Highway Safety Improvement Program

Data Driven Decisions

Wisconsin
Highway Safety Improvement Program
2013 Annual Report

Prepared by: WI

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 following report outlines the details of projects obligated in SFY2013 for Wisconsin's Highway Safety Improvement Program. Also included are program methodologies, historical crash data and safety trends, information on subprograms, and project evaluation data.

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.

HSIP applications from local governments are solicited by the Regions as part of the regular HSIP Program. All applications derived from local governments are selected and submitted voluntarily by local governments. Projects on the local system or sponsored by local governments must meet the same requirements and follow the same process as HSIP applications submitted by WisDOT Regions for improvements on the State Trunk Network. Exceptions to this equal competition requirement are local projects identified on the Local 5% Report. Local 5% Report projects follow a different set of requirements that streamline the

approval process and allows the state's most severe locations to be addressed appropriately. The Local 5% Report will not be continued after Wisconsin's State Fiscal Year 2014 due to its elimination in MAP-21.

In addition, Wisconsin has decided to continue to move forward in implementing a data-driven High Risk Rural Roads Program (HRRRP) despite its formal elimination in MAP-21. Wisconsin has developed a statewide data analysis methodology that will allow the focused use of safety funding to improve eligible segments on county rural roads exhibiting particular run-off-road non-intersection crash issues. A primary goal of the HRRRP is to install low-cost safety treatments on these roadways to mitigate KA crash rates as quickly as possible. It is unlikely these county trunk highways would receive federal investments outside of the HRRRP.

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.

The HSIP Program is managed by WisDOT's Division of Transportation Investment Management (DTIM) and the Bureau of State of Highway Programs (BSHP). DTIM/BSHP makes all final application approvals or denials and related project change or cost increase requests. However, DTIM/BSHP coordinates its efforts with several internal partners that both directly and indirectly influence the decision making process. Below is a summary of these partners and their role in the program.

- Division of Motor Vehicles (DMV): DMV receives, edits, and maintains all law enforcement

crash report files.

- Traffic Safety Council (TSC): The TSC is comprised of representatives from Division of Transportation System Development (DTSD), DTIM, DMV, Division of State Patrol (DSP), and various Executive Offices. This group is charged with developing and maintaining the Wisconsin Strategic Highway Safety Plan (SHSP), which helps guide the safety efforts of the HSIP Program. The TSC is currently updating the SHSP for theWisconsin Transportation Secretary's approval by March of 2014.

- Safety Engineer Executive Group (SEEG): This is a high-level group comprised of representatives from DTSD and DTIM management. Its focus is to identify safety trends and issues to develop and offer direction and initiatives to both the HSIP Program and the TSC on important safety engineering issues throughout the state.

- Traffic Safety Engineering Workgroup (TSEWG): TSEWG is comprised of the State HSIP Coordinator, State Traffic Safety Engineer, and the Regional Traffic Safety Engineers. In some cases, the Regional HSIP Coordinators also participate. This group identifies and evaluates potential safety initiatives both within and outside of the HSIP Program, provides peer support, and reviews proposed HSIP projects. After a group evaluation, a recommendation to approve or not approve is forwarded to the State HSIP Coordinator for final review.

- State Project Oversight Engineers: The State Project Oversight Engineers are a critical component of the joint process with the TSEWG for application review and approval. The DTSD State Project Oversight Engineers, Regional Traffic Safety Engineers, the State Traffic Safety Engineer, and the State HSIP Coordinator will provide a consensus approval or disapproval of HSIP funding after a comprehensive in-person peer review. Each Region has one Project Oversight Engineer. State Project Oversight Engineers only review applications originating from the Region in which they are assigned. This consensus approval or disapproval is advisory to DTIM/BSHP.

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

☐ Metropolitan Planning Organizations

☐ Governors Highway Safety Office

☐ Local Government Association

☒ Other: Other-University of Wisconsin-Madison's Traffic Operations and Safety Laboratory (UW TOPS Lab)

☒Other: Other-FHWA

☒Other: Other-LTAP/Individual counties and municipalities

The HSIP Program is managed by WisDOT's Division of Transportation Investment Management (DTIM). However, DTIM coordinates its efforts with several external partners that both directly and indirectly impact program outcomes and results. Below is a summary of these partners' roles.

- University of Wisconsin-Madison Traffic Operations and Safety Laboratory (UW TOPS Lab): The UW TOPS Lab receives a copy of all law enforcement crash reports (MV4000s) from DMV and maintains a web access portal (WisTransPortal) with all crash reports made available for analysis purposes. UW TOPS Lab also performs safety data analysis and provides review and report enereation for a number of groups related to HSIP. They are also participants in the Traffic Safety Council, Safety Engineering Executive Workgroup, and the Traffic Safety Engineers Workgoup. In addition, UW TOPS Lab performs an annual evaluation of of the program through an extensive benefit-cost analysis. This evaluation provides insight into the effectiveness of the HSIP Program in Wisconsin.

- FHWA: FHWA coordinate and advises key groups involved in the HSIP process through participation in the Traffic Safety Council, Safety Engineering Executive Group, and the Traffic Safety Engineers Workgroup.

- LTAP: Wisconsin's LTAP, the Wisconsin Transportation Information Center, coordinates various education and outreach sessions throughout the state and electronically for local governments to familiarize themselves with various aspects of HSIP and traffic safety engineering in general.

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-Use of in-person meetings for faster approval timelines

☒Other: Other-Implementation of biannual application deadlines

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

WisDOT makes continuous efforts to strengthen the administration and implementation of the HSIP Program. Several changes made since the last reporting period are:

1. Use of in-person meetings to streamline the application approval/disapproval process.
2. Formal adoption of biannual application deadlines (mid-August and mid-February)
3. Adjustment of Project Evaluation Factor crash values to better align with Highway Safety Manual
4. Development and implementation of data-driven statewide High Risk Rural Roads Program.

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-Beam Guard

"Programs" determined to be those HSIP subprograms that are subject to different project selection methodology and data analysis than the "standard" HSIP project selection methodology and process.

Program: **Median Barrier**

Date of Program Methodology: **1/1/2005**

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-All CMC	☒ 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-Non-competitive application process

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

☐ Cost Effectiveness

☒ CMC crash rate threshold 2

Program: **Other-Beam Guard**

Date of Program Methodology: **8/22/2011**

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-Guardrail end inventory	☒ 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

☒ Other-Guardrail end inventory

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-Non-competitive application process

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

☐ Cost Effectiveness

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

8

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

☐ Clear Zone Improvements

☐ Safety Edge

☐ Install/Improve Lighting

☒ Add/Upgrade/Modify/Remove Traffic Signal

☐ 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: Other-Align monetary crash values used in analysis with Highway Safety Manual

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

Project Evaluation Factor (PEF)

The PEF is a tool for ranking the relative merits of a group of projects, and should not be compared to a benefit/cost analysis.

Accident reduction benefits are one of the elements needed to justify infrastructure projects for the HSIP program. Establishing **values** associated with loss of life and quality of life is obviously very challenging. When developing values related to various types of crashes, it is necessary to consider, among other things, the available data regarding crash values, the relative causes of different types of crashes and the ability of traditional treatment options to

address safety issues. Following identification of crash problems, and treatment solutions, projects are compared on a relative basis so that funding decisions can be made.

The following **values per crash** are to be used in the *Excel* spreadsheet program for estimating various types of crash reductions:

Property damage crashes	**10,000.**
Possible injury (Type C) crashes	**50,000.**
Non-incapacitating injury (Type B) crashes	**200,000.**
Each iIncapacitating injury (Type A) crash	**200,000.**
Multiple incapacitating injury (Type A)	**230,000.**
Each incapacitating injury (Type A) crash in combination with one or more Fatal crash/es	**230,000.**
Fatal crash	**200,000.**
Multiple fatal crashes	**250,000.**

The "Multiple incapacitating injury (Type A) crashes," "Each incapacitating injury (Type A) crash in combination with one or more Fatal crash/es," and "Multiple fatal crashes" crash severity

values are triggered if the multiple or combination scenarios occur at any point throughout the required five year analysis period.

The current values used within the PEF calculation are influenced by the Highway Safety Manual (HSM) developed by the American Association of State Highway and Transportation Officials (AASHTO). The above crash severity values are adjusted to approximate 2011 dollars using the Consumer Price Index, correlating to the most recent year of available crash data.

Although Wisconsin designs solutions to reduce all crashes, a number of targeted engineering, educational and enforcement efforts have been implemented with the defined goal of reducing crashes involving serious injuries and fatalities. Because of this focus on reducing serious injuries and fatalities, the PEF scoring mechanism assigns higher values to reoccurring Type A and Fatal crashes.

An Excel spreadsheet program is available that performs a safety project analysis and computes the PEF. It should be used for all standard HSIP projects, except for minor installations of safety hardware, such as beam guard, impact attenuators, etc. Operational costs should be included in the computations for signal projects. It is critical appropriate reduction factors are used to calculate PEFs. More information on the use of reduction factors is below.

Projects require a PEF of 1.0 or greater for approval. Projects treating 5% locations require a PEF of 0.50 or greater for approval. After a project is approved, all project funding increase requests for projects over $200,000 in total costs must include a recalculated PEF spreadsheet. The recalculated PEF should be greater than or equal to 1.0 to receive cost increase approval consideration.

All data fields should be inputted to ensure accurate and consistent PEF calculations across projects. The most recent five years of available crash data is required.

Construction, such as intersections, left turn storage lanes and geometric improvements, requires justification with a PEF. Traffic signals must meet warrants in addition to having a favorable PEF.

The following additional information and guidance is provided for the Regions and local officials on how to use the crash data.

1. Rather than use typical reduction factors for various types of improvements in the spreadsheet, the following more site-specific approach should be used:

a. Gather all crash reports from the most recent 5 year period for the site under consideration. Local officials are required to submit this information.

b. Plot collision diagrams (include all crashes except deer hits). Locals provide for their requests.

c. Identify those crashes that likely would have been avoided if the proposed safety improvement had been constructed.

d. Estimate what percentage of those crashes, by crash type, would be reduced by constructing the proposed improvement and enter that percentage on the spreadsheet. Use crash reduction factors found in the FHWA Crash Reduction Factors Desktop Reference.

e. The program will then compute the total crash reduction factor

2. To aid Regions in identifying exceptionally hazardous locations, average crash rates for sections of various types of streets and highways, and average intersection crash rates will be provided

Program Approval

Program approval is a joint process between the Regional Safety Engineers, the Statewide Traffic Safety Engineer, applicable Project Oversight Engineers, and the Statewide HSIP Coordinator. These individuals together comprise the HSIP Review Committee and are advisory to BSHP.

Efforts will be made to streamline the approval process by gathering all members of the HSIP Review Committee at in-person HSIP Application Review Meetings after the Standard or Mid-Cycle HSIP application deadline. These meetings will serve as a comprehensive peer review and ultimately provide a consensus approval or disapproval of application submittals.

HSIP applications occasionally require a "tabling" to allow time for further review led by the application's primary Regional Safety Engineer contact. Depending on the timeline of the work, efforts to generate a HSIP Review Committee consensus approval or disapproval on the subject application will occur over email or at the next bi-monthly TSEWG meeting.

BSHP will distribute the HSIP approval memos containing a regional HSIP project listings and FIIPS loading instructions to the Regions for implementation as soon as possible after approval.

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)	31732187	86 %	31637254	86 %
HRRRP (SAFETEA-LU)	610105	2 %	610105	2 %
HRRR Special Rule				
Penalty Transfer - Section 154				
Penalty Transfer – Section 164	744200	2 %	744200	2 %
Incentive Grants - Section 163				
Incentive Grants (Section 406)				
Other Federal-aid Funds (i.e. STP, NHPP)				
State and Local Funds	3658644	10 %	3648095	10 %

Totals	36745136	100%	36639654	100%

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

13 %

How much funding is obligated to local safety projects?

13 %

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

1 %

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

1 %

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.

1. A significant increase in federal funds in 2005 and again in 2012 has historically made it difficult to fully obligate available funding on projects that meet Wisconsin's high safety benefits standards outlined in the state's HSIP guidelines. Wisconsin has traditionally been hesitant to implement broad system-wide safety upgrades (e.g. blanket median barrier upgrade decisions, expansive sign inventories and replacements, etc.) with available HSIP funding due to the lack of data-supported evidence to justify such large expenses. As such, standalone projects that can feasibly demonstrate expected data-supported safety benefits have received funding priority. This makes it more difficult to quickly spend available increased funding levels. WisDOT is exploring options to better and more fairly integrate systemic-type safety treatments within the dynamics of the current process that is more focused on spot treatments.

2. The primary impediment to implementing the HSIP Program has been successfully incorporating natural project attrition into program planning to deliver a full HSIP Program that fully utilizes federal funding sources. Smaller projects (particularly on the local system) have traditionally experienced project delays with greater frequency than larger projects. This could be for a variety of reasons, like local governments' unfamiliarty with HSIP and federal rules and regulations, lack of priority on smaller projects, a HSIP project's interaction with larger tied projects that experience delays, etc. Issues are shared between state and local projects. WisDOT undertakes outreach and education efforts with local governments in conjunction with partners like the LTAP to ensure local governments are more familiar and comfortable with the HSIP and Federal-aid process at the onset of potential involvement. WisDOT has also adjusted application deadlines to better align with the realities of the chronology of project planning and development internally on WisDOT state projects. This will reduce the number of project delays and/or cancellations that ultimately affect HSIP federal obligation levels.

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

None.

