJDOT. These meetings promote partnering with a focus on safety. NJDOT's Division of Local Aid coordinates with the MPOs on regular basis to ensure advancement of Local Safety Projects.

Program Methodology

Select the programs that are administered under the HSIP.

Intersection Pedestrian Safety Other-Utility Pole Mitigation Roadway Departure Segments Local Safety Other-High Risk Rural Roads

Program:IntersectionDate of Program Methodology:1/1/2015

What data types were used in the program methodology?CrashesExposure

Roadway

All crashes

What project identification methodology was used for this program?

Crash frequency Equivalent property damage only (EPDO Crash frequency)

Are local roads (non-state owned and operated) included or addressed in this program? No

How are highway safety improvement projects advanced for implementation? Other-Using the ranking to identify priorities, NJDOT selects and implements 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

Cost Effectiveness 1

Program:	Roadway Departure
Date of Program Methodology:	9/16/2008
What data types were used in th	e program methodology?

Crashes		
All crashes		

Roadway Roadside features Other-Horizontal Curvature

What project identification methodology was used for this program?

Crash frequency Equivalent property damage only (EPDO Crash frequency)

Are local roads (non-state owned and operated) included or addressed in this program? No

How are highway safety improvement projects advanced for implementation?

Exposure

Lane miles

Other-Sites identified based on methodology developed for systemic treatment for roadway departure crashes

Other-Using the ranking to identify priorities, NJDOT selects and implement 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

Ranking based on net benefit 1

Program:	Local Safety	
Date of Program Methodology:	9/16/2005	
What data types were used in the	e program metho	dology?
Crashes	Exposure	Roadway
All crashes		
What project identification method	odology was used	for this program?
Crash frequency		
Equivalent property damage only	(EPDO Crash frequ	iency)
Are local roads (non-state owned	and operated) in	cluded or addressed in this program?
Yes		
If yes, are local road projects ident	tified using the sa	ne methodology as state roads?
Yes		
11		
How are highway safety improve	ment projects adv	anced for implementation?
Competitive application process		
selection committee		
Other-Priority given to State's focu	us areas	
Select the processes used to prior	ritize projects for	implementation. For the methods selected, indicate
	• •	prioritization. Enter either the weights or numerical
		al 100. If ranks are entered, indicate ties by giving
		shest rank (as an example: 1, 2, 2, 4).
Relative Weight in Scoring		,
Available funding	20	

Available funding	20
Ranking based on net benefit	60
Project to address established	20
safety problem as shown through	
crash history, risk-based	
(systemic) analysis and/or local	
roadway knowledge	

Program: Date of Program Methodology:	Pedestrian Safety 9/16/2011	
What data types were used in th	e program methodology?	
Crashes	Exposure	Roadway
Other-Pedestrian Crashes	Other-NJ is a pedestrian focus	
	state	
	nodology was used for this program	?
Crash frequency		
Equivalent property damage only	(EPDO Crash frequency)	
Other-Pedestrian generators		

Are local roads (non-state owned and operated) included or addressed in this program? No

How are highway safety improvement projects advanced for implementation?

Other-Using the ranking to identify priorities, NJDOT selects and implements 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

Ranking based on net benefit1FHWA Ped Focus State1

Program:	Segments	
Date of Program Methodology:	2/1/2016	
What data types were used in th	ne program methodology	,
Crashes	Exposure	Roadway
Crashes All crashes	<i>Exposure</i> Volume	Roadway

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

Equivalent property damage only (EPDO Crash frequency) Other-Exposure is taken into consideration

Are local roads (non-state owned and operated) included or addressed in this program? No

How are highway safety improvement projects advanced for implementation? Other-Using the ranking to identify priorities, NJDOT selects and implement projects

1

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

Cost Effectiveness

Program: Date of Program Methodology:	Other-High Risk Rural Roads 9/16/2005	
What data types were used in th	e program methodology?	
Crashes	Exposure	Roadway
All crashes		Functional classification
		Other-Rural
What project identification meth	odology was used for this program	n?
Equivalent property damage only	(EPDO 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? Competitive application process

selection committee

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

Relative Weight in Scoring

Available funding	20
Ranking based on net benefit	60
Project to address established	20
safety problem as shown through	
crash history, risk-based	
(systemic) analysis and/or local	
roadway knowledge.	

Program:	Other-Utility Pole Mitigation
Date of Program Methodology:	10/1/2015

What data types were used in the program methodology?

Crashes Exposure
Other-Fixed Object crashes

Roadway Roadside features

What project identification methodology was used for this program?

Crash frequency Equivalent property damage only (EPDO Crash frequency)

Are local roads (non-state owned and operated) included or addressed in this program? No

How are highway safety improvement projects advanced for implementation? Other-by ranking

1

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

Field investigation

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

29%

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

Rumble Strips Other-High Friction Surface Treatment Other-Local pilot roundabouts

What process is used to identify potential countermeasures?

Engineering Study Road Safety Assessment Other-with alternatives Analysis utilizing the HSM

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

Other-The Safe Corridor program has been eliminated Other-Corridor Segment program has been added Other-Utility Pole Mitigation program has been added Other-Systemic countermeasure treatments increased (HFST, Pilot Roundabouts)

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

N/A

Progress in Implementing Projects

Funds Programmed

Reporting period for Highway Safety Improvement Program funding.

Federal Fiscal Year

Funding Category	Programmed*		g Category Programmed* Obligated		
HSIP (Section 148)	\$43,872,000.00	93 %	\$40,018,054.00	94 %	
HRRRP (SAFETEA-LU)	\$0.00	0 %	\$0.00	0 %	
HRRR Special Rule	\$3,300,000.00	7 %	\$2,475,160.00	6 %	
Totals	\$47,172,000.00	100%	\$42,493,214.00	100%	

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

How much funding is programmed to local (non-state owned and operated) safety projects? \$19,700,000.00 How much funding is obligated to local safety projects? \$23,056,214.00

How much funding is programmed to non-infrastructure safety projects? \$5,347,000.00 How much funding is obligated to non-infrastructure safety projects? \$7,659,000.00

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

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.

N/A

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

N/A

General Listing of Projects

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

Project	Improvement Category	Outpu t	HSIP Cost	Total Cost	Fundi ng	Function al	AA DT	Spe ed	Roadw ay	Relationsh	ip to SHSP
					Categ ory	Classifica tion		cu	Owners hip	Emphasi s Area	Strategy
2016 Staff Work Program - Rail	Non-infrastructure Transportation safety planning	0	24980 00	24980 00	HSIP (Secti on 148)	Statewid e	0	0	State Highwa y Agency	Planning	Staff Work Program - Rail
2016 Staff Work Program - Safety	Non-infrastructure Transportation safety planning	0	20990 00	20990 00	HSIP (Secti on 148)	Statewid e	0	0	State Highwa y Agency	Planning	Staff Work Program - Safety
2016 Statewide Utility Pole Relocation/Repla cement	Roadside Removal of roadside objects (trees, poles, etc.)	0	14500 0	14500 0	HSIP (Secti on 148)	Statewid e	0	0	State Highwa y Agency		Relocation of utility pole
2016 Utility Pole Relocation/Repla cement (DVRPC)	Roadside Removal of roadside objects (trees, poles, etc.)	0	10000 0	10000 0	HSIP (Secti on 148)	DVRPC area	0	0	State Highwa y Agency		Relocation of utility pole
2016 Utility Pole Relocation/Repla cement (NJTPA)	Roadside Removal of roadside objects (trees, poles, etc.)	0	20000 0	20000 0	HSIP (Secti on 148)	NJTPA area	0	0	State Highwa y Agency		Relocation of utility pole
2016 Utility Pole Relocation/Repla	Roadside Removal of roadside objects (trees,	0	16000 0	16000 0	HSIP (Secti	SJTPO area	0	0	State Highwa		Relocation of utility pole

