Highway Safety Improvement Program

Data Driven Decisions

Texas
Highway Safety Improvement Program
2013 Annual Report

Prepared by: TX

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 Texas State Fiscal Year is September 1 - August 31.

Texas uses incapacitating and non-incapacitating injuries to determine the number of serious injuries.

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 roads receive the same consideration as roads on the state highway system. They are subjected to the same cost/benefit analysis.

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.

Step - Responsible Party - Action

1. TRF (Central) - Using the most current Strategic Highway Safety Plan (SHSP), the program safety emphasis areas are identified.

2. TRF (Central)- analyzes the three most current years of crash data to identify potential project locations that qualify for improvements in the identified program emphasis areas.

3. TRF (Central)- Provides a spreadsheet listing potential project locations by emphasis area that qualified for the program to each district.

4. District (Design/Operations) - Evaluates each identified location to determine if the project is feasible and to verify that appropriate countermeasures addressing the location's safety needs have not already been implemented or scheduled for construction.

5. District (Design/Operations) - Works with area offices and local governments to gather additional location information and to identify any potential locations that may have been excluded due to incomplete or inaccurate crash and roadway data.

6. District (Design/Operations) - For projects determined to be feasible, conducts a field evaluation to determine the appropriate countermeasure and develop a detailed estimate.

7. District (Design/Operations) - Completes and submits spreadsheets containing requested data to the Texas Department of Transportation (TxDOT) Traffic Operations Division (TRF) along with the necessary backup data (typical sec-tions, layouts, etc.) in response to the program call.

8. TRF (Central) - analyzes the proposed highway safety projects for HSIP eligibility, data accuracy, and conformance with design standards.

9. TRF (Central)- Subjects each eligible project to a benefit/cost analysis using the Safety Improvement Index (SII), then puts the projects into priority order based on the results.

10. TRF (Central)- Places projects in the HSIP according to priority and appropriated federal funding; then sends listing of highway safety projects selected for funding in the HSIP to the districts.

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-No change

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

None at this time.

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:		

Program: **Median Barrier**

Date of Program Methodology: **9/1/2012**

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	1
☒ Available funding	2
☐ Incremental B/C	
☐ Ranking based on net benefit	
☐ Cost Effectiveness	

Program: **Intersection**

Date of Program Methodology: **9/1/2012**

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	1
☒Available funding	2
☐Incremental B/C	
☐Ranking based on net benefit	
☐Cost Effectiveness	

Program: **Rural State Highways**

Date of Program Methodology: **9/1/2012**

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	1
☒Available funding	2
☐Incremental B/C	
☐Ranking based on net benefit	
☐Cost Effectiveness	

Program: **Crash Data**

Date of Program Methodology: **9/1/2012**

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

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

Program: **Roadway Departure**

Date of Program Methodology: **9/1/2012**

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	1
☒ Available funding	2
☐ Incremental B/C	

☐ Ranking based on net benefit

☐ Cost Effectiveness

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

☐ 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-No change

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

None at this time.

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)	0	0 %	86773554	100 %
HRRRP (SAFETEA-LU)	0	0 %	0	0 %
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	0	100%	86773554	100%

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

$0.00

How much funding is obligated to local safety projects?

$0.00

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

$0.00

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

$0.00

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

$0.00

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.

We do not have any impediments to obligating our HSIP funds at this time. Our Administration is supportive of the program and provides us with appropriate obligation authority

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

We do not have anything on which to elaborate.

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
STP 2013(822) HES	Intersection geometry Auxiliary lanes - add left-turn lane	1 Numbers	400000	1645901	HSIP (Section 148)	Rural Principal Arterial - Other	7500	0	State Highway Agency	Improving the design and operation of highway intersections	Add more turn bays and accelerationl anes on high-speed rural roads.
STP 2013(121) HES	Roadside Roadside - other	7 Miles	440172	440172	HSIP (Section 148)	Rural Major Collector	740	0	State Highway Agency	Minimizing the consequences of leaving the road	Continue to remove trees, relocate utility poles, and protect culverts or remediate risks by other means.

STP 2013(527) HES	Miscellaneous	1 Miles	636600	1240499	HSIP (Section 148)	Rural Principal Arterial - Other	26555	0	State Highway Agency	Reducing head-on and across-median crashes	Install more concrete and cable median barriers
STP 2013(059) HRR	Shoulder treatments Widen shoulder - paved or other	13 Miles	3105423	3105423	HRRRP (SAFETEA-LU)	Rural Major Collector	3900	0	State Highway Agency	Keeping vehicles in the roadway	Increase the use of paved shoulders on FM roads to increase the "forgiveness" of the road during road departures
STP 2013(119) HES	Intersection geometry Intersection geometrics - realignment to increase cross street offset	1 Numbers	976008	976008	HSIP (Section 148)	Urban Minor Arterial	4000	0	State Highway Agency	Improving the design and operation of highway intersections	Eliminate limited sight distance on all roads. This includes high speed rural and urban intersections where sight distance limitations exist due to

											vegetation, signing and other obstructions.
STP 2012(085) HES	Shoulder treatments Widen shoulder - paved or other	4 Miles	2155016	2155016	HSIP (Section 148)	Rural Major Collector	1900	0	State Highway Agency	Keeping vehicles in the roadway	Increase the use of paved shoulders on FM roads to increase the "forgiveness" of the road during road departures
STP 2012(068) HES	Shoulder treatments Widen shoulder - paved or other	4 Miles	1485179	1485179	HSIP (Section 148)	Rural Major Collector	590	0	State Highway Agency	Keeping vehicles in the roadway	Increase the use of paved shoulders on FM roads to increase the "forgiveness" of the road during road departures
STP 2013(330) HES	Shoulder treatments Widen shoulder - paved or other	10 Miles	4803637	4803637	HSIP (Section 148)	Rural Minor Arterial	4000	0	State Highway Agency	Keeping vehicles in the roadway	Install more pavement width to allow edge lines

STP 2013(595) HES	Shoulder treatments Widen shoulder - paved or other	8 Miles	3120993	3120993	HSIP (Section 148)	Rural Major Collector	1400	0	State Highway Agency	Keeping vehicles in the roadway	Increase the use of paved shoulders on FM roads to increase the "forgiveness" of the road during road departures
STP 2012(736) HES	Shoulder treatments Widen shoulder - paved or other	13 Miles	4938999	4938999	HSIP (Section 148)	Rural Minor Collector	1350	0	State Highway Agency	Keeping vehicles in the roadway	Increase the use of paved shoulders on FM roads to increase the "forgiveness" of the road during road departures
STP 2013(016) HES	Shoulder treatments Widen shoulder - paved or other	13 Miles	3730000	4743893	HSIP (Section 148)	Rural Minor Collector	420	0	State Highway Agency	Keeping vehicles in the roadway	Increase the use of paved shoulders on FM roads to increase the "forgiveness" of the road during road departures

STP 2013(463) HES	Shoulder treatments Widen shoulder - paved or other	8 Miles	1937298	1937298	HSIP (Section 148)	Rural Minor Arterial	1700	0	State Highway Agency	Keeping vehicles in the roadway	Install more pavement width to allow edge lines
STP 2013(394) HES	Shoulder treatments Widen shoulder - paved or other	13 Miles	3002000	3618415	HSIP (Section 148)	Rural Major Collector	540	0	State Highway Agency	Keeping vehicles in the roadway	Increase the use of paved shoulders on FM roads to increase the "forgiveness" of the road during road departures
STP 2013(677) HES	Shoulder treatments Widen shoulder - paved or other	18 Miles	3244521	3244521	HSIP (Section 148)	Rural Minor Collector	620	0	State Highway Agency	Keeping vehicles in the roadway	Increase the use of paved shoulders on FM roads to increase the "forgiveness" of the road during road departures
STP 2013(546) HES	Shoulder treatments Widen shoulder - paved or other	11 Miles	3772000	4278380	HSIP (Section 148)	Rural Minor Collector	890	0	State Highway Agency	Keeping vehicles in the roadway	Increase the use of paved shoulders on FM roads to

											increase the "forgiveness" of the road during road departures
STP 2013(025) HES	Shoulder treatments Widen shoulder - paved or other	7 Miles	4348946	4348946	HSIP (Section 148)	Rural Major Collector	1950	0	State Highway Agency	Keeping vehicles in the roadway	Increase the use of paved shoulders on FM roads to increase the "forgiveness" of the road during road departures
STP 2013(028) HES	Shoulder treatments Widen shoulder - paved or other	9 Miles	5106864	5106864	HSIP (Section 148)	Rural Major Collector	1200	0	State Highway Agency	Keeping vehicles in the roadway	Install more pavement width to allow edge lines
STP 2013(851) HES	Intersection geometry Auxiliary lanes - add left-turn lane	1 Numbers	791190	791190	HSIP (Section 148)	Urban Principal Arterial - Other	10500	0	State Highway Agency	Improving the design and operation of highway intersections	Add more turn bays and accelerationl anes on high-speed rural roads.

STP 2013(022) HES	Shoulder treatments Widen shoulder - paved or other	5 Miles	2191992	2191992	HSIP (Section 148)	Rural Major Collector	1200	0	State Highway Agency	Keeping vehicles in the roadway	Increase the use of paved shoulders on FM roads to increase the "forgiveness" of the road during road departures
STP 2013(029) HES	Shoulder treatments Widen shoulder - paved or other	6 Miles	2899581	2899581	HSIP (Section 148)	Rural Major Collector	440	0	State Highway Agency	Keeping vehicles in the roadway	Install more pavement width to allow edge lines
STP 2013(054) HES	Shoulder treatments Widen shoulder - paved or other	8 Miles	1998013	1998013	HSIP (Section 148)	Rural Major Collector	920	0	State Highway Agency	Keeping vehicles in the roadway	Increase the use of paved shoulders on FM roads to increase the "forgiveness" of the road during road departures
STP 2013(133) HES	Shoulder treatments Widen shoulder - paved or other	8 Miles	2638786	2638786	HSIP (Section 148)	Rural Major Collector	3200	0	State Highway Agency	Keeping vehicles in the roadway	Increase the use of paved shoulders on FM roads to

											increase the "forgiveness" of the road during road departures
STP 2013(314) HES	Shoulder treatments Widen shoulder - paved or other	5 Miles	2196076	2196076	HSIP (Section 148)	Rural Major Collector	1500	0	State Highway Agency	Keeping vehicles in the roadway	Increase the use of paved shoulders on FM roads to increase the "forgiveness" of the road during road departures
STP 2013(006) HES	Shoulder treatments Widen shoulder - paved or other	9 Miles	2683160	2683160	HSIP (Section 148)	Rural Major Collector	910	0	State Highway Agency	Keeping vehicles in the roadway	Increase the use of paved shoulders on FM roads to increase the "forgiveness" of the road during road departures
STP 2013(005) HES	Shoulder treatments Widen shoulder - paved or other	15 Miles	2554818	2554818	HSIP (Section 148)	Rural Major Collector	170	0	State Highway Agency	Keeping vehicles in the roadway	Increase the use of paved shoulders on FM roads to

											increase the "forgiveness" of the road during road departures
STP 2013(444) HES	Shoulder treatments Widen shoulder - paved or other	5 Miles	1757770	1757770	HSIP (Section 148)	Rural Major Collector	1100	0	State Highway Agency	Keeping vehicles in the roadway	Install more pavement width to allow edge lines
STP 2013(060) HES	Shoulder treatments Widen shoulder - paved or other	13 Miles	4394843	4394843	HSIP (Section 148)	Rural Major Collector	2000	0	State Highway Agency	Keeping vehicles in the roadway	Increase the use of paved shoulders on FM roads to increase the "forgiveness" of the road during road departures
STP 2013(315) HES	Shoulder treatments Widen shoulder - paved or other	1 Miles	106645	106645	HSIP (Section 148)	Rural Minor Collector	1250	0	State Highway Agency	Keeping vehicles in the roadway	Install more pavement width to allow edge lines
STP 2013(315)	Shoulder treatments Widen shoulder - paved	7 Miles	2346143	2346143	HSIP (Sectio	Rural Major	520	0	State Highway	Keeping vehicles in the	Increase the use of paved shoulders on

