Highway Safety Improvement Program

Data Driven Decisions

New Jersey
Highway Safety Improvement Program
2013 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."

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Executive Summary

The *Moving Ahead for Progress in the 21st Century Act* (MAP-21) went into effect on October 1, 2012. It continued the Highway Safety Improvement Program (HSIP) as a core Federal-aid program. The goal of the program is to achieve a significant reduction in traffic fatalities and serious injuries on all public roads, including non-State-owned public roads. HSIP originated in 2005 as a component of the *Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users* (SAFETEA-LU), which expired in 2009. Congress renewed the Federal transportation funding formula established by SAFETEA-LU 10 times after its expiration date, until replacing the bill with MAP-21 last year.

MAP-21 also continues provisions of SAFETEA-LU that 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 and implement a SHSP; (2) produce a program of projects and strategies; (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.

According to crash record data for the 2012 calendar year that has been collected by the NJDOT's Bureau of Transportation Data and Safety, New Jersey strategic approach continues to make progress in achieving the safety aims set by SAFETEA-LU and, now, MAP-21.

Over a five-year period, 2008 through 2012, there has been a steady drop in the number of crashes. In 2008, there were 303,013 crashes; in 2012, 284,062 – a reduction of 18,951. There were 9,533 fewer crashes in 2012 than the 2011 total.

There has also been a steady decline in the number of crash-related injuries during the five-year period – from a high of 68,502 in 2008 to a low of 63,333 in 2012.

The number of crashes resulting in fatalities has fluctuated. The lowest number of annual fatalities during this five-year period was 542, in 2012 and 2010. Fatalities dropped from 2011 to 2012 by 49.

The progress made by the NJDOT is a result of a broad spectrum of safety programs designed to reduce the frequency and severity of crashes and promote the 4Es of highway safety – Engineering (design changes that make roads safer); Education (encouraging better driving habits); Enforcement (stopping unsafe and illegal driving), and Emergency Medical Services (timely response to and from incidents). These initiatives include the:

- Intersection Safety Improvement Program;
- Right Angle Crash Frequency Reduction / Signalization Program;
- Left Turn Crash Reduction Program;
- Roadway Departure / Fixed Object Safety Treatment Program;
- Utility Pole Crash Mitigation Program;

- Safe Corridors Program;
- Cross Median Crash Prevention Program;
- Pedestrian Crash Reduction Program;
- Pedestrian Corridor Program;
- Rail Highway Grade Crossing Program (State);
- Rail Highway Grade Crossing Program (Federal);
- High Risk Rural Routes Program;
- Same Direction Crash Reduction Program, and the
- Local Federal Aid Safety Program.

The ultimate goal of the State of New Jersey is to ensure the safe passage of all roadway users. Moving forward, the NJDOT intends to employ a data-driven systemic safety improvement approach that will concentrate our resources and focus our energies on high risk roadway features that correlate with specific severe crash types.

An analysis conducted for the State's new Intersection Safety Implementation Plan, now being finalized, determined that during the five-year period from 2007 to 2011, 1,504,232 crashes were reported including 398,705 crashes (or 27 percent) at intersections. Out of the total 14,271 intersections reviewed, 593, or approximately the top four percent, had three or more severe crashes over the five-year analysis period and comprised 12 percent of the severe intersection crashes. The most problematic intersection type was determined to be urban signalized intersections.

The NJDOT's vision is shared by safety stakeholders, involved State agencies, each of the three regional Metropolitan Planning Organizations (MPOs) covering New Jersey, and localities through their respective safety advisory committees.

New Jersey is preparing to revise its Strategic Highway Safety Plan (SHSP), which has not been updated since 2007. The updated SHSP will renew and strengthen the State's vision to protect the safety of roadway users and strive for zero fatalities. The resulting emphasis areas will guide future modifications and refocus New Jersey's HSIP program and sub-programs. In addition, the update to the SHSP will contribute a safety perspective and element to the Regional Transportation Plan (RTP) developed by each of the MPOs.

NJTPA

The North Jersey Transportation Planning Authority (NJTPA) is the MPO that serves the 13-county northern New Jersey region.

To strengthen its traffic safety efforts, the NJTPA is working to develop targeted network screening methodologies aligned with the Highway Safety Manual (HSM) for use in future years. The NJTPA also encourages the use of road safety audits (RSAs) and considers them a factor in weighing funding applications.

In an effort to reduce pedestrian and bicycle fatalities in the City of Newark (designated as a pedestrian focus City), the NJTPA and Newark are preparing to develop a pedestrian and bicycle safety action plan. Successful approaches to improving safety often involve a combination of engineering, enforcement and education, as well as strategies to improve emergency response time. This study will result in the creation

of an action plan to improve safety and reduce pedestrian and bicycle fatalities and injuries throughout the City.

DVRPC

The Delaware Valley Regional Planning Commission (DVRPC) is the MPO that serves four counties in central New Jersey.

The DVRPC will consider targeted network screening methodologies for its region once the NJTPA's methodologies are finalized. As mentioned earlier, the NJTPA is working to develop targeted network screening methodologies aligned with the Highway Safety Manual (HSM) for use in future years.

The DVRPC has incorporated an expanded focus on the outcomes of their RSAs and intersection safety projects, including use of HSM methodologies where possible, to move safety projects ideas into problems statements and eventually to implementation.

A collaboration is underway between the DVRPC and the South Jersey Transportation Organization to use HSM methodologies to analyze the benefit/cost implications of a safety project in Burlington County that is slated for a funding obligation during the 2013 federal fiscal year. There have been 15 accidents at the project site (intersection of Route 528 and Old York Road in Chesterfield) between 2007 and 2011. In February 2012, a crash involving a truck and a school bus resulted in the death of an 11-year-old girl and injuries, some critical, to 15 other students.

The fourth edition of the DVRPC's Transportation Safety Action Plan, scheduled to be published in 2014, will be aligned with the SHSP. The Transportation Safety Action Plan analyzes crash data to identify key emphasis areas for the region, following the American Association of State Highway and Transportation Officials (AASHTO) guidelines.

The DVRPC, with the assistance of the South Jersey Transportation Planning Organization, has also employed HSM methodologies to analyze the benefit/cost implications of a safety project in Burlington County that is slated for a funding obligation during the 2013 federal fiscal year. Also in support of pedestrian safety, the DVRPC has provided pedestrian crash network screenings and interactive web-maps to the New Jersey Division of Highway Traffic Safety (NJDHTS) to advance the pedestrian decoy training program in Burlington and Camden counties, and a targeted pedestrian safety enforcement campaign on US Rt. 130.

Building upon the success of this initial effort, the DVRPC plans to continue this practice to assist member counties in both developing data-driven safety projects, and in assisting them in moving those projects to implementation. These technical efforts are one of the many safety initiatives in the DVRPC region, including the continuing RSA program, annual crash data bulletins (regional), new county-specific bulletins, and a local roads safety newsletter.

The DVRPC is also expanding its data and analysis resources by providing more interactive crash data mapping products, a new crash Data-Finder web-resource, and an update of the Congestion Management Process in 2014, which will include an enhanced safety analysis component.

SJTPO

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

In FY11, the SJTPO began using the methodologies introduced within the HSM to assist justifying potential safety projects in the region, utilizing benefit-cost analysis as an evaluation tool. This effort continues with the hope of utilizing more HSM methodologies in additional stages of the project selection process. The crash history and important features of the intersection or roadway are carefully evaluated to determine the projected change in crash frequency expected with the employment of selected safety countermeasures.

The SJTPO has taken steps to incorporate the HSM into its RSA reports. This effort is expected to expand in the upcoming years.

In the SJTPO region, a Safety Action Plan is under development that analyzes crash data and will additionally utilize the methodologies within the AASHTO Highway Safety Manual as it progresses. The action plan, along with the national and state emphasis areas, help focus SJTPO strategies for improving safety performance, whether through driver education and outreach or physical improvements.

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

☐ District

☐ Other

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 MPO. All Local Roadways in NJ are covered by one of three MPOs – NJTPA, SJTPO, or DVRPC.

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

☒ Design

☒ Planning

☒Maintenance

☒Operations

☐Governors Highway Safety Office

☐Other:

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. This office has also been responsible for the design of improvements on the state highway system. We are working to move to a new delivery process whereby the Bureau of Transportation Data and Safety will focus on the the planning and program development, but move final design and implementation of improvements to the Division of Project Management under the Assistant Commissioner of Capital Program Management. This will bring safety improvements in line with the delivery of other projects.

NJDOT's Operation and Maintenance Division has been responsible up till now with the construction of improvements. While some work will continue, we expect that a larger portion will be carried out under the purview of the Capital Program Management Division.

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

☐Other:

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

☐ Multi-disciplinary HSIP steering committee

☒ Other: Other-Working on new program delivery process. We are beginning to implement.

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

Program Methodology

Select the programs that are administered under the HSIP.

☐ Median Barrier	☒ Intersection	☒ Safe Corridor
☐ Horizontal Curve	☐ Bicycle Safety	☐ Rural State Highways
☐ Skid Hazard	☐ Crash Data	☐ Red Light Running Prevention
☒ Roadway Departure	☐ Low-Cost Spot Improvements	☐ Sign Replacement And Improvement
☒ Local Safety	☒ Pedestrian Safety	☒ Right Angle Crash
☒ Left Turn Crash	☐ Shoulder Improvement	☒ Segments
☒ Other: Other-High Risk Rural Roads		

Program: **Intersection**

Date of Program Methodology: **9/16/2009**

What data types were used in the program methodology?

Crashes	*Exposure*	*Roadway*
☒ All crashes	☐ Traffic	☐ Median width
☐ Fatal crashes only	☐ Volume	☐ Horizontal curvature
☐ Fatal and serious injury crashes only	☐ Population	☐ Functional classification
☐ Other	☐ Lane miles	☐ Roadside features
	☐ Other	☐ Other

What project identification methodology was used for this program?

☒ Crash frequency

☐ Expected crash frequency with EB adjustment

☒ Equivalent property damage only (EPDO Crash frequency)

☐ EPDO crash frequency with EB adjustment

☐ Relative severity index

☐ Crash rate

☐ Critical rate

☐ Level of service of safety (LOSS)

☐ Excess expected crash frequency using SPFs

☐ Excess expected crash frequency with the EB adjustment

☐ Excess expected crash frequency using method of moments

☐ Probability of specific crash types

☒ Excess proportions of specific crash types

☐ Other

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

☐ Yes

☒ No

How are highway safety improvement projects advanced for implementation?

☐ Competitive application process

☐ selection committee

☐ Other

☒ Other-Using ranking to identify priorities, NJDOT selects 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).

☐ Relative Weight in Scoring

☒ Rank of Priority Consideration

☐ Ranking based on B/C

☐ Available funding

☐ Incremental B/C

☐ Ranking based on net benefit

☒ Cost Effectiveness 2

☒ Quick Fix - i.e., minimal environmental, ROW and other constraints. 1

Program: **Safe Corridor**

Date of Program Methodology: **9/18/2005**

What data types were used in the program methodology?

Crashes	*Exposure*	*Roadway*
☒ All crashes	☐ Traffic	☐ Median width
☒ Fatal crashes only	☐ Volume	☐ Horizontal curvature
☐ Fatal and serious injury crashes only	☐ Population	☐ Functional classification
☐ Other	☐ Lane miles	☐ Roadside features
	☐ Other	☐ Other

What project identification methodology was used for this program?

☒ Crash frequency

☐ Expected crash frequency with EB adjustment

☐ Equivalent property damage only (EPDO Crash frequency)

☐ EPDO crash frequency with EB adjustment

☐ Relative severity index

☒ Crash rate

☐ Critical rate

☐ Level of service of safety (LOSS)

☐ Excess expected crash frequency using SPFs

☐ Excess expected crash frequency with the EB adjustment

☐ Excess expected crash frequency using method of moments

☐ Probability of specific crash types

☐ Excess proportions of specific crash types

☐ Other

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

☐ Yes

☒ No

How are highway safety improvement projects advanced for implementation?

☐ Competitive application process

☐ selection committee

☒ Other-Road Safety audits were performed for each Safe Corridor to identify safety improvements

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

☒ Rank of Priority Consideration

☐ Ranking based on B/C

☐ Available funding

☐ Incremental B/C

☐ Ranking based on net benefit

☒ Cost Effectiveness 2

☒ Quick Fix - minimial environmental, ROW and other constraints. 1

Program: **Roadway Departure**

Date of Program Methodology: **9/16/2008**

What data types were used in the program methodology?

Crashes	*Exposure*	*Roadway*
☒ All crashes	☐ Traffic	☐ Median width
☐ Fatal crashes only	☐ Volume	☐ Horizontal curvature
☐ Fatal and serious injury crashes only	☐ Population	☐ Functional classification
☐ Other	☐ Lane miles	☒ Roadside features
	☐ Other	☒ Other-Utility poles

What project identification methodology was used for this program?

☒ Crash frequency

☐ Expected crash frequency with EB adjustment

☐ Equivalent property damage only (EPDO Crash frequency)

☐ EPDO crash frequency with EB adjustment

☐ Relative severity index

☐ Crash rate

☐ Critical rate

☐ Level of service of safety (LOSS)

☐ Excess expected crash frequency using SPFs

☐ Excess expected crash frequency with the EB adjustment

☐ Excess expected crash frequency using method of moments

☐ Probability of specific crash types

☐ Excess proportions of specific crash types

☐ Other

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

☒ Yes

☐ No

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

☒ Yes

☐ No

How are highway safety improvement projects advanced for implementation?

☐ Competitive application process

☐ selection committee

☐ Other

☒ Other-Locations identified through data driven list and priority locations coordinated with utility

companies.

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

☒ Rank of Priority Consideration

- ☐ Ranking based on B/C
- ☐ Available funding
- ☐ Incremental B/C
- ☒ Ranking based on net benefit 1
- ☐ Cost Effectiveness

Program: **Local Safety**

Date of Program Methodology: **9/16/2005**

What data types were used in the program methodology?

Crashes	*Exposure*	*Roadway*
☒ All crashes	☐ Traffic	☐ Median width
☐ Fatal crashes only	☐ Volume	☐ Horizontal curvature
☐ Fatal and serious injury crashes only	☐ Population	☐ Functional classification

☐ Other

☐ Lane miles

☐ Roadside features

☐ Other

☐ Other

What project identification methodology was used for this program?

☒ Crash frequency

☐ Expected crash frequency with EB adjustment

☒ Equivalent property damage only (EPDO Crash frequency)

☐ EPDO crash frequency with EB adjustment

☐ Relative severity index

☐ Crash rate

☐ Critical rate

☐ Level of service of safety (LOSS)

☐ Excess expected crash frequency using SPFs

☐ Excess expected crash frequency with the EB adjustment

☐ Excess expected crash frequency using method of moments

☐ Probability of specific crash types

☐ Excess proportions of specific crash types

☐ Other

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

☒ Yes

☐ No

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

☒ Yes

☐ No

How are highway safety improvement projects advanced for implementation?

☒Competitive application process

☒selection committee

☐Other

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

☒Rank of Priority Consideration

☐Ranking based on B/C	
☒Available funding	1
☐Incremental B/C	
☒Ranking based on net benefit	1
☐Cost Effectiveness	
☒Problem to address established safety problem as shown through crash history, risk-based (systemic) analysis and/or local roadway knowledge	1

Program: **Pedestrian Safety**

Date of Program Methodology: **9/16/2011**

What data types were used in the program methodology?

Crashes	*Exposure*	*Roadway*
☐ All crashes	☐ Traffic	☐ Median width
☒ Fatal crashes only	☐ Volume	☐ Horizontal curvature
☐ Fatal and serious injury crashes only	☐ Population	☐ Functional classification
☐ Other	☐ Lane miles	☐ Roadside features
	☒ Other-NJ is a pedestrian focus state	☐ Other

What project identification methodology was used for this program?

☒ Crash frequency

☐ Expected crash frequency with EB adjustment

☐ Equivalent property damage only (EPDO Crash frequency)

☐ EPDO crash frequency with EB adjustment

☐ Relative severity index

☐ Crash rate

☐ Critical rate

☐ Level of service of safety (LOSS)

☐ Excess expected crash frequency using SPFs

☐ Excess expected crash frequency with the EB adjustment

☐ Excess expected crash frequency using method of moments

☐ Probability of specific crash types

☐ Excess proportions of specific crash types

☐ Other

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

☒Yes

☐No

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

☒Yes

☐No

How are highway safety improvement projects advanced for implementation?