cement (SJTPO)	poles, etc.)				on 148)				y Agency		
2016 Verifiers	Non-infrastructure Transportation safety planning	0	23120 00	23120 00	HSIP (Secti on 148)	Statewid e	0	0	State Highwa Y Agency	Data	Staff work - verifies
Bergen St - Ped Safety Corridor Improvements - FD	Pedestrians and bicyclists Miscellaneous pedestrians and bicyclists	3 Numb ers	12200 0	12200 0	HSIP (Secti on 148)	Urban Minor Arterial	0	25	City of Munici pal Highwa y Agency	Pedestri ans	Provide crosswalk enhancement s, including curb ext
Broad St (CR 11) & Bergen Place, Red Bank - FD	Intersection traffic control Modify traffic signal - modernization/replace ment	1 Numb ers	11700 0	11700 0	HSIP (Secti on 148)	Urban Minor Arterial	0	30	County Highwa Y Agency	Intersect ions	D1-Improve visibility of signals
Byram-Kingwood Road (CR 651) from CR 519 to SR 29	Roadway Pavement surface - high friction surface	0	62000	62000	HRRR Specia I Rule	Rural Local Road or Street	0	40	County Highwa Y Agency	Roadway Departur e	High friction treatment
CR 524 (Stage Coach Road) Improvements and Resurfa	Roadway Superelevation / cross slope	0	11700 0	11700 0	HRRR Specia I Rule	Rural Major Collector	0	50	County Highwa Y Agency	Roadway Departur e	Superelevatio n improvement s
Garden Road & Mill Road Traffic Signalization - FD	Intersection traffic control Intersection traffic control - other	1 Numb ers	10000 0	10000 0	HSIP (Secti on 148)	Urban Minor Arterial	122 00	45	City of Munici pal Highwa y Agency	Intersect ions	Convert two- way stop control to traffic signal
HFST Pilot Program at Route	Roadway Pavement surface - high friction	3.27 Miles	25700 0	25700 0	HSIP (Secti	Rural and Urban	0	0	State Highwa	Roadway Departur	Install High Friction

I-80 Interchanges (25%	surface				on 148)	Interstat e			y Agency	е	Surface Treatment
HFST Pilot Program at Route I-80 Interchanges (25%	Roadway Pavement surface - high friction surface	3.27 Miles	30820 00	30820 00	HSIP (Secti on 148)	Rural and Urban Interstat e	0	0	State Highwa Y Agency	Roadway Departur e	Install High Friction Surface Treatment
Intersection Improvements at CR 551 (Auburn Rd.) a	Intersection traffic control Modify control - two-way stop to roundabout	1 Numb ers	10000 00	10000 00	HSIP (Secti on 148)	Urban Major Collector	150 00	35	County Highwa y Agency	Intersect ions	Install roundabouts to control traffic and reduce
JFK Blvd E at Bergenline Improvements - FD	Intersection traffic control Modify traffic signal - modernization/replace ment	2 Numb ers	38775	38775	HSIP (Secti on 148)	Urban Minor Arterial	0	25	County Highwa y Agency	Intersect ions	D1-Improve visibility of signals
Mercer Roundabout - PE	Intersection traffic control Modify control - two-way stop to roundabout	1 Numb ers	19000 0	19000 0	HSIP (Secti on 148)	Urban Principal Arterial - Other	205 00	25	County Highwa Y Agency	Intersect ions	Install roundabouts to reduce conflicts
MLK Blvd - Ped Safety Corridor Improvements (Newar	Pedestrians and bicyclists Medians and pedestrian refuge areas	2 Numb ers	13100 0	13100 0	HSIP (Secti on 148)	Urban Major Collector	0	25	City of Munici pal Highwa y Agency	Pedestri ans	Provide crosswalk enhancement s, including curb ext
MLK Blvd Intersection Improvements (Jersey City) -	Pedestrians and bicyclists Pedestrian signal - install new at intersection	0	86500 0	86500 0	HSIP (Secti on 148)	Urban Principal Arterial - Other	0	25	City of Munici pal Highwa y Agency	Pedestri ans	upgrade traffic and pedestrian signals
Mt. Ephraim	Pedestrians and	1.4	30000	30000	HSIP	Urban	120	35	County	Pedestri	lighting and

2016 New Jersey Highway Safety Improvement Program

Avenue Safety Improvements - pedestria	bicyclists Miscellaneous pedestrians and bicyclists	Miles	0	0	(Secti on 148)	Principal Arterial - Other	00		Highwa Y Agency	ans	other pedestrian improvement s
NJ 47 and Almond, Vineland - CON	Intersection traffic control Intersection traffic control - other	1 Numb ers	21000	21000	HSIP (Secti on 148)	Urban Minor Arterial	161 39	40	State Highwa Y Agency	Intersect ions	Improve lane use
NJ 47 and Forest Grove, Vineland - CON	Intersection traffic control Intersection flashers - add miscellaneous/other/u nspecified	1 Numb ers	32000 0	32000 0	HSIP (Secti on 148)	Urban Minor Arterial	161 39	40	State Highwa Y Agency	Intersect ions	Flashing beacon installation
Passaic CLRS - CON - Systemic	Roadway Rumble strips - center	0	80000 0	80000 0	HSIP (Secti on 148)	NJTPA area - Passaic County	0	0	County Highwa Y Agency	Lane Departur e	install centerline rumble strips
Passaic Horizontal Curve High Friction Surface Tre	Roadway Pavement surface - high friction surface	0	53760 00	53760 00	HSIP (Secti on 148)	NJTPA area - Passaic County	0	0	County Highwa Y Agency	Roadway Departur e	provide skid- resisteant pavement surfaces
Paterson Plank Rd (CR 681) at Webster Ave Improvem	Intersection traffic control Intersection traffic control - other	0	43439	43439	HSIP (Secti on 148)	Urban Minor Arterial	0	25	County Highwa Y Agency	Pedestri ans	Install traffic and pedestrian signals
Route 15 & Berkshire Valley Road (CR 699) - PE	Intersection traffic control Modify traffic signal timing - left-turn phasing (permissive to protected/permissive)	2 Numb ers	80000 0	80000 0	HSIP (Secti on 148)	Urban Principal Arterial - Other Freeways and Expressw ays	480 00	55	State Highwa Y Agency	Intersect ions	Provide/Impr ove left-turn channelizatio ns

2016 New Jersey Hig

Stuyvesant	Intersection traffic	0	27210	27210	HSIP	Urban	0	35	County	Intersect	D1-Improve
Avenue (CR 619)	control Modify traffic	Ū	00	00	(Secti	Principal	Ŭ		Highwa	ions	visibility of
& 18th Avenue,	, signal -				on	Arterial -			y		signals
South Or	modernization/replace				148)	Other			, Agency		
	ment				- /				07		
Summit Ave	Pedestrians and	12	45000	45000	HSIP	Urban	0	25	City of	Pedestri	improve
Intersection	bicyclists Modify	Numb	0	0	(Secti	Minor			Munici	ans	pavement
Improvement	existing crosswalk	ers			on	Arterial			pal		markings at
Phase III (Cha					148)				Highwa		intersections
									y		
									Agency		
US 130 and 30/38	Intersection traffic	3	31000	31000	HSIP	Urban	640	40	State	Intersect	signal
(Airport Circle),	control Modify traffic	Numb			(Secti	Principal	00		Highwa	ions	upgrade
Pennsauken - CO	signal -	ers			on	Arterial -			у		
	modernization/replace				148)	Other			Agency		
	ment										
US 130 and	Intersection traffic	1	34000	34000	HSIP	Urban	392	50	State	Intersect	signal
Union,	control Modify traffic	Numb			(Secti	Principal	60		Highwa	ions	upgrade
Pennsauken -	signal -	ers			on	Arterial -			У		
CON	modernization/replace				148)	Other			Agency		
	ment										
US 206	Intersection traffic	1	47060	47060	HSIP	Urban	0	45	State	Intersect	Conver a
Whitehorse Circle	control Modify control	Numb	00	00	(Secti	Principal			Highwa	ions	traffic circle to
- CON	 modifications to 	ers			on	Arterial -			У		a modern
	roundabout				148)	Other			Agency		roundabout
US 22	Roadway Roadway	0.5	12550	12550	HSIP	Urban	604	45	State	Congesti	Adding
Westbound	widening - travel lanes	Miles	00	00	(Secti	Principal	24		Highwa	on	auxiliary lanes
(Vauxhall to Bloy)					on	Arterial -			У		
- FD					148)	Other			Agency		
US 40/322 and	Intersection traffic	1	78000	78000	HSIP	Urban	230	40	State	Intersect	signal
Rt.9 and Decatur,	control Modify traffic	Numb			(Secti	Principal	09		Highwa	ions	upgrade
Pleasantville - CO	signal -	ers			on	Arterial -			у		
	modernization/replace				148)	Other			Agency		