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
1000-03-32	Roadside Roadside - other	0	930204	1033560	HSIP (Section 148)		0	0	VAR	Improving the design and operation of highway intersections	
1000-44-04	Advanced technology and ITS Advanced technology and ITS - other	0	55200	55200	Penalty Transfer – Section 164		0	0	VAR	Reducing head-on and across-median crashes	
1000-99-41	Non-infrastructure Transportation safety planning	0	145363	161515	HSIP (Section 148)		0	0	VAR	Improving information and decision support systems	
1000-	Non-infrastructure	0	127022	141136	HSIP		0	0	VAR	Improving	

99-53	Transportation safety planning				(Section 148)					information and decision support systems	
1001-03-74	Intersection geometry Intersection geometrics - miscellaneous/other/unspecified	0 Miles	1679931	1866590	HSIP (Section 148)		0	0	IH	Improving the design and operation of highway intersections	
1016-00-61	Roadside Roadside - other	0 Miles	238406	264896	HSIP (Section 148)		0	0	IH	Minimizing the consequences of leaving the road	
1016-00-63	Roadside Roadside - other	0 Miles	71539	79488	HSIP (Section 148)		0	0	IH	Minimizing the consequences of leaving the road	
1016-00-72	Roadside Roadside - other	0 Miles	823500	915000	HSIP (Section 148)		0	0	IH	Minimizing the consequences of leaving	

										the road	
1020-00-63	Roadside Roadside - other	132 Miles	1449519	1610576	HSIP (Section 148)		0	0	VAR	Minimizing the consequences of leaving the road	
1022-08-73	Roadside Roadside - other	6 Miles	85500	95000	HSIP (Section 148)		0	0	IH	Minimizing the consequences of leaving the road	
1050-00-64	Roadside Roadside - other	72 Miles	1291500	1435000	HSIP (Section 148)		0	0	VAR	Minimizing the consequences of leaving the road	
1070-03-71	Roadside Roadside - other	23 Miles	278100	309000	HSIP (Section 148)		0	0	IH	Minimizing the consequences of leaving the road	
1071-07-77	Roadside Roadside - other	6 Miles	281485	312761	HSIP (Section 148)		0	0	IH	Minimizing the consequences of leaving	

										the road	
1100-40-70	Roadside Roadside - other	26 Miles	1184288	1315875	HSIP (Section 148)		0	0	USH	Minimizing the consequences of leaving the road	
1133-03-71	Roadside Roadside - other	1 Miles	533555	592839	HSIP (Section 148)		0	0	USH	Minimizing the consequences of leaving the road	
1170-01-70	Roadside Roadside - other	0 Miles	7163	7959	HSIP (Section 148)		0	0	USH	Minimizing the consequences of leaving the road	
1170-01-73	Roadside Roadside - other	1 Miles	91320	101467	HSIP (Section 148)		0	0	USH	Minimizing the consequences of leaving the road	
1178-08-60	Roadside Roadside - other	14 Miles	135083	150092	HSIP (Section 148)		0	0	USH	Minimizing the consequences of leaving	

										the road	
1190-00-63	Access management Median crossover - unspecified	151 Miles	1789055	1987839	HSIP (Section 148)		0	0	VAR	Minimizing the consequences of leaving the road	
1195-01-04	Roadway Roadway - other	0 Miles	22500	25000	HSIP (Section 148)		0	0	USH	Reducing head-on and across-median crashes	
1204-02-70	Roadside Roadside - other	0 Miles	1042200	1158000	HSIP (Section 148)		0	0	USH	Minimizing the consequences of leaving the road	
1209-01-76	Roadside Roadside - other	0 Miles	194400	216000	HSIP (Section 148)		0	0	USH	Minimizing the consequences of leaving the road	
1440-25-71	Access management Change in access - miscellaneous/unspecified	1 Miles	1350000	1500000	HSIP (Section 148)		0	0	STH	Reducing head-on and across-median	

										crashes	
1440-26-71	Access management Change in access - miscellaneous/unspecified	0 Miles	960692	1067436	HSIP (Section 148)		0	0	STH	Reducing head-on and across-median crashes	
1550-03-95	Advanced technology and ITS Advanced technology and ITS - other	0 Miles	26100	29000	HSIP (Section 148)		0	0	USH	Enhancing emergency medical capabilities to increase survivability	
1570-01-70	Intersection geometry Intersection geometrics - miscellaneous/other/unspecified	0 Miles	888300	987000	HSIP (Section 148)		0	0	USH	Improving the design and operation of highway intersections	
1602-13-70	Roadway Roadway - other	0 Miles	219862	244292	HSIP (Section 148)		0	0	USH	Minimizing the consequences of leaving the road	
1650-	Intersection geometry Intersection geometrics -	0	257580	286200	HSIP (Section		0	0	USH	Improving the design	

01-79	miscellaneous/other/unspecified	Miles			148)					and operation of highway intersections	
1670-03-71	Roadway delineation Roadway delineation - other	5 Miles	368220	409134	HSIP (Section 148)		0	0	USH	Minimizing the consequences of leaving the road	
2030-11-00	Intersection traffic control Intersection traffic control - other	0	45000	50000	HSIP (Section 148)		0	0	STH	Improving the design and operation of highway intersections	
2046-03-90	Intersection traffic control Intersection traffic control - other	0 Miles	22967	25519	HSIP (Section 148)		0	0	LOC	Improving the design and operation of highway intersections	
2049-00-70	Intersection traffic control Intersection traffic control -	0 Miles	71102	79002	HSIP (Section		0	0	LOC	Improving the design and	

	other				148)					operation of highway intersections	
2100-13-90	Intersection traffic control Intersection traffic control - other	0	36621	40690	HSIP (Section 148)		0	0	LOC	Improving the design and operation of highway intersections	
2100-13-91	Intersection traffic control Intersection traffic control - other	0	29256	32506	HSIP (Section 148)		0	0	USH	Improving the design and operation of highway intersections	
2155-03-00	Intersection traffic control Intersection traffic control - other	0	13500	15000	HSIP (Section 148)		0	0	LOC	Improving the design and operation of highway intersections	
2155-	Intersection traffic control Intersection traffic control -	0	36000	40000	HSIP (Section		0	0	STH	Improving the design	

03-01	other	Miles			148)					and operation of highway intersections	
2160-01-02	Intersection traffic control Intersection traffic control - other	0	94932	105481	HSIP (Section 148)		0	0	CTH	Improving the design and operation of highway intersections	
2265-03-06	Lighting Lighting - other	3 Miles	189000	210000	Penalty Transfer – Section 164		0	0	STH	Improving the design and operation of highway intersections	
2645-08-90	Intersection traffic control Intersection traffic control - other	0	14784	16427	HSIP (Section 148)		0	0	STH	Improving the design and operation of highway intersections	

2645-09-90	Intersection traffic control Intersection traffic control - other	0	53846	59829	HSIP (Section 148)		0	0	LOC	Improving the design and operation of highway intersections	
2718-01-02	Pedestrians and bicyclists Pedestrian signal	0	18000	20000	HSIP (Section 148)		0	0	LOC	Making walking and street crossing easier	
2718-01-03	Pedestrians and bicyclists Pedestrian signal	0	6300	7000	HSIP (Section 148)		0	0	VAR	Making walking and street crossing easier	
2718-09-01	Intersection traffic control Intersection traffic control - other	0 Miles	54000	60000	HSIP (Section 148)		0	0	NON	Improving the design and operation of highway intersections	
2967-00-96	Intersection traffic control Intersection traffic control -	0	166522	185024	HSIP (Section		0	0	LOC	Improving the design and	

	other				148)					operation of highway intersections	
2967-16-00	Pedestrians and bicyclists Pedestrian signal	0	54000	60000	HSIP (Section 148)		0	0	NON	Making walking and street crossing easier	
2984-08-05	Intersection traffic control Intersection traffic control - other	0	202500	225000	HSIP (Section 148)		0	0	NON	Improving the design and operation of highway intersections	
3140-00-71	Intersection geometry Intersection geometrics - miscellaneous/other/unspecified	0 Miles	81141	90157	HSIP (Section 148)		0	0	STH	Improving the design and operation of highway intersections	
4327-06-71	Intersection geometry Intersection geometrics - miscellaneous/other/unspec	0 Miles	72000	80000	HSIP (Section 148)		0	0	CTH	Improving the design and operation of	

	ified									highway intersections	
4494-06-71	Intersection traffic control Intersection traffic control - other	0 Miles	275862	362068	HSIP (Section 148)		0	0	CTH	Improving the design and operation of highway intersections	
4494-06-71	Intersection traffic control Intersection traffic control - other	0 Miles	500000	500000	HSIP (Section 148)		0	0	CTH	Improving the design and operation of highway intersections	
4685-12-71	Intersection geometry Intersection geometrics - miscellaneous/other/unspecified	1 Miles	1187730	1319700	HSIP (Section 148)		0	0	STH	Improving the design and operation of highway intersections	
4685-26-71	Intersection geometry Intersection geometrics - miscellaneous/other/unspec	0 Miles	142770	158633	HSIP (Section		0	0	STH	Improving the design and	

	ified				148)					operation of highway intersection s	
4984-18-71	Pedestrians and bicyclists Pedestrian signal	0	63000	70000	HSIP (Section 148)		0	0	NON	Making walking and street crossing easier	
4998-03-71	Intersection geometry Intersection geometrics - miscellaneous/other/unspecified	0 Miles	22050	24500	HSIP (Section 148)		0	0	LOC	Improving the design and operation of highway intersection s	
5020-05-71	Intersection geometry Intersection geometrics - miscellaneous/other/unspecified	0 Miles	630045	700050	HSIP (Section 148)		0	0	STH	Improving the design and operation of highway intersection s	
5096-00-71	Roadway Roadway - other	0 Miles	410105	455672	HRRRP (SAFETEA-LU)		0	0	CTH	Minimizing the consequences of leaving	

										the road	
5096-00-72	Roadway Roadway - other	0 Miles	200000	222222	HRRRP (SAFETEA-LU)		0	0	CTH	Minimizing the consequences of leaving the road	
5658-00-74	Intersection geometry Intersection geometrics - miscellaneous/other/unspecified	0 Miles	90803	100892	HSIP (Section 148)		0	0	CTH	Improving the design and operation of highway intersections	
5810-00-71	Roadway Roadway - other	1 Miles	1219586	1355095	HSIP (Section 148)		0	0	CTH	Minimizing the consequences of leaving the road	
6180-20-71	Intersection traffic control Intersection traffic control - other	0 Miles	130743	145270	HSIP (Section 148)		0	0	STH	Improving the design and operation of highway intersections	

6243-02-00	Roadway Roadway - other	0 Miles	49500	55000	HSIP (Section 148)		0	0	CTH	Minimizing the consequences of leaving the road	
6767-04-72	Intersection geometry Intersection geometrics - miscellaneous/other/unspecified	0 Miles	291155	323506	HSIP (Section 148)		0	0	CTH	Improving the design and operation of highway intersections	
6950-03-74	Roadway Roadway - other	0 Miles	324715	360795	HSIP (Section 148)		0	0	STH	Minimizing the consequences of leaving the road	
7090-02-90	Advanced technology and ITS Advanced technology and ITS - other	0 Miles	4500	5000	HSIP (Section 148)		0	0	USH	Enhancing emergency medical capabilities to increase survivability	
7210-00-75	Intersection geometry Intersection geometrics - miscellaneous/other/unspec	0 Miles	221928	246586	HSIP (Section 148)		0	0	USH	Improving the design and operation of	

	ified									highway intersections	
7220-01-01	Roadway Roadway - other	0 Miles	54000	60000	HSIP (Section 148)		0	0	STH	Minimizing the consequences of leaving the road	
7255-05-02	Access management Access management - other	0 Miles	52200	58000	HSIP (Section 148)		0	0	STH	Reducing head-on and across-median crashes	
7600-04-00	Intersection traffic control Intersection traffic control - other	0 Miles	2700	3000	HSIP (Section 148)		0	0	USH	Improving the design and operation of highway intersections	
7600-04-70	Intersection traffic control Intersection traffic control - other	0 Miles	112500	125000	HSIP (Section 148)		0	0	USH	Improving the design and operation of highway intersection	

										s	
7620-00-00	Advanced technology and ITS Advanced technology and ITS - other	0 Miles	92700	103000	HSIP (Section 148)		0	0	STH	Minimizing the consequences of leaving the road	
8010-07-74	Pedestrians and bicyclists Pedestrian signal	1 Miles	461349	512610	HSIP (Section 148)		0	0	STH	Making walking and street crossing easier	
8070-01-74	Intersection geometry Intersection geometrics - miscellaneous/other/unspecified	0 Miles	228200	253555	HSIP (Section 148)		0	0	USH	Improving the design and operation of highway intersections	
8070-01-75	Intersection geometry Intersection geometrics - miscellaneous/other/unspecified	0 Miles	201790	224211	HSIP (Section 148)		0	0	USH	Improving the design and operation of highway intersections	

8680-00-00	Intersection geometry Intersection geometrics - miscellaneous/other/unspecified	0 Miles	30515	33905	HSIP (Section 148)		0	0	USH	Improving the design and operation of highway intersections	
8865-00-03	Intersection geometry Intersection geometrics - miscellaneous/other/unspecified	0 Miles	28644	31826	HSIP (Section 148)		0	0	STH	Improving the design and operation of highway intersections	
8917-06-73	Roadway Roadway - other	0 Miles	361712	401903	HSIP (Section 148)		0	0	CTH	Minimizing the consequences of leaving the road	
8997-00-20	Intersection geometry Intersection geometrics - miscellaneous/other/unspecified	0	72000	80000	HSIP (Section 148)		0	0	LOC	Improving the design and operation of highway intersections	