☐Competitive application process

☐selection committee

☒Other-Single statewide educatitonal pedestrian and driver safety awareness campaign.

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

☒Rank of Priority Consideration

☐Ranking based on B/C

☐Available funding

☐Incremental B/C

☐Ranking based on net benefit

☐Cost Effectiveness

☒FHWA Ped Focus State 1

Program: **Right Angle Crash**

Date of Program Methodology: **9/16/2010**

What data types were used in the program methodology?

Crashes	*Exposure*	*Roadway*
☒ All crashes	☐ Traffic	☐ Median width
☐ Fatal crashes only	☐ Volume	☐ Horizontal curvature
☐ Fatal and serious injury crashes only	☐ Population	☐ Functional classification
☐ Other	☐ Lane miles	☐ Roadside features
	☐ Other	☐ Other

What project identification methodology was used for this program?

☒ Crash frequency

☐ Expected crash frequency with EB adjustment

☒ Equivalent property damage only (EPDO Crash frequency)

☐ EPDO crash frequency with EB adjustment

☐ Relative severity index

☐ Crash rate

☐ Critical rate

☐ Level of service of safety (LOSS)

☐ Excess expected crash frequency using SPFs

☐ Excess expected crash frequency with the EB adjustment

☐ Excess expected crash frequency using method of moments

☐ Probability of specific crash types

☐ Excess proportions of specific crash types

☐ Other

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

☐ Yes

☒ No

How are highway safety improvement projects advanced for implementation?

☐ Competitive application process

☐ selection committee

☒ Other-Using the ranking to identify priorities, NJDOT selects 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).

☐ Relative Weight in Scoring

☒ Rank of Priority Consideration

☐ Ranking based on B/C

☐ Available funding

☐ Incremental B/C

☐ Ranking based on net benefit

☒ Cost Effectiveness 2

☒Quick fix, minimal environmental, ROW and other constraints	1

Program: **Left Turn Crash**

Date of Program Methodology: **9/16/2010**

What data types were used in the program methodology?

Crashes	*Exposure*	*Roadway*
☐All crashes	☐Traffic	☐Median width
☐Fatal crashes only	☐Volume	☐Horizontal curvature
☐Fatal and serious injury crashes only	☐Population	☐Functional classification
☐Other	☐Lane miles	☐Roadside features
	☐Other	☒Other-Consideration of pairs of opposing approaches.

What project identification methodology was used for this program?

☒Crash frequency

☐Expected crash frequency with EB adjustment

☒Equivalent property damage only (EPDO Crash frequency)

☐EPDO crash frequency with EB adjustment

☐Relative severity index

☐Crash rate

☐ Critical rate

☐ Level of service of safety (LOSS)

☐ Excess expected crash frequency using SPFs

☐ Excess expected crash frequency with the EB adjustment

☐ Excess expected crash frequency using method of moments

☐ Probability of specific crash types

☐ Excess proportions of specific crash types

☐ Other

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

☐ Yes

☒ No

How are highway safety improvement projects advanced for implementation?

☐ Competitive application process

☐ selection committee

☒ Other-Using the ranking to identify priorities, NJDOT selects 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).

☐ Relative Weight in Scoring

☒ Rank of Priority Consideration

☐ Ranking based on B/C

☐ Available funding

☐ Incremental B/C

☐ Ranking based on net benefit

☒ Cost Effectiveness 2

☒ Quick fix, minimal environmental, ROW and other constraints. 1

Program: **Segments**

Date of Program Methodology: **9/16/2007**

What data types were used in the program methodology?

Crashes	*Exposure*	*Roadway*
☒ All crashes	☐ Traffic	☐ Median width
☐ Fatal crashes only	☐ Volume	☐ Horizontal curvature
☐ Fatal and serious injury crashes only	☐ Population	☐ Functional classification
☐ Other	☐ Lane miles	☐ Roadside features
	☒ Other-Centerline miles	☐ Other

What project identification methodology was used for this program?

☒ Crash frequency

☐ Expected crash frequency with EB adjustment

☐ Equivalent property damage only (EPDO Crash frequency)

☐ EPDO crash frequency with EB adjustment

☒ Relative severity index

☐ Crash rate

☐ Critical rate

☐ Level of service of safety (LOSS)

☐ Excess expected crash frequency using SPFs

☐ Excess expected crash frequency with the EB adjustment

☐ Excess expected crash frequency using method of moments

☐ Probability of specific crash types

☐ Excess proportions of specific crash types

☐ Other

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

☐ Yes

☒ No

How are highway safety improvement projects advanced for implementation?

☐ Competitive application process

☐ selection committee

☒ Other-Using the ranking to identify priorities, NJDOT selects 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).

☐ Relative Weight in Scoring

☒Rank of Priority Consideration

☐Ranking based on B/C

☒Available funding 1

☒Incremental B/C 2

☒Ranking based on net benefit 3

☐Cost Effectiveness

Program: **Other-High Risk Rural Roads**

Date of Program Methodology: **9/16/2005**

What data types were used in the program methodology?

Crashes	*Exposure*	*Roadway*
☒All crashes	☐Traffic	☐Median width
☐Fatal crashes only	☐Volume	☐Horizontal curvature
☐Fatal and serious injury crashes only	☐Population	☐Functional classification
☐Other	☐Lane miles	☐Roadside features
	☐Other	☐Other

What project identification methodology was used for this program?

☒Crash frequency

☐Expected crash frequency with EB adjustment

☒ Equivalent property damage only (EPDO Crash frequency)

☐ EPDO crash frequency with EB adjustment

☐ Relative severity index

☒ Crash rate

☐ Critical rate

☐ Level of service of safety (LOSS)

☐ Excess expected crash frequency using SPFs

☐ Excess expected crash frequency with the EB adjustment

☐ Excess expected crash frequency using method of moments

☒ Probability of specific crash types

☐ Excess proportions of specific crash types

☐ Other

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

☒ Yes

☐ No

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

☒ Yes

☐ No

How are highway safety improvement projects advanced for implementation?

☒ Competitive application process

☒ selection committee

☐ Other

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

☒ Rank of Priority Consideration

☐ Ranking based on B/C	
☒ Available funding	1
☐ Incremental B/C	
☒ Ranking based on net benefit	1
☐ Cost Effectiveness	
☒ Project to address established safety problem as shown through crash history, risk-based (systemic) analysis and/or local roadway knowledge.	1

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

0

Highway safety improvment program funds are used to address which of the following systemic improvments?

☐ Cable Median Barriers	☐ Rumble Strips
☐ Traffic Control Device Rehabilitation	☐ Pavement/Shoulder Widening
☐ Install/Improve Signing	☐ Install/Improve Pavement Marking and/or

Delineation

☐ Upgrade Guard Rails

☐ Safety Edge

☐ Add/Upgrade/Modify/Remove Traffic Signal

☐ Clear Zone Improvements

☐ Install/Improve Lighting

☐ Other

What process is used to identify potential countermeasures?

☒ Engineering Study

☒ Road Safety Assessment

☐ Other:

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

☒ Highway Safety Manual

☒ Road Safety audits

☒ Systemic Approach

☐ Other:

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

No comments.

Progress in Implementing Projects

Funds Programmed

Reporting period for Highway Safety Improvement Program funding.

☐ Calendar Year

☐ State Fiscal Year

☒ Federal Fiscal Year

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

Funding Category	Programmed*		Obligated	
HSIP (Section 148)	22804000	93 %	5430000	85 %
HRRRP (SAFETEA-LU)	1667000	7 %	940000	15 %
HRRR Special Rule				
Penalty Transfer - Section 154				
Penalty Transfer – Section 164				
Incentive Grants - Section 163				

Incentive Grants (Section 406)				
Other Federal-aid Funds (i.e. STP, NHPP)				
State and Local Funds				
Totals	24471000	100%	6370000	100%

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

$6,000,000.00

How much funding is obligated to local safety projects?

$3,637,000.00

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

$500,000.00

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

$500,000.00

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.

To date this program has been spot location focused and focused on improvements that could be completed within the existing right-of-way and with minimal utility impacts. This has resulted in an inability to obligate funds at any significant levels. The authorization process has also been modified over the last year or two and has required Safety Programs staff to change the way business is done. NJDOT is looking at a multipronged approach to increase obligation of safety funds. First, NJDOT is modifying its program and project development process to provide more resources to implement safety projects. Second, NJDOT is looking at other opportunities to maximize the use of HSIP funds including increasing obligations for local projects, the implementation of systemic improvements, and the use of HSIP funds to support crash data compilation and analysis.

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

We have recently advanced our first systemic safety project to implement FHWA's proven countermeasures centerline rumble strips on a 20 mile section of Route 70 in Burlington and Ocean Counties. We expect that this project can move from concept to construction authorization in a matter of a few months.

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
Highway Safety Improvement Program Planning - Crash Analysis/Research and Safety	Intersection traffic control Intersection traffic control - other	16 Numbers	160300	160300	HSIP (Section 148)	N/A (Planning)	0	0	State Highway Agency	Creating more effective processes and safety management systems	NJ Emphasis Area 2, Strategy 1: Develop and/or enhance methodologies and establish standardization for problem identification, prioritization and evaluation
Park Avenue (CR 658) & 4th Street,	Intersection traffic control Modify traffic signal -	1 Numb	470000	564000	HSIP (Sectio	Urban Principal Arterial -	17351	35	County Highway	Improving the design	NJ Emphasis Area 2, Strategy 1,

Newark, Essex	modernization/replacement	ers			n 148)	Other			Agency	and operation of highway intersections	Action 5: Implement engineering countermeasures at problem locations.
Shrewsbury Avenue (CR 13) & W. Bergen Place , Red Bank, Monmouth	Intersection traffic control Modify traffic signal - modernization/replacement	1 Numbers	290000	348000	HSIP (Section 148)	Urban Minor Arterial	0	35	County Highway Agency	Improving the design and operation of highway intersections	NJ Emphasis Area 2, Strategy 1, Action 5: Implement engineering countermeasures at problem locations.
Park Avenue (CR 658) at High Street and Glenwood Avenue, Orange & East Orange, Essex	Intersection traffic control Modify traffic signal - modernization/replacement	2 Numbers	630000	756000	HSIP (Section 148)	Urban Principal Arterial - Other	10745	25	City of Municipal Highway Agency	Improving the design and operation of highway intersections	NJ Emphasis Area 2, Strategy 1, Action 5: Implement engineering countermeasures at problem locations.

McGinley Square, Jersey City, Hudson	Pedestrians and bicyclists Pedestrian signal - install new at intersection	5 Numbers	396538	475846	HSIP (Section 148)	Urban Local Road or Street	16	45	County Highway Agency	Improving the design and operation of highway intersections	NJ Emphasis Area 2, Strategy 1, Action 5: Implement engineering countermeasures at problem locations.
Little York Road (CR 614), Union & Alexandria, Hunterdon	Advanced technology and ITS Over height vehicle detection	3 Numbers	395026	474031	HRRRP (SAFETEA-LU)	Rural Major Collector	4160	40	County Highway Agency	Improving the design and operation of highway intersections	NJ Emphasis Area 2, Strategy 1, Action 5: Implement engineering countermeasures at problem locations.
River Road (CR 625), Hillsborough, Somerset	Roadway Pavement surface - high friction surface	1.3 Miles	300000	363000	HRRRP (SAFETEA-LU)	Rural Minor Collector	2672	40	County Highway Agency	Keeping vehicles in the roadway	NJ Emphasis Area 1, Strategy 2: Identify and implement engineering solutions to prevent and

											minimize roadway departure crashes.
Milford-Mt. Pleasant Road (CR 519), Millford & Holland, Hunterdon	Roadway Pavement surface - high friction surface	0.4 Miles	163237	195884	HRRRP (SAFETEA-LU)	Rural Major Collector	0	0	County Highway Agency	Keeping vehicles in the roadway	NJ Emphasis Area 1, Strategy 2: Identify and implement engineering solutions to prevent and minimize roadway departure crashes.
NJTPA Pilot Pedestrian Education Program	Non-infrastructure Educational efforts	1 Numbers	500000	500000	HSIP (Section 148)	N/A (Non-Infrastructure)	0	0	State Highway Agency	Making walking and street crossing easier	NJ Emphasis Area 7, Strategy 1: Educate and encourage all stakeholders on enforcement to reduce pedestrian, bicycle, rail and vehicular

											conflicts.
Burlington County Route 528 Roundabout	Intersection traffic control Modify control - all-way stop to roundabout	0.1 Miles	1451000	1741200	HSIP (Section 148)	Urban Major Collector	5239	50	County Highway Agency	Improving the design and operation of highway intersections	NJ Emphasis Area 2, Strategy 1, Action 5: Implement engineering countermeasures at problem locations.