HES	or other				n 148)	Collector			Agency	roadway	FM roads to increase the "forgiveness" of the road during road departures
STP 2013(152) HES	Shoulder treatments Widen shoulder - paved or other	5 Miles	2497972	2497972	HSIP (Section 148)	Rural Major Collector	1100	0	State Highway Agency	Keeping vehicles in the roadway	Increase the use of paved shoulders on FM roads to increase the "forgiveness" of the road during road departures
STP 2013(768) HES	Shoulder treatments Widen shoulder - paved or other	7 Miles	2530000	3869442	HSIP (Section 148)	Rural Major Collector	2300	0	State Highway Agency	Keeping vehicles in the roadway	Increase the use of paved shoulders on FM roads to increase the "forgiveness" of the road during road departures
STP 2013(828) HES	Shoulder treatments Widen shoulder - paved or other	21 Miles	4787587	4787587	HSIP (Section 148)	Rural Major Collector	820	0	State Highway Agency	Keeping vehicles in the	Increase the use of paved shoulders on

										roadway	FM roads to increase the "forgiveness" of the road during road departures
STP 2013(480) HES	Shoulder treatments Widen shoulder - paved or other	28 Miles	3149302	3149302	HSIP (Section 148)	Rural Major Collector	180	0	State Highway Agency	Keeping vehicles in the roadway	Increase the use of paved shoulders on FM roads to increase the "forgiveness" of the road during road departures
STP 2013(395) HES	Shoulder treatments Widen shoulder - paved or other	7 Miles	3500000	4938297	HSIP (Section 148)	Rural Major Collector	1000	0	State Highway Agency	Keeping vehicles in the roadway	Install more pavement width to allow edge lines
STP 2013(797) HES	Shoulder treatments Widen shoulder - paved or other	14 Miles	3576796	3576796	HSIP (Section 148)	Rural Major Collector	520	0	State Highway Agency	Keeping vehicles in the roadway	Increase the use of paved shoulders on FM roads to increase the "forgiveness" of the road

											during road departures
STP 2013(798) HES	Shoulder treatments Widen shoulder - paved or other	16 Miles	5647170	5647170	HSIP (Section 148)	Rural Major Collector	400	0	State Highway Agency	Keeping vehicles in the roadway	Increase the use of paved shoulders on FM roads to increase the "forgiveness" of the road during road departures
STP 2013(173) HES	Shoulder treatments Widen shoulder - paved or other	2 Miles	792516	792516	HSIP (Section 148)	Rural Major Collector	1300	0	State Highway Agency	Keeping vehicles in the roadway	Install more pavement width to allow edge lines
STP 2013(245) HES	Shoulder treatments Widen shoulder - paved or other	9 Miles	1812780	1812780	HSIP (Section 148)	Rural Major Collector	600	0	State Highway Agency	Keeping vehicles in the roadway	Increase the use of paved shoulders on FM roads to increase the "forgiveness" of the road during road departures
STP 2013(486)	Shoulder treatments Widen shoulder - paved	20	22578	22578	HSIP (Sectio	Rural Major	820	0	State Highway	Keeping vehicles in	Increase the use of paved

HES	or other	Miles	94	94	n 148)	Collector			Agency	the roadway	shoulders on FM roads to increase the "forgiveness" of the road during road departures
STP 2013(684) HES	Shoulder treatments Widen shoulder - paved or other	1 Miles	381984	381984	HSIP (Section 148)	Rural Minor Arterial	1150	0	State Highway Agency	Keeping vehicles in the roadway	Increase the use of paved shoulders on FM roads to increase the "forgiveness" of the road during road departures
STP 2013(684) HES	Shoulder treatments Widen shoulder - paved or other	2 Miles	442084	442084	HSIP (Section 148)	Urban Minor Arterial	7600	0	State Highway Agency	Keeping vehicles in the roadway	Install more pavement width to allow edge lines
STP 2013(241) HES	Shoulder treatments Widen shoulder - paved or other	8 Miles	248614 6	248614 6	HSIP (Section 148)	Rural Major Collector	850	0	State Highway Agency	Keeping vehicles in the roadway	Install more pavement width to allow edge lines

STP 2013(241) HES	Shoulder treatments Widen shoulder - paved or other	13 Miles	3551186	3551186	HSIP (Section 148)	Rural Major Collector	1650	0	State Highway Agency	Keeping vehicles in the roadway	Install more pavement width to allow edge lines
STP 2013(397) HES	Shoulder treatments Widen shoulder - paved or other	8 Miles	3239483	3239483	HSIP (Section 148)	Rural Major Collector	2200	0	State Highway Agency	Keeping vehicles in the roadway	Install more pavement width to allow edge lines
STP 2013(380) HES	Shoulder treatments Shoulder treatments - other	7 Miles	67389	67389	HSIP (Section 148)	Rural Major Collector	7300	0	State Highway Agency	Keeping vehicles in the roadway	Continue to install shoulder and centerline rumble strips
STP 2013(380) HES	Shoulder treatments Shoulder treatments - other	6 Miles	65307	65307	HSIP (Section 148)	Rural Major Collector	7600	0	State Highway Agency	Keeping vehicles in the roadway	Continue to install shoulder and centerline rumble strips
STP 2013(677) HES	Roadside Roadside - other	8 Miles	265901	265901	HSIP (Section 148)	Rural Minor Collector	510	0	State Highway Agency	Minimizing the consequences of leaving the road	Continue to remove trees, relocate utility poles, and protect culverts or

											remediate risks by other means.
STP 2013(394) HES	Roadside Roadside - other	13 Miles	768662	768662	HSIP (Section 148)	Rural Major Collector	540	0	State Highway Agency	Minimizing the consequences of leaving the road	Continue to remove trees, relocate utility poles, and protect culverts or remediate risks by other means.
STP 2013(677) HES	Roadside Roadside - other	20 Miles	994821	994821	HSIP (Section 148)	Rural Minor Collector	620	0	State Highway Agency	Minimizing the consequences of leaving the road	Continue to remove trees, relocate utility poles, and protect culverts or remediate risks by other means.
STP 2013(330) HES	Roadside Roadside - other	11 Miles	533098	533098	HSIP (Section 148)	Rural Major Collector	4000	0	State Highway Agency	Minimizing the consequences of	Continue to remove trees, relocate

										leaving the road	utility poles, and protect culverts or remediate risks by other means.
STP 2013(847) HES	Access management Median crossover - close crossover	0 Miles	302360	394374	HSIP (Section 148)	Urban Principal Arterial - Other Freeways and Expressways	6800	0	State Highway Agency	Improving the design and operation of highway intersections	Promote better access management policies
STP 2013(847) HES	Intersection traffic control Modify traffic signal - miscellaneous/other/unspecified	1 Numbers	203489	203489	HSIP (Section 148)	Urban Principal Arterial - Other Freeways and Expressways	2200	0	State Highway Agency	Improving the design and operation of highway intersections	Implement engineering solutions to reduce red-light running, such as changes in signal timing (i.e., longer yellow, all-red phase, etc.)
STP	Roadside Barrier -	5	10185	10185	HSIP	Rural	185	0	State	Reducing	Install more

2013(882) HES	concrete	Miles	81	81	(Section 148)	Principal Arterial - Other	00		Highway Agency	head-on and across-median crashes	concrete and cable median barriers
STP 2013(990) HES	Lighting Continuous roadway lighting	6 Miles	1190807	1190807	HSIP (Section 148)	Urban Principal Arterial - Other Freeways and Expressways	18000	0	State Highway Agency	Enhancing safety on the roadway.	Other
STP 2013(080) HES	Roadside Barrier - cable	17 Miles	1384987	1384987	HSIP (Section 148)	Rural Principal Arterial - Interstate	18800	0	State Highway Agency	Reducing head-on and across-median crashes	Install more concrete and cable median barriers