9030-09-00	Intersection geometry Intersection geometrics - miscellaneous/other/unspecified	1 Miles	22500	25000	HSIP (Section 148)		0	0	STH	Improving the design and operation of highway intersections	
9200-04-71	Interchange design Interchange design - other	1 Miles	6628853	7365392	HSIP (Section 148)		0	0	STH	Improving the design and operation of highway intersections	
9200-05-71	Intersection geometry Intersection geometrics - miscellaneous/other/unspecified	0 Miles	353450	392722	HSIP (Section 148)		0	0	STH	Improving the design and operation of highway intersections	
9200-07-71	Intersection geometry Intersection geometrics - miscellaneous/other/unspecified	0 Miles	726313	807014	HSIP (Section 148)		0	0	STH	Improving the design and operation of highway intersection	

										s	

Progress in Achieving Safety Performance Targets

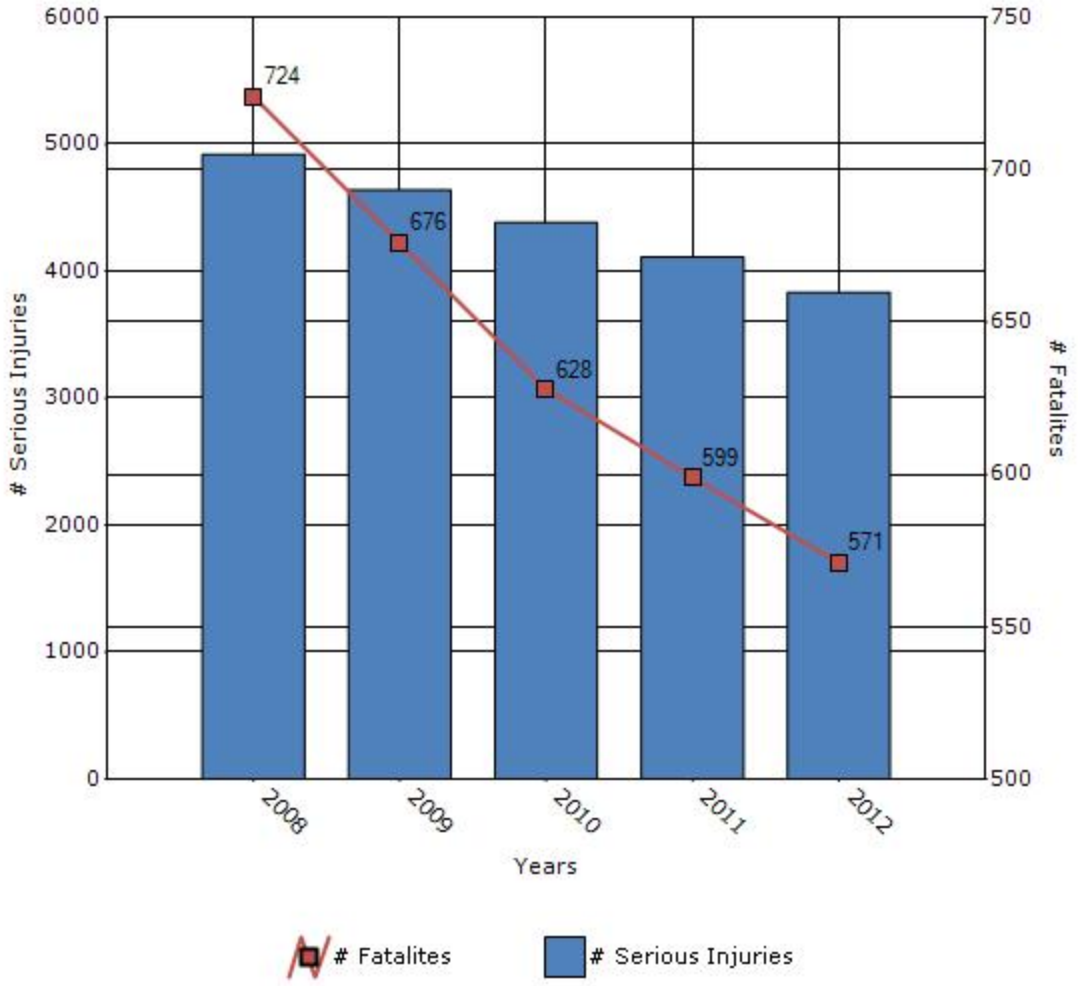
Overview of General Safety Trends

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

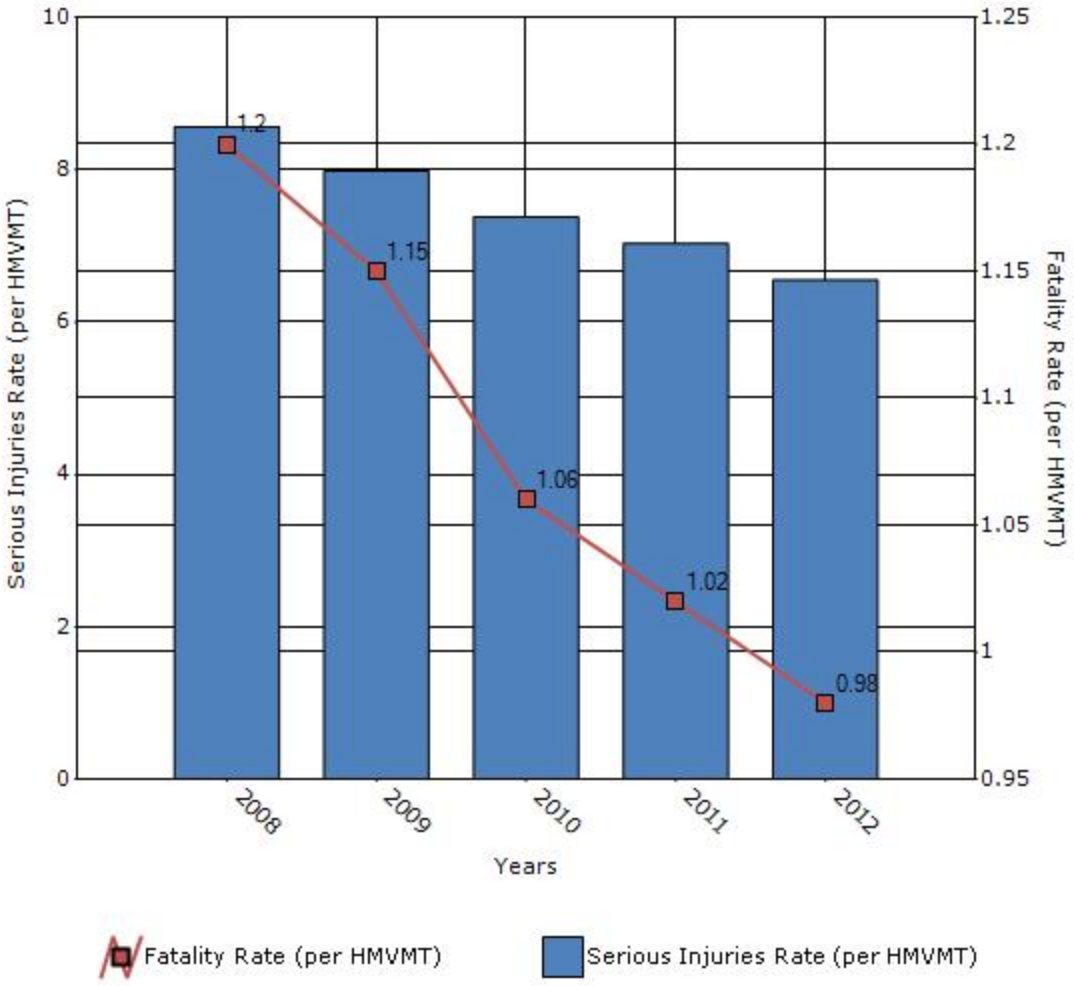
Performance Measures*	2008	2009	2010	2011	2012
Number of fatalities	724	676	628	599	571
Number of serious injuries	4920	4639	4382	4114	3834
Fatality rate (per HMVMT)	1.2	1.15	1.06	1.02	0.98
Serious injury rate (per HMVMT)	8.56	7.98	7.38	7.03	6.55

*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



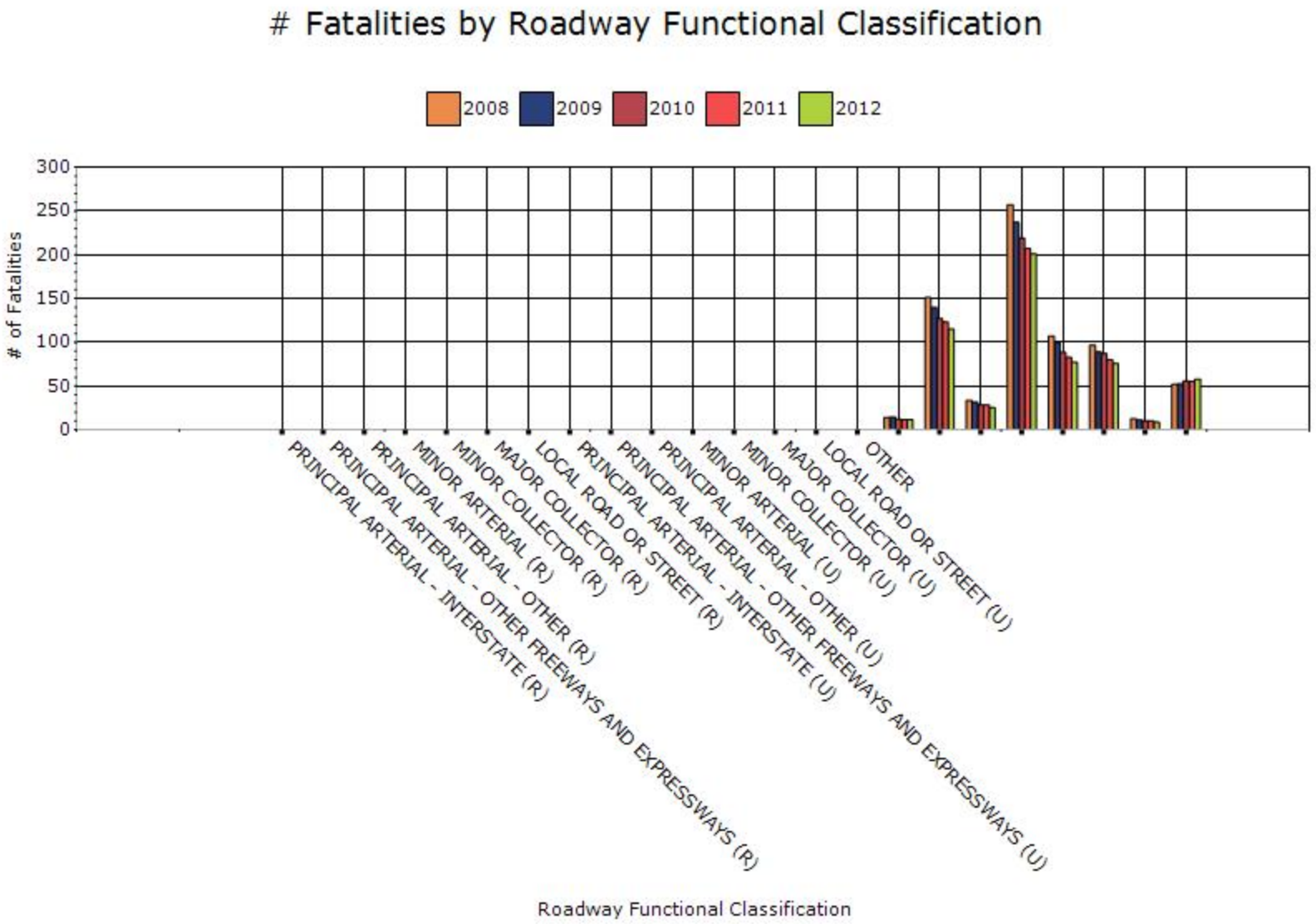
To the maximum extent possible, present performance measure* data by functional classification and ownership.