Progress in Achieving Safety Performance Targets

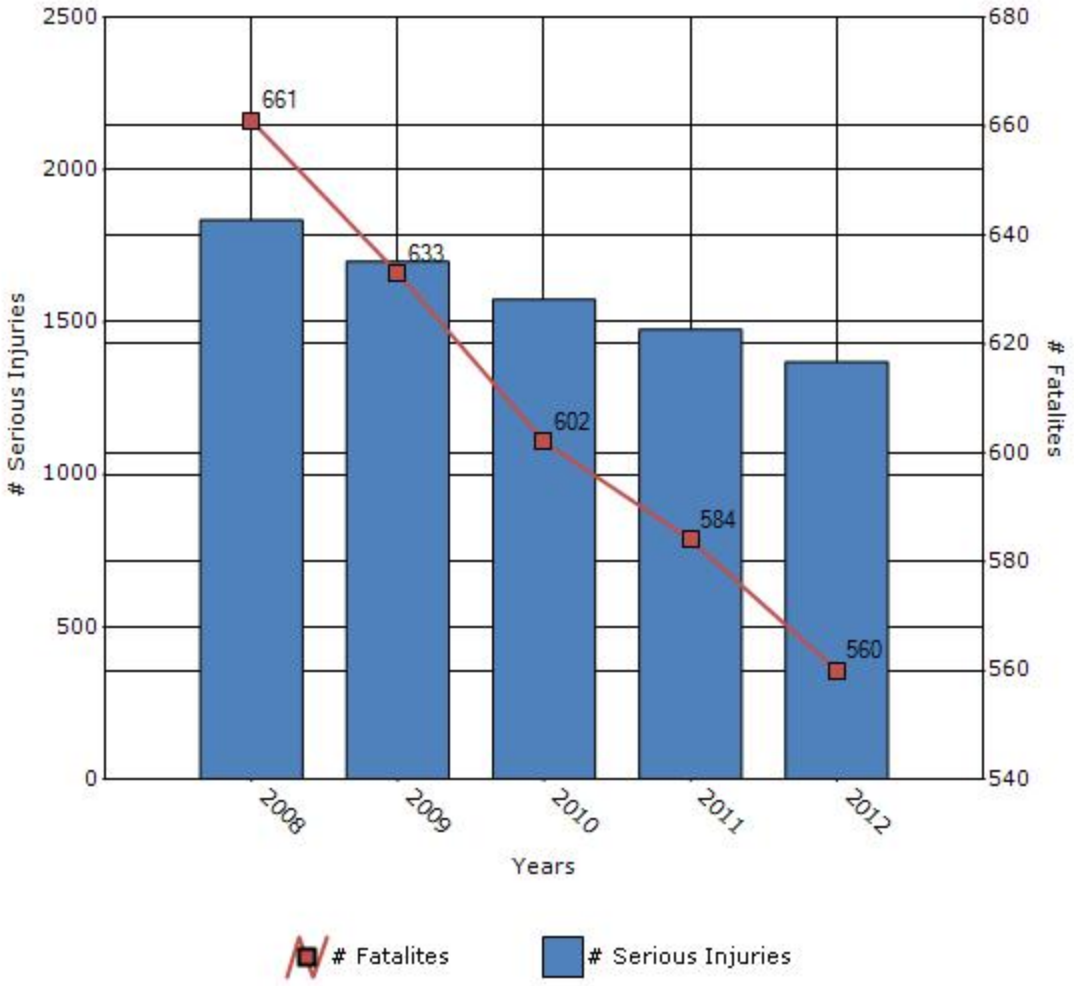
Overview of General Safety Trends

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

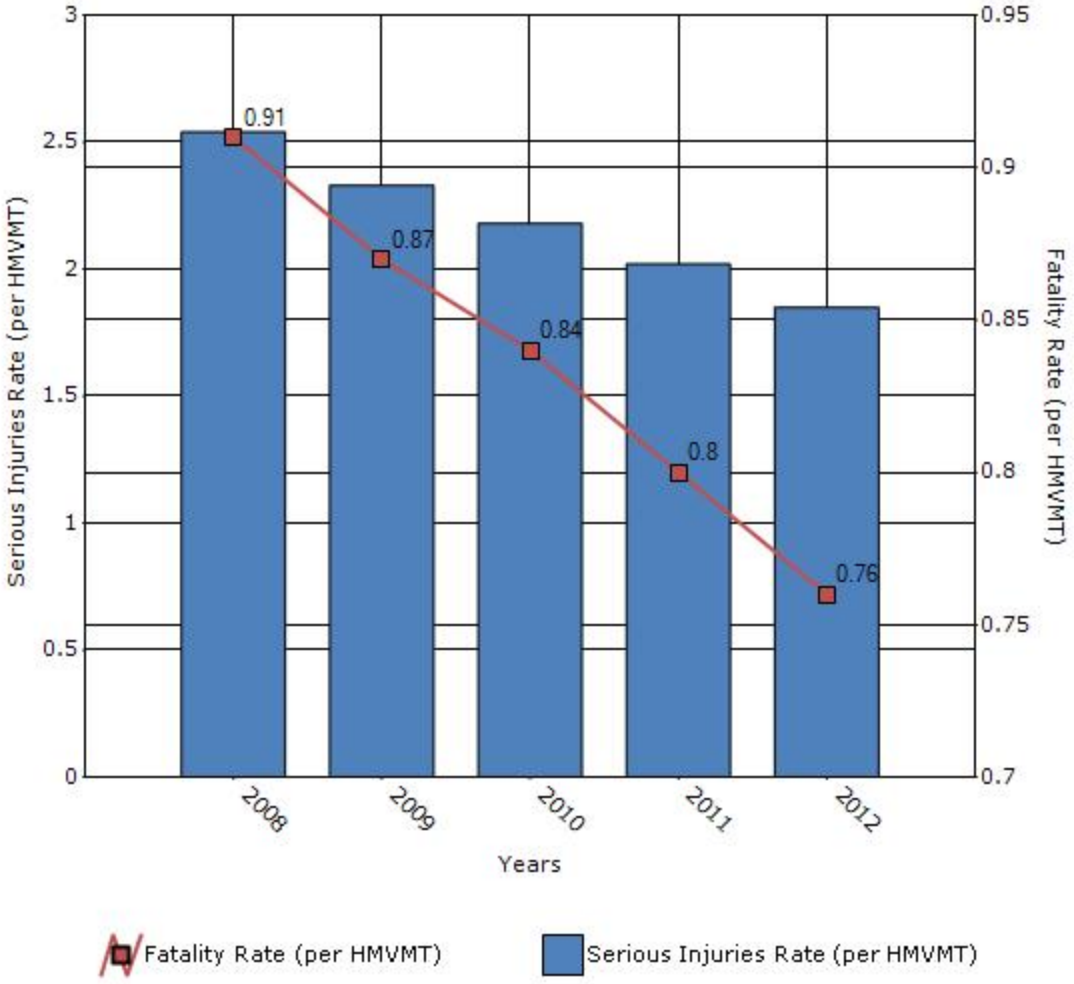
Performance Measures*	2008	2009	2010	2011	2012
Number of fatalities	661	633	602	584	560
Number of serious injuries	1834	1698	1574	1475	1369
Fatality rate (per HMVMT)	0.91	0.87	0.84	0.8	0.76
Serious injury rate (per HMVMT)	2.54	2.33	2.18	2.02	1.85

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

Number of Fatalities and Serious injuries for the Last Five Years



Rate of Fatalities and Serious injuries for the Last Five Years

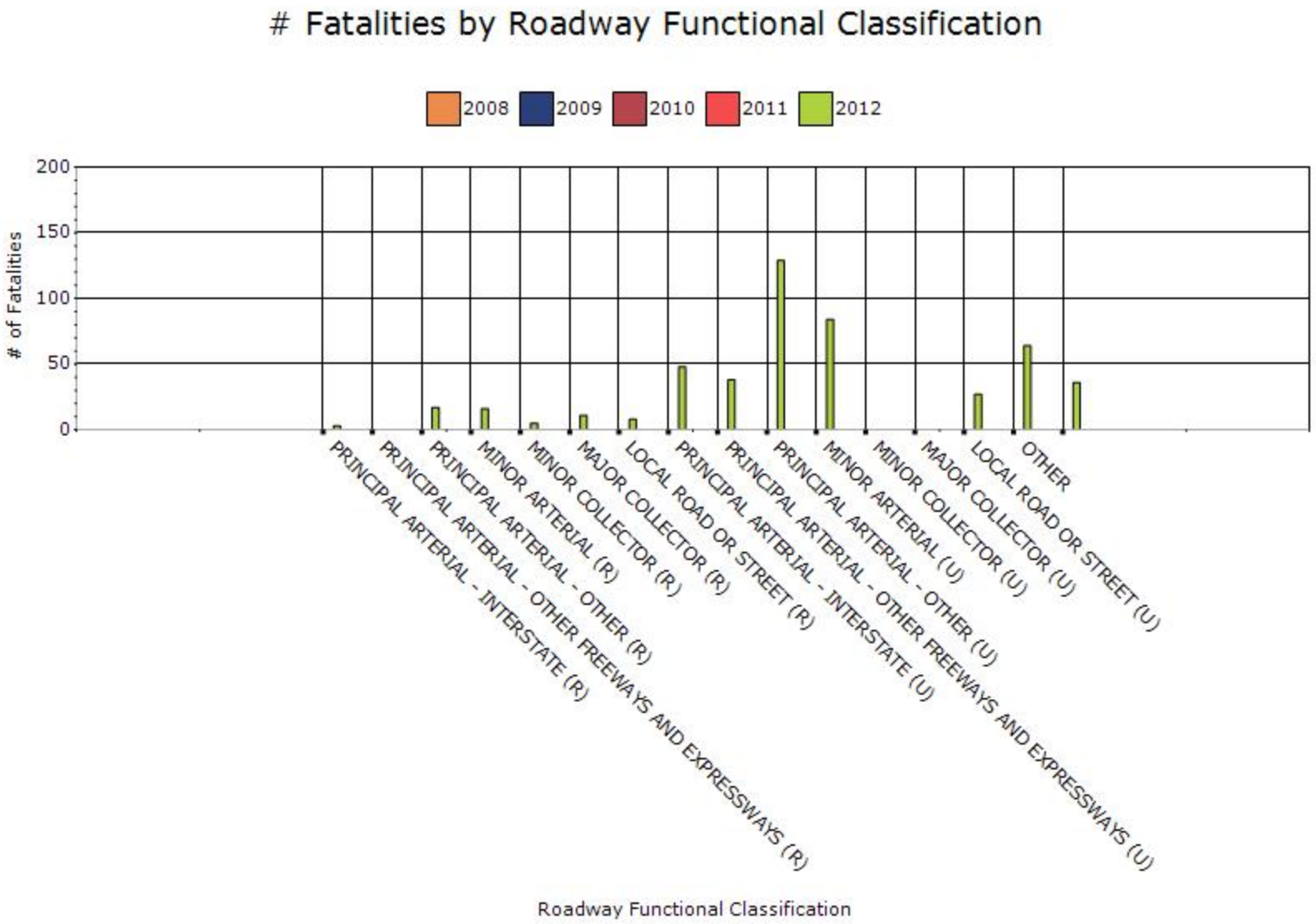


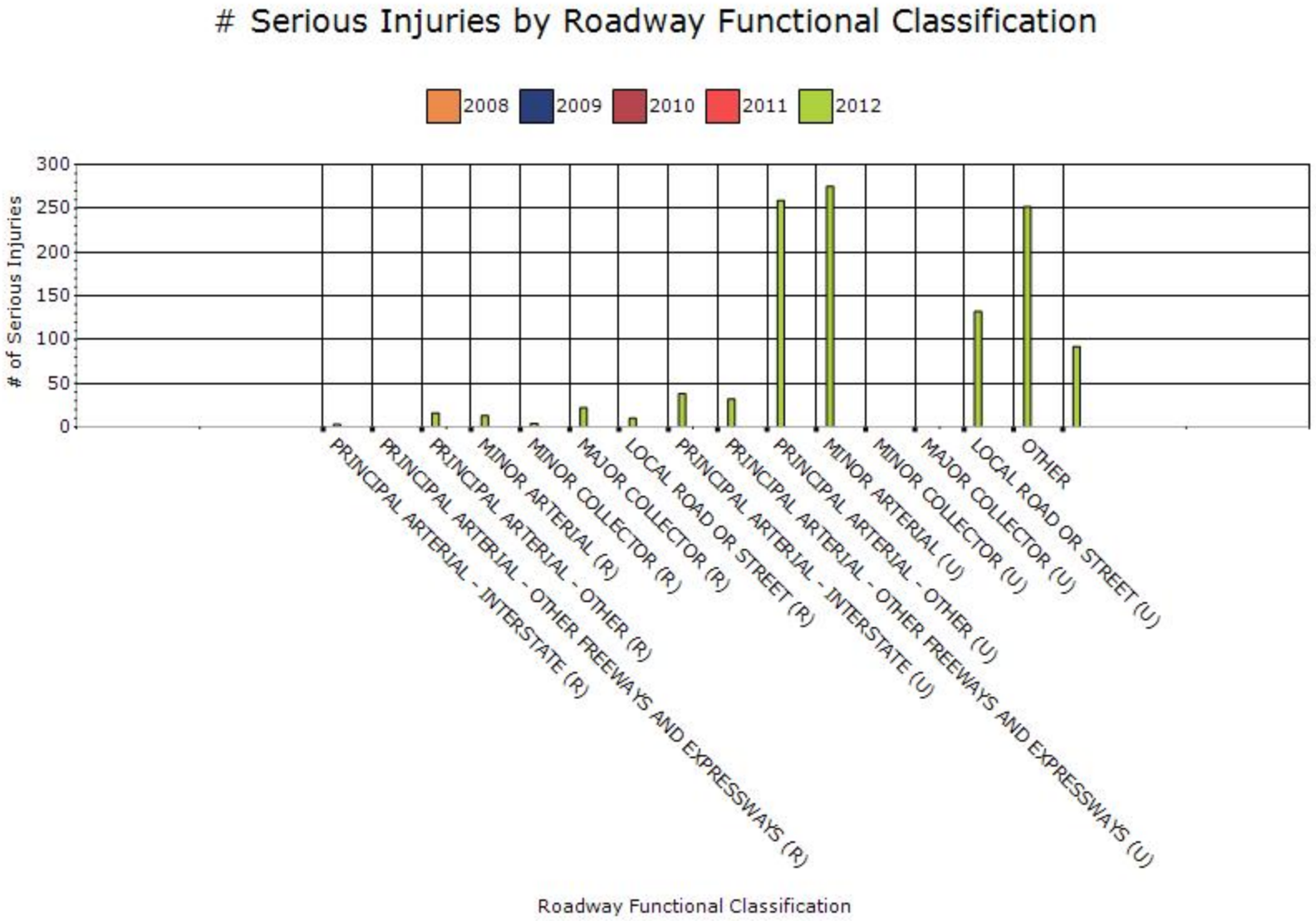
To the maximum extent possible, present performance measure* data by functional classification and ownership.