Progress in Achieving Safety Performance Targets

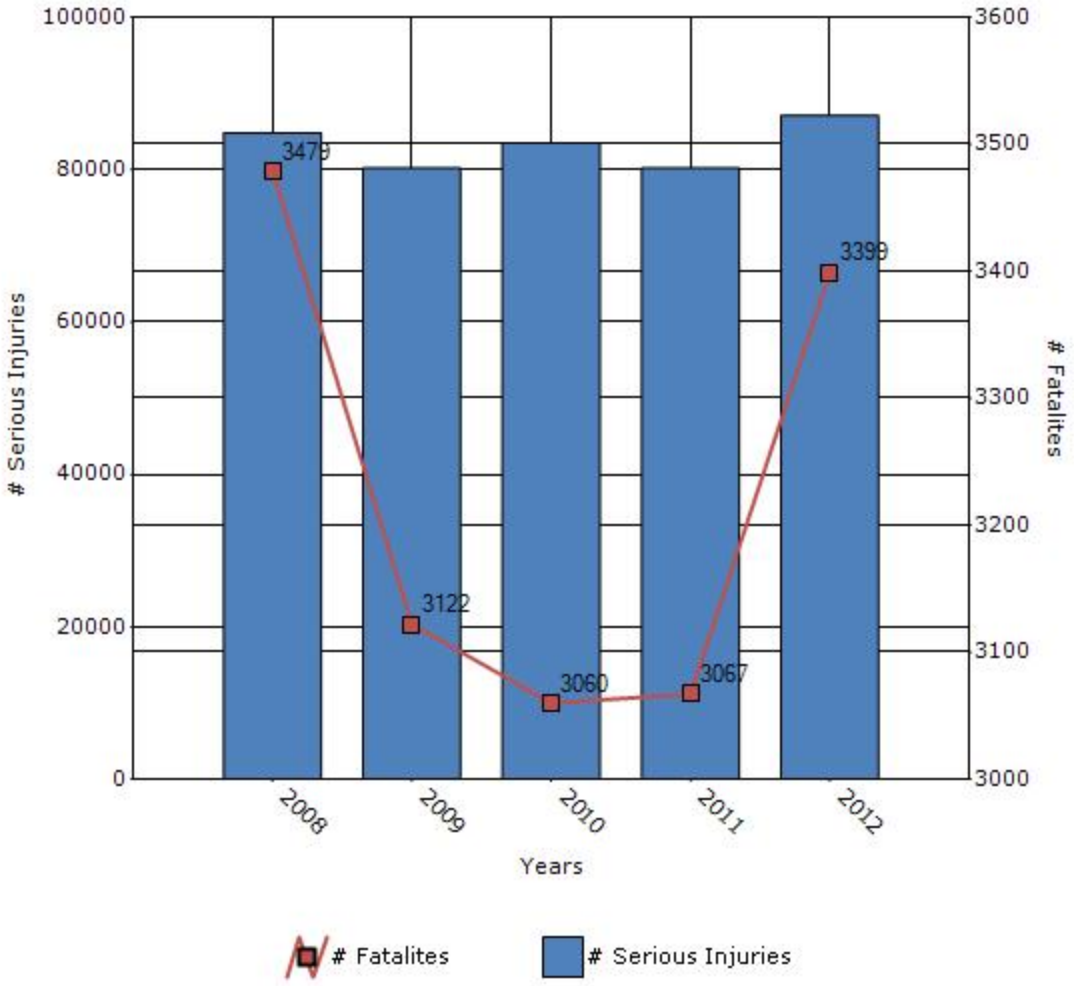
Overview of General Safety Trends

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

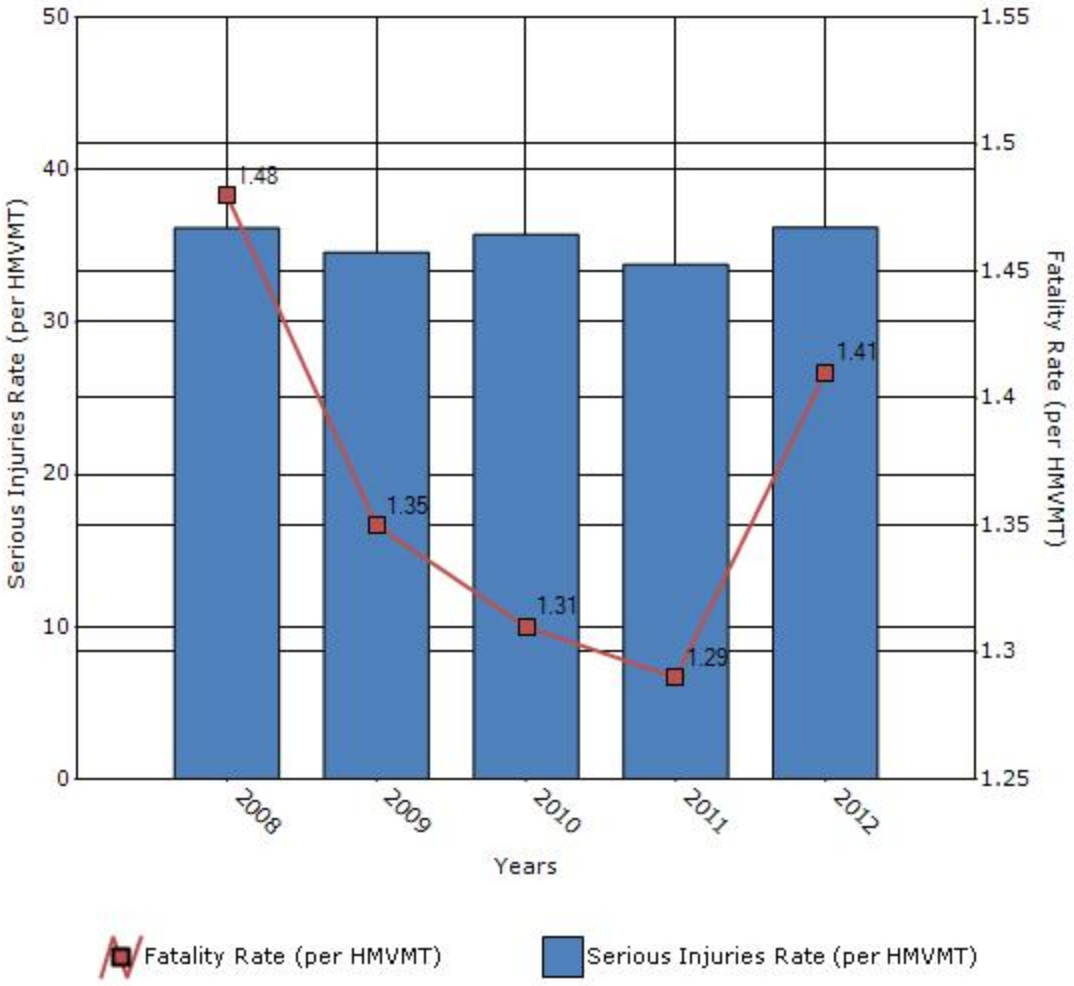
Performance Measures*	2008	2009	2010	2011	2012
Number of fatalities	3479	3122	3060	3067	3399
Number of serious injuries	84827	80205	83512	80188	87087
Fatality rate (per HMVMT)	1.48	1.35	1.31	1.29	1.41
Serious injury rate (per HMVMT)	36.16	34.57	35.73	33.77	36.19