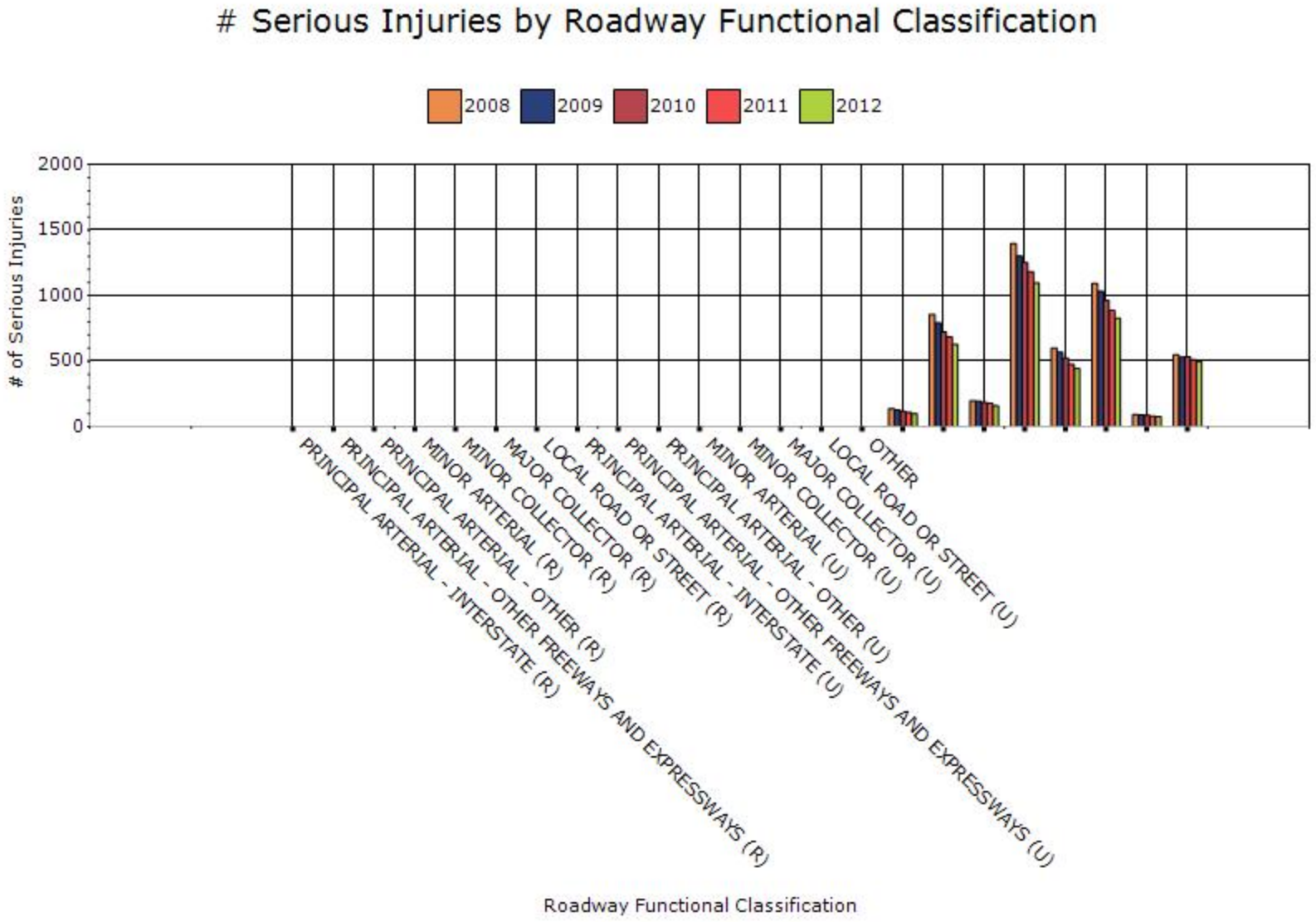
Year - 2012

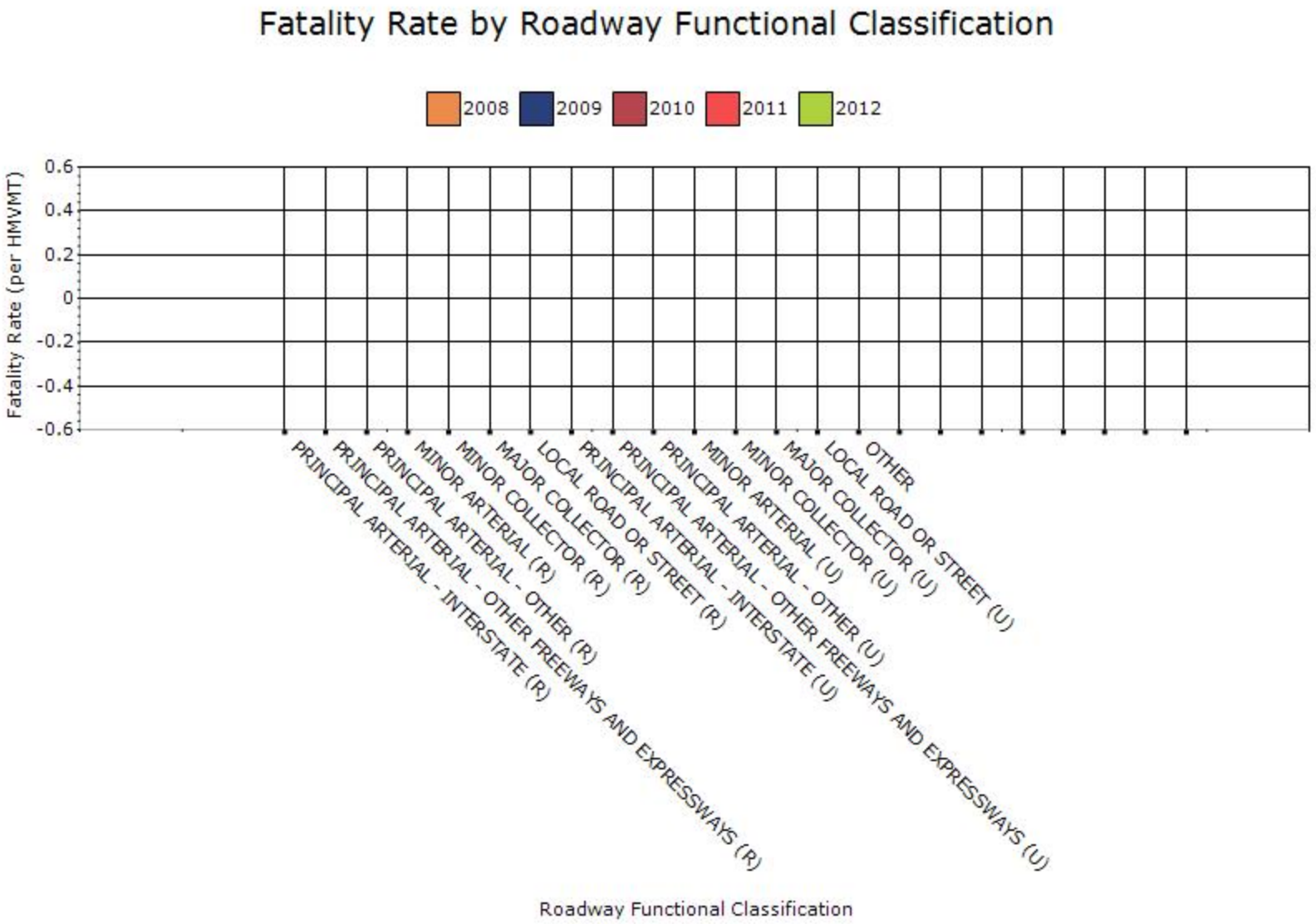
Function Classification	Number of fatalities	Number of serious injuries	Fatality rate (per HMVMT)	Serious injury rate (per HMVMT)
RURAL PRINCIPAL ARTERIAL - INTERSTATE	0	0	0	0
RURAL PRINCIPAL ARTERIAL - OTHER FREEWAYS AND EXPRESSWAYS	0	0	0	0
RURAL PRINCIPAL ARTERIAL - OTHER	0	0	0	0
RURAL MINOR ARTERIAL	0	0	0	0
RURAL MINOR COLLECTOR	0	0	0	0
RURAL MAJOR COLLECTOR	0	0	0	0
RURAL LOCAL ROAD OR STREET	0	0	0	0
URBAN PRINCIPAL	0	0	0	0

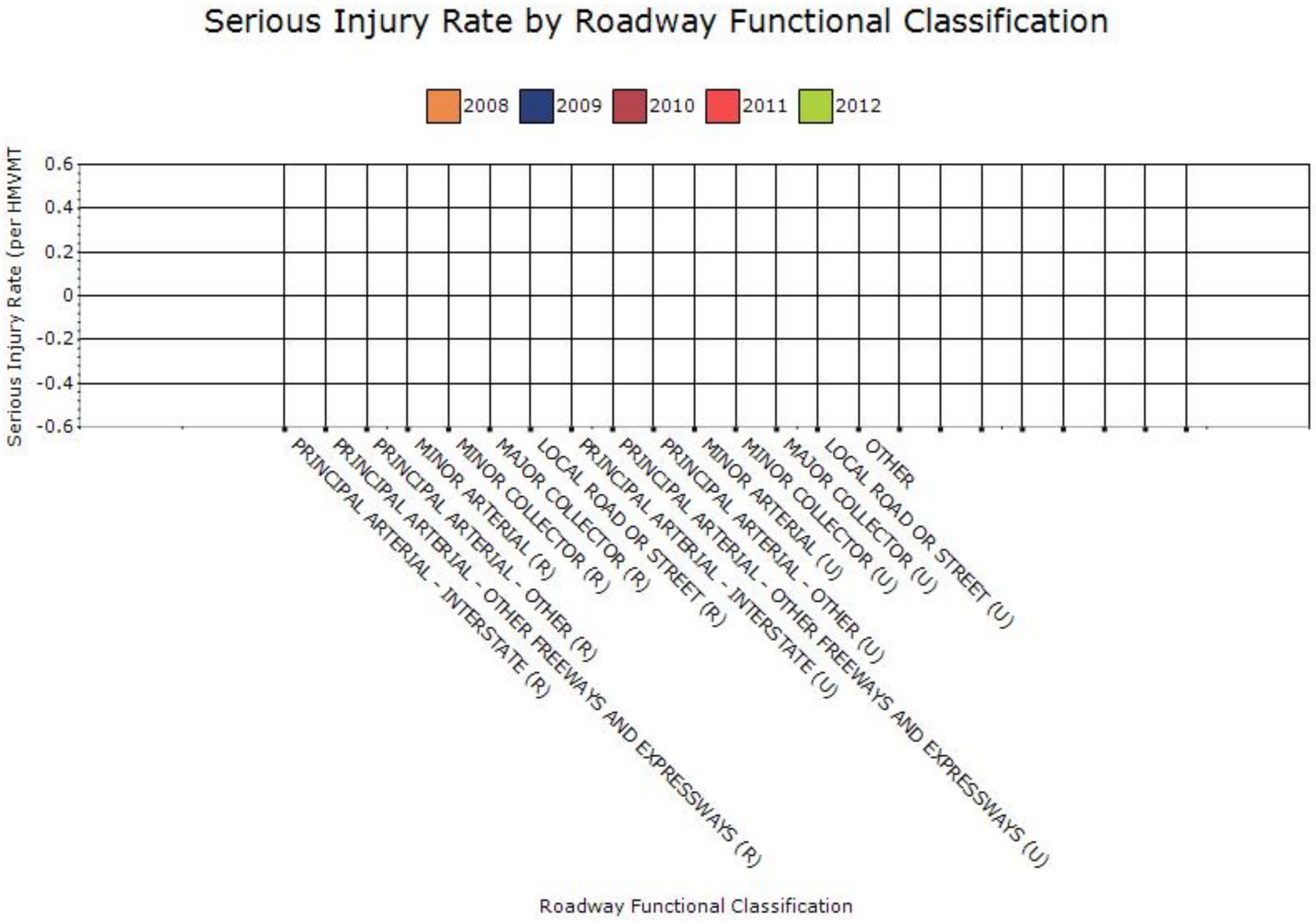
ARTERIAL - INTERSTATE				
URBAN PRINCIPAL ARTERIAL - OTHER FREEWAYS AND EXPRESSWAYS	0	0	0	0
URBAN PRINCIPAL ARTERIAL - OTHER	0	0	0	0
URBAN MINOR ARTERIAL	0	0	0	0
URBAN MINOR COLLECTOR	0	0	0	0
URBAN MAJOR COLLECTOR	0	0	0	0
URBAN LOCAL ROAD OR STREET	0	0	0	0
OTHER	0	0	0	0
RURAL CITY STREET	11.6	99.6	0	0
RURAL COUNTY TRUNK HIGHWAY	115	629.6	0	0
RURAL INTERSTATE HIGHWAY	25.2	159.2	0	0

RURAL STATE TRUNK HIGHWAY	201	1098	0	0
RURAL TOWN ROAD	77	444.2	0	0
URBAN CITY STREET	75.6	826.8	0	0
URBAN INTERSTATE HIGHWAY	8.6	78.2	0	0
URBAN STATE TRUNK HIGHWAY	57.8	498.2	0	0
URBAN STATE TRUNK HIGHWAY	57.8	498.2	0	0


Fatalities by Roadway Functional Classification
2008
2009
2010
2011
2012
# of Fatalities
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


Serious Injuries by Roadway Functional Classification
2008
2009
2010
2011
2012
# of Serious Injuries
2000
1500
1000
500
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

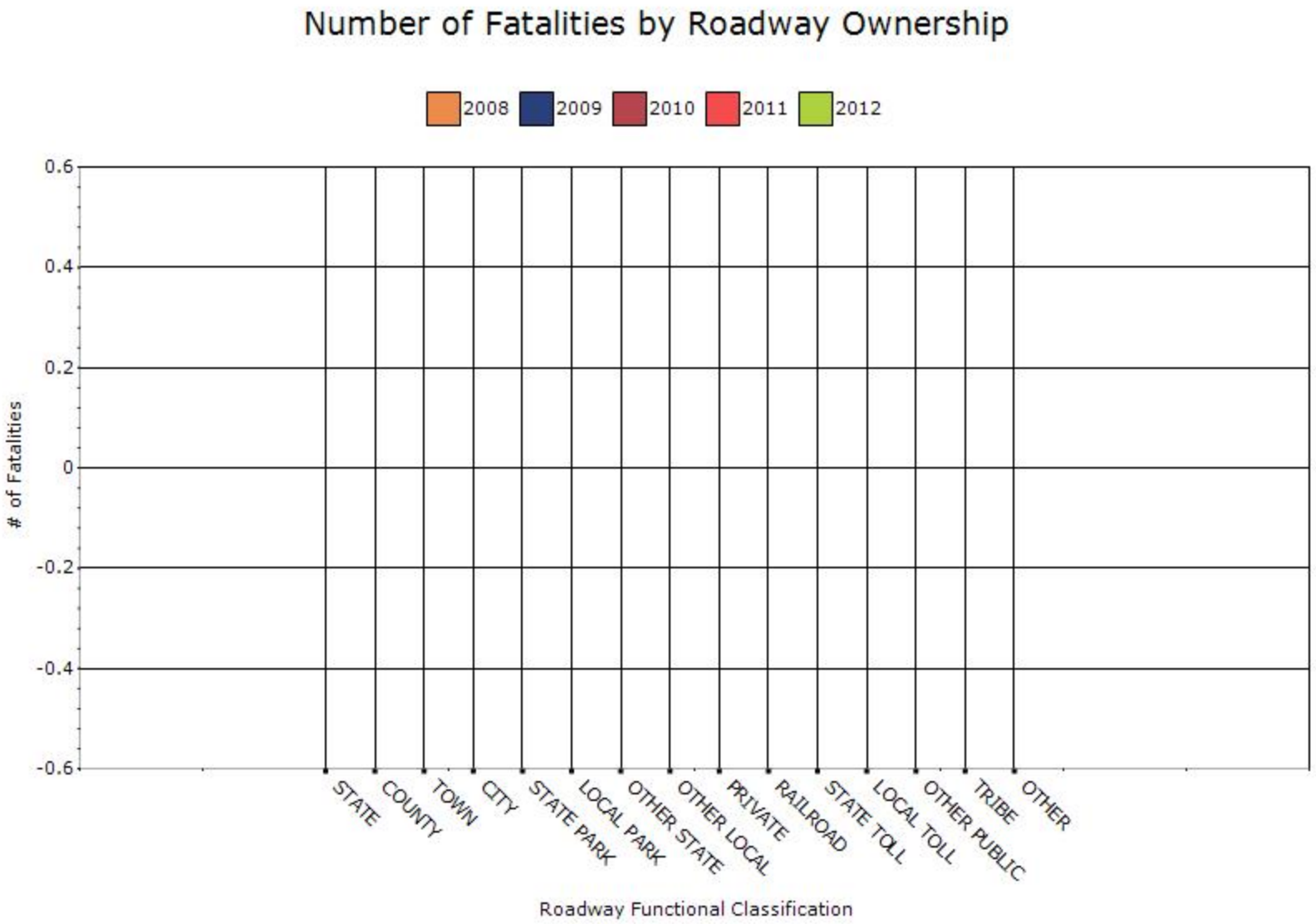

Fatality Rate by Roadway Functional Classification
2008
2009
2010
2011
2012
Fatality Rate (per HMVMT)
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
PRINCIPAL ARTERIAL - INTERSTATE (R)
PRINCIPAL ARTERIAL - OTHER FREEWAYS AND EXPRESSWAYS (R)
PRINCIPAL ARTERIAL - OTHER (R)
MINOR ARTERIAL (R)
MINOR COLLECTOR (R)
MAJOR COLLECTOR (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