	ment										
W. Seventh St (CR 601) Intersection Improvements -	Intersection traffic control Modify traffic signal - modernization/replace ment	3 Numb ers	82000	82000	HSIP (Secti on 148)	Urban Minor Arterial	0	35	County Highwa Y Agency	Intersect ions	D1-Improve visibility of signals
Washington Avenue (CR 503) Phase I & II (Bergen) -	Roadway Roadway - other	1.36 Miles	30020 00	30020 00	HSIP (Secti on 148)	Urban Principal Arterial - Other	200 00	40	County Highwa y Agency	Pedestri ans	provide sidewalks/wal kways and curb ramps
2016 Safety Programs Consultant Services - CD	Non-infrastructure Transportation safety planning	0	75000 0	75000 0	HSIP (Secti on 148)	Statewid e	0	0	State Highwa Y Agency	Safety Program s Consulta nt Services	
Horizontal Curve Safety Treatment, Rt 47 and RT 5	Roadway Pavement surface - high friction surface	0	58900 0	58900 0	HSIP (Secti on 148)	Multiple	0	0	State Highwa y Agency	Roadway Departur e	Install High Friction Surface Treatment
Lyons Avenue (CR 602) (different segment from FFY1	Intersection traffic control Modify traffic signal - modernization/replace ment	0	33800 00	33800 00	HSIP (Secti on 148)	Urban Minor Arterial	0	25	County Highwa y Agency	Intersect ions	D1-Improve visibility of signals
Chancellor Avenue (CR 601) - (different segment fr	Intersection traffic control Modify traffic signal - modernization/replace ment	0	31040 00	31040 00	HSIP (Secti on 148)	Urban Minor Arterial	0	25	County Highwa y Agency	Intersect ions	D1-Improve visibility of signals
Burlington County CLRS Local Pilot (Rural	Roadway Rumble strips - center	94 Miles	10550 00	10550 00	HRRR Specia I Rule	Multiple	0	0	County Highwa Y	Lane Departur e	Minimize roadway Departure

2016 New Jersey Highway Safety Improvement Program

r	miles) -					Agency	crashes
							1

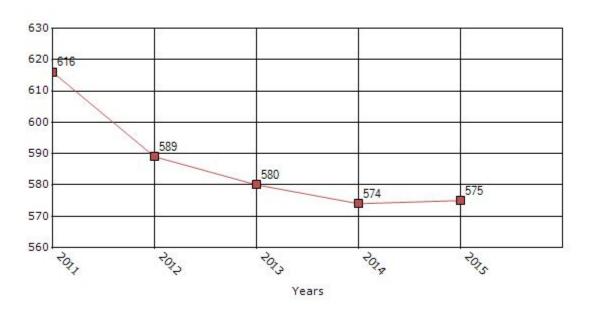
Progress in Achieving Safety Performance Targets

Overview of General Safety Trends

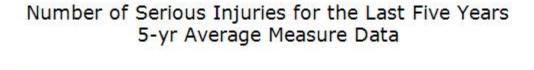
Present data showing the general highway safety trends in the state for the past five years.

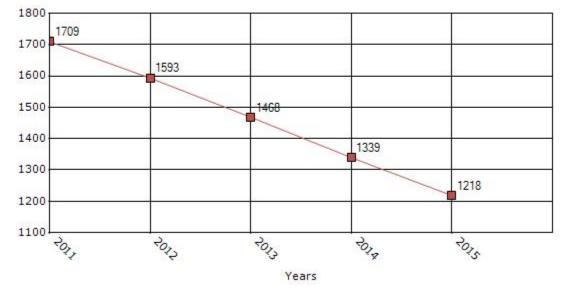
Performance Measures*	2011	2012	2013	2014	2015
Number of fatalities	616	589	580	574	575
Number of serious injuries	1709	1593	1468	1339	1218
Fatality rate (per HMVMT)	0.84	0.81	0.79	0.78	0.77
Serious injury rate (per HMVMT)	2.33	2.19	2.01	1.82	1.64

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

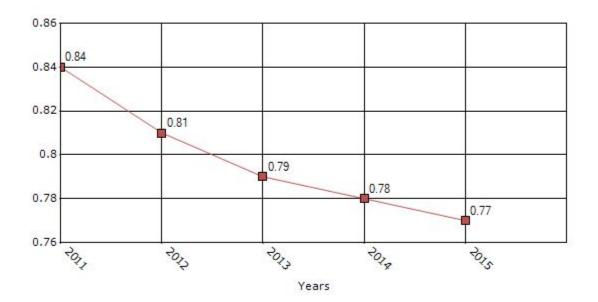


Number of Fatalities for the Last Five Years 5-yr Average Measure Data

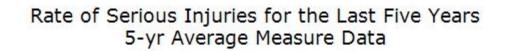


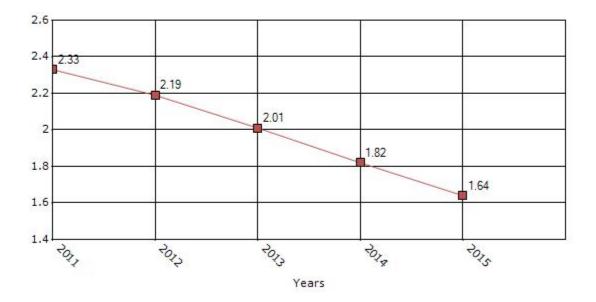


Rate of Fatalities for the Last Five Years 5-yr Average Measure Data



25





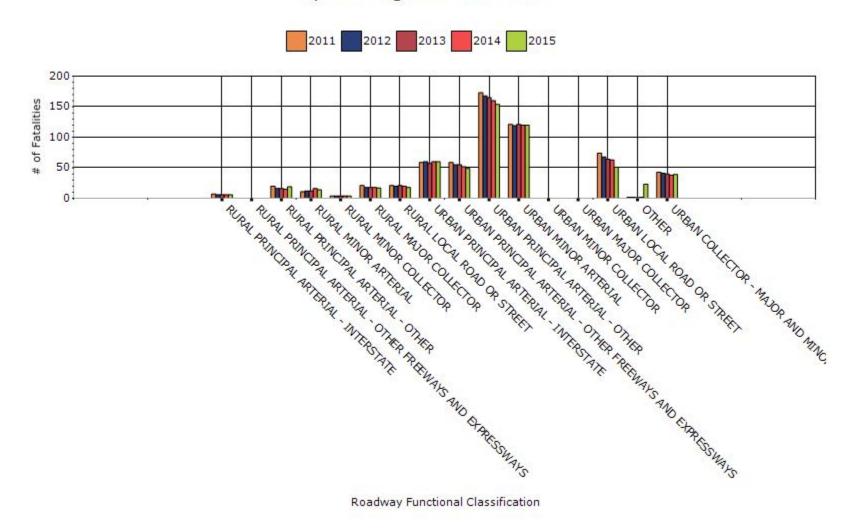
To the maximum extent possible, present performance measure* data by functional classification and ownership.