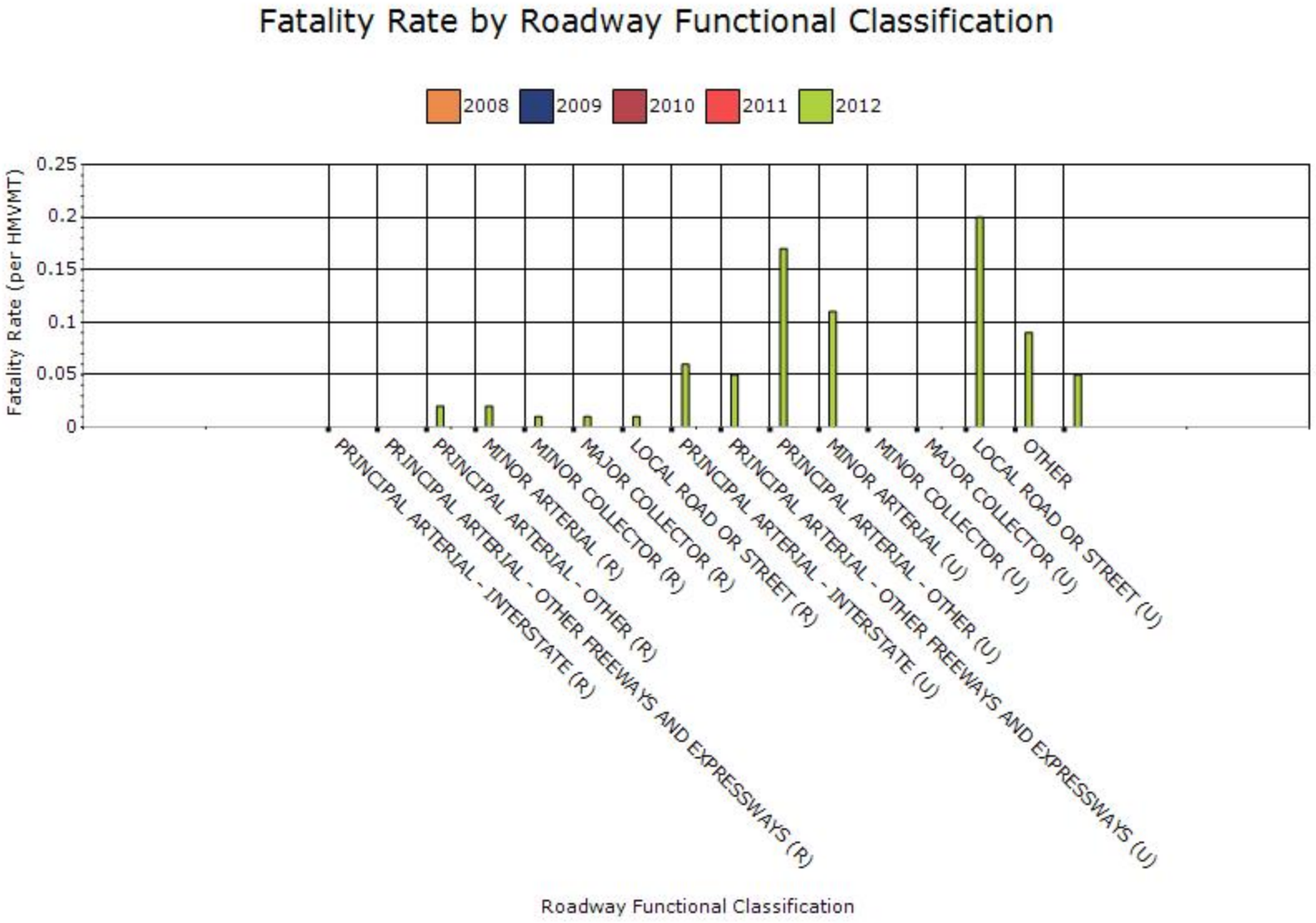
Year - 2012

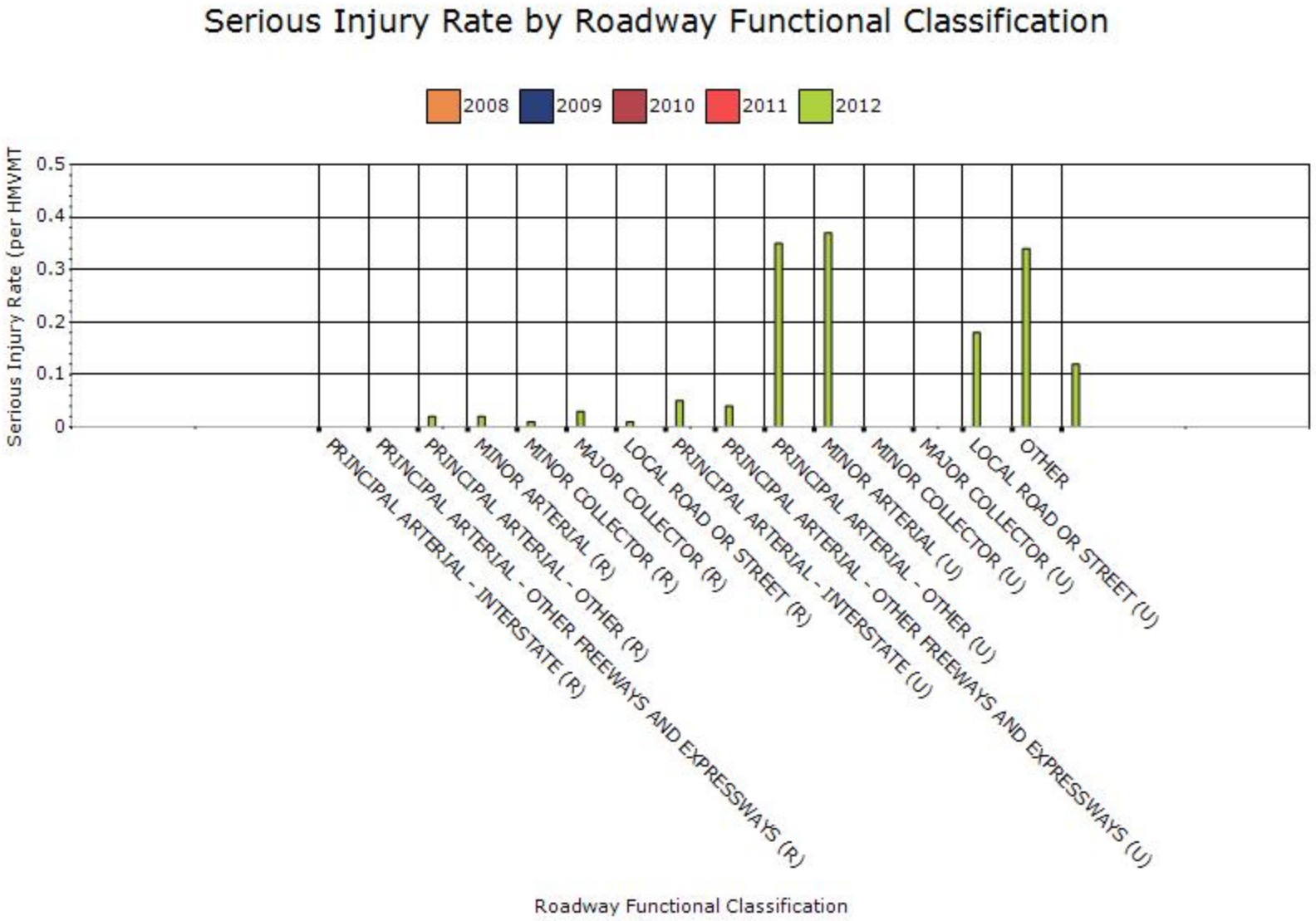
Function Classification	Number of fatalities	Number of serious injuries	Fatality rate (per HMVMT)	Serious injury rate (per HMVMT)
RURAL PRINCIPAL ARTERIAL - INTERSTATE	3	3	0	0
RURAL PRINCIPAL ARTERIAL - OTHER FREEWAYS AND EXPRESSWAYS	0	0	0	0
RURAL PRINCIPAL ARTERIAL - OTHER	17	16	0.02	0.02
RURAL MINOR ARTERIAL	16	13	0.02	0.02
RURAL MINOR COLLECTOR	5	4	0.01	0.01
RURAL MAJOR COLLECTOR	11	22	0.01	0.03
RURAL LOCAL ROAD OR STREET	8	10	0.01	0.01
URBAN PRINCIPAL	48	38	0.06	0.05

ARTERIAL - INTERSTATE				
URBAN PRINCIPAL ARTERIAL - OTHER FREEWAYS AND EXPRESSWAYS	38	32	0.05	0.04
URBAN PRINCIPAL ARTERIAL - OTHER	129	259	0.17	0.35
URBAN MINOR ARTERIAL	84	275	0.11	0.37
URBAN MINOR COLLECTOR	0	0	0	0
URBAN MAJOR COLLECTOR	0	0	0	0
URBAN LOCAL ROAD OR STREET	27	132	0.2	0.18
OTHER	64	252	0.09	0.34
URBAN COLLECTOR - MAJOR AND MINOR	36	92	0.05	0.12
URBAN COLLECTOR - MAJOR AND MINOR	36	92	0.05	0.12


Fatalities by Roadway Functional Classification
2008
2009
2010
2011
2012
# of Fatalities
200
150
100
50
0
PRINCIPAL ARTERIAL - INTERSTATE (R)
PRINCIPAL ARTERIAL - OTHER FREEWAYS AND EXPRESSWAYS (R)
PRINCIPAL ARTERIAL - OTHER (R)
MINOR ARTERIAL (R)
MINOR COLLECTOR (R)
MAJOR COLLECTOR (R)
LOCAL ROAD OR STREET (R)
PRINCIPAL ARTERIAL - INTERSTATE (U)
PRINCIPAL ARTERIAL - OTHER FREEWAYS AND EXPRESSWAYS (U)
PRINCIPAL ARTERIAL - OTHER (U)
MINOR ARTERIAL (U)
MINOR COLLECTOR (U)
MAJOR COLLECTOR (U)
LOCAL ROAD OR STREET (U)
OTHER
Roadway Functional Classification


Serious Injuries by Roadway Functional Classification
2008
2009
2010
2011
2012
# of Serious Injuries
300
250
200
150
100
50
0
PRINCIPAL ARTERIAL - INTERSTATE (R)
PRINCIPAL ARTERIAL - OTHER FREEWAYS AND EXPRESSWAYS (R)
PRINCIPAL ARTERIAL - OTHER (R)
MINOR ARTERIAL (R)
MINOR COLLECTOR (R)
MAJOR COLLECTOR (R)
LOCAL ROAD OR STREET (R)
PRINCIPAL ARTERIAL - INTERSTATE (U)
PRINCIPAL ARTERIAL - OTHER FREEWAYS AND EXPRESSWAYS (U)
PRINCIPAL ARTERIAL - OTHER (U)
MINOR ARTERIAL (U)
MINOR COLLECTOR (U)
MAJOR COLLECTOR (U)
LOCAL ROAD OR STREET (U)
OTHER
Roadway Functional Classification

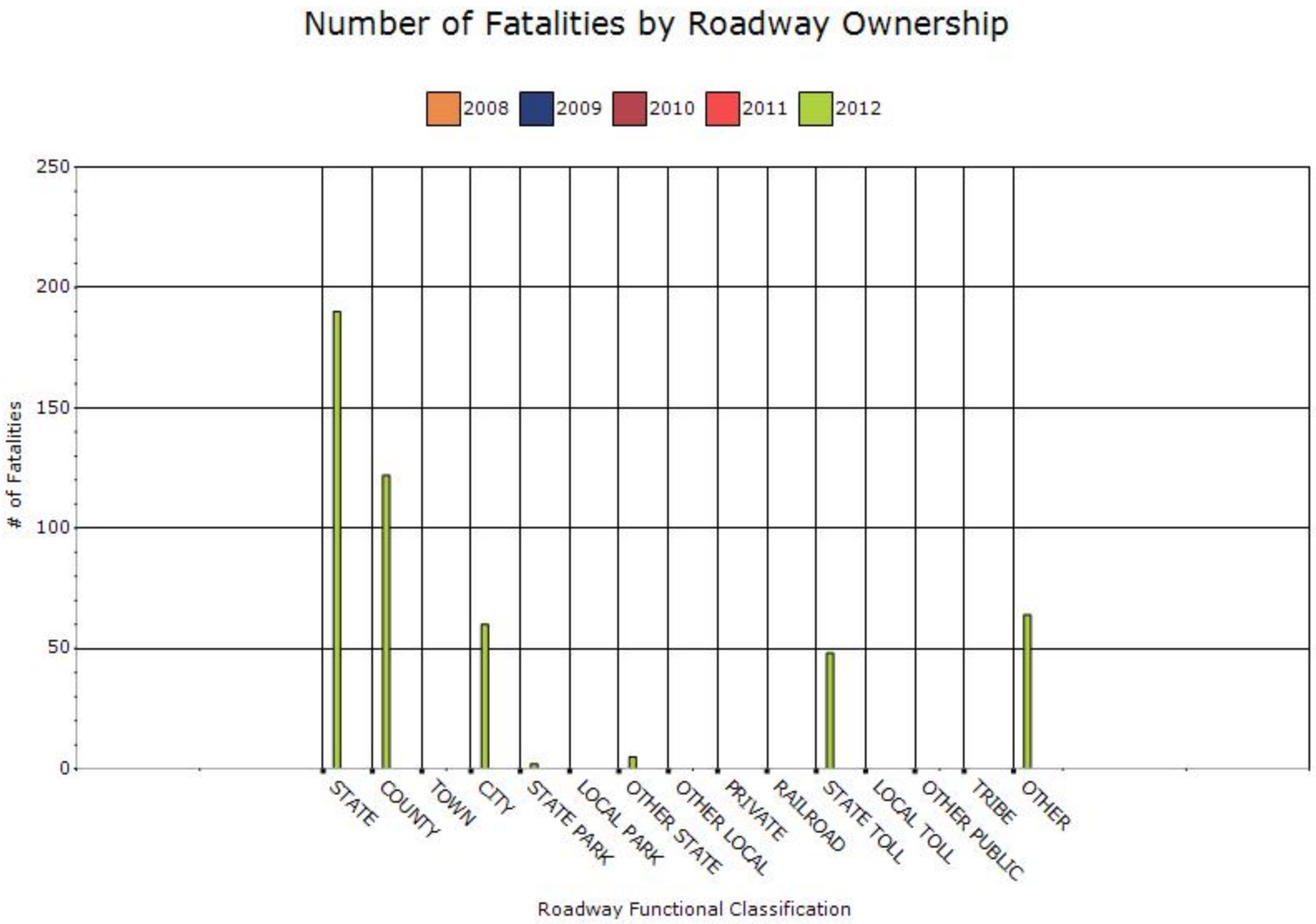

Fatality Rate by Roadway Functional Classification
2008
2009
2010
2011
2012
Fatality Rate (per HMVMT)
0.25
0.2
0.15
0.1
0.05
0
PRINCIPAL ARTERIAL - INTERSTATE (R)
PRINCIPAL ARTERIAL - OTHER FREEWAYS AND EXPRESSWAYS (R)
PRINCIPAL ARTERIAL - OTHER (R)
MINOR ARTERIAL (R)
MINOR COLLECTOR (R)
MAJOR COLLECTOR (R)
LOCAL ROAD OR STREET (R)
PRINCIPAL ARTERIAL - INTERSTATE (U)
PRINCIPAL ARTERIAL - OTHER FREEWAYS AND EXPRESSWAYS (U)
PRINCIPAL ARTERIAL - OTHER (U)
MINOR ARTERIAL (U)
MINOR COLLECTOR (U)
MAJOR COLLECTOR (U)
LOCAL ROAD OR STREET (U)
OTHER
Roadway Functional Classification

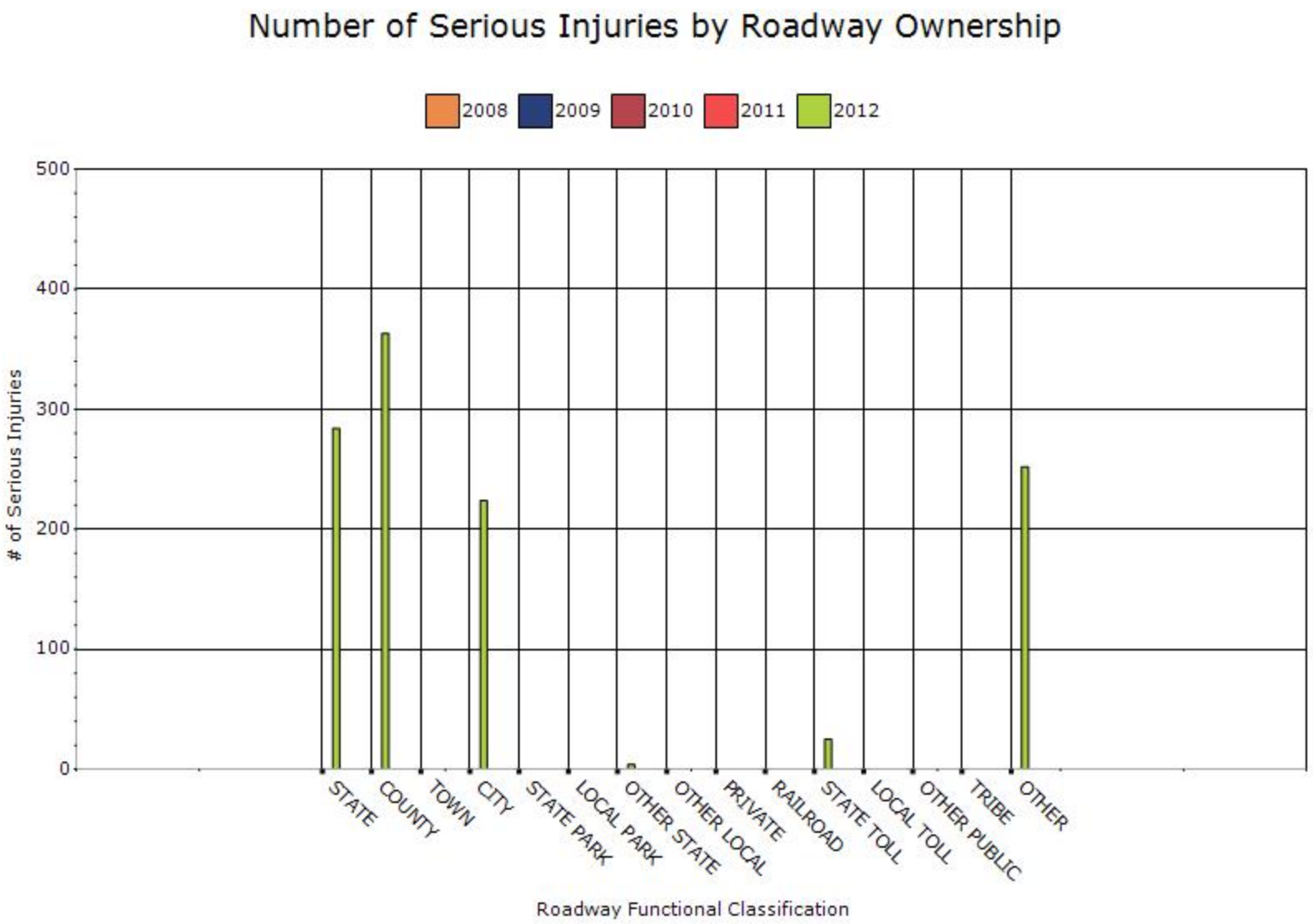

Serious Injury Rate by Roadway Functional Classification
2008
2009
2010
2011
2012
Serious Injury Rate (per HMVMT
0.5
0.4
0.3
0.2
0.1
0
PRINCIPAL ARTERIAL - INTERSTATE (R)
PRINCIPAL ARTERIAL - OTHER FREEWAYS AND EXPRESSWAYS (R)
PRINCIPAL ARTERIAL - OTHER (R)
MINOR ARTERIAL (R)
MINOR COLLECTOR (R)
MAJOR COLLECTOR (R)
LOCAL ROAD OR STREET (R)
PRINCIPAL ARTERIAL - INTERSTATE (U)
PRINCIPAL ARTERIAL - OTHER FREEWAYS AND EXPRESSWAYS (U)
PRINCIPAL ARTERIAL - OTHER (U)
MINOR ARTERIAL (U)
MINOR COLLECTOR (U)
MAJOR COLLECTOR (U)
LOCAL ROAD OR STREET (U)
OTHER
Roadway Functional Classification