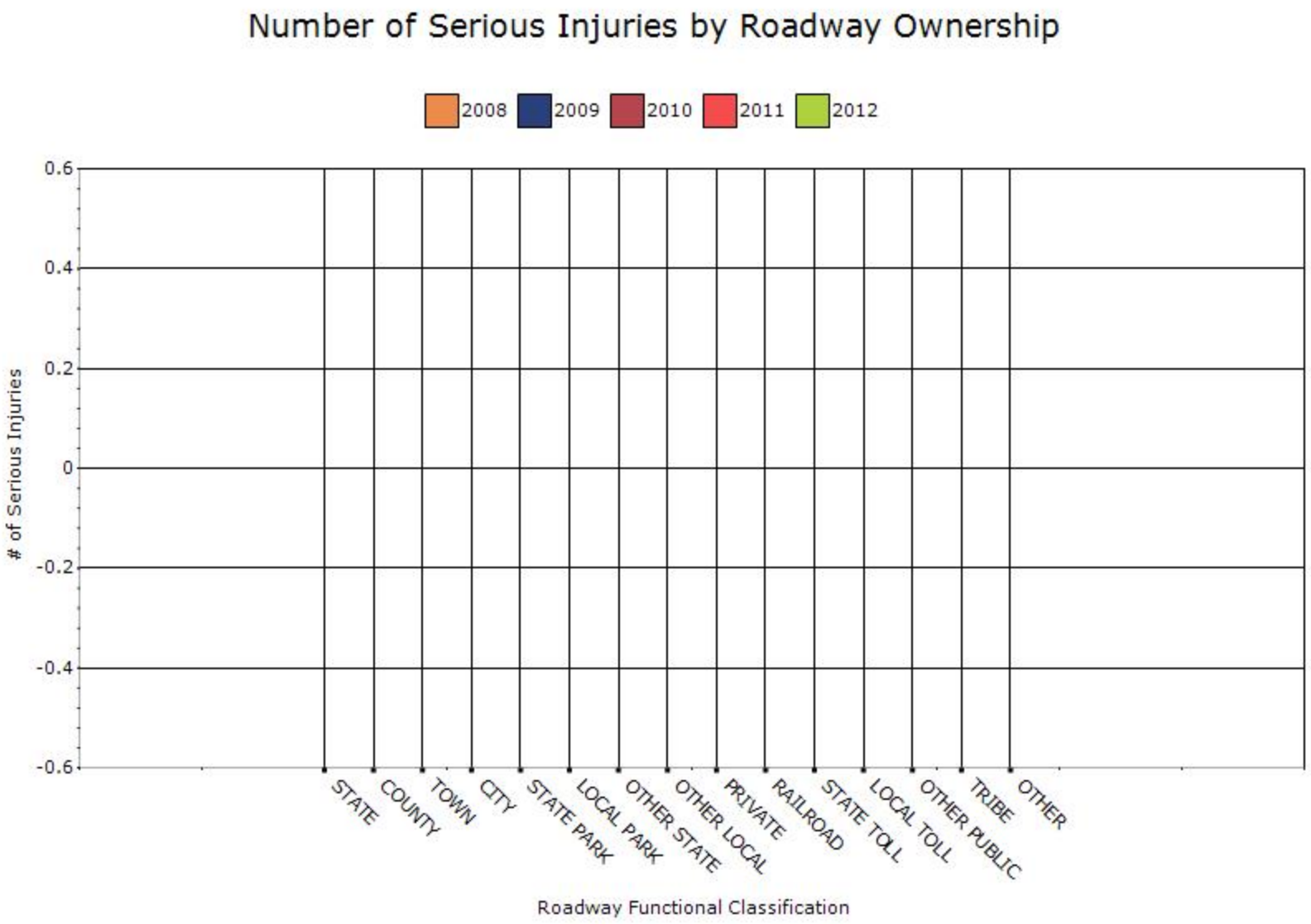

Serious Injury Rate by Roadway Functional Classification
2008
2009
2010
2011
2012
Serious Injury Rate (per HMVMT
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
PRINCIPAL ARTERIAL - INTERSTATE (R)
PRINCIPAL ARTERIAL - OTHER FREEWAYS AND EXPRESSWAYS (R)
PRINCIPAL ARTERIAL - OTHER (R)
MINOR ARTERIAL (R)
MINOR COLLECTOR (R)
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

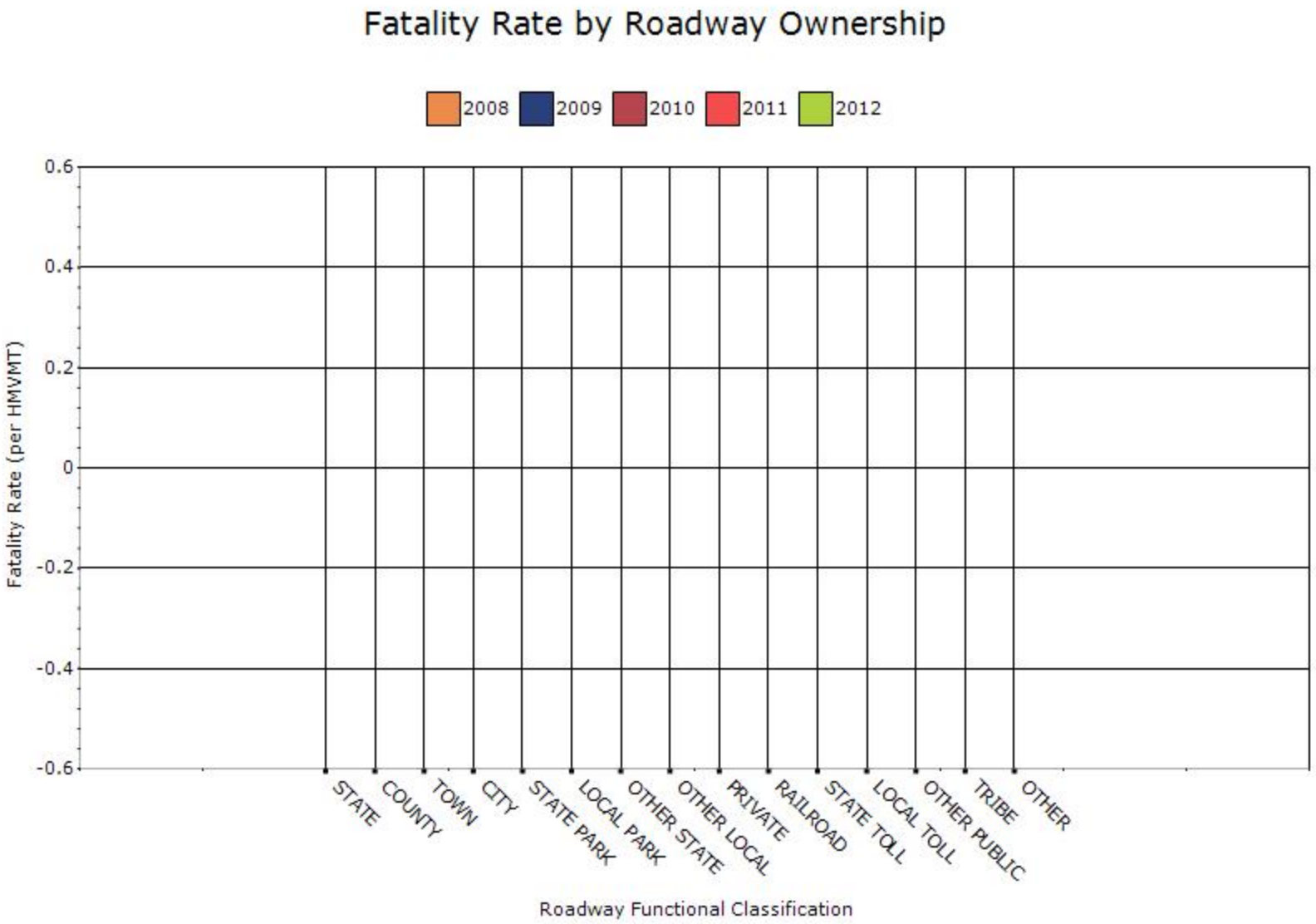
Year - 2012

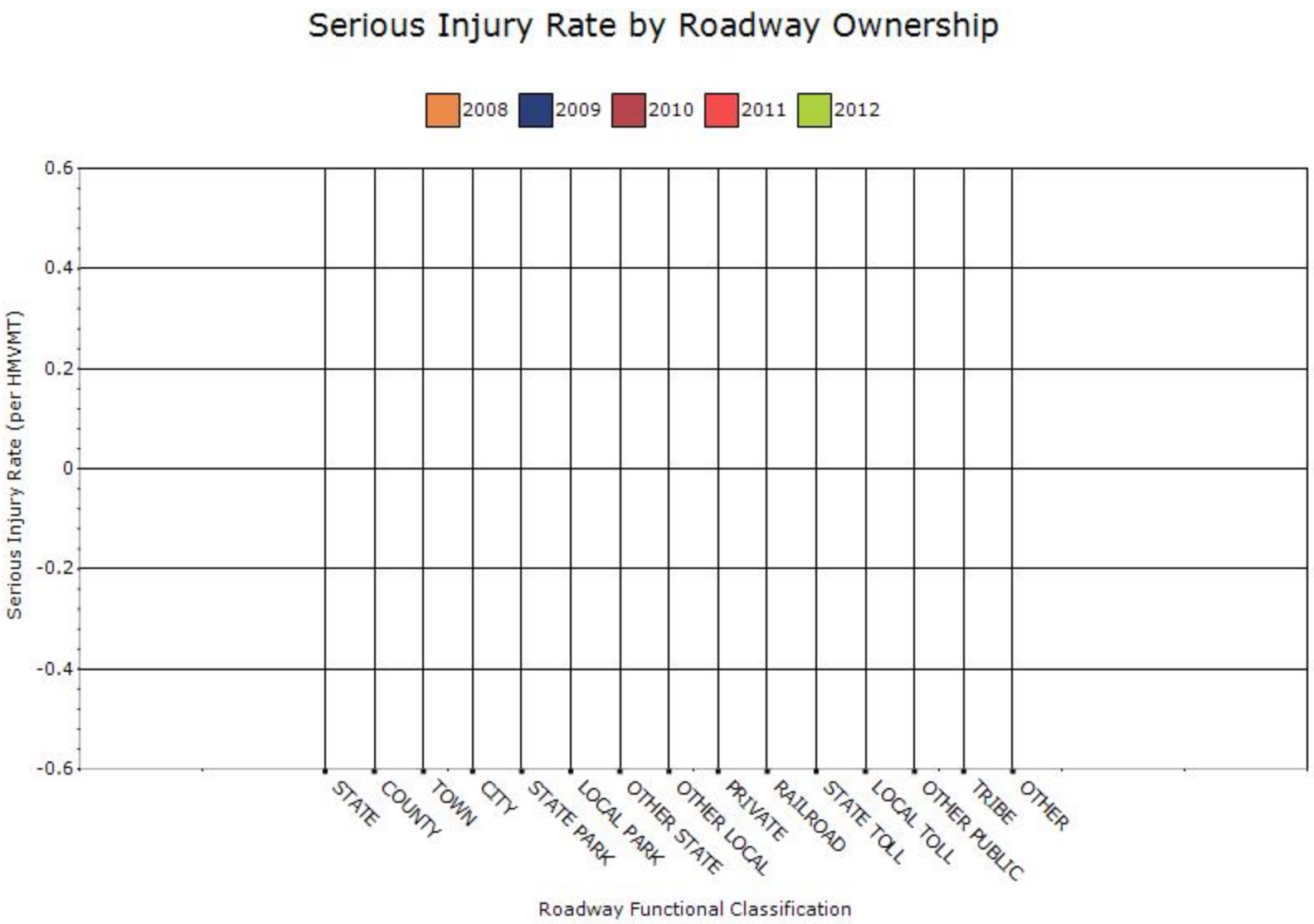
Roadway Ownership	Number of fatalities	Number of serious injuries	Fatality rate (per HMVMT)	Serious injury rate (per HMVMT)
STATE HIGHWAY AGENCY	0	0	0	0
COUNTY HIGHWAY AGENCY	0	0	0	0
TOWN OR TOWNSHIP HIGHWAY AGENCY	0	0	0	0
CITY OF MUNICIPAL HIGHWAY AGENCY	0	0	0	0
STATE PARK, FOREST, OR RESERVATION AGENCY	0	0	0	0
LOCAL PARK, FOREST OR RESERVATION AGENCY	0	0	0	0
OTHER STATE AGENCY	0	0	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	0	0	0	0
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	0	0	0	0
OTHER	0	0	0	0


Number of Fatalities by Roadway Ownership
2008
2009
2010
2011
2012
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
# 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
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
# 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
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
Fatality Rate (per HMVMT)
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
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
Serious Injury Rate (per HMVMT)
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

Datasource: WisTransPortal MV4000 Crash Database

Functional classifications amended to reflect classficiations captured in the MV4000 crash reports.