Function Classification	Number of fatalities	Number of serious injuries	Fatality rate (per HMVMT)	Serious injury rate (per HMVMT)							
RURAL PRINCIPAL ARTERIAL - INTERSTATE	6	3	0.53	0.23							
RURAL PRINCIPAL ARTERIAL - OTHER	19	25	1.48	1.93							
RURAL MINOR ARTERIAL	14	15	2.07	2.17							
RURAL MINOR COLLECTOR	4	7	1.89	3.04							
RURAL MAJOR COLLECTOR	17	30	1.87	3.31							
RURAL LOCAL ROAD OR STREET	18	9	2.99	1.45							
URBAN PRINCIPAL ARTERIAL - INTERSTATE	60	50	0.42	0.36							
URBAN PRINCIPAL ARTERIAL - OTHER FREEWAYS AND EXPRESSWAYS	49	47	0.4	0.38							

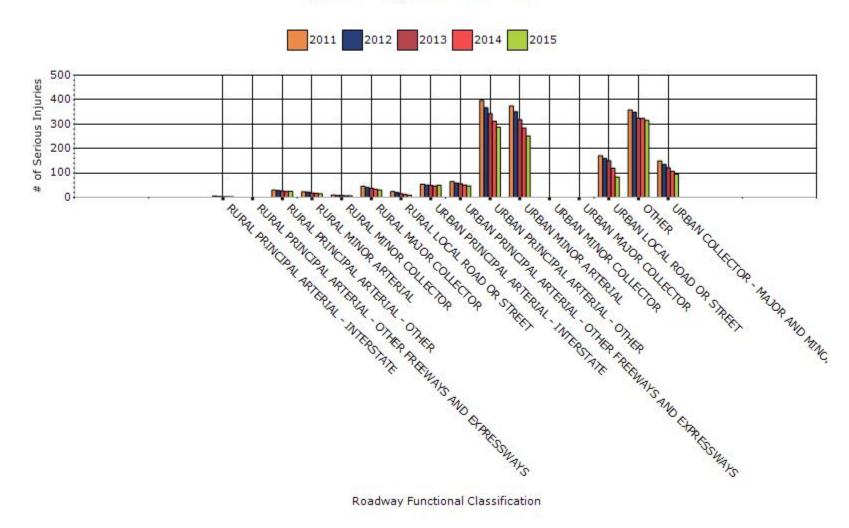
Year - 2015

URBAN PRINCIPAL ARTERIAL - OTHER	154	287	0.94	1.76
URBAN MINOR ARTERIAL	120	252	1.08	2.27
URBAN LOCAL ROAD OR STREET	51	84	0.49	0.8
OTHER	23	315		
URBAN COLLECTOR - MAJOR AND MINOR	39	95	0.78	1.96

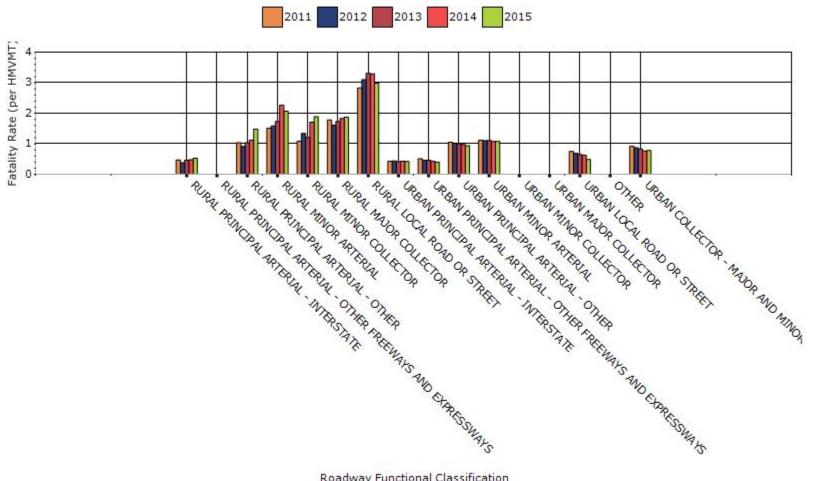
Fatalities by Roadway Functional Classification 5-yr Average Measure Data



Serious Injuries by Roadway Functional Classification 5-yr Average Measure Data

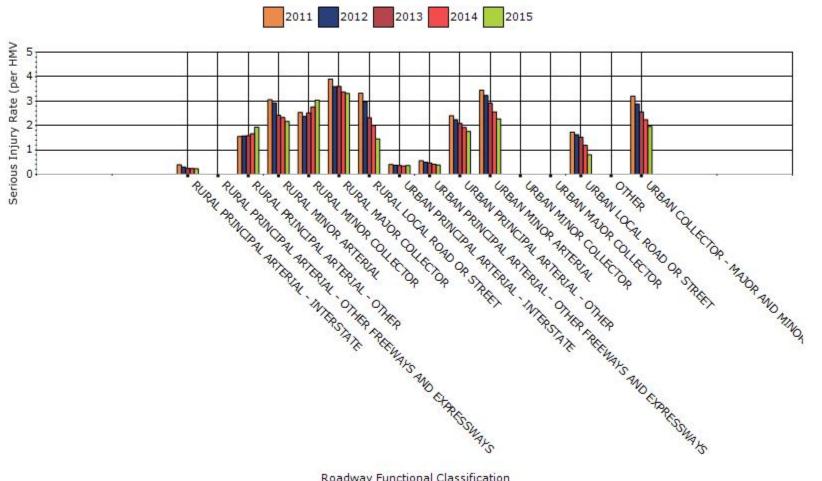


Fatality Rate by Roadway Functional Classification 5-yr Average Measure Data



Roadway Functional Classification

Serious Injury Rate by Roadway Functional Classification 5-yr Average Measure Data

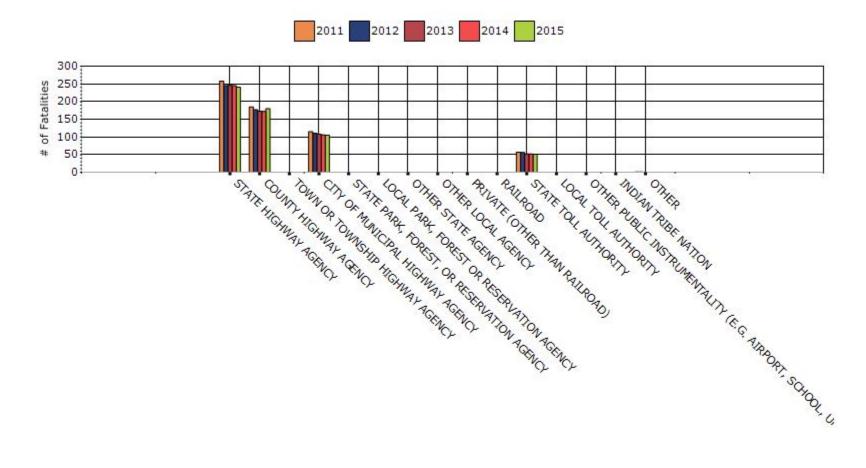


Roadway Functional Classification

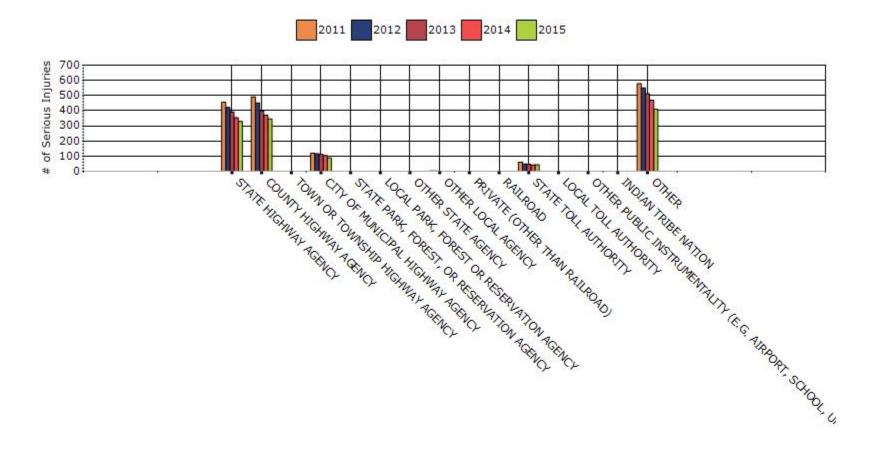
Year - 2015

Roadway Ownership	Number of fatalities	Number of serious injuries	Fatality rate (per HMVMT)	Serious injury rate (per HMVMT)
STATE HIGHWAY AGENCY	241	330	0.81	1.11
COUNTY HIGHWAY AGENCY	180	346	1.23	2.36
CITY OF MUNICIPAL HIGHWAY AGENCY	105	88	1.49	1.31
OTHER LOCAL AGENCY		1		0.52
STATE TOLL AUTHORITY	51	44	0.37	0.33
OTHER		410		