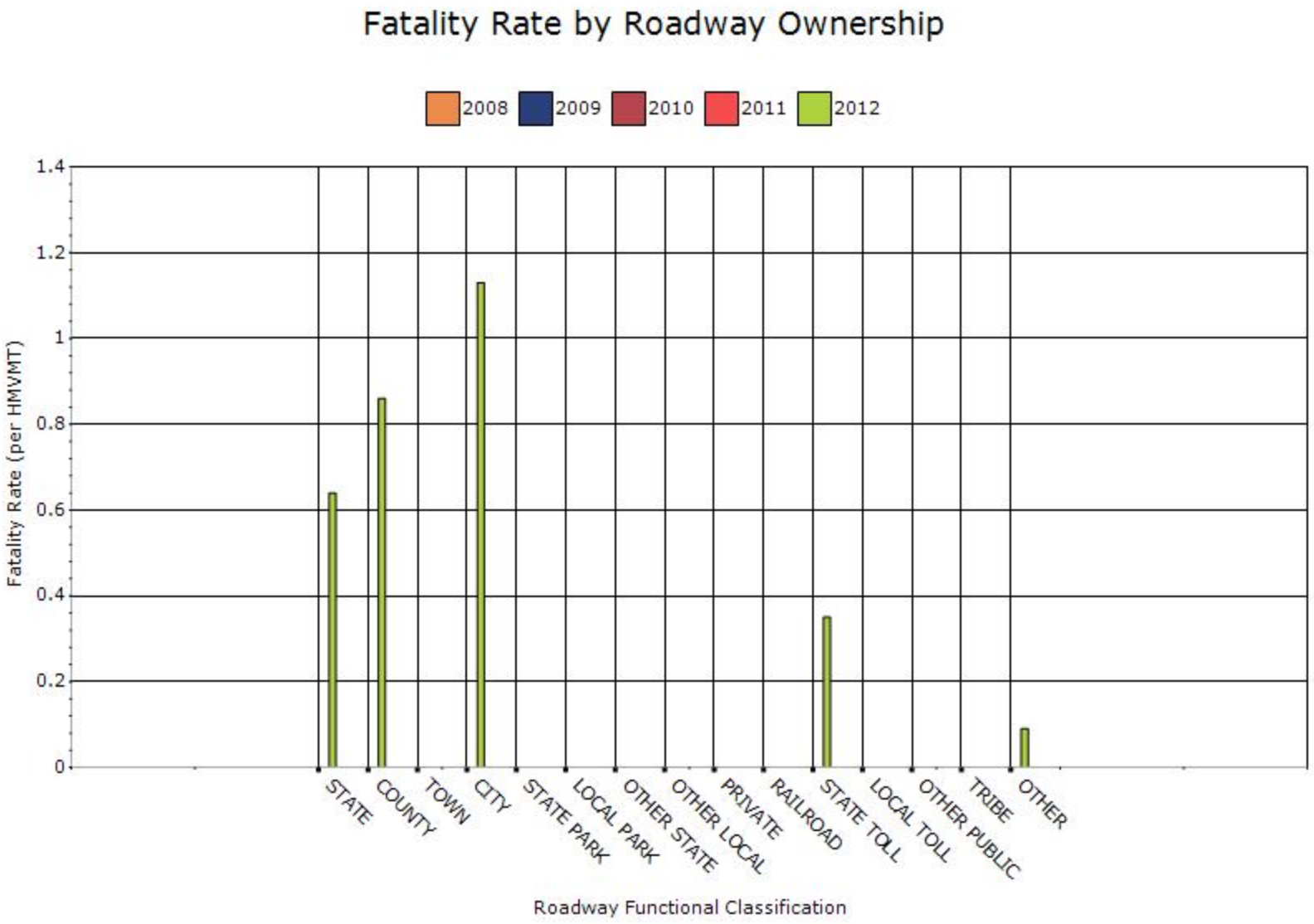
Year - 2012

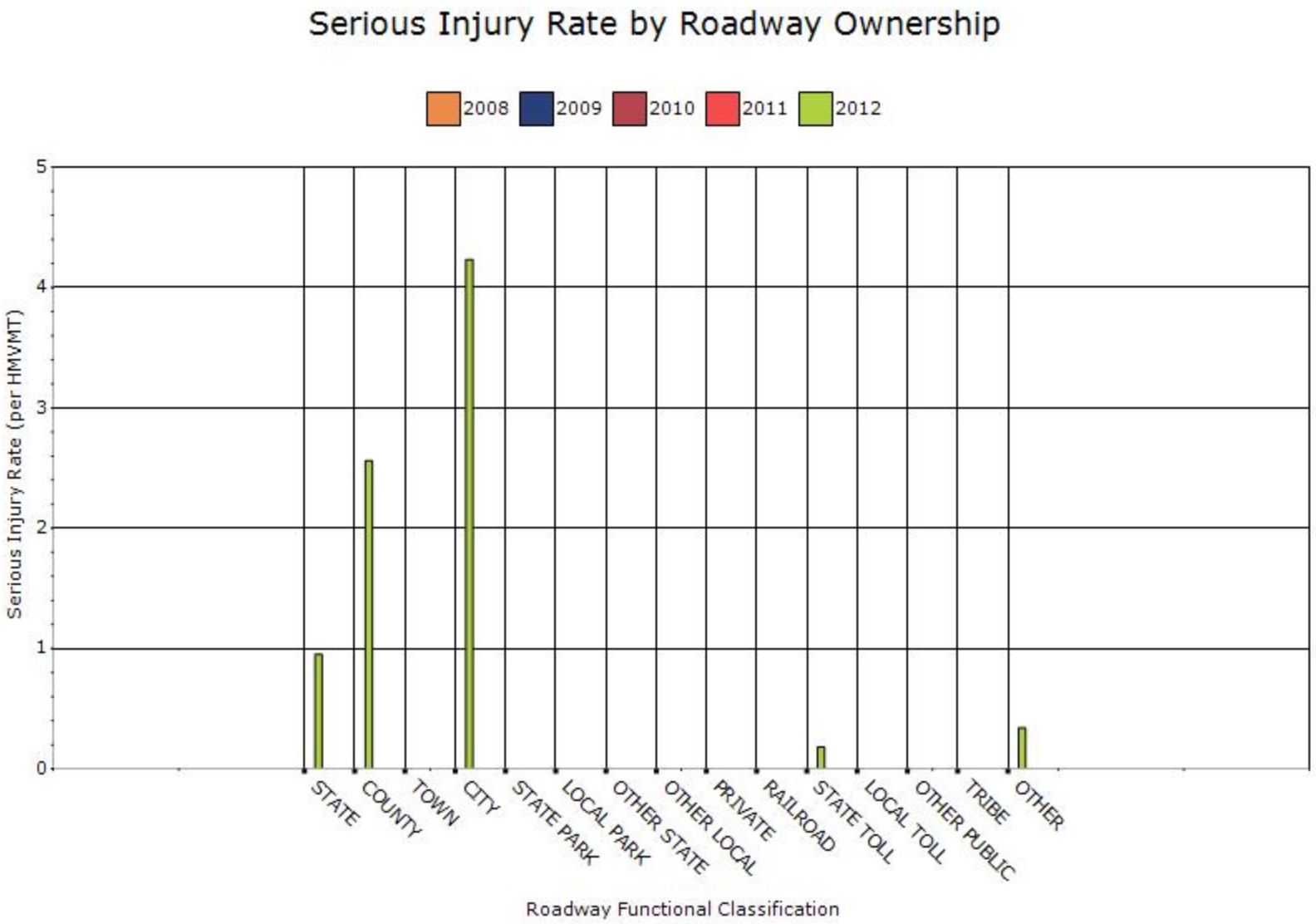
Roadway Ownership	Number of fatalities	Number of serious injuries	Fatality rate (per HMVMT)	Serious injury rate (per HMVMT)
STATE HIGHWAY AGENCY	190	284	0.64	0.95
COUNTY HIGHWAY AGENCY	122	363	0.86	2.56
TOWN OR TOWNSHIP HIGHWAY AGENCY	0	0	0	0
CITY OF MUNICIPAL HIGHWAY AGENCY	60	224	1.13	4.23
STATE PARK, FOREST, OR RESERVATION AGENCY	2	0	0	0
LOCAL PARK, FOREST OR RESERVATION AGENCY	0	0	0	0
OTHER STATE AGENCY	5	4	0	0
OTHER LOCAL AGENCY	0	0	0	0
PRIVATE (OTHER THAN RAILROAD)	0	0	0	0

RAILROAD	0	0	0	0
STATE TOLL AUTHORITY	48	25	0.35	0.18
LOCAL TOLL AUTHORITY	0	0	0	0
OTHER PUBLIC INSTRUMENTALITY (E.G. AIRPORT, SCHOOL, UNIVERSITY)	0	0	0	0
INDIAN TRIBE NATION	0	0	0	0
OTHER	64	252	0.09	0.34
OTHER	64	252	0.09	0.34


Number of Fatalities by Roadway Ownership
2008
2009
2010
2011
2012
250
200
150
100
50
0
# of Fatalities
STATE
COUNTY
TOWN
CITY
STATE PARK
LOCAL PARK
OTHER STATE
OTHER LOCAL
PRIVATE
RAILROAD
STATE TOLL
LOCAL TOLL
OTHER PUBLIC
TRIBE
OTHER
Roadway Functional Classification


Number of Serious Injuries by Roadway Ownership
2008
2009
2010
2011
2012
500
400
300
200
100
0
# of Serious Injuries
STATE
COUNTY
TOWN
CITY
STATE PARK
LOCAL PARK
OTHER STATE
OTHER LOCAL
PRIVATE
RAILROAD
STATE TOLL
LOCAL TOLL
OTHER PUBLIC
TRIBE
OTHER
Roadway Functional Classification


Fatality Rate by Roadway Ownership
2008
2009
2010
2011
2012
Fatality Rate (per HMVMT)
1.4
1.2
1
0.8
0.6
0.4
0.2
0
STATE
COUNTY
TOWN
CITY
STATE PARK
LOCAL PARK
OTHER STATE
OTHER LOCAL
PRIVATE
RAILROAD
STATE TOLL
LOCAL TOLL
OTHER PUBLIC
TRIBE
OTHER
Roadway Functional Classification


Serious Injury Rate by Roadway Ownership
2008
2009
2010
2011
2012
Serious Injury Rate (per HMVMT)
0
1
2
3
4
5
STATE
COUNTY
TOWN
CITY
STATE PARK
LOCAL PARK
OTHER STATE
OTHER LOCAL
PRIVATE
RAILROAD
STATE TOLL
LOCAL TOLL
OTHER PUBLIC
TRIBE
OTHER
Roadway Functional Classification

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

Nothing more to report.

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	**2008**	**2009**	**2010**	**2011**	**2012**
Fatality rate (per capita)	0	0.8	0.8	0.8	0
Serious injury rate (per capita)	0	1.4	1.3	1.2	0
Fatality and serious injury rate (per capita)	0	2.2	2.1	2	0

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

To determine whether the Special Rule applies in New Jersey, we considered older drivers and older pedestrians collectively as instructed by the FHWA Guidance. The number of fatalities and serious injuries for drivers and pedestrians 65 and older were retrieved from the NJDOT database. That amount was then divided by the number of people in the State who are 65 years of age and older compared to total state population to determine rate. To maintain consistency with other performance measures, New Jersey compared the three time periods of 5 year rolling average rates of fatalities and serious injuries. (2007-2011, 2006-2010, 2005-2009). The methodology used was as follows:

Example:

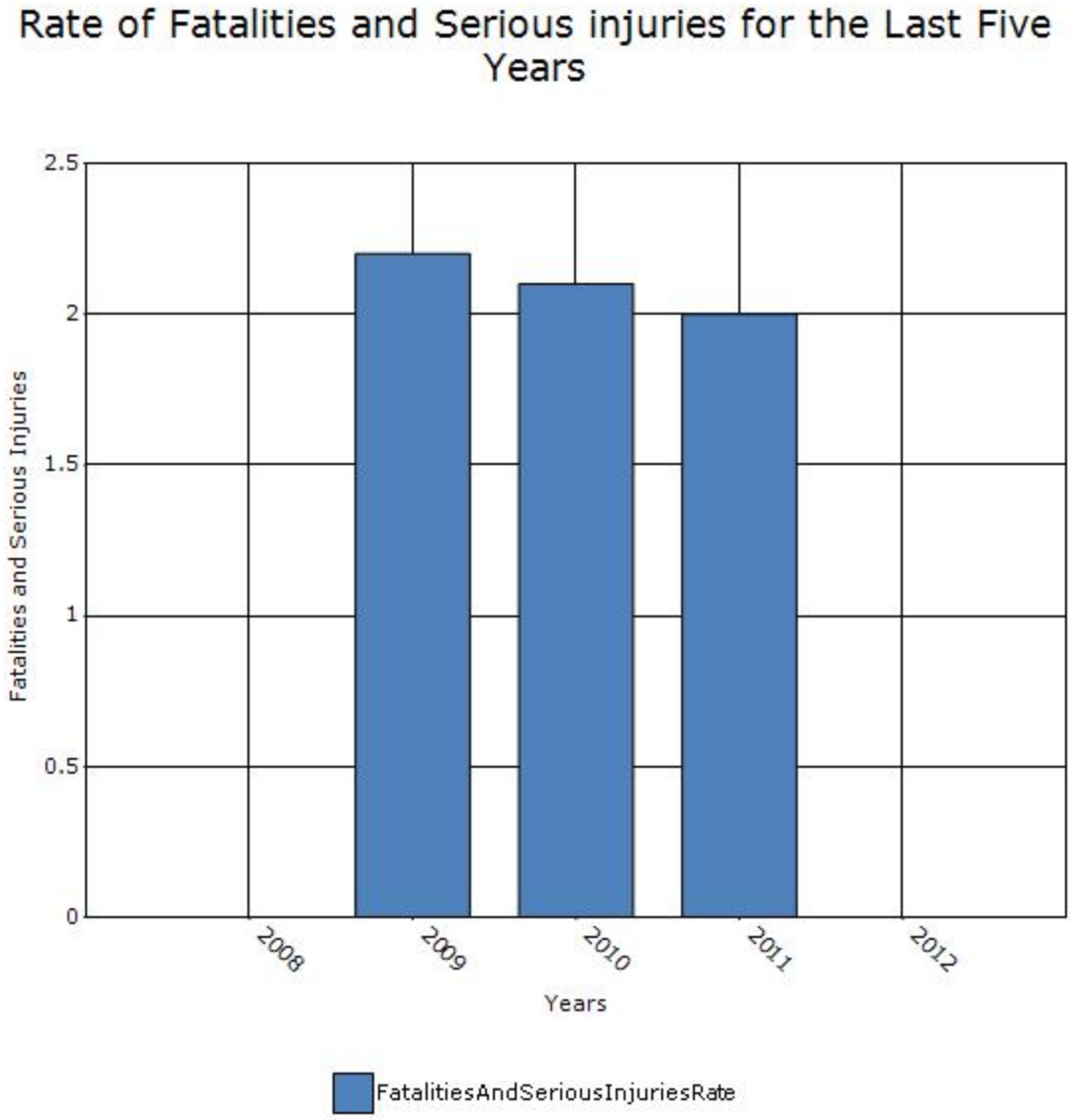
Calculation Rate for 2007-2011:

((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) + (F+SI 2009 Drivers and Pedestrians 65 years of age and older/2009 Population Figure) + (F+SI 2008 Drivers and Pedestrians 65 years of age and older/2008 Population Figure) + (F+SI 2007 Drivers and Pedestrians 65 years of age and older/2007 Population Figure)) / 5

The Population Figures were provided by the FHWA guidance and are as follows for New Jersey:

2005	2006	2007	2008	2009	2010	2011
125	129	131	132	134	135	137

The rates calculated were compared, and it is shown that there has been a steady decrease based on the 5 year average. Therefore, the Older Drivers and Pedestrians Special Rule does not apply in New Jersey.



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?

☐ None

☐ Benefit/cost

☒ Policy change

☐ Other:

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

☐ Shift Focus to Fatalities and Serious Injuries

☐ Include Local Roads in Highway Safety Improvement Program

☒ Organizational Changes

☐ None

☒ Other: Other-Completion of NJDOT HSIP Manual, Increased collaboration with metropolitan planning organizations and other organizations, and change in project advancement process.

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

NJDOT has completed its NJDOT HSIP Program manual, which outlines how it will advance the HSIP Program. NJDOT has also made a significant change in how projects will be advanced through NJDOT. NJDOT intends to advance more projects and larger HSIP eligible projects through its Division of Project Management for implementation. These changes are now just taking place.