Roadway ownership not included due to uncertainty in crash reporting methodology.

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

None.

Application of Special Rules

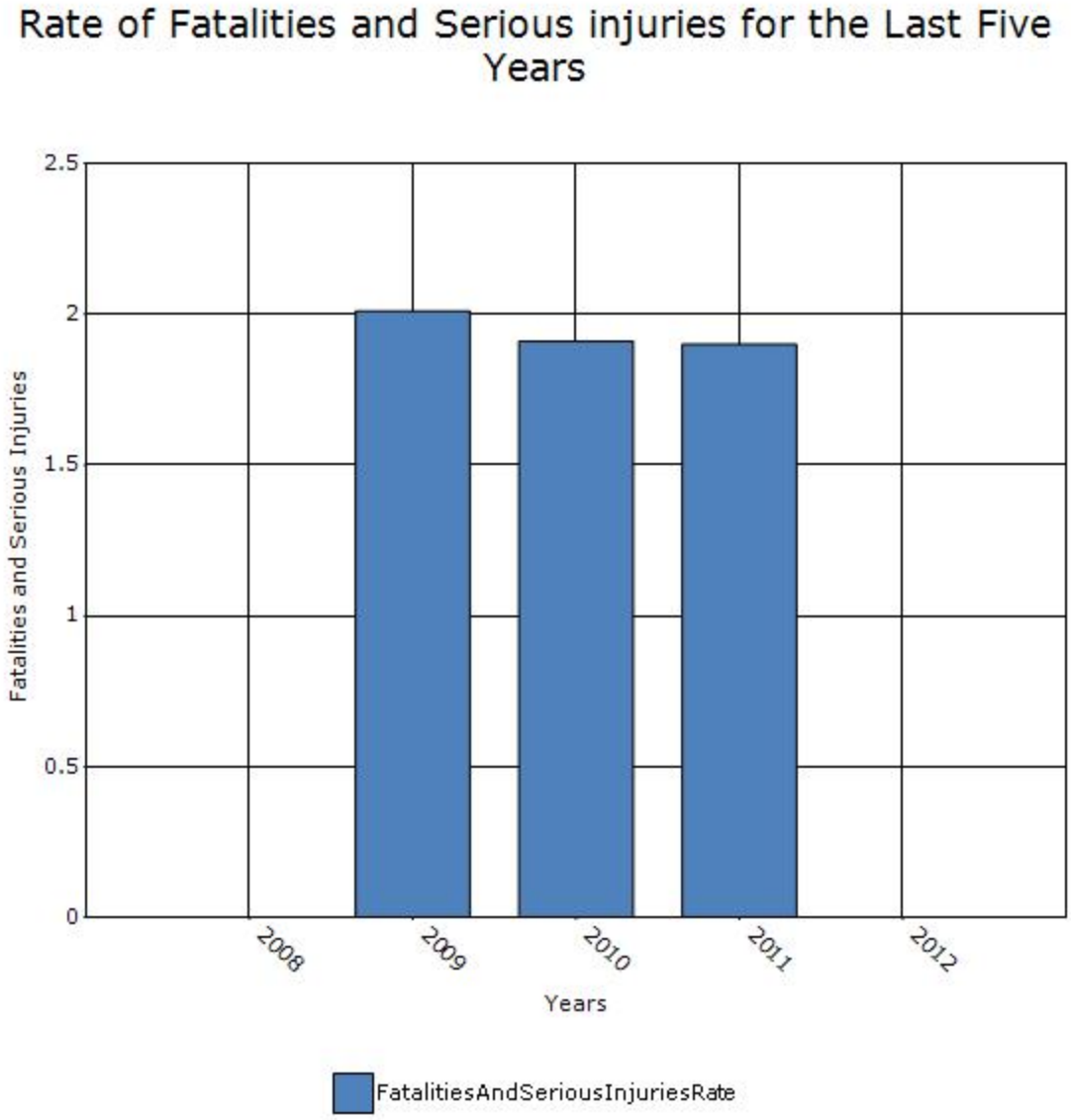
Present the rate of traffic fatalities and serious injuries per capita for drivers and pedestrians over the age of 65.

Older Driver Performance Measures	2008	2009	2010	2011	2012
Fatality rate (per capita)	0	2.6	2.47	2.46	0
Serious injury rate (per capita)	0	0.59	0.56	0.55	0
Fatality and serious injury rate (per capita)	0	2.01	1.91	1.9	0

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

1. (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

((337/139)+(310/137)+(311/134)+(326/133)+(373/132))/5



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: Other-Decrease in total severe and total injury crashes

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:

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

None.

SHSP Emphasis Areas

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

Year - 2012

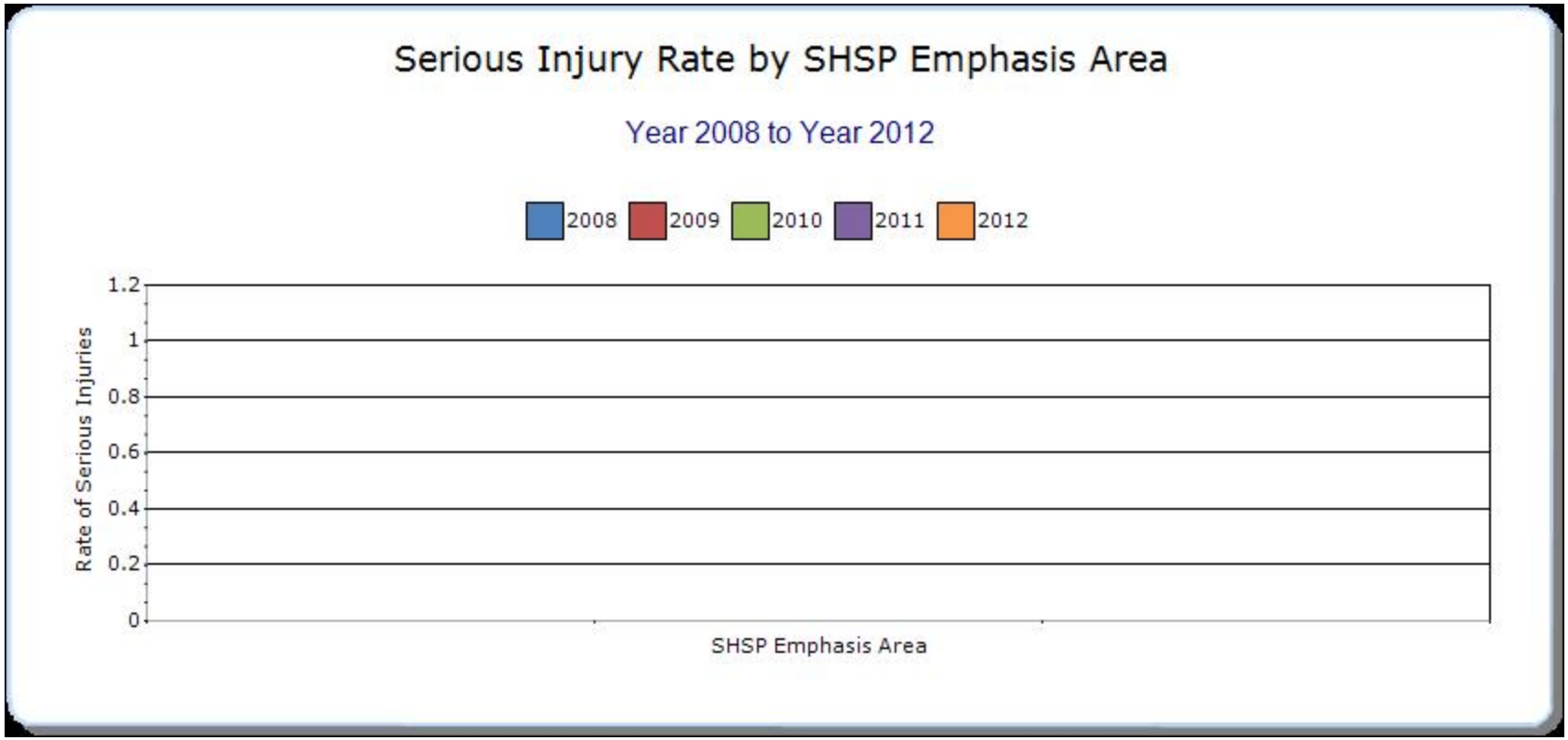
HSIP-related SHSP Emphasis Areas	Target Crash Type	Number of fatalities	Number of serious injuries	Fatality rate (per HMVMT)	Serious injury rate (per HMVMT)	Other-1	Other-2	Other-3
Improve Design and Operation of Intersections		**156**	**1478**	**0**	**0**	**41772**	**0**	**0**
Reduce Speed-Related Crashes		173	982	0	0	19593	0	0
Prevent/Mitigate Roadway Departure Crashes		195	1031	0	0	19352	0	0
create Safer Work Zones		8	54	0	0	1601	0	0
Reduce Alcohol/Drug-Impaired Driving		228	639	0	0	5547	0	0
Improve Driver Alertness/Reduce Driver Distraction		104	862	0	0	22021	0	0
Improve Occupant Protection		187	688	0	0	0	0	0

Improve Motorcycle Safety		95	664	0	0	2462	0	0
Improve Safe Travel in Bad Weather		113	840	0	0	32946	0	0
Reduce Head-On Crashes		68	274	0	0	1555	0	0
Reduce Cross Median Crashes		0	0	0	0	0	0	0


Number of Fatalities by SHSP Emphasis Area
Year 2008 to Year 2012
2008
2009
2010
2011
2012
1.2
1
0.8
0.6
0.4
0.2
0
# of Fatalities
SHSP Emphasis Area


Number of Serious Injuries by SHSP Emphasis Area
Year 2008 to Year 2012
2008
2009
2010
2011
2012
1.2
1
0.8
0.6
0.4
0.2
0
# of Serious Injuries
SHSP Emphasis Area


Fatality Rate by SHSP Emphasis Area
Year 2008 to Year 2012
2008
2009
2010
2011
2012
1.2
1
0.8
0.6
0.4
0.2
0
Rate of Fatalities
SHSP Emphasis Area

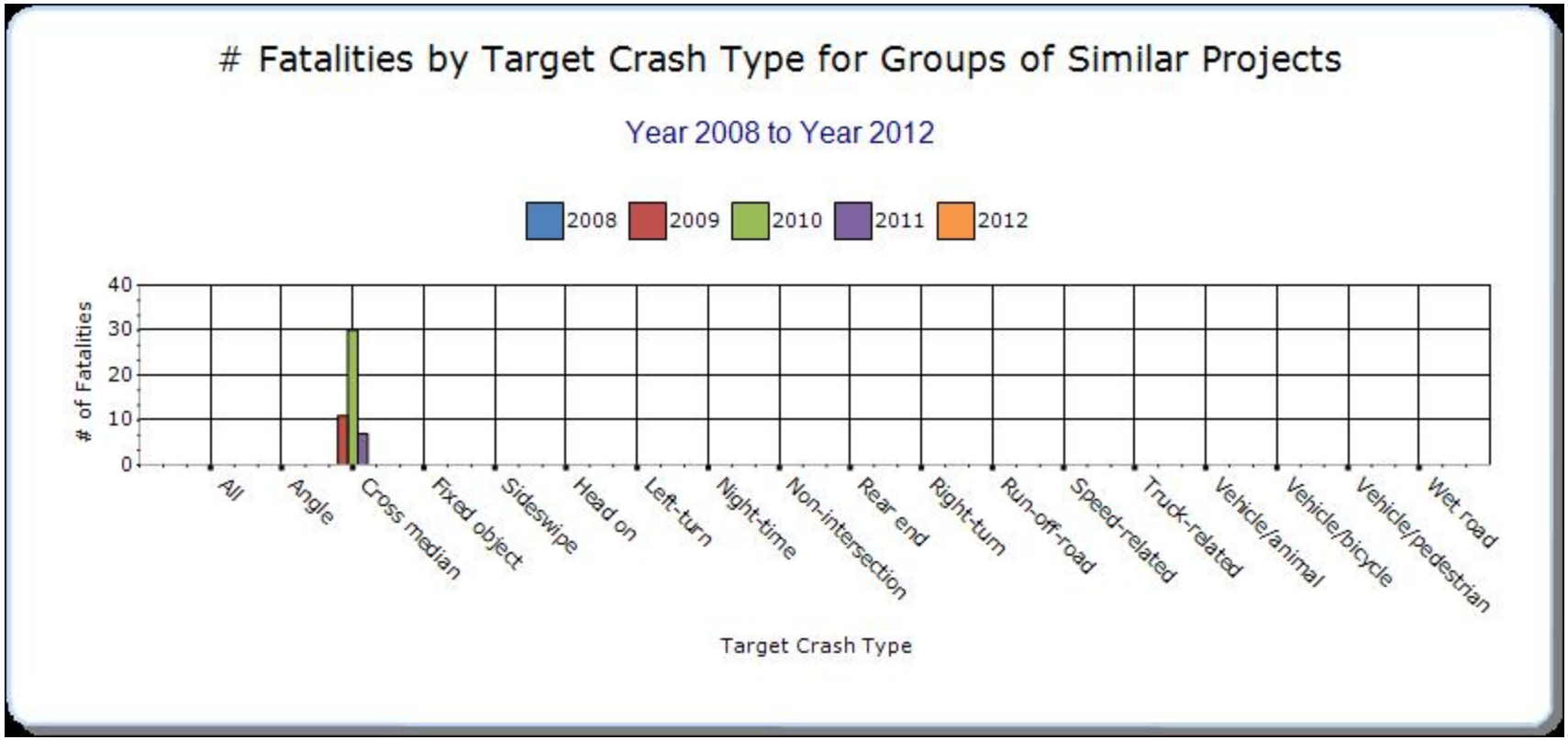

Serious Injury Rate by SHSP Emphasis Area
Year 2008 to Year 2012
2008
2009
2010
2011
2012
1.2
1
0.8
0.6
0.4
0.2
0
Rate of Serious Injuries
SHSP Emphasis Area