*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

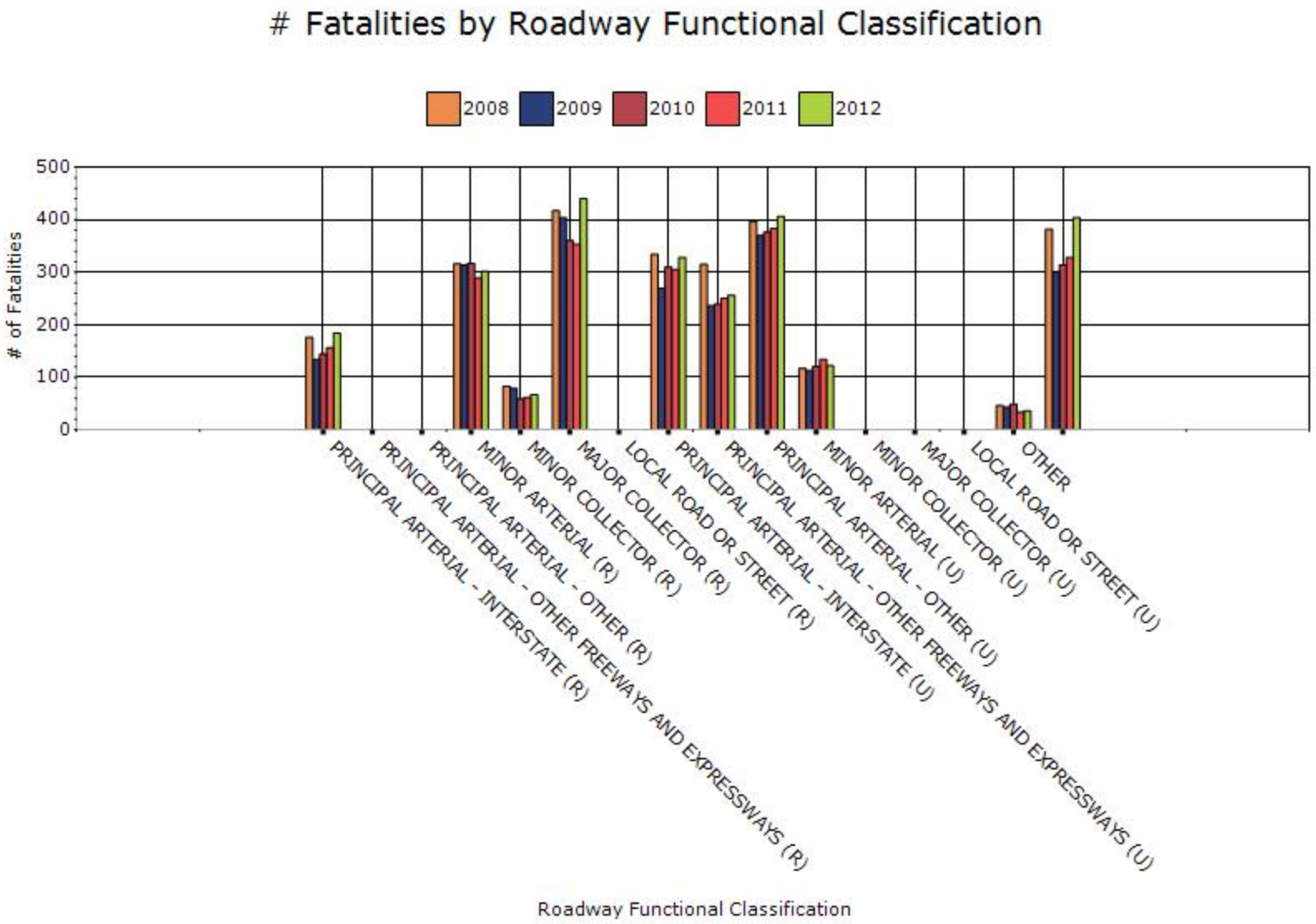


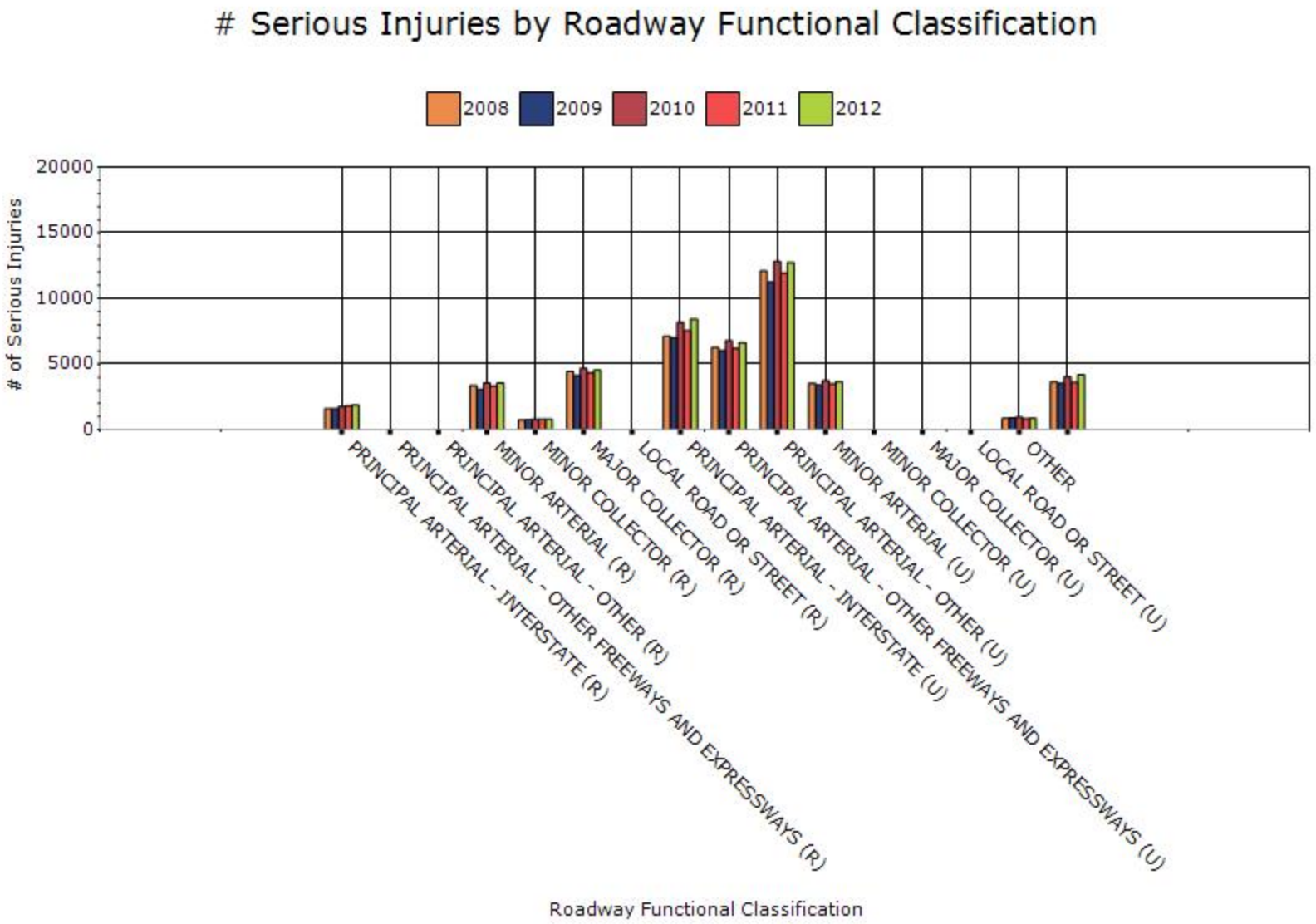
To the maximum extent possible, present performance measure* data by functional classification and ownership.

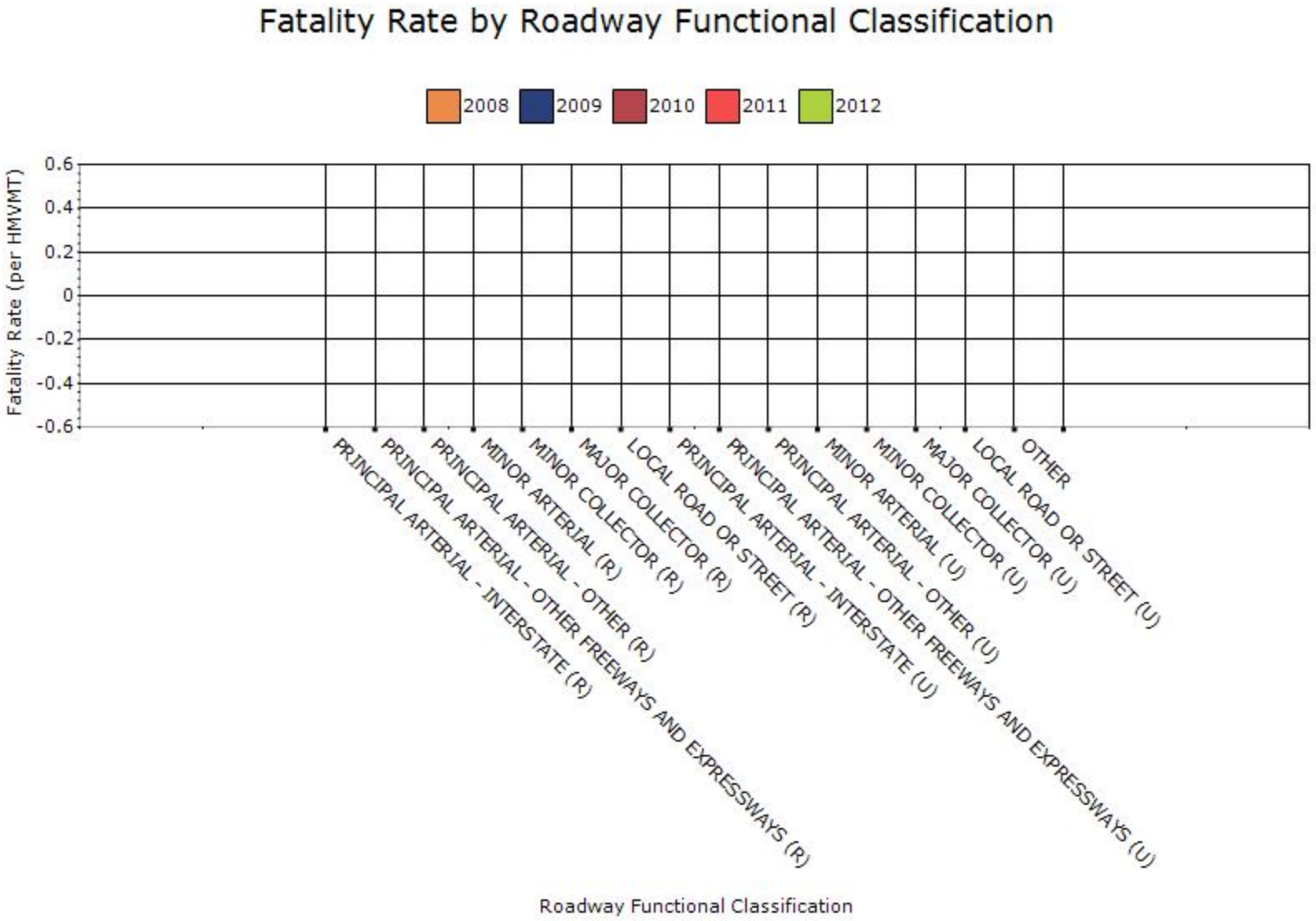
Year - 2012

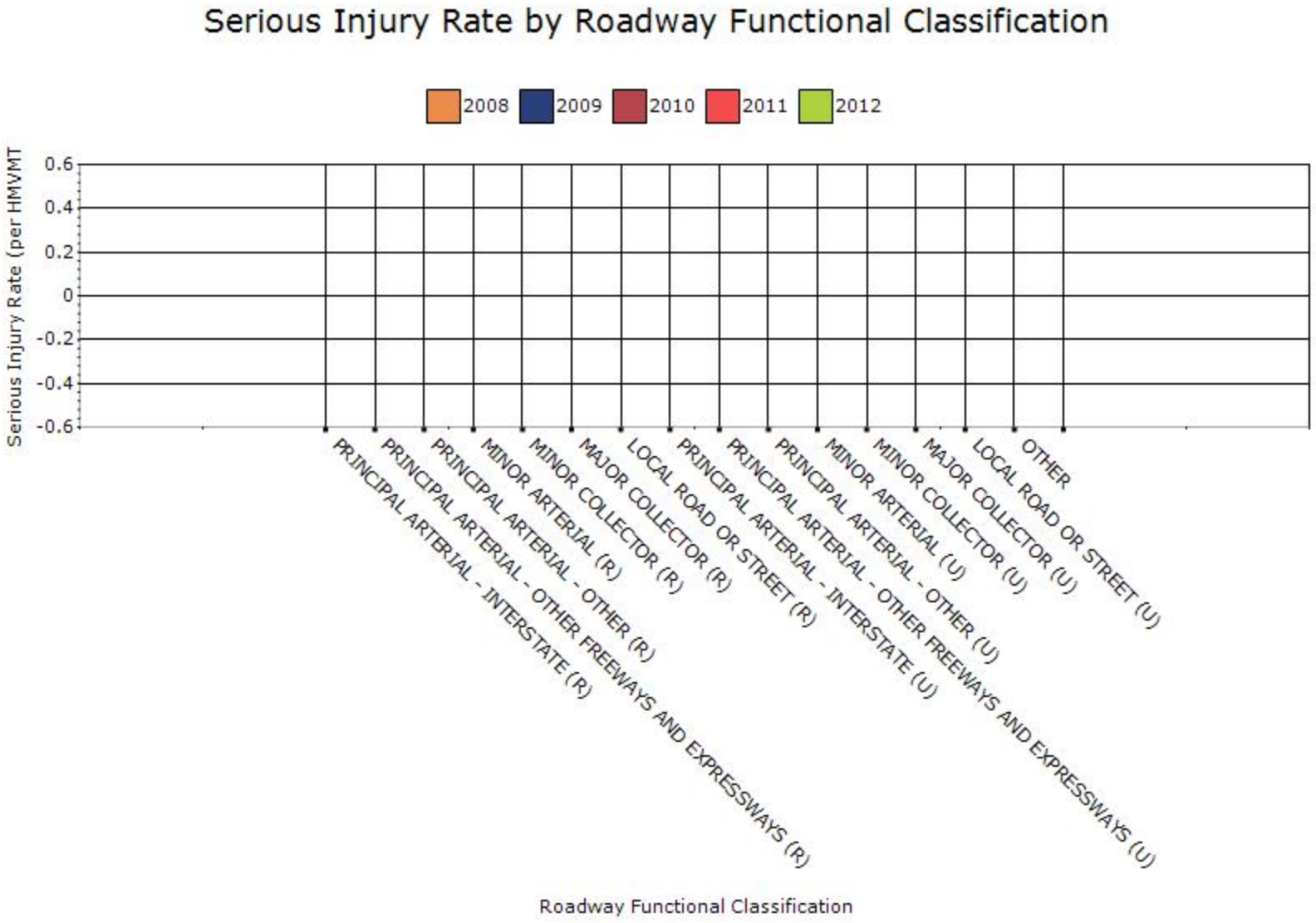
Function Classification	Number of fatalities	Number of serious injuries	Fatality rate (per HMVMT)	Serious injury rate (per HMVMT)
RURAL PRINCIPAL ARTERIAL - INTERSTATE	184	1869	0	0
RURAL PRINCIPAL ARTERIAL - OTHER FREEWAYS AND EXPRESSWAYS	0	0	0	0
RURAL PRINCIPAL ARTERIAL - OTHER	0	0	0	0
RURAL MINOR ARTERIAL	302	3556	0	0
RURAL MINOR COLLECTOR	67	814	0	0
RURAL MAJOR COLLECTOR	440	4553	0	0
RURAL LOCAL ROAD OR STREET	0	0	0	0
URBAN PRINCIPAL	328	8429	0	0

ARTERIAL - INTERSTATE				
URBAN PRINCIPAL ARTERIAL - OTHER FREEWAYS AND EXPRESSWAYS	256	6640	0	0
URBAN PRINCIPAL ARTERIAL - OTHER	406	12735	0	0
URBAN MINOR ARTERIAL	122	3655	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
URBAN COLLECTOR	36	870	0	0
RURAL PRINCIPAL ARTERIAL	404	4192	0	0
RURAL PRINCIPAL ARTERIAL	404	4192	0	0


Fatalities by Roadway Functional Classification
2008
2009
2010
2011
2012
500
400
300
200
100
0
# of Fatalities
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
20000
15000
10000
5000
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