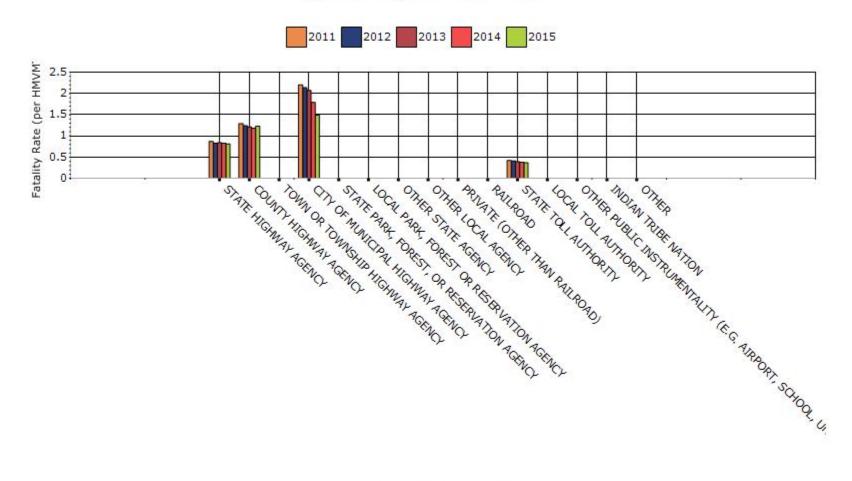
Number of Fatalities by Roadway Ownership 5-yr Average Measure Data



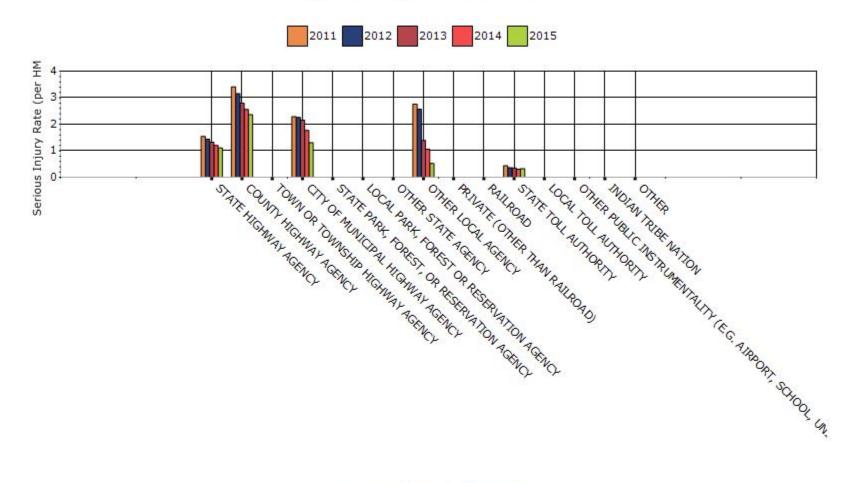
Number of Serious Injuries by Roadway Ownership 5-yr Average Measure Data



Fatality Rate by Roadway Ownership 5-yr Average Measure Data



Serious Injury Rate by Roadway Ownership 5-yr Average Measure Data



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

N/A

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	2010	2011	2012	2013	2014
Performance Measures					
Fatality rate (per capita)	0.052	0.072	0.088	0.09	0.088
Serious injury rate (per capita)	0.084	0.104	0.13	0.118	0.108
Fatality and serious injury rate (per capita)	0.138	0.178	0.218	0.208	0.196

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

NJ Population of 65 Years and Older (In Thousands)

2008	2009	2010	2011	2012	2013	2014
1150	1169	1191	1207	1250	1284	1312
As per:	http://ww	/w.fhwa.d	ot.gov/ma	ap21/guida	ance/guid	eolder.cfm

NJ Census Estimates

- **2008 =** 8,663,398
- **2009 =** 8,707,739
- **2010 =** *8,803,881*
- **2011 =** *8,842,934*
- **2012 =** *8,874,893*
- **2013 =** 8,907,384
- 2**014 =** 8,938,844
- As per: <u>https://www.census.gov/popest/data/historical/2000s/index.html</u> https://www.census.gov/popest/data/index.html

For Fatal Rate:

[(F 2014 Drivers and Pedestrians 65 years of age and older/2014 Population Figure) + (F 2013 Drivers and Pedestrians 65 years of age and older/2013 Population Figure) + (F 2012 Drivers and Pedestrians 65 years of age and older/2012 Population Figure) + (F 2011 Drivers and Pedestrians 65 years of age and older/2011 Population Figure) + (F 2010 Drivers and Pedestrians 65 years of age and older/2010 Population Figure)] / 5

[(103/1312) + (118/1248) + (96/1250) + (121/1207) + (113/1191)]/5

For Serious Injury Rate:

[(SI 2014 Drivers and Pedestrians 65 years of age and older/2014 Population Figure) + (SI 2013 Drivers and Pedestrians 65 years of age and older/2013 Population Figure) + (SI 2012 Drivers and Pedestrians 65 years of age and older/2012 Population Figure) + (SI 2011 Drivers and Pedestrians 65 years of age and older /2011 Population Figure) + (SI 2010 Drivers and Pedestrians 65 years of age and older/2010 Population Figure)] / 5

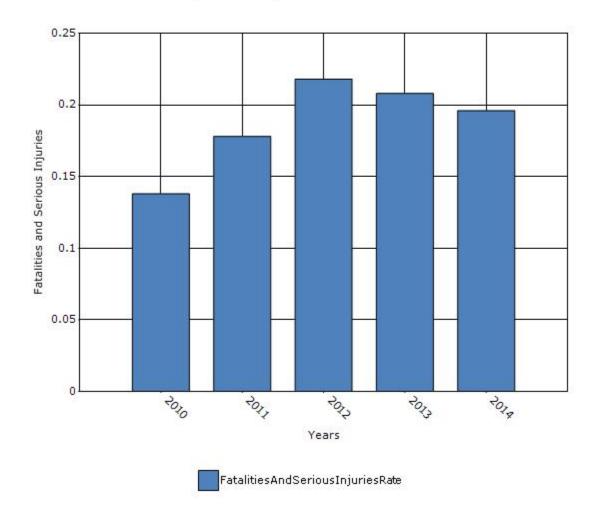
[(118/1312) + (115/1248) + (159/1250) + (124/1207) + (155/1191)]/5

For Fatality and Serious Injury Rate:

[(F+SI 2014 Drivers and Pedestrians 65 years of age and older/2014 Population Figure) + (F+SI 2013 Drivers and Pedestrians 65 years of age and older/2013 Population Figure) + (F+SI 2012 Drivers and Pedestrians 65 years of age and older/2012 Population Figure) + (F+SI 2011 Drivers and Pedestrians 65 years of age and older /2011 Population Figure) + (F+SI 2010 Drivers and Pedestrians 65 years of age and older/2010 Population Figure)] / 5

[(221/1312) + (233/1248) + (255/1250) + (245/1207) + (268/1191)]/5

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



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?