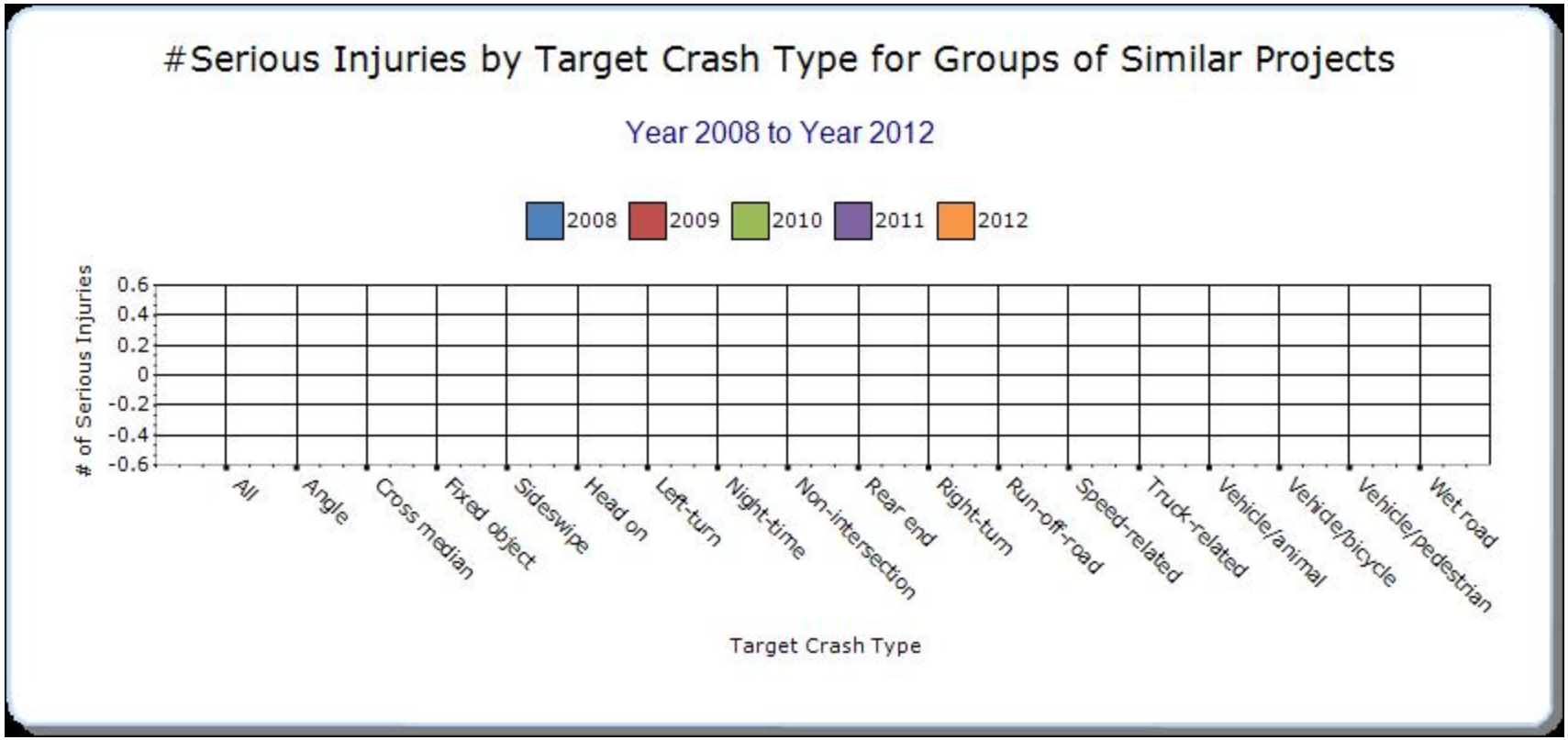
Groups of similar project types

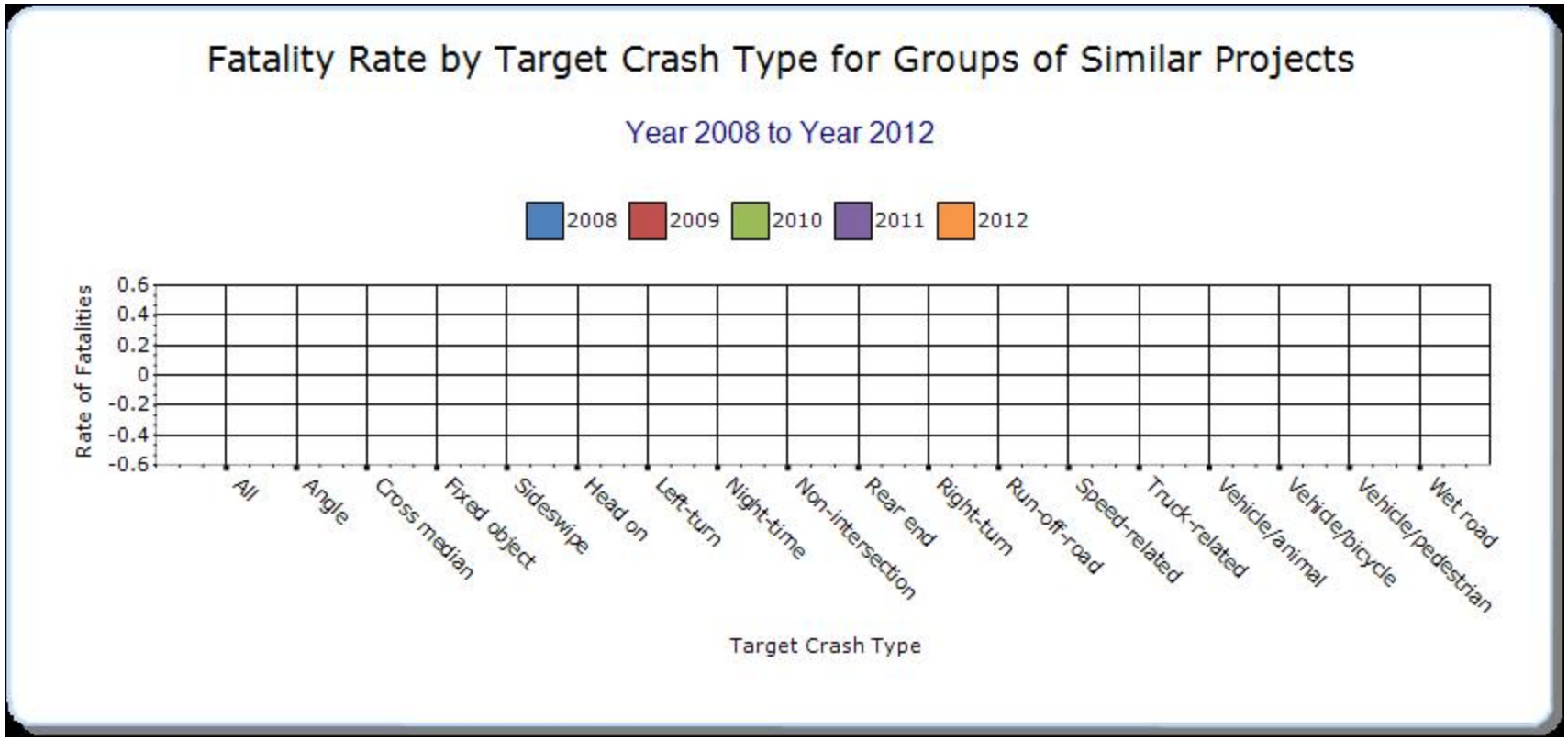
Present the overall effectiveness of groups of similar types of projects.

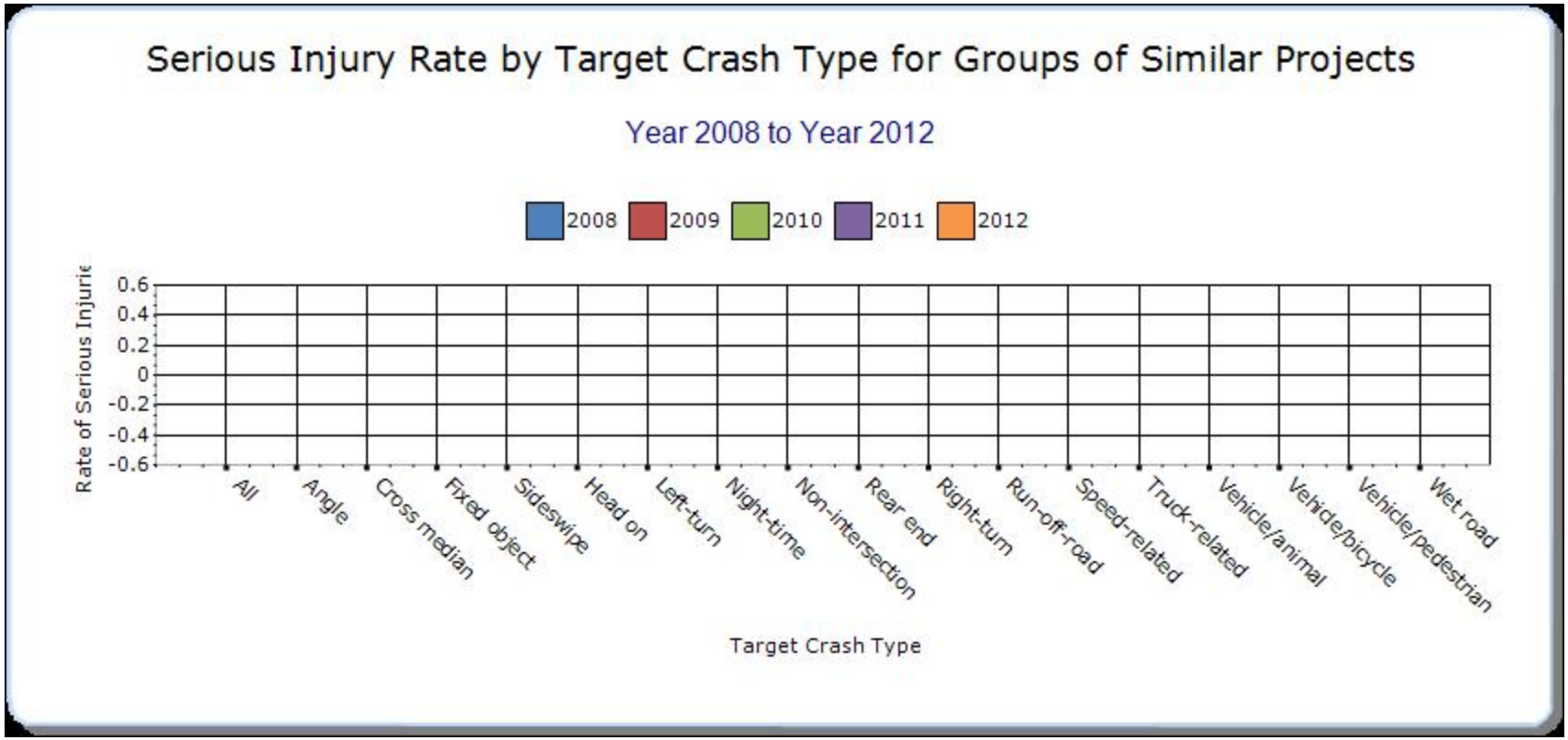
Year - 2012

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
Median Barrier		0	0	0	0	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
40
30
20
10
0
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