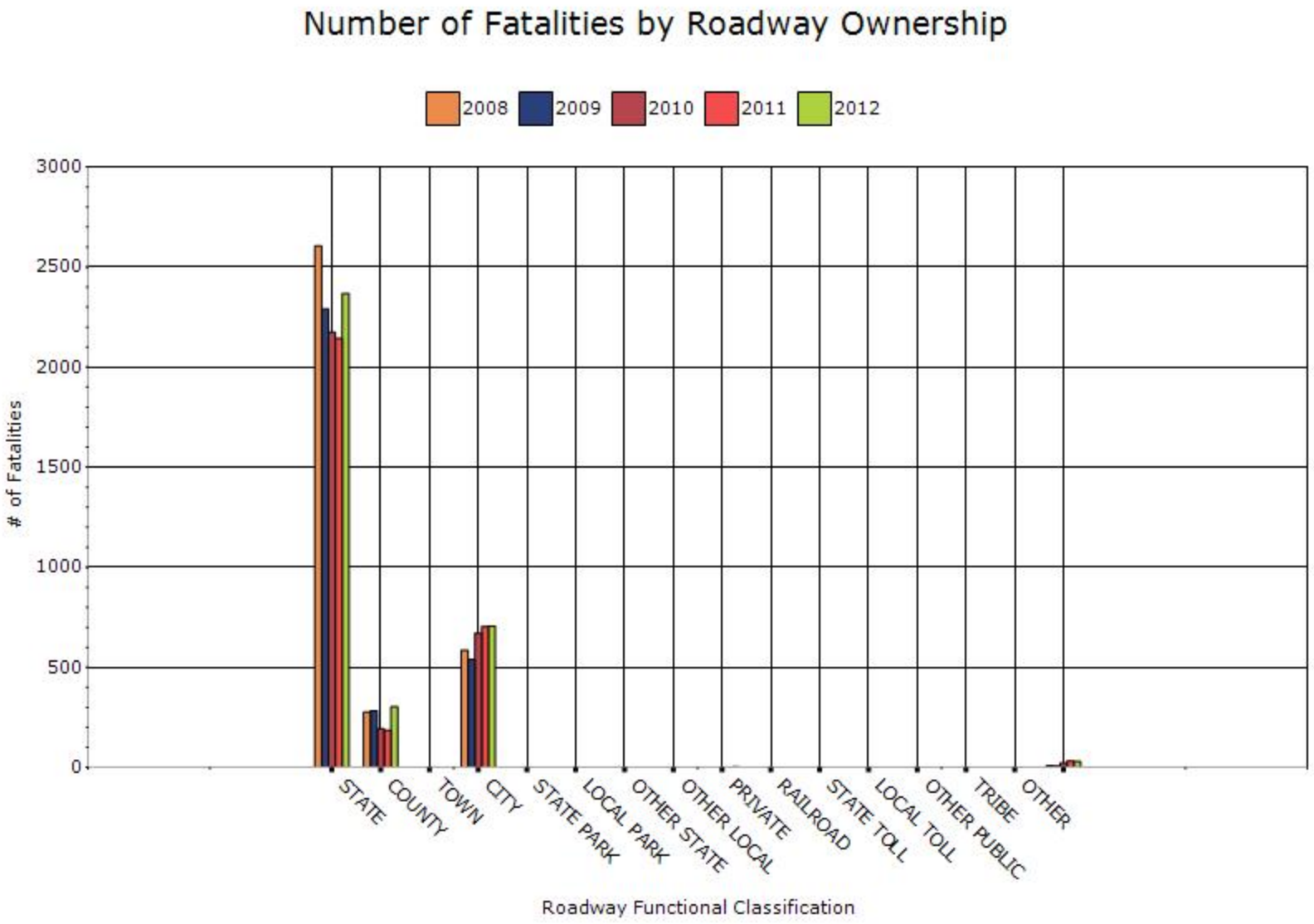

Fatality Rate by Roadway Functional Classification
2008
2009
2010
2011
2012
Fatality Rate (per HMVMT)
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
PRINCIPAL ARTERIAL - INTERSTATE (R)
PRINCIPAL ARTERIAL - OTHER FREEWAYS AND EXPRESSWAYS (R)
PRINCIPAL ARTERIAL - OTHER (R)
MINOR ARTERIAL (R)
MINOR COLLECTOR (R)
MAJOR COLLECTOR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

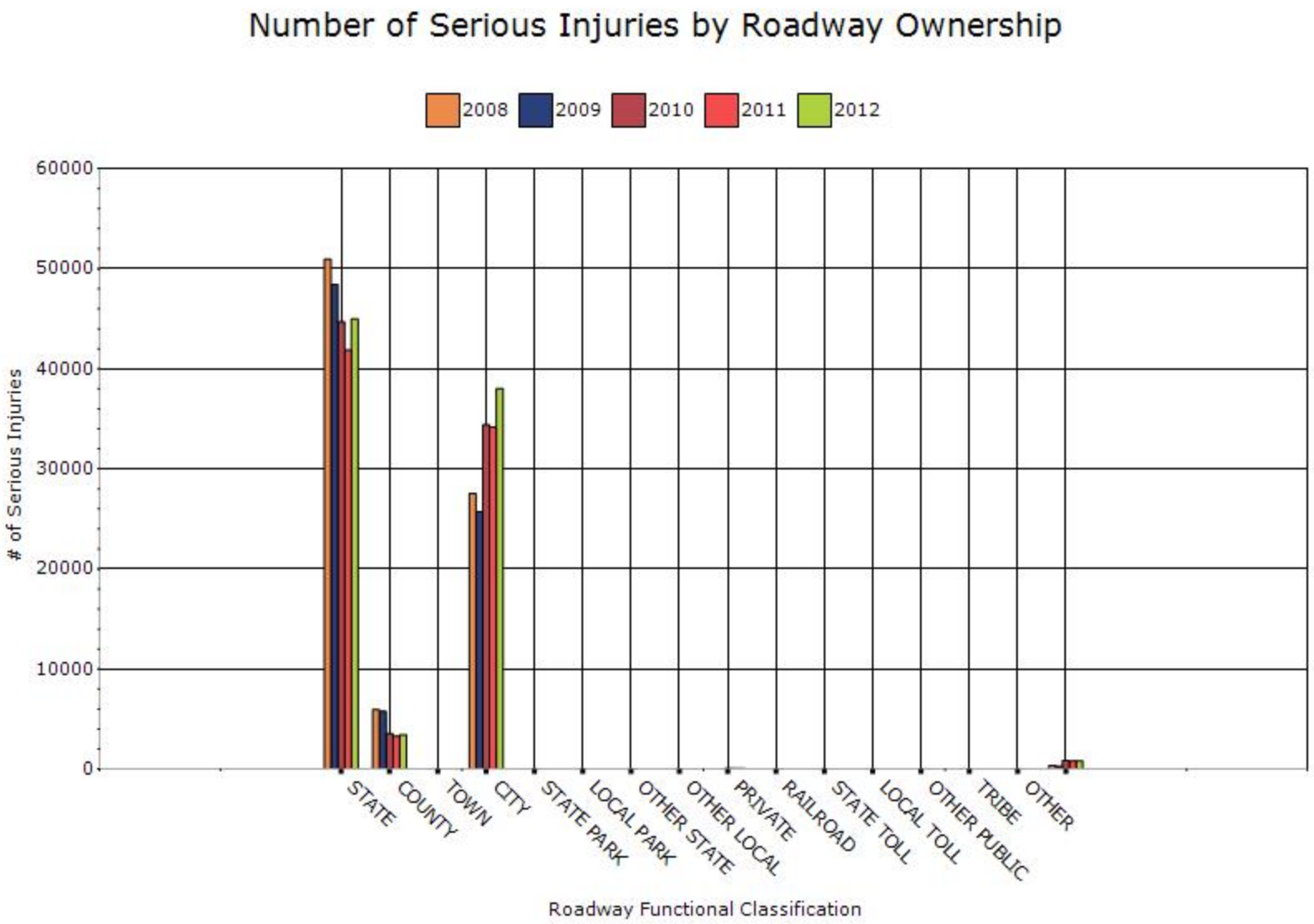

Serious Injury Rate by Roadway Functional Classification
2008
2009
2010
2011
2012
Serious Injury Rate (per HMVMT
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
PRINCIPAL ARTERIAL - INTERSTATE (R)
PRINCIPAL ARTERIAL - OTHER FREEWAYS AND EXPRESSWAYS (R)
PRINCIPAL ARTERIAL - OTHER (R)
MINOR ARTERIAL (R)
MINOR COLLECTOR (R)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