Benefit/cost

If 'benefit/cost', indicate the overall Highway Safety Improvement Program benefit/cost ratio.

Equal or greater than 1

Policy change

if 'policy change', list the policy changes made.

Including HSM on all local projects

Other-Continue to obligate more funds to MPOs as well as to State to target crashes on public roadways

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

Other-Implemented Corridor Segment List Other-Aligned investments for Local and State based on Fatalities and Serious Injury crashes

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

- Safe Corridor List has been eliminated
- Corridor Segment list has been initiated with new methodology
- Systemic HFST has been initiated
- New Jersey has developed a new software application for crash data analysis called NJ Voyager

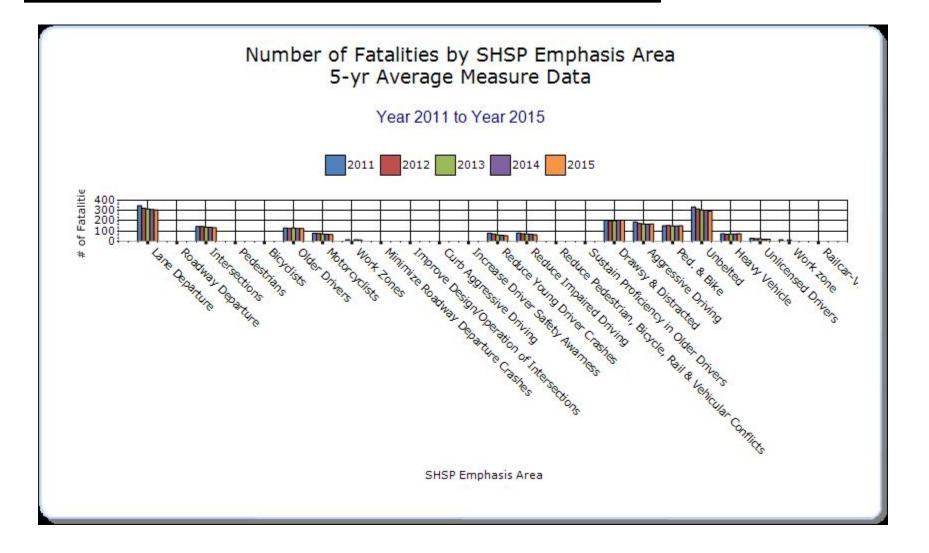
- New Jersey has purchase the license for Safety Analyst and will be working towards developing Safety Management Lists

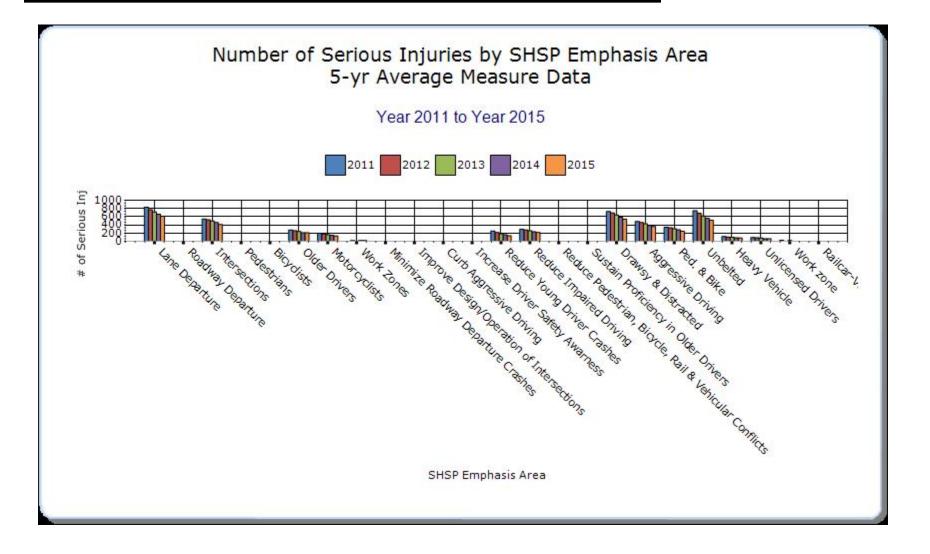
SHSP Emphasis Areas

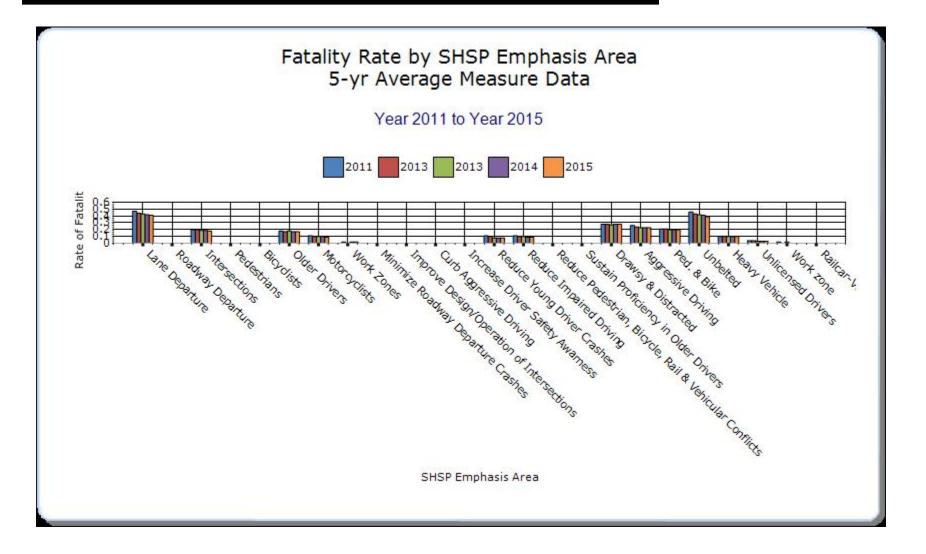
For each SHSP emphasis area that relates to the HSIP, present trends in emphasis area performance measures.

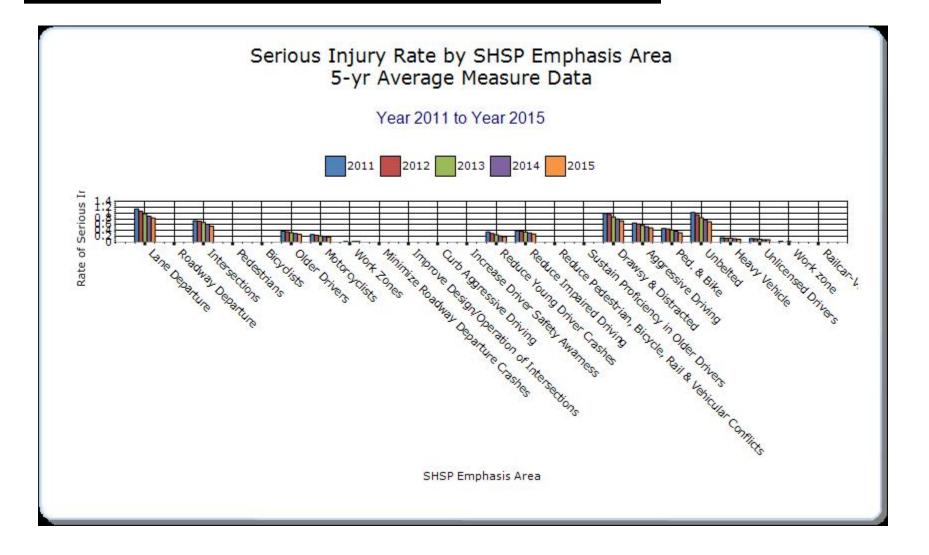
HSIP-related SHSP Emphasis Areas	Target Crash Type	Number of fatalities	Number of serious injuries	Fatality rate (per HMVMT)	Serious injury rate (per HMVMT)	Other- 1	Other- 2	Other- 3
Lane Departure	Run-off-road	307	615	0.41	0.83			
Intersections								
	Intersections	133	411	0.18	0.55			
Older Drivers	All	125	210	0.17	0.28			
Motorcyclists	All	66	132	0.09	0.18			
Work Zones	All	13	19	0.02	0.03			
Reduce Young Driver Crashes	All	56	139	0.08	0.19			
Reduce Impaired Driving	All	64	217	0.09	0.29			
Drawsy & Distracted	All	205	541	0.28	0.73			
Aggressive Driving	All	170	364	0.23	0.49			
Ped. & Bike	Vehicle-ped +Vehicle-bike	152	244	0.2	0.33			
Unbelted	All	293	517	0.39	0.7			
Heavy Vehicle	All	74	84	0.1	0.11			
Unlicensed Drivers	All	20	64	0.03	0.09			
Railcar-Vehicle		2	1					