SHSP Emphasis Areas

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

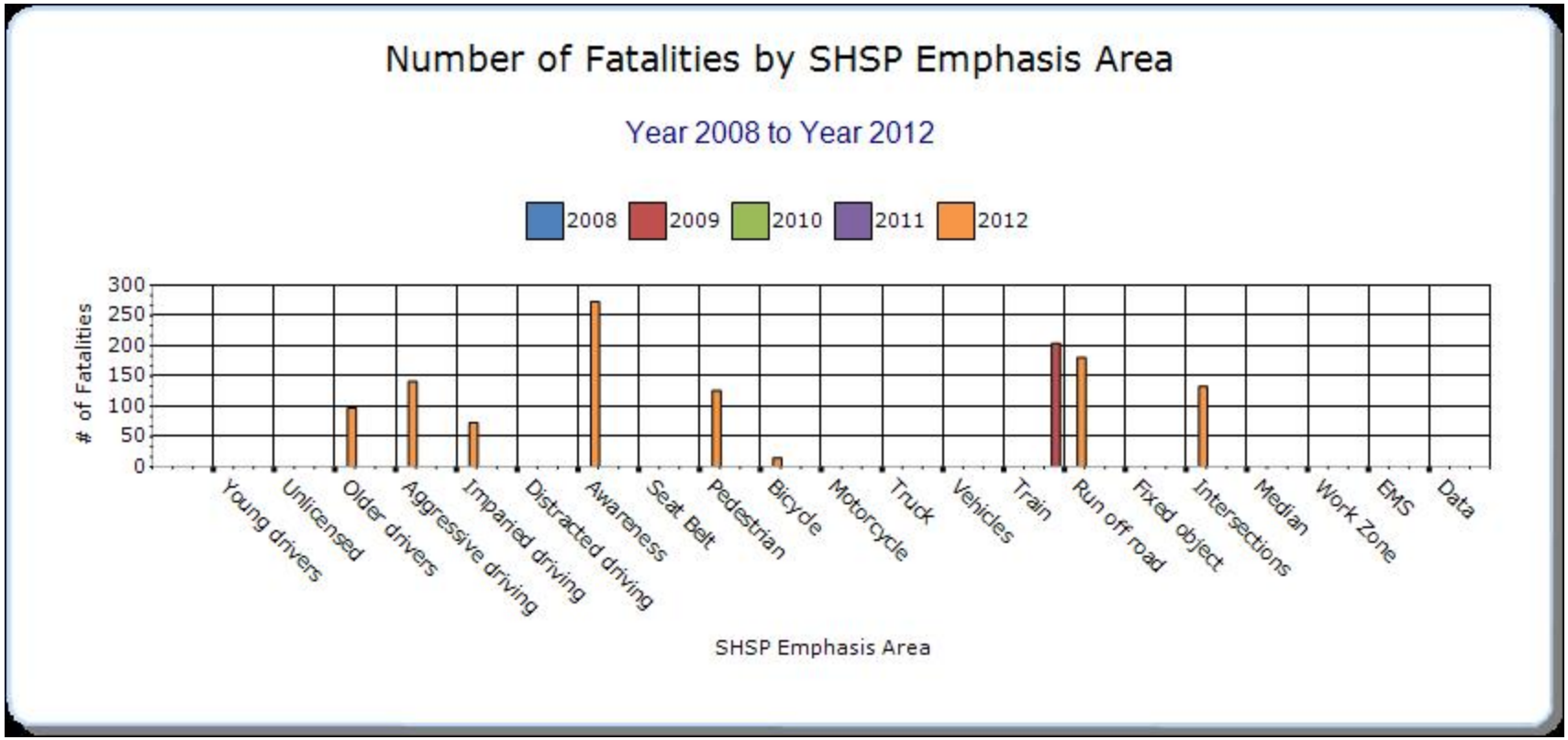
Year - 2012

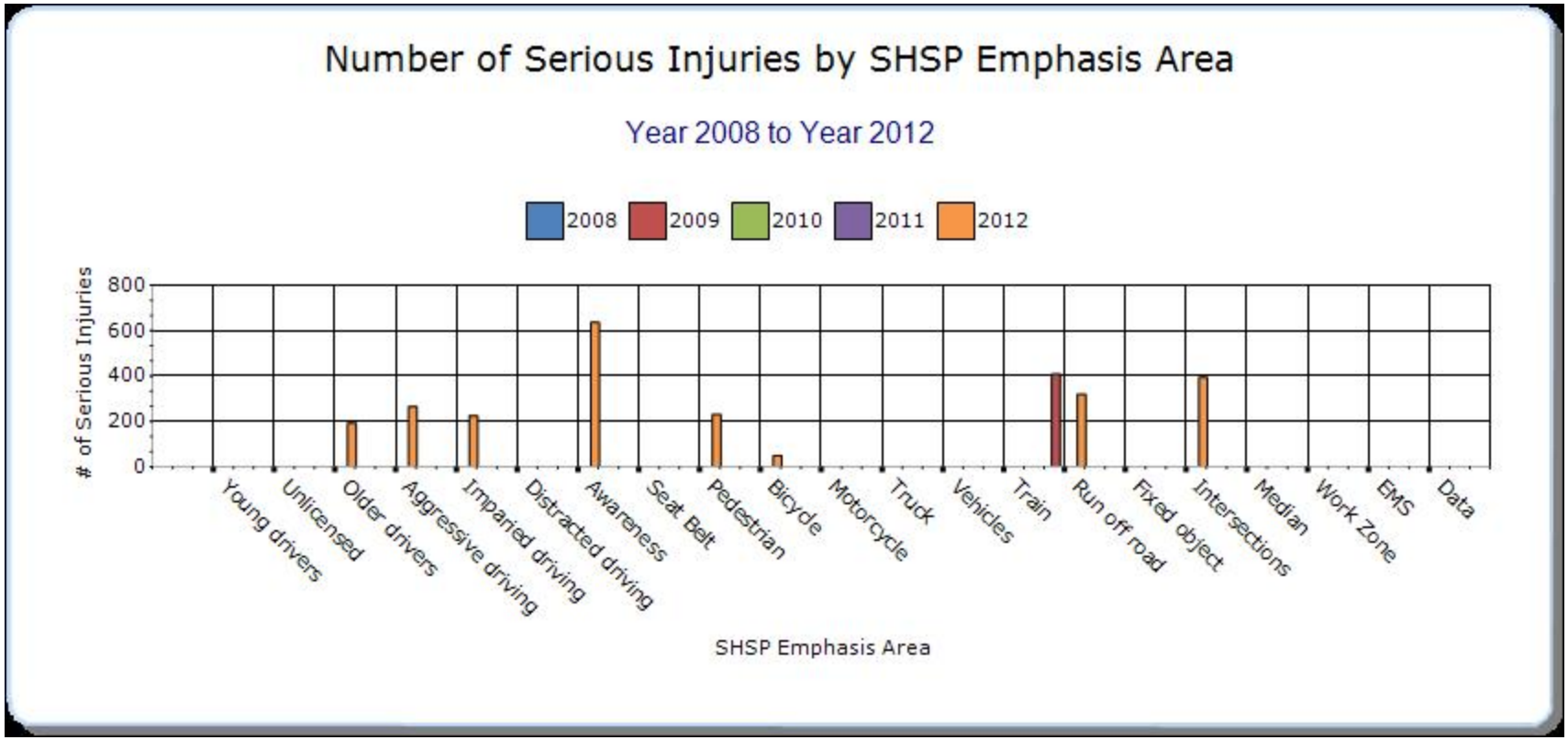
HSIP-related SHSP Emphasis Areas	Target Crash Type	Number of fatalities	Number of serious injuries	Fatality rate (per HMVMT)	Serious injury rate (per HMVMT)	Other-1	Other-2	Other-3
Instituting graduated licensing for younger drivers		**0**	**0**	**0**	**0**	**0**	**0**	**0**
Ensuring drivers are licensed and fully competent		0	0	0	0	0	0	0
Sustaining proficiency in older drivers	Ages 65+	97	193	0.13	0	0	0	0
Curbing aggressive driving	Vehicle at fault failures to obey signs/signals, following too closely, improper lane change, improper passing, unsafe speed	141	266	0.19	0.36	0	0	0

Reducing impaired driving	All	73	226	0.1	0.3	0	0	0
Keeping drivers alert		0	0	0	0	0	0	0
Increasing driver safety awareness	Same as Curbing Aggressive Driving	273	637	0.37	0.86	0	0	0
Increasing seat belt use and improving airbag effectiveness		0	0	0	0	0	0	0
Making walking and street crossing easier	Pedestrian, pedacyclist, railcar-vehicle	126	232	0.17	0.31	0	0	0
Ensuring safer bicycle travel	Pedalcyclist or Bicyclist	15	50	0.02	0.07	0	0	0
Improving motorcycle safety and increasing motorcycle awareness		0	0	0	0	0	0	0
Making truck travel safer		0	0	0	0	0	0	0
Increasing safety enhancements in		0	0	0	0	0	0	0

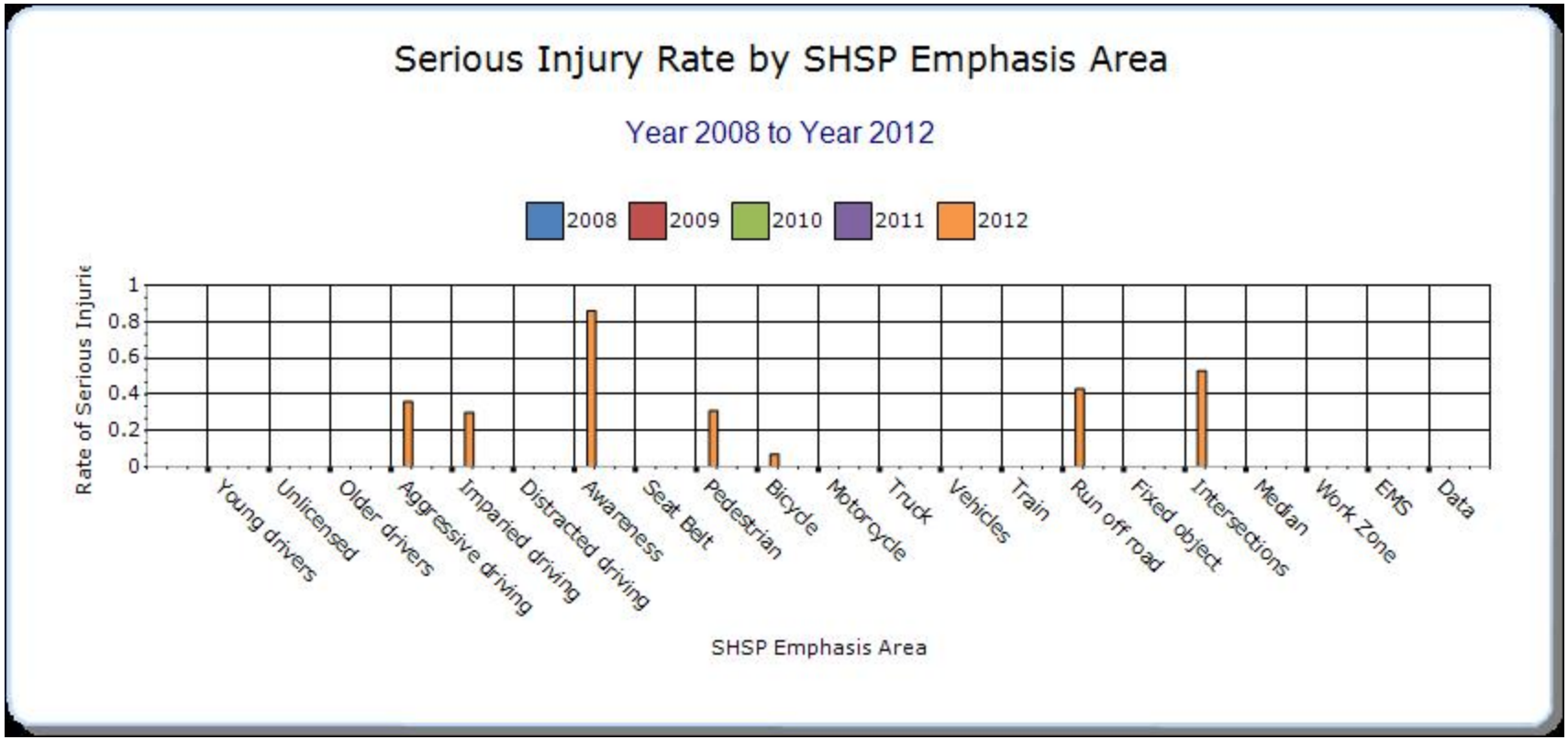
vehicles								
Reducing vehicle-train crashes	Rail-car Vehicle or Railcar	0	0	0	0	0	0	0
Keeping vehicles in the roadway	Run-off-road	181	320	0.24	0.43	0	0	0
Minimizing the consequences of leaving the road		0	0	0	0	0	0	0
Improving the design and operation of highway intersections	All crashes at intersection in the box	133	394	0.18	0.53	0	0	0
Reducing head-on and across-median crashes		0	0	0	0	0	0	0
Designing safer work zones		0	0	0	0	0	0	0
Enhancing emergency medical capabilities to increase survivability		0	0	0	0	0	0	0
Improving information and decision support systems		0	0	0	0	0	0	0

Reduce Young Driver Crashes	Focus on ages 16-20	46	117	0.06	0.16	0	0	0




Number of Serious Injuries by SHSP Emphasis Area
Year 2008 to Year 2012
2008
2009
2010
2011
2012
# of Serious Injuries
800
600
400
200
0
Young drivers
Unlicensed
Older drivers
Aggressive driving
Impaired driving
Distracted driving
Awareness
Seat Belt
Pedestrian
Bicycle
Motorcycle
Truck
Vehicles
Train
Run off road
Fixed object
Intersections
Median
Work Zone
EMS
Data
SHSP Emphasis Area


Fatality Rate by SHSP Emphasis Area
Year 2008 to Year 2012
2008
2009
2010
2011
2012
Rate of Fatalities
0.5
0.4
0.3
0.2
0.1
0
Young drivers
Unlicensed
Older drivers
Aggressive driving
Impaired driving
Distracted driving
Awareness
Seat Belt
Pedestrian
Bicycle
Motorcycle
Truck
Vehicles
Train
Run off road
Fixed object
Intersections
Median
Work Zone
EMS
Data
SHSP Emphasis Area

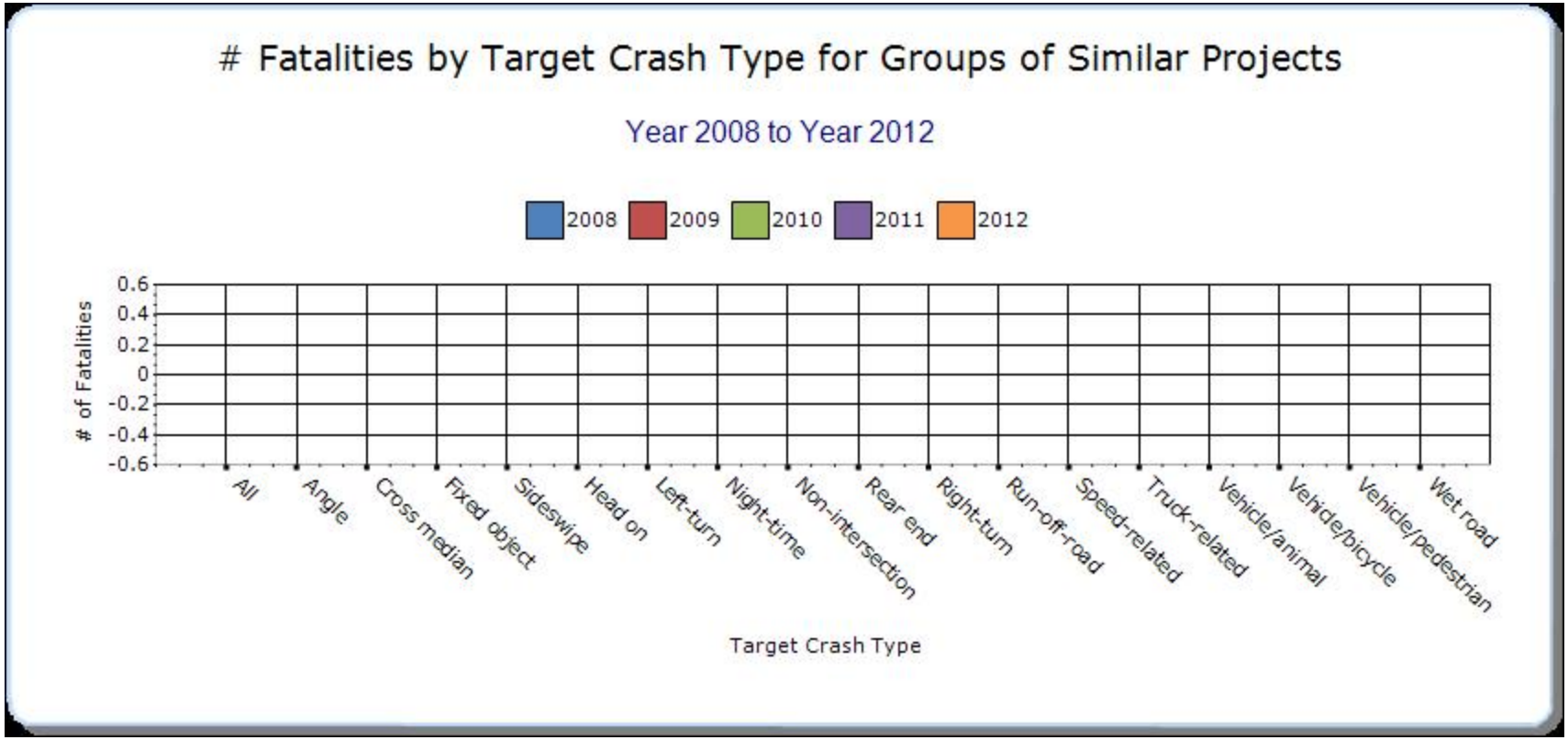

Serious Injury Rate by SHSP Emphasis Area
Year 2008 to Year 2012
2008
2009
2010
2011
2012
Rate of Serious Injurie
1
0.8
0.6
0.4
0.2
0
Young drivers
Unlicensed
Older drivers
Aggressive driving
Impaired driving
Distracted driving
Awareness
Seat Belt
Pedestrian
Bicycle
Motorcycle
Truck
Vehicles
Train
Run off road
Fixed object
Intersections
Median
Work Zone
EMS
Data
SHSP Emphasis Area