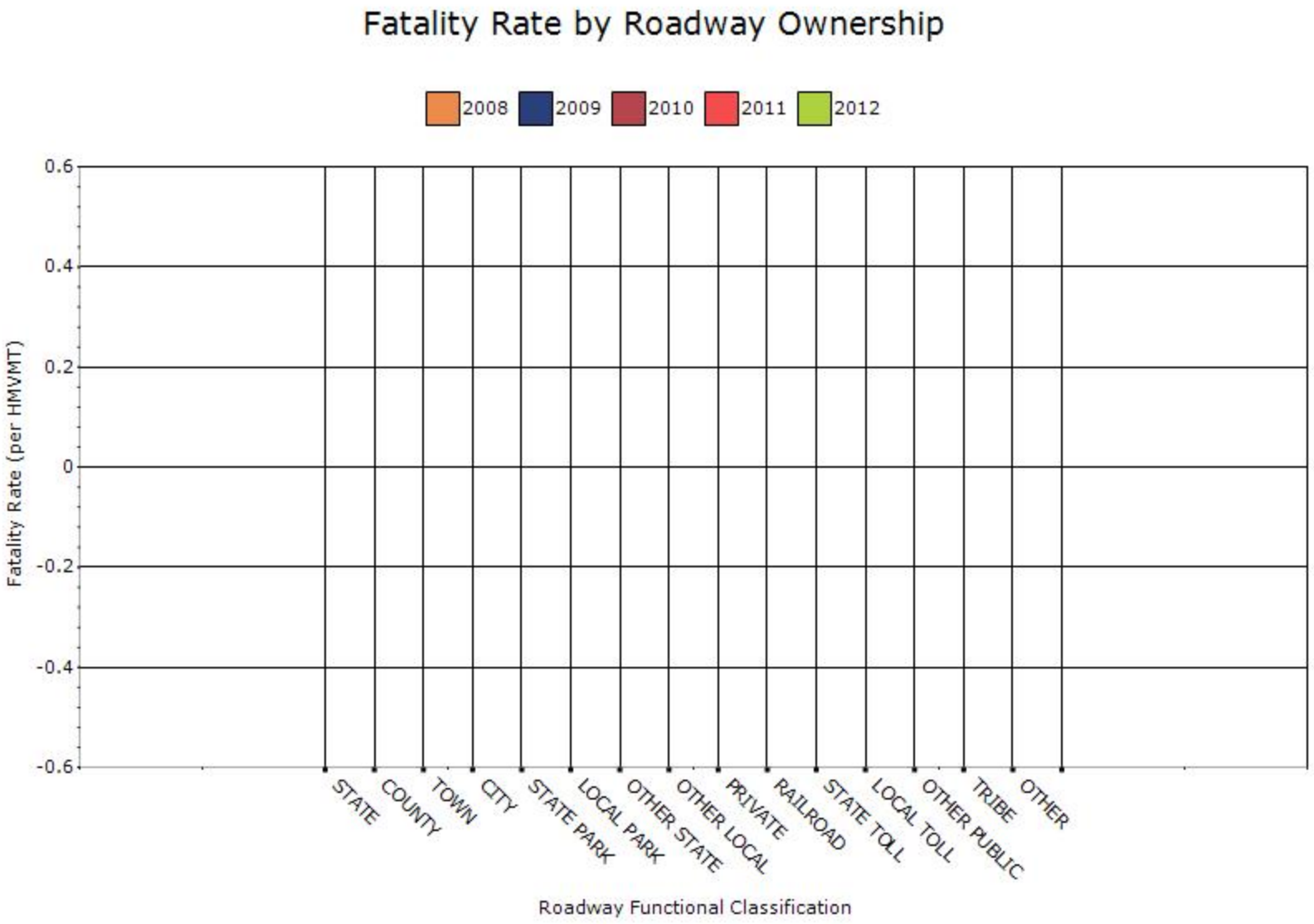
Year - 2012

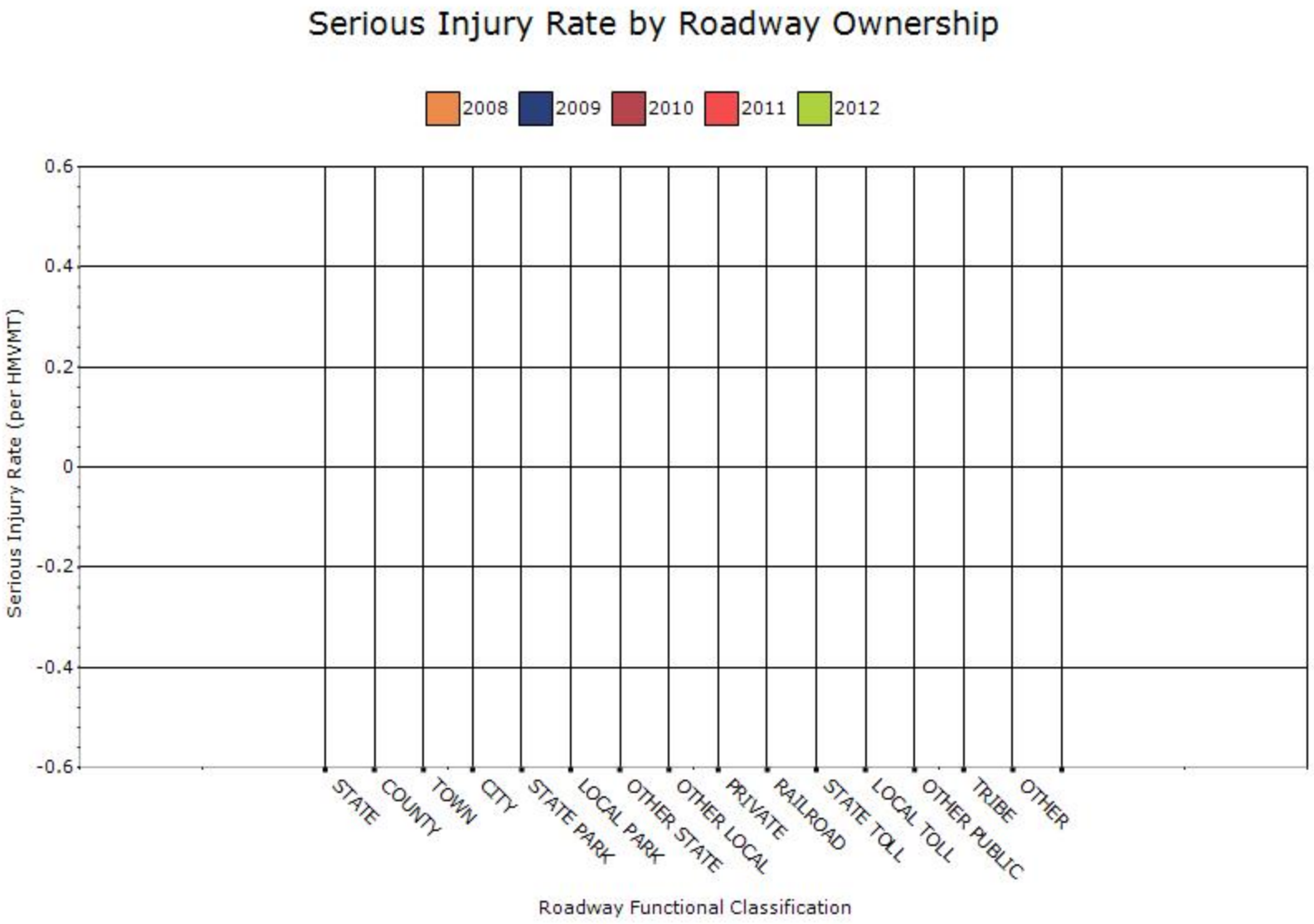
Roadway Ownership	Number of fatalities	Number of serious injuries	Fatality rate (per HMVMT)	Serious injury rate (per HMVMT)
STATE HIGHWAY AGENCY	2368	44967	0	0
COUNTY HIGHWAY AGENCY	303	3426	0	0
TOWN OR TOWNSHIP HIGHWAY AGENCY	0	0	0	0
CITY OF MUNICIPAL HIGHWAY AGENCY	706	38003	0	0
STATE PARK, FOREST, 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)	3	43	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
TOLL ROAD	30	817	0	0
TOLL ROAD	30	817	0	0


Number of Fatalities by Roadway Ownership
2008
2009
2010
2011
2012
3000
2500
2000
1500
1000
500
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
60000
50000
40000
30000
20000
10000
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
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

Functional Classification is only collected for on-system crashes.

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

With the exception of two years, there has been a decrease in the number fatalities each year for the last 10 years.

Application of Special Rules

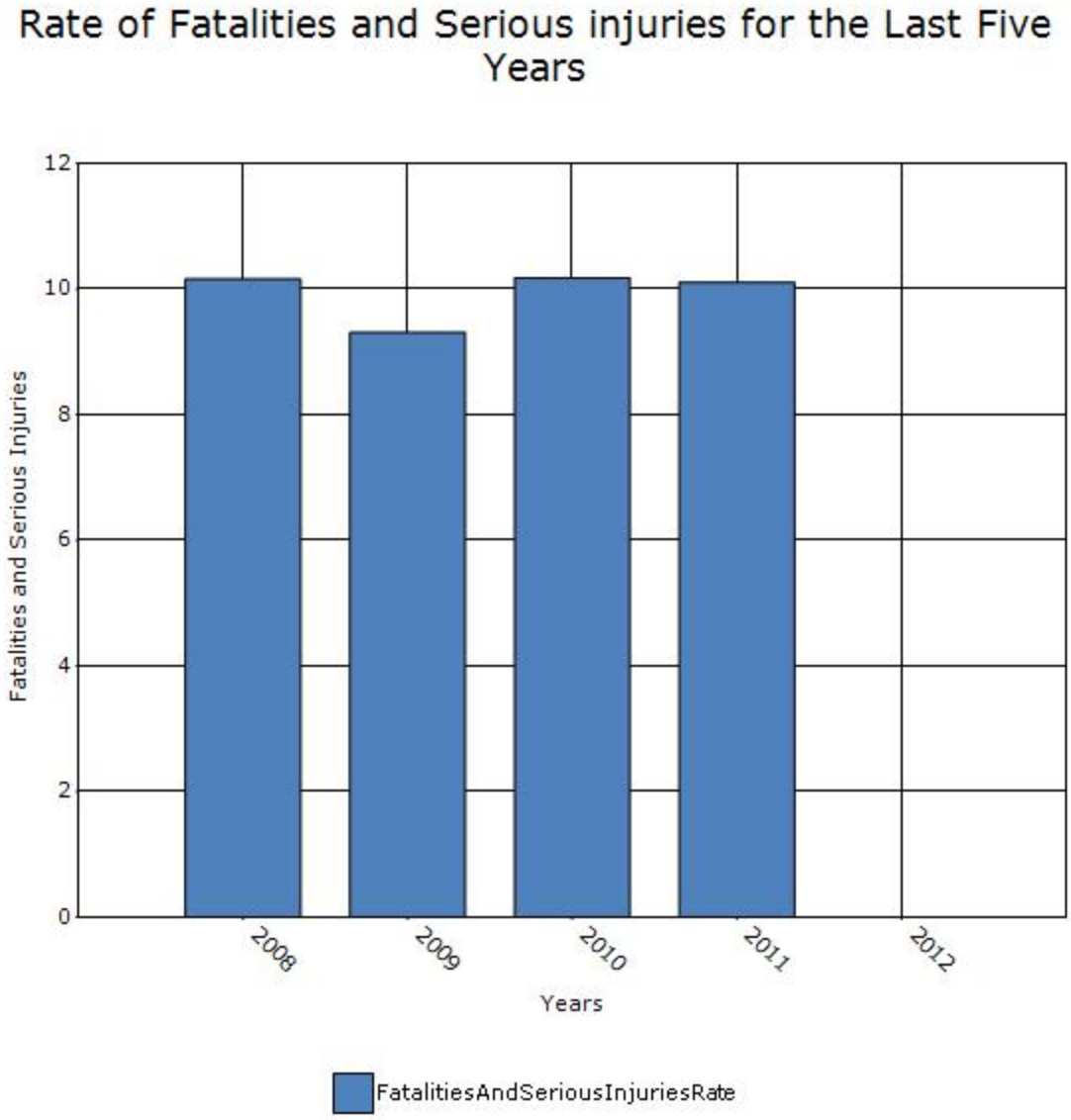
Present the rate of traffic fatalities and serious injuries per capita for drivers and pedestrians over the age of 65.

Older Driver **Performance Measures**	**2008**	**2009**	**2010**	**2011**	**2012**
Fatality rate (per capita)	2.76	2.54	2.64	2.83	0
Serious injury rate (per capita)	7.4	6.77	7.54	7.29	0
Fatality and serious injury rate (per capita)	10.16	9.31	10.18	10.11	0

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

Fatality and Serious Injury Rate = (Fatalities (FARS)+Incapacitating Injutries)/65+ Population (per 1,000)

For the purpose of this analysis, serious injuries are defined as incapacitating injuries only.



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-% decease in number of fatal and serious injury crashes and injuries in SHSP emphasis areas.

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.

No changes were made since the last reporting period.