Year - 2015







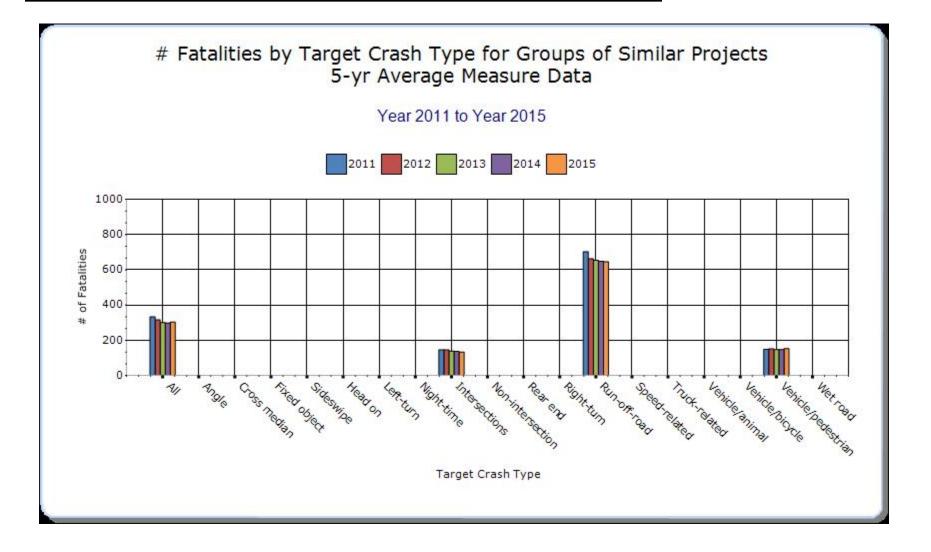


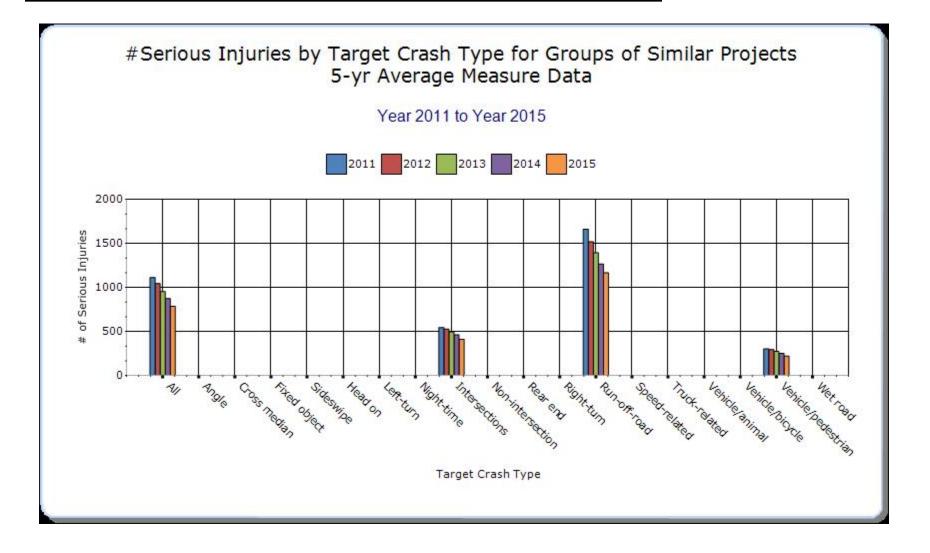
Groups of similar project types

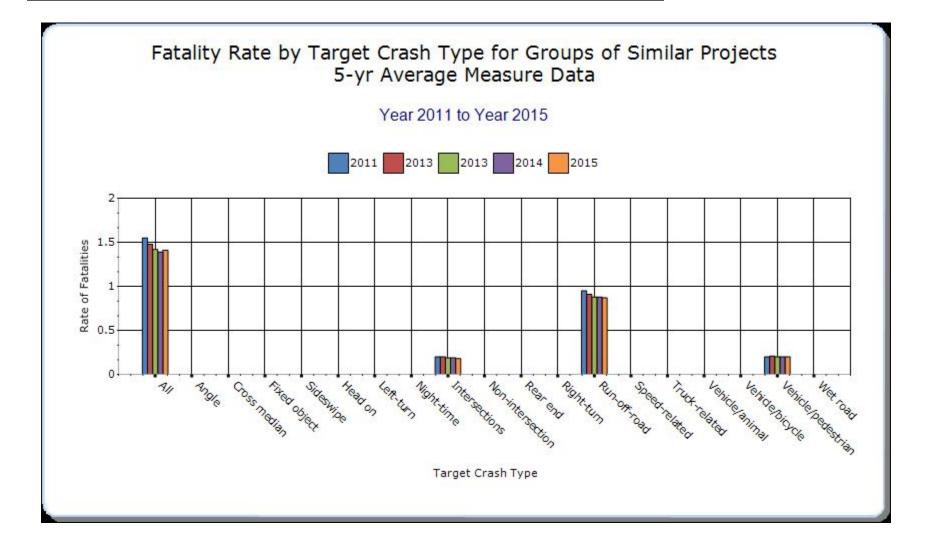
Present the overall effectiveness of groups of similar types of projects.

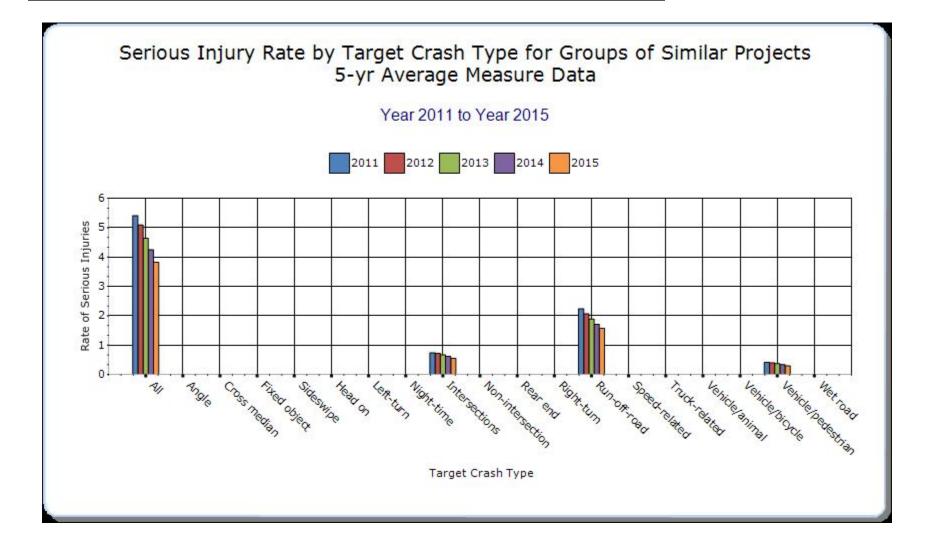
HSIP Sub-program **Target Crash Type** Number of Number of Serious injury rate Other-Fatality rate Other-Other-1 2 3 Types fatalities (per HMVMT) (per HMVMT) serious injuries 152 0.2 0.29 **Pedestrian Safety** Vehicle/pedestrian 219 Run-off-road Roadway 209 360 0.28 0.48 Departure Local Safety All 271 741 1.37 3.76 Run-off-road Segments 437 807 0.59 1.09 32 **Other-High Risk** All 45 0.04 0.06 **Rural Roads** Intersection Intersections 133 411 0.18 0.55