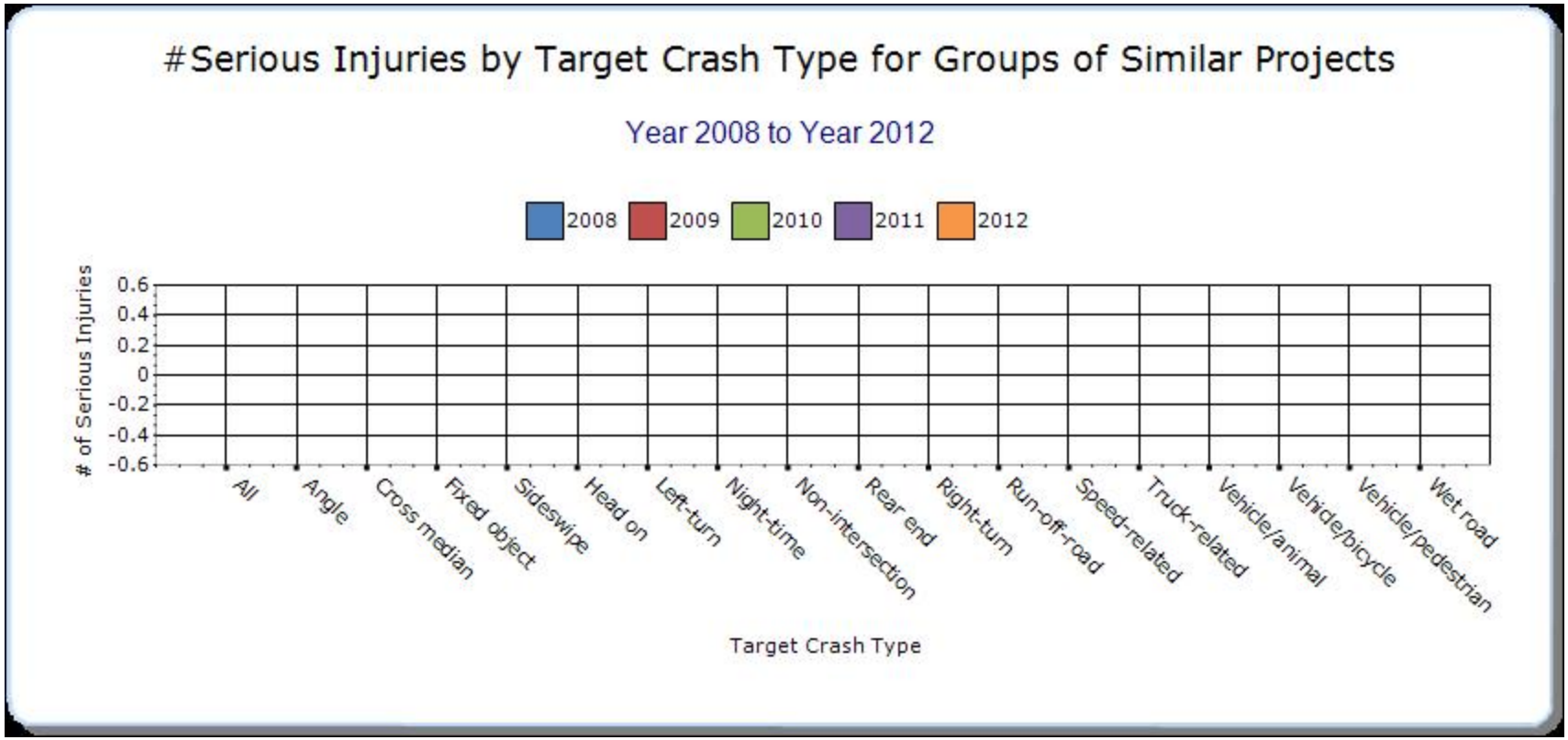
Groups of similar project types

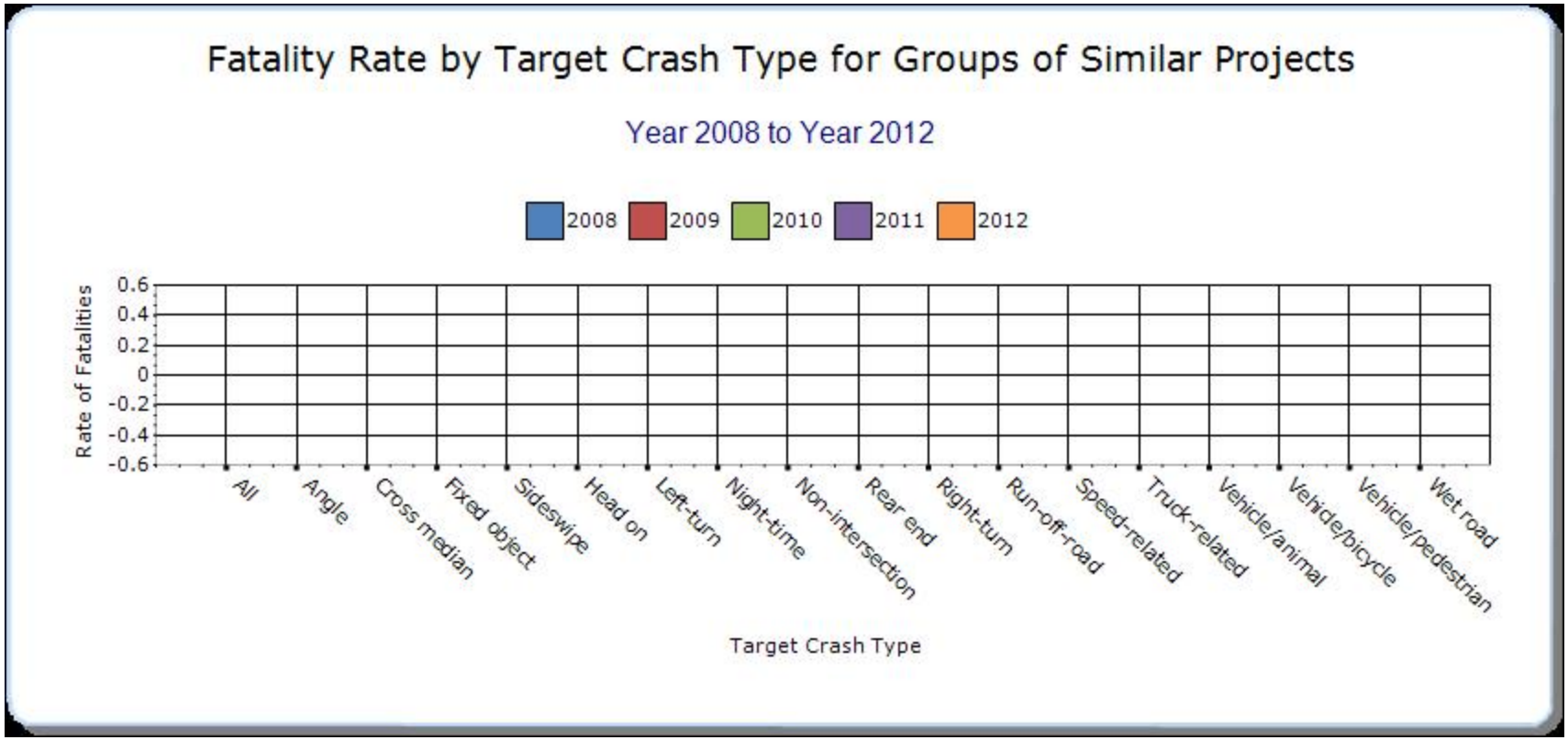
Present the overall effectiveness of groups of similar types of projects.

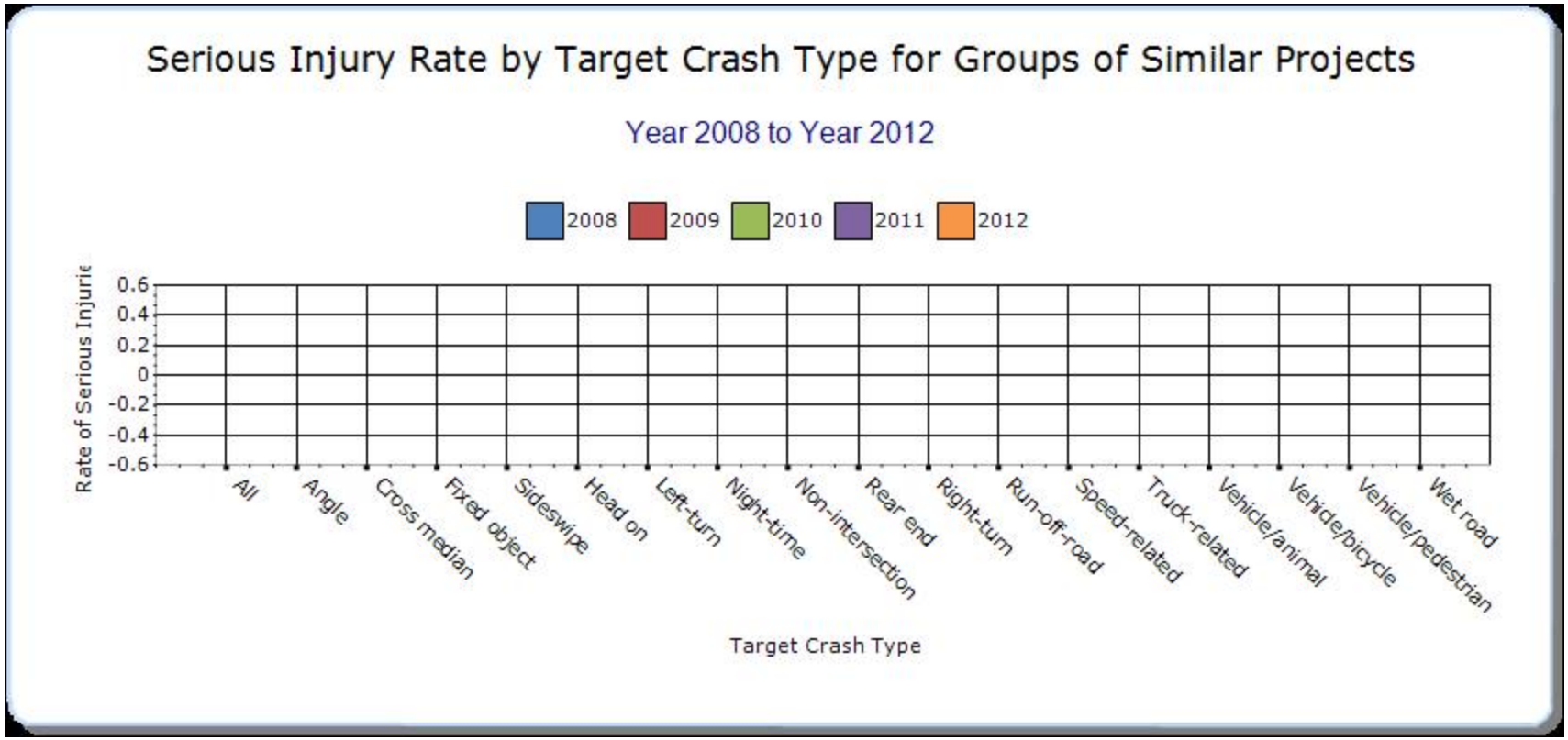
Year - 2012

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
Other-High Risk Rural Roads		**65**	**68**	**0.09**	**0.09**	**0**	**0**	**0**
Intersection		133	394	0.18	0.53	0	0	0
Roadway Departure		46	113	0.06	0.15	0	0	0
Left Turn Crash		20	39	0.03	0.05	0	0	0
Local Safety		229	723	0.03	1	0	0	0
Safe Corridor		25	35	0.03	0.04	0	0	0
Segments		4	1	0	0.01	0	0	0
Pedestrian Safety		126	232	0.17	0.31	0	0	0
Right Angle Crash		42	164	0.06	0.22	0	0	0


Fatalities by Target Crash Type for Groups of Similar Projects
Year 2008 to Year 2012
2008
2009
2010
2011
2012
# of Fatalities
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
All
Angle
Cross median
Fixed object
Sideswipe
Head on
Left-turn
Night-time
Non-intersection
Rear end
Right-turn
Run-off-road
Speed-related
Truck-related
Vehicle/animal
Vehicle/bicycle
Vehicle/pedestrian
Wet road
Target Crash Type


#Serious Injuries by Target Crash Type for Groups of Similar Projects
Year 2008 to Year 2012
2008
2009
2010
2011
2012
# of Serious Injuries
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
All
Angle
Cross median
Fixed object
Sideswipe
Head on
Left-turn
Night-time
Non-intersection
Rear end
Right-turn
Run-off-road
Speed-related
Truck-related
Vehicle/animal
Vehicle/bicycle
Vehicle/pedestrian
Wet road
Target Crash Type


Fatality Rate by Target Crash Type for Groups of Similar Projects
Year 2008 to Year 2012
2008
2009
2010
2011
2012
Rate of Fatalities
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
All
Angle
Cross median
Fixed object
Sideswipe
Head on
Left-turn
Night-time
Non-intersection
Rear end
Right-turn
Run-off-road
Speed-related
Truck-related
Vehicle/animal
Vehicle/bicycle
Vehicle/pedestrian
Wet road
Target Crash Type