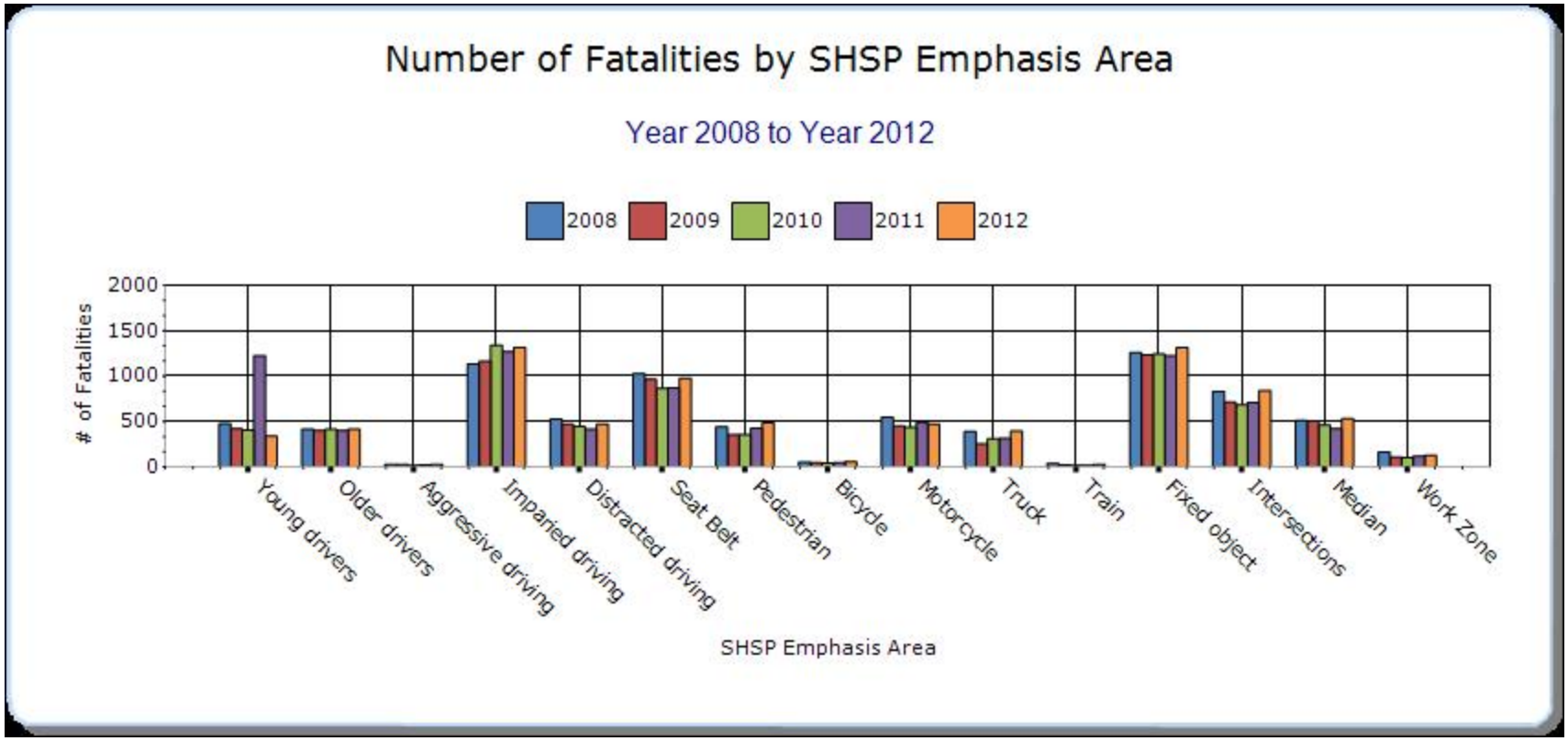
SHSP Emphasis Areas

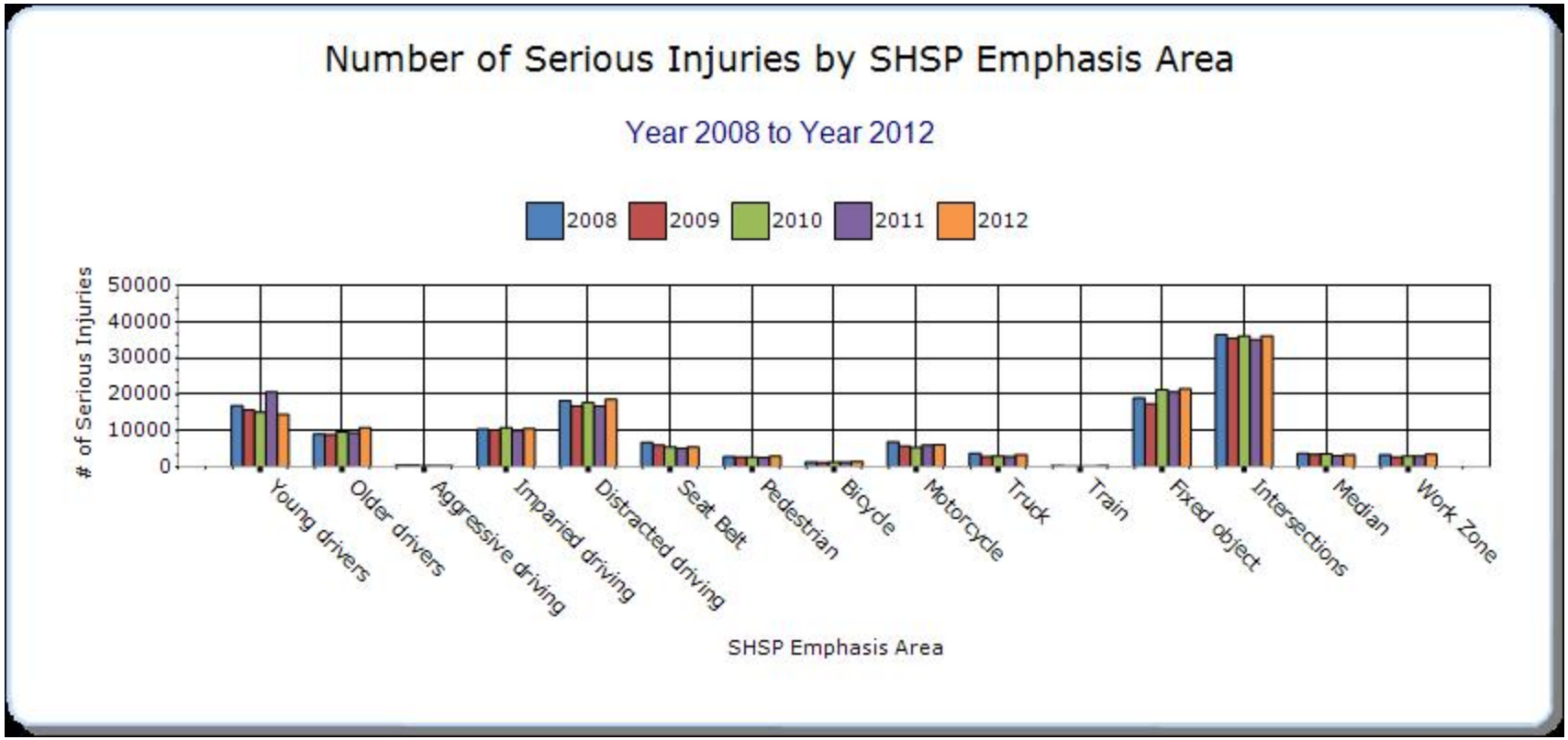
For each SHSP emphasis area that relates to the HSIP, present trends in emphasis area performance measures.

Year - 2012

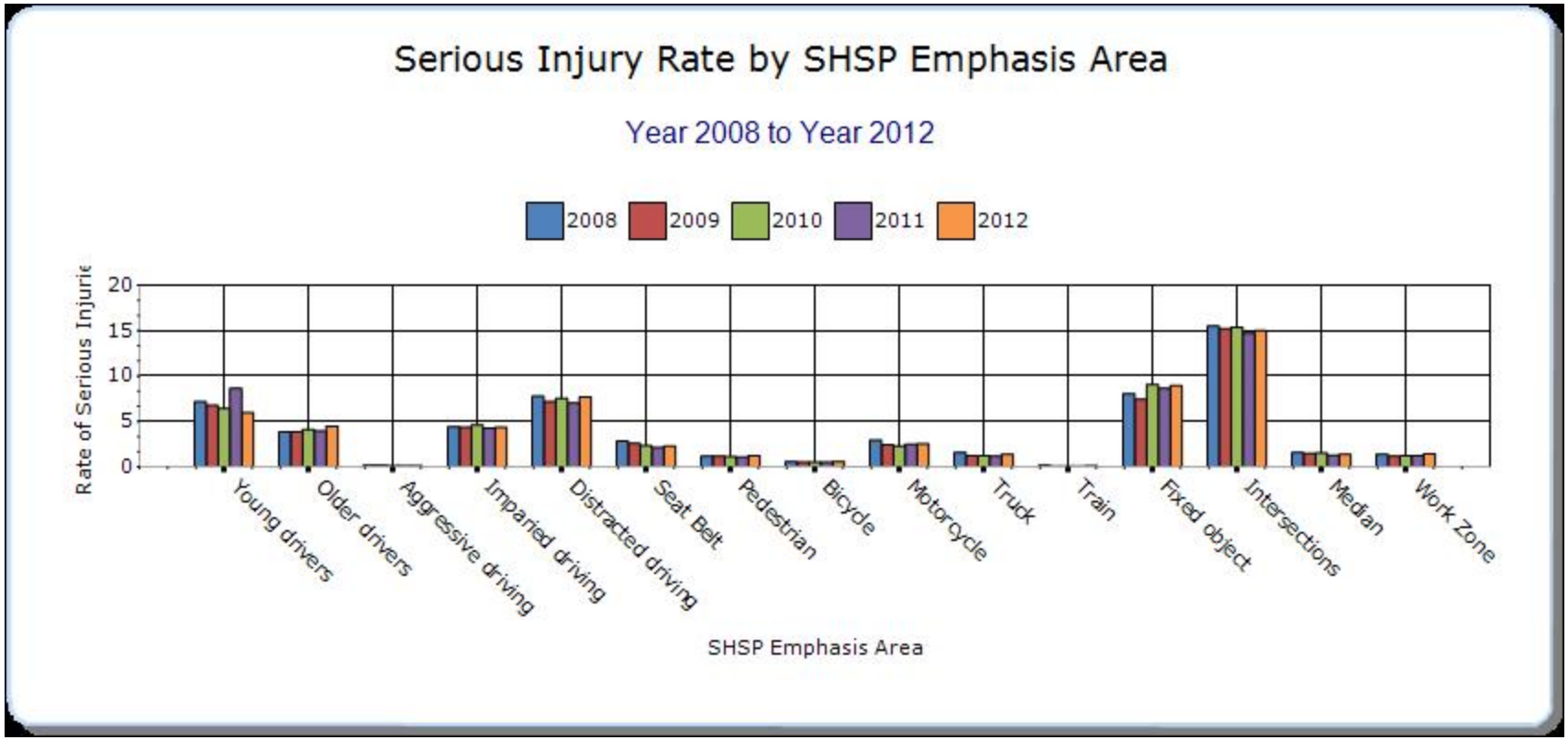
HSIP-related SHSP Emphasis Areas	Target Crash Type	Number of fatalities	Number of serious injuries	Fatality rate (per HMVMT)	Serious injury rate (per HMVMT)	Other-1	Other-2	Other-3
Instituting graduated licensing for younger drivers	**Teen drivers - related**	**339**	**14417**	**0.14**	**5.99**	**0**	**0**	**0**
Sustaining proficiency in older drivers	Drivers 65 years of age and older	419	10792	419	4.49	0	0	0
Curbing aggressive driving	Speed-related	28	313	0.01	0.13	0	0	0
Reducing impaired driving	DUI-related	1317	10531	0.55	4.38	0	0	0
Keeping drivers alert	distracted driving - related	470	18583	0.2	7.72	0	0	0
Increasing seat belt use and improving airbag effectiveness	Lack of restraint usage - related	978	5477	0.41	2.28	0	0	0
Making walking and street crossing easier	Vehicle/pedestrian	485	2966	0.2	1.23	0	0	0