Year - 2015







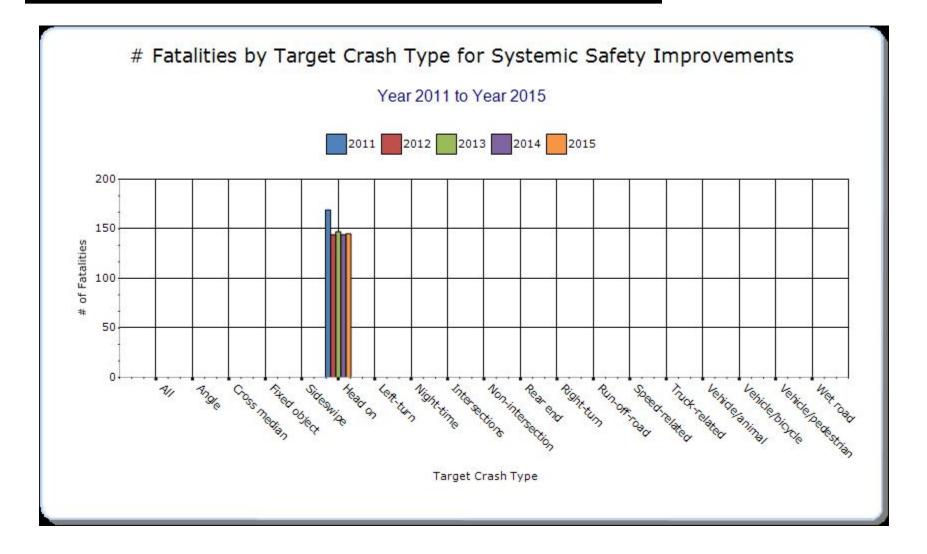


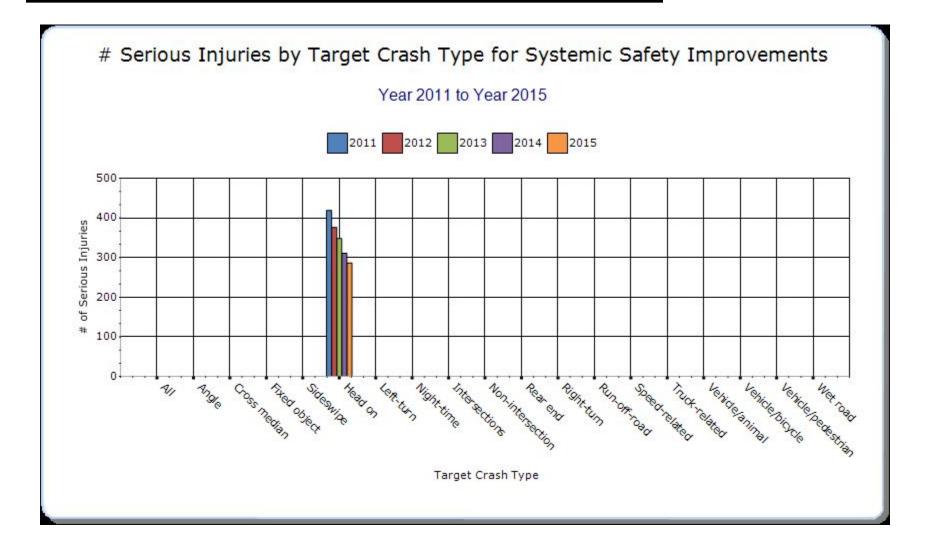
Systemic Treatments

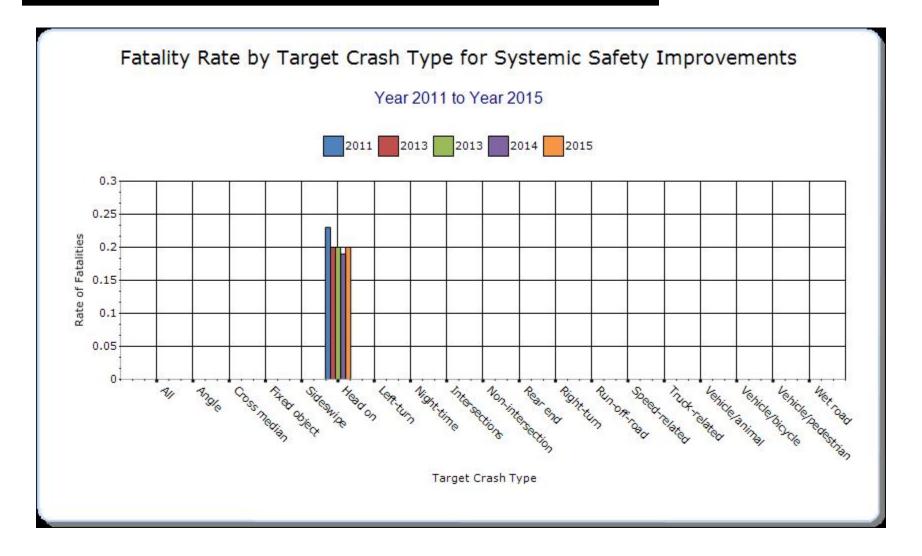
Present the overall effectiveness of systemic treatments.

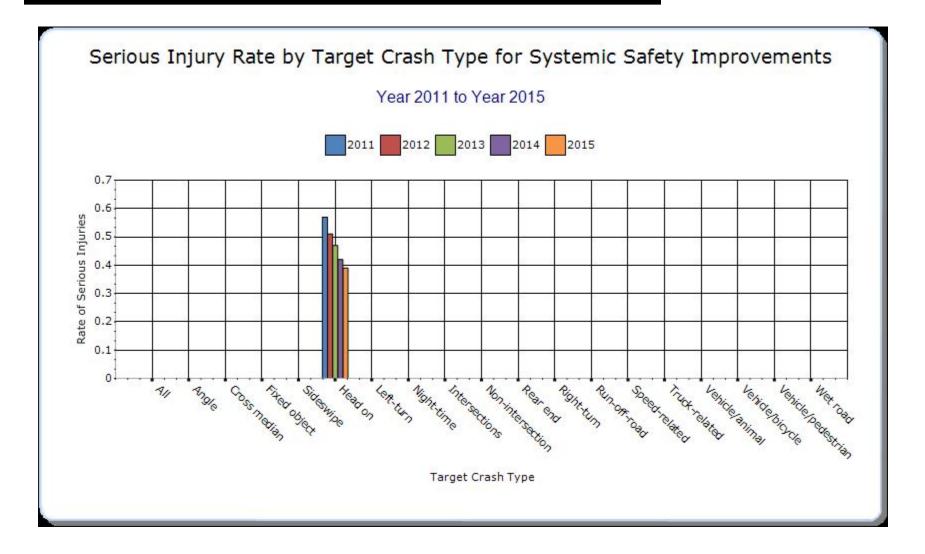
Year - 2015

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
State Cross Center Line Crashes	Head on	145	286	0.2	0.39			









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

N/A

Project Evaluation

Provide project evaluation data for completed projects (optional).

Location	Improvement Category	Improvement Type	Fatal	Bef- Serious Injury	Bef-All Injuries		Fatal	Aft-All Injuries	Aft- PDO	Total	Evaluation Results (Benefit/ Cost Ratio)
see attached file											

Optional Attachments

Sections Program Structure: Program Administration Program Structure: Program Administration Files Attached <u>Project Evaluation.docx</u> <u>2016 ASR General Notes.docx</u>

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 noninfrastructure 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.