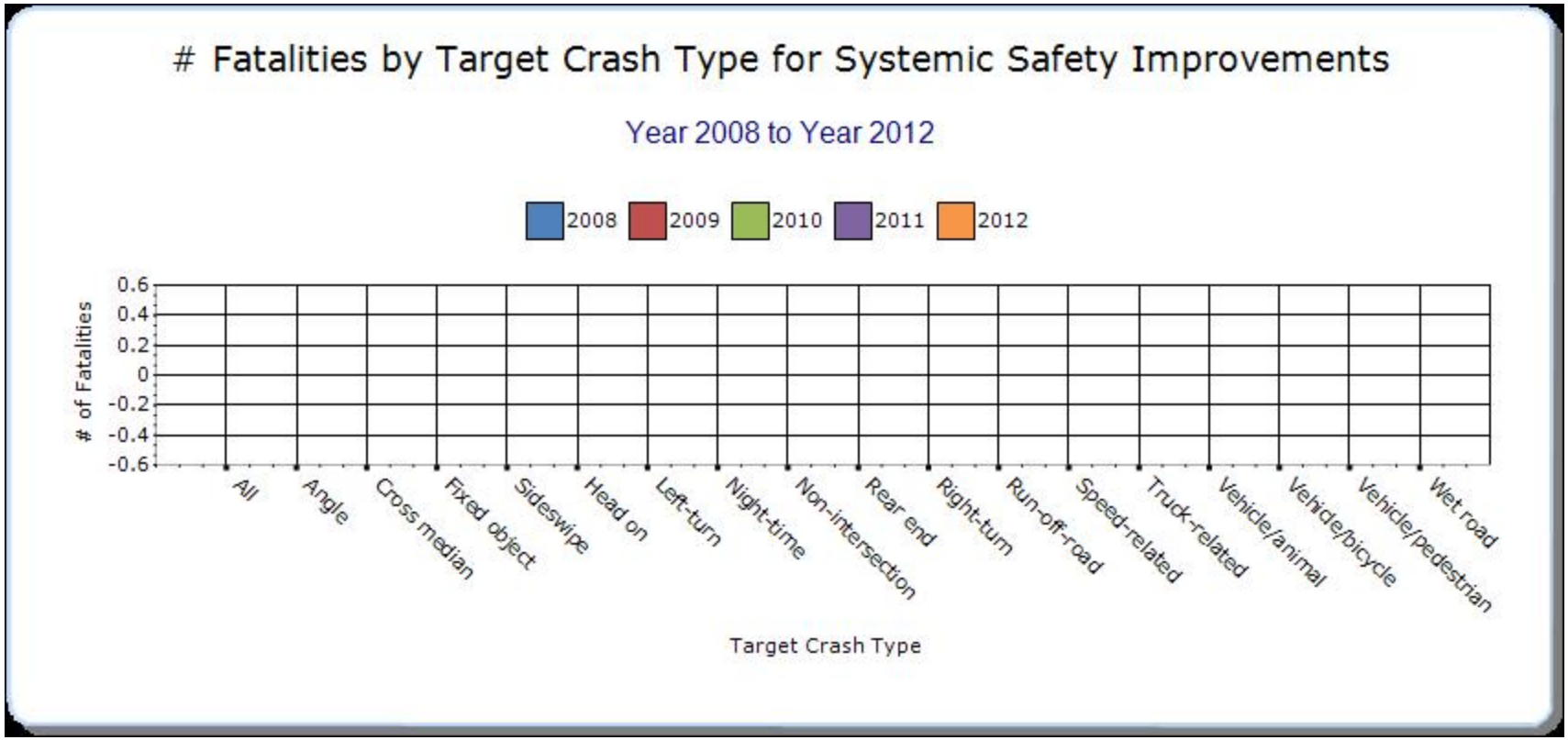

Serious Injury Rate by Target Crash Type for Groups of Similar Projects
Year 2008 to Year 2012
2008
2009
2010
2011
2012
Rate of Serious Injurie
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
All
Angle
Cross median
Fixed object
Sideswipe
Head on
Left-turn
Night-time
Non-intersection
Rear end
Right-turn
Run-off-road
Speed-related
Truck-related
Vehicle/animal
Vehicle/bicycle
Vehicle/pedestrian
Wet road
Target Crash Type

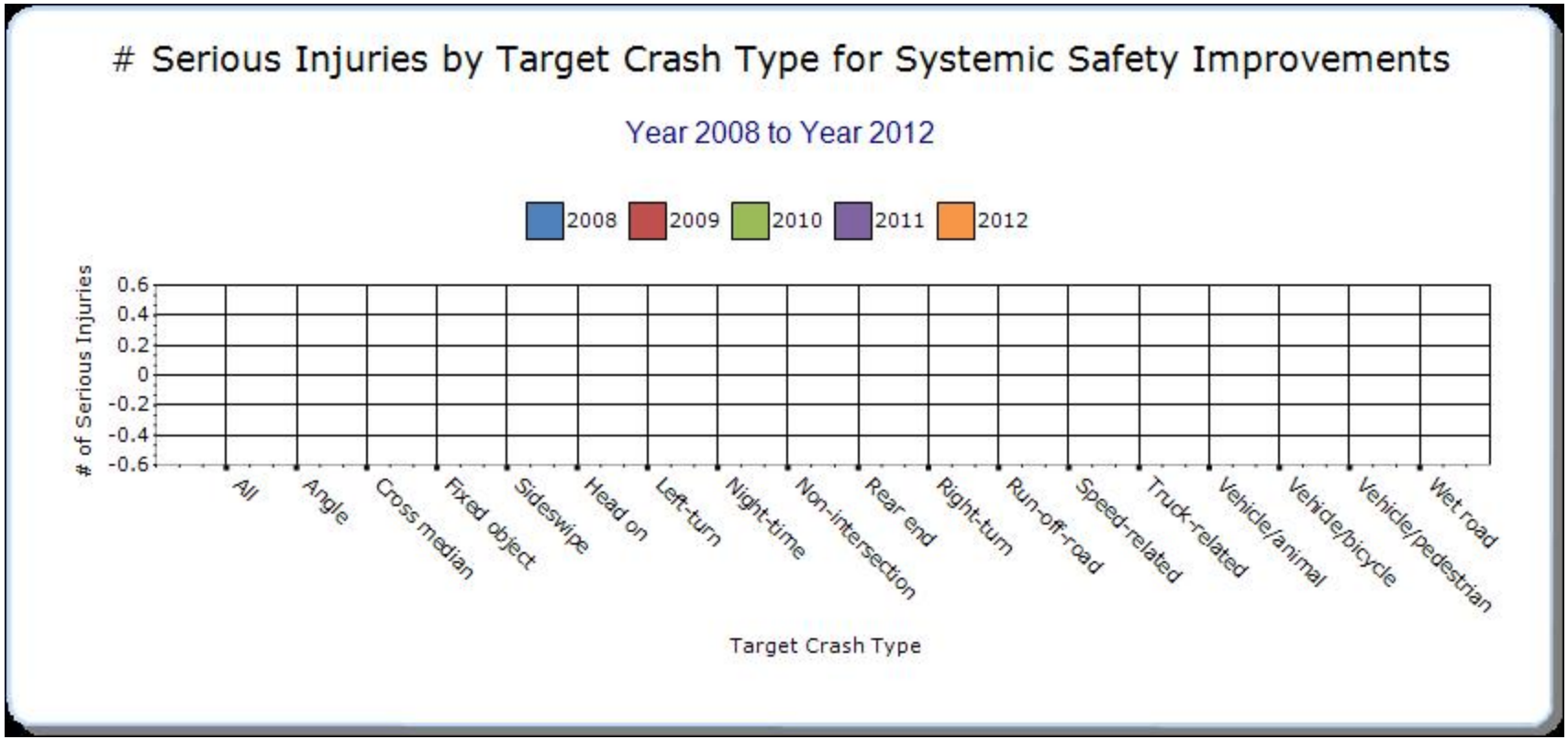
Systemic Treatments

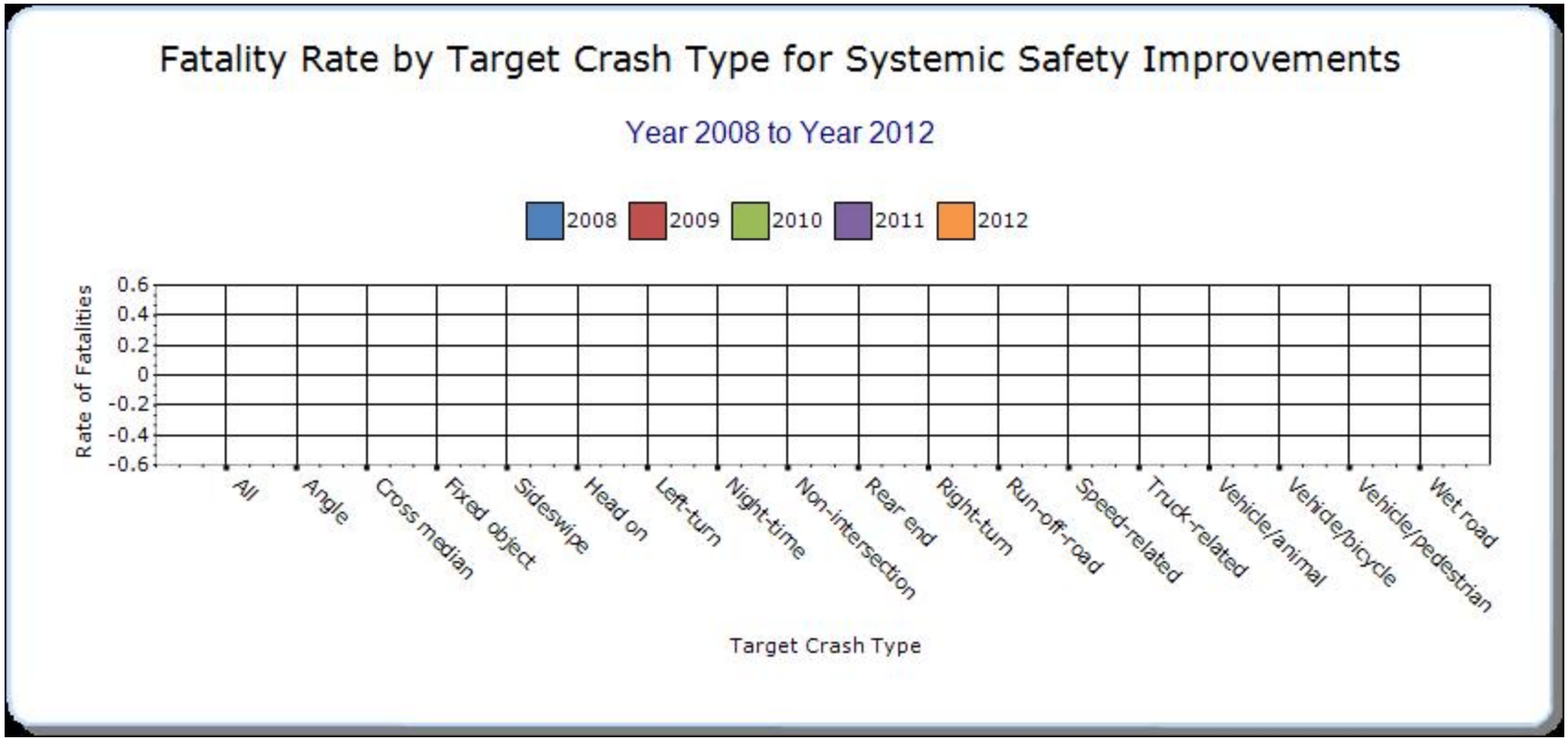
Present the overall effectiveness of systemic treatments..

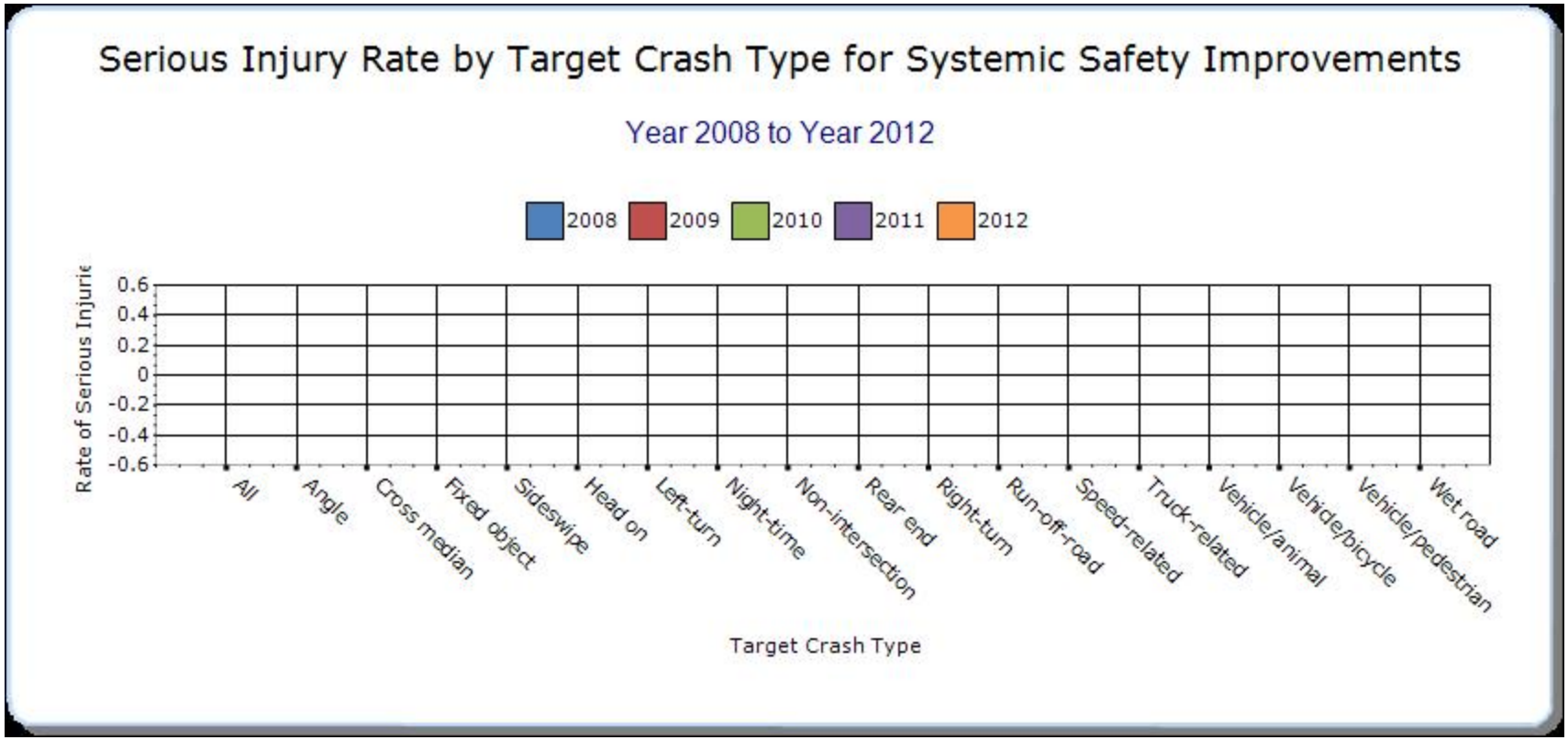
Year - 2012

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
		0	0	0	0	0	0	0


Fatalities by Target Crash Type for Systemic Safety Improvements
Year 2008 to Year 2012
2008
2009
2010
2011
2012
# of Fatalities
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
All
Angle
Cross median
Fixed object
Sideswipe
Head on
Left-turn
Night-time
Non-intersection
Rear end
Right-turn
Run-off-road
Speed-related
Truck-related
Vehicle/animal
Vehicle/bicycle
Vehicle/pedestrian
Wet road
Target Crash Type


Serious Injuries by Target Crash Type for Systemic Safety Improvements
Year 2008 to Year 2012
2008
2009
2010
2011
2012
# of Serious Injuries
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
All
Angle
Cross median
Fixed object
Sideswipe
Head on
Left-turn
Night-time
Non-intersection
Rear end
Right-turn
Run-off-road
Speed-related
Truck-related
Vehicle/animal
Vehicle/bicycle
Vehicle/pedestrian
Wet road
Target Crash Type


Fatality Rate by Target Crash Type for Systemic Safety Improvements
Year 2008 to Year 2012
2008
2009
2010
2011
2012
Rate of Fatalities
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
All
Angle
Cross median
Fixed object
Sideswipe
Head on
Left-turn
Night-time
Non-intersection
Rear end
Right-turn
Run-off-road
Speed-related
Truck-related
Vehicle/animal
Vehicle/bicycle
Vehicle/pedestrian
Wet road
Target Crash Type


Serious Injury Rate by Target Crash Type for Systemic Safety Improvements
Year 2008 to Year 2012
2008
2009
2010
2011
2012
Rate of Serious Injurie
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
All
Angle
Cross median
Fixed object
Sideswipe
Head on
Left-turn
Night-time
Non-intersection
Rear end
Right-turn
Run-off-road
Speed-related
Truck-related
Vehicle/animal
Vehicle/bicycle
Vehicle/pedestrian
Wet road
Target Crash Type

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

Roadway Departure* - It was instructed by the guidance that “Property Damage = Utility Pole” be used as the criteria, but due to how the NJTR-1 is written, and how crash data is collected in New Jersey, a more accurate way to capture the Utility Pole crashes are using the four sequence of events involving a utility pole for any crash. This accurately pulls the crashes that involved utility poles.

Provide project evaluation data for completed projects (optional).

Location	Functional Class	Improvement Category	Improvement Type	Bef-Fatal	Bef-Serious Injury	Bef-Other Injury	Bef-PDO	Bef-Total	Aft-Fatal	Aft-Serious Injury	Aft-Other Injury	Aft-PDO	Aft-Total	Evaluation Results (Benefit/ Cost Ratio)

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.

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.