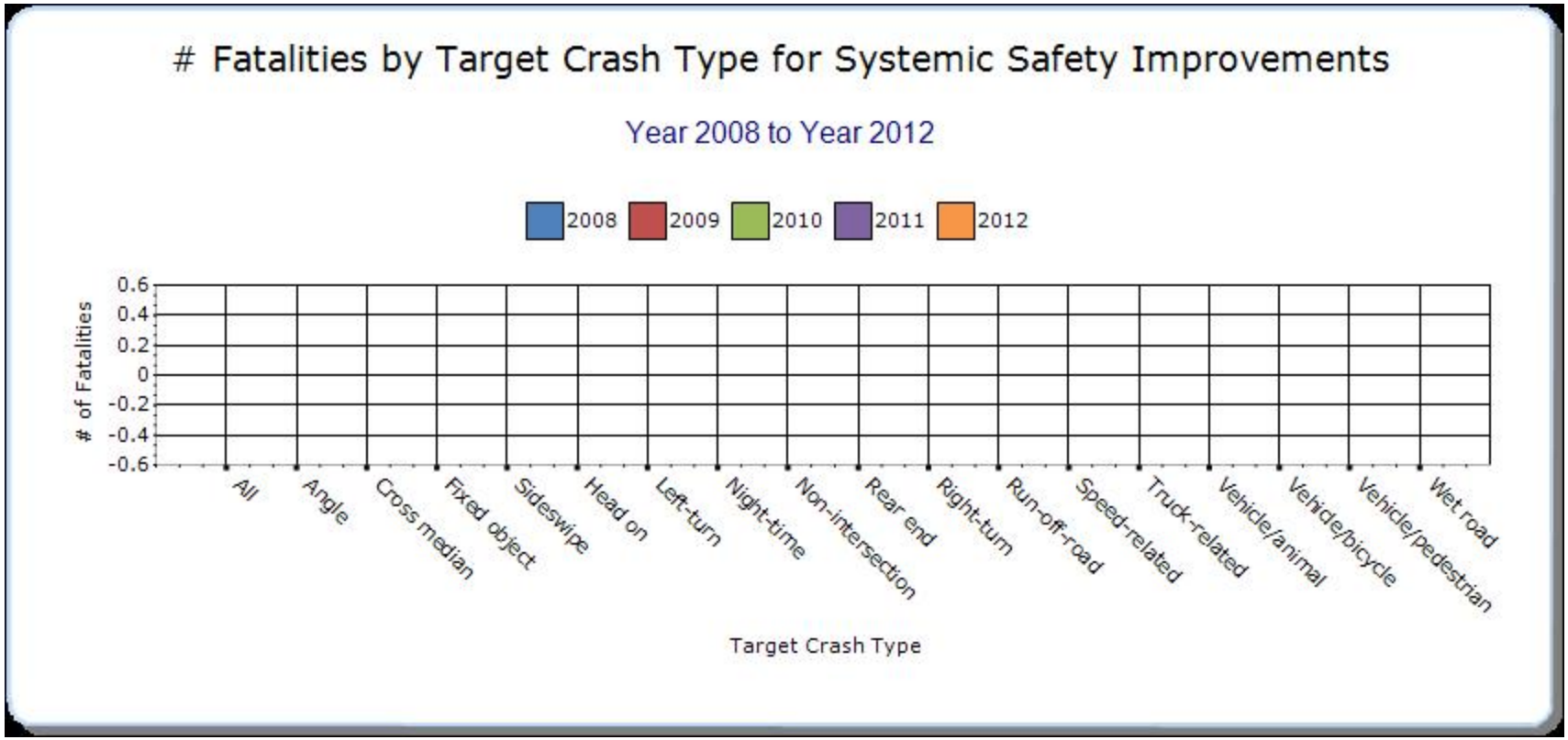

Serious Injury Rate by Target Crash Type for Groups of Similar Projects
Year 2008 to Year 2012
2008
2009
2010
2011
2012
Rate of Serious Injuri
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
All
Angle
Cross median
Fixed object
Sideswipe
Head on
Left-turn
Night-time
Non-intersection
Rear end
Right-turn
Run-off-road
Speed-related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

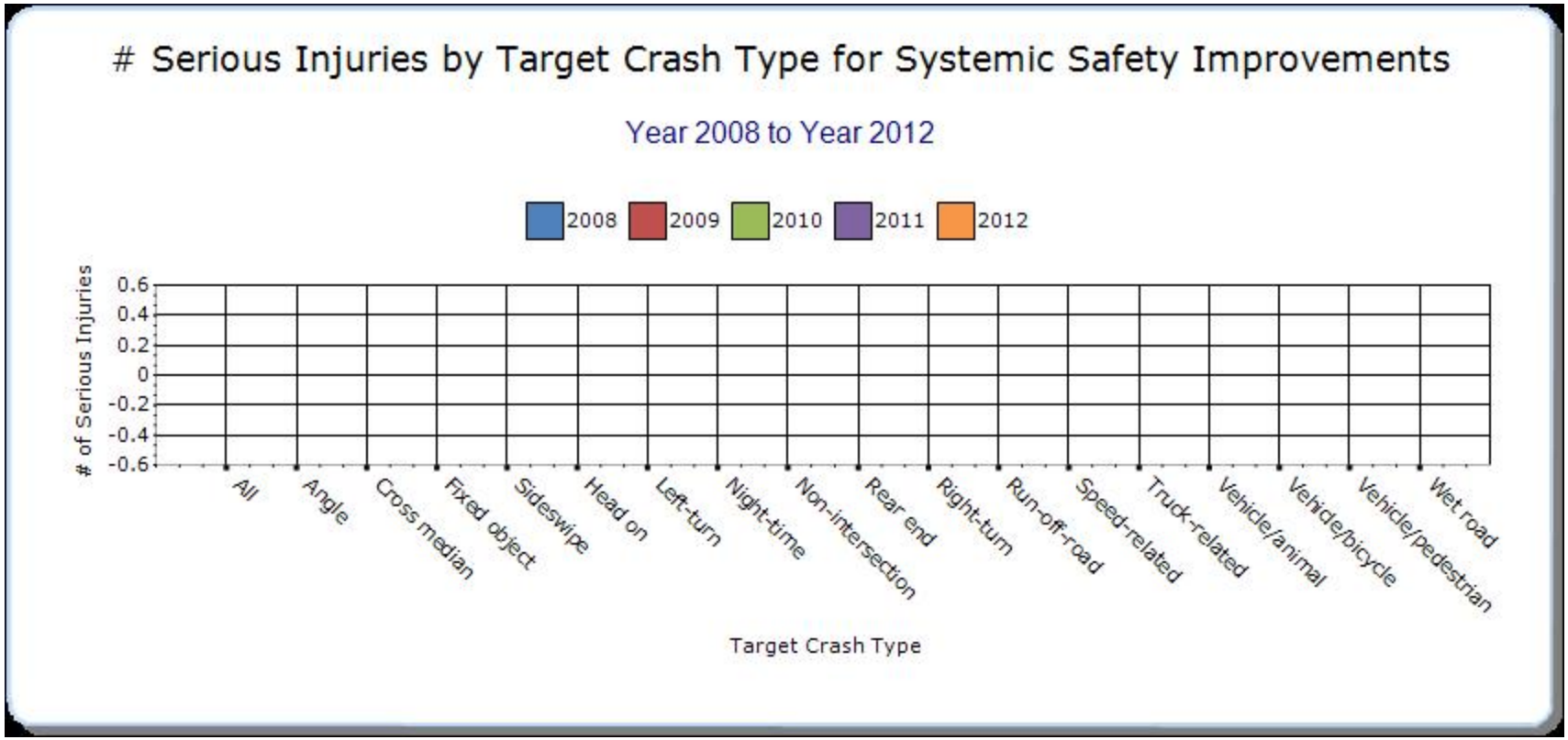
Systemic Treatments

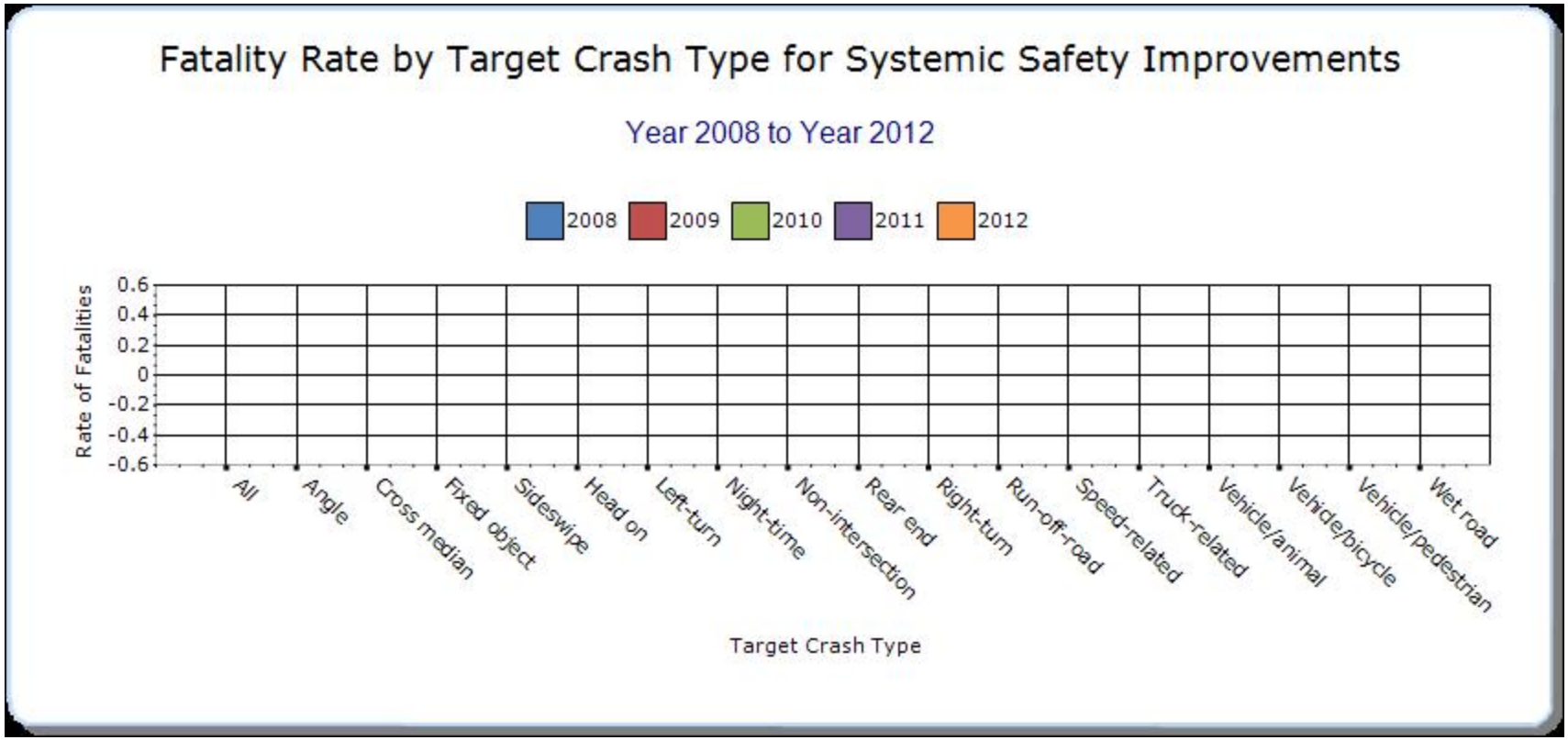
Present the overall effectiveness of systemic treatments..

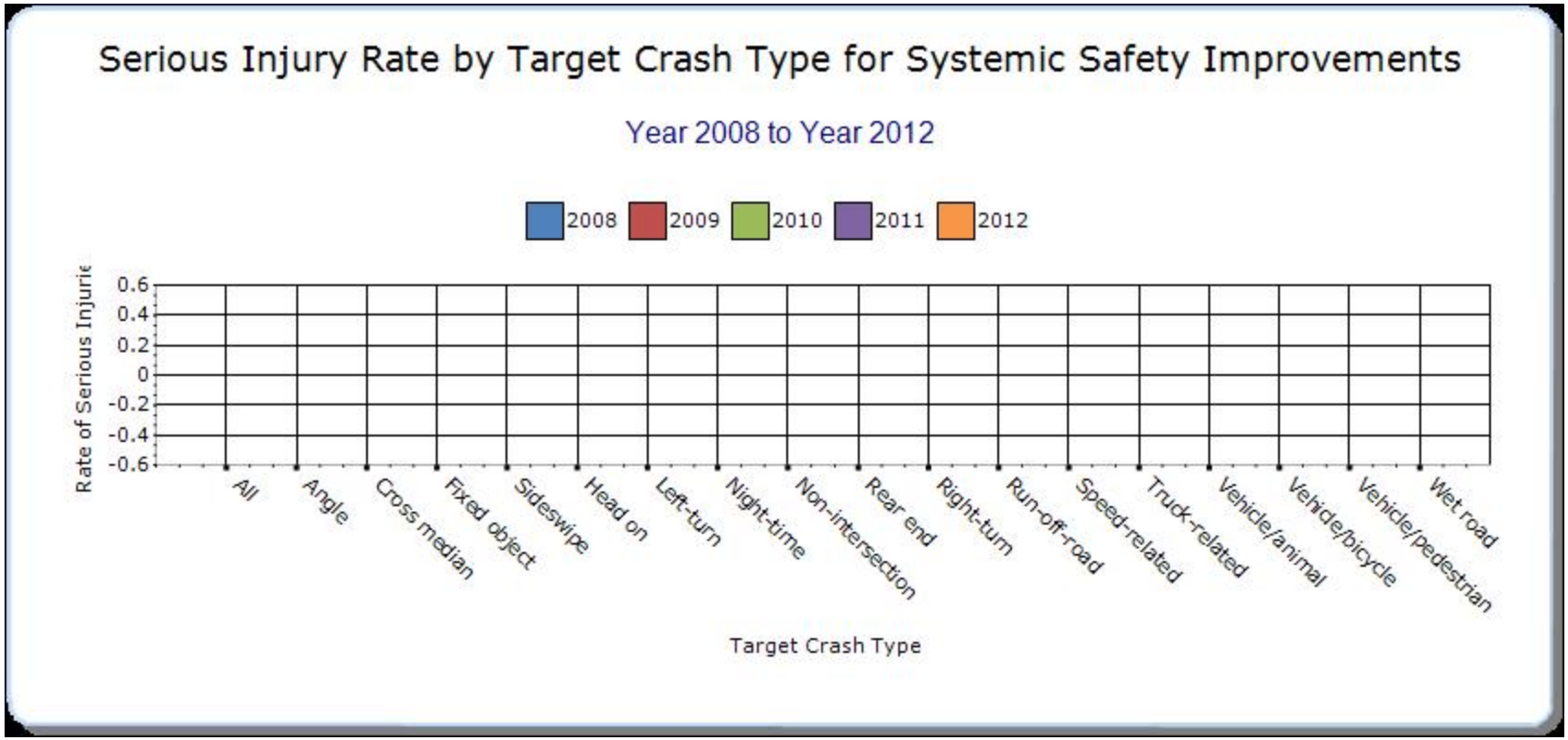
Year - 2012

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


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



Upgrade Guard Rails: Significant number of treatments installed because of NCHRP 350 non-compliance and hazardous characteristics rather than observed crash potential.

Add/Upgrade/Modify/Remove Traffic Signal: A limited number of municipalities statewide develop extensive systemic-type traffic signal projects resulting in inconclusive data analysis.

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

None.

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)
See attachment "WI_HSIP_Evaluation_Final_Report_2013_08.pdf" for project evaluation data.														

See attachment "WI_HSIP_Evaluation_Final_Report_2013_08.pdf" for project evaluation data.

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.