Ensuring safer bicycle travel	Vehicle/bicycle	56	1452	0.02	0.6	0	0	0
Improving motorcycle safety and increasing motorcycle awareness	Vehicle/motorcycle	470	6130	0.2	2.55	0	0	0
Making truck travel safer	Truck-related	395	3378	0.16	1.4	0	0	0
Reducing vehicle-train crashes	Vehicle/train	30	309	0.01	0.13	0	0	0
Minimizing the consequences of leaving the road	Run-off-road	1314	21576	0.55	8.97	0	0	0
Improving the design and operation of highway intersections	Angle	841	36087	0.35	15	0	0	0
Reducing head-on and across-median crashes	Head on	535	3364	0.22	1.4	0	0	0
Designing safer work zones	crashes that occur in wz	131	3500	0.05	1.45	0	0	0


Number of Fatalities by SHSP Emphasis Area
Year 2008 to Year 2012
2008
2009
2010
2011
2012
# of Fatalities
2000
1500
1000
500
0
Young drivers
Older drivers
Aggressive driving
Impaired driving
Distracted driving
Seat Belt
Pedestrian
Bicycle
Motorcycle
Truck
Train
Fixed object
Intersections
Median
Work Zone
SHSP Emphasis Area


Number of Serious Injuries by SHSP Emphasis Area
Year 2008 to Year 2012
2008
2009
2010
2011
2012
# of Serious Injuries
50000
40000
30000
20000
10000
0
Young drivers
Older drivers
Aggressive driving
Impaired driving
Distracted driving
Seat Belt
Pedestrian
Bicycle
Motorcycle
Truck
Train
Fixed object
Intersections
Median
Work Zone
SHSP Emphasis Area


Fatality Rate by SHSP Emphasis Area
Year 2008 to Year 2012
2008
2009
2010
2011
2012
Rate of Fatalities
500
400
300
200
100
0
Young drivers
Older drivers
Aggressive driving
Impaired driving
Distracted driving
Seat Belt
Pedestrian
Bicycle
Motorcycle
Truck
Train
Fixed object
Intersections
Median
Work Zone
SHSP Emphasis Area

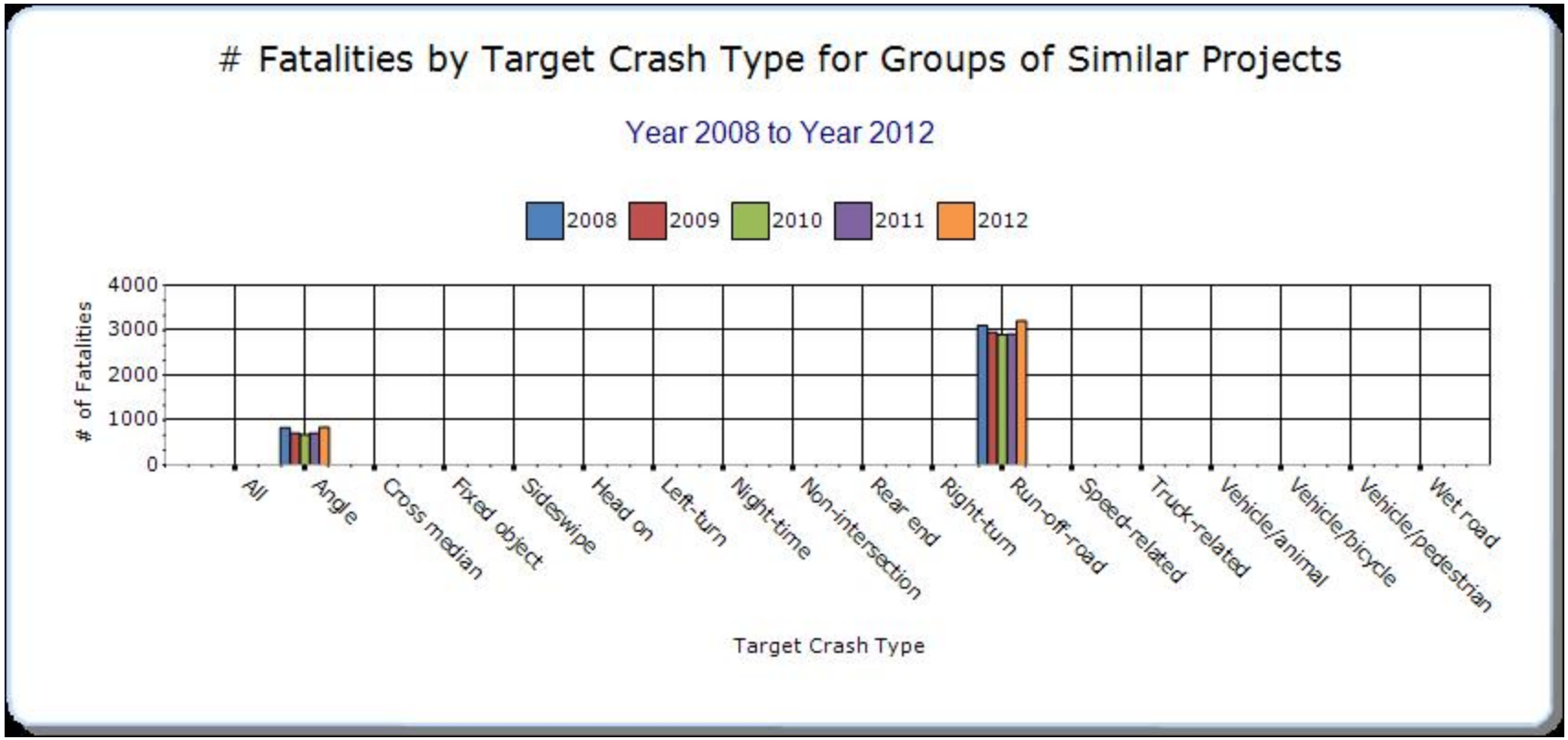

Serious Injury Rate by SHSP Emphasis Area
Year 2008 to Year 2012
2008
2009
2010
2011
2012
Rate of Serious Injurie
20
15
10
5
0
Young drivers
Older drivers
Aggressive driving
Impaired driving
Distracted driving
Seat Belt
Pedestrian
Bicycle
Motorcycle
Truck
Train
Fixed object
Intersections
Median
Work Zone
SHSP Emphasis Area

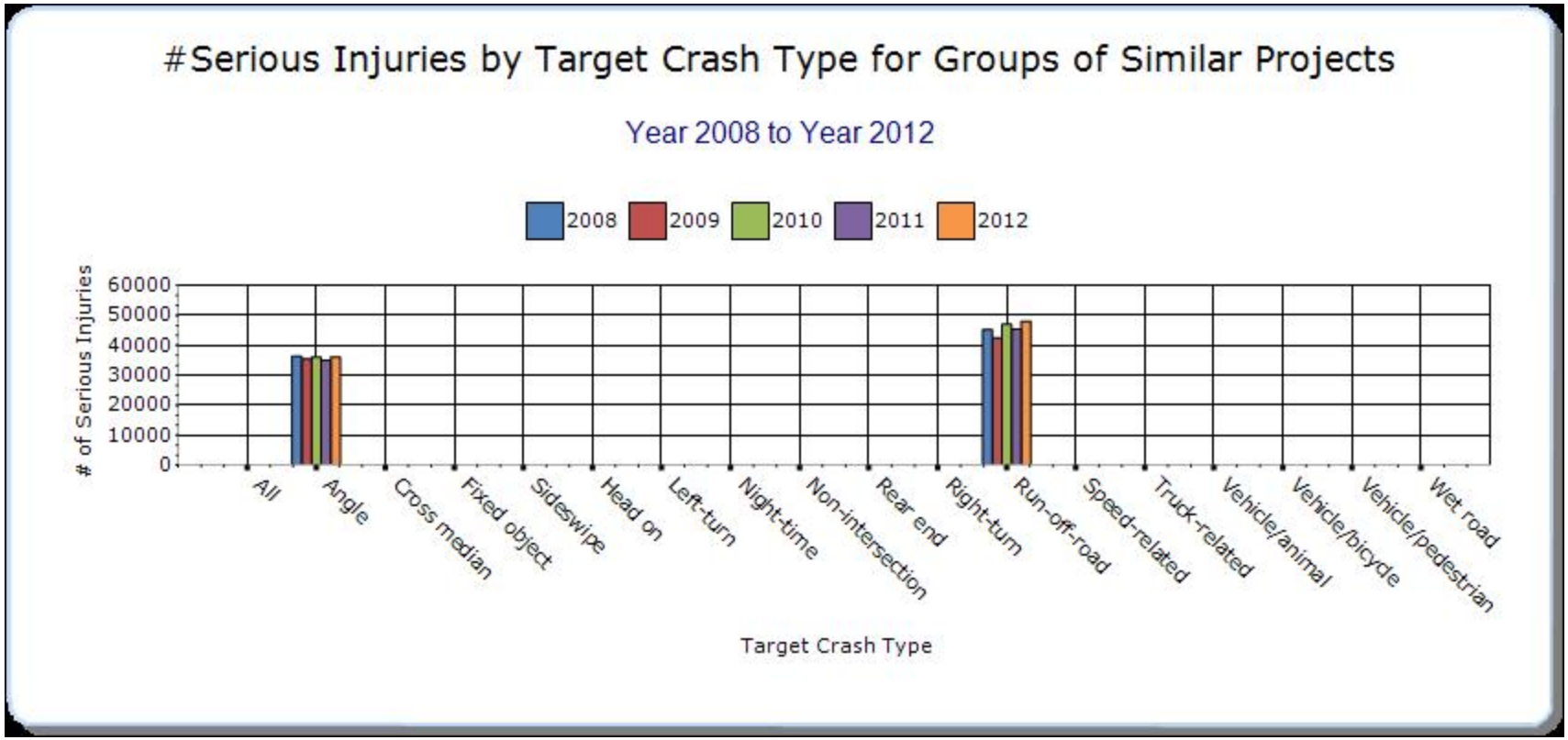
Groups of similar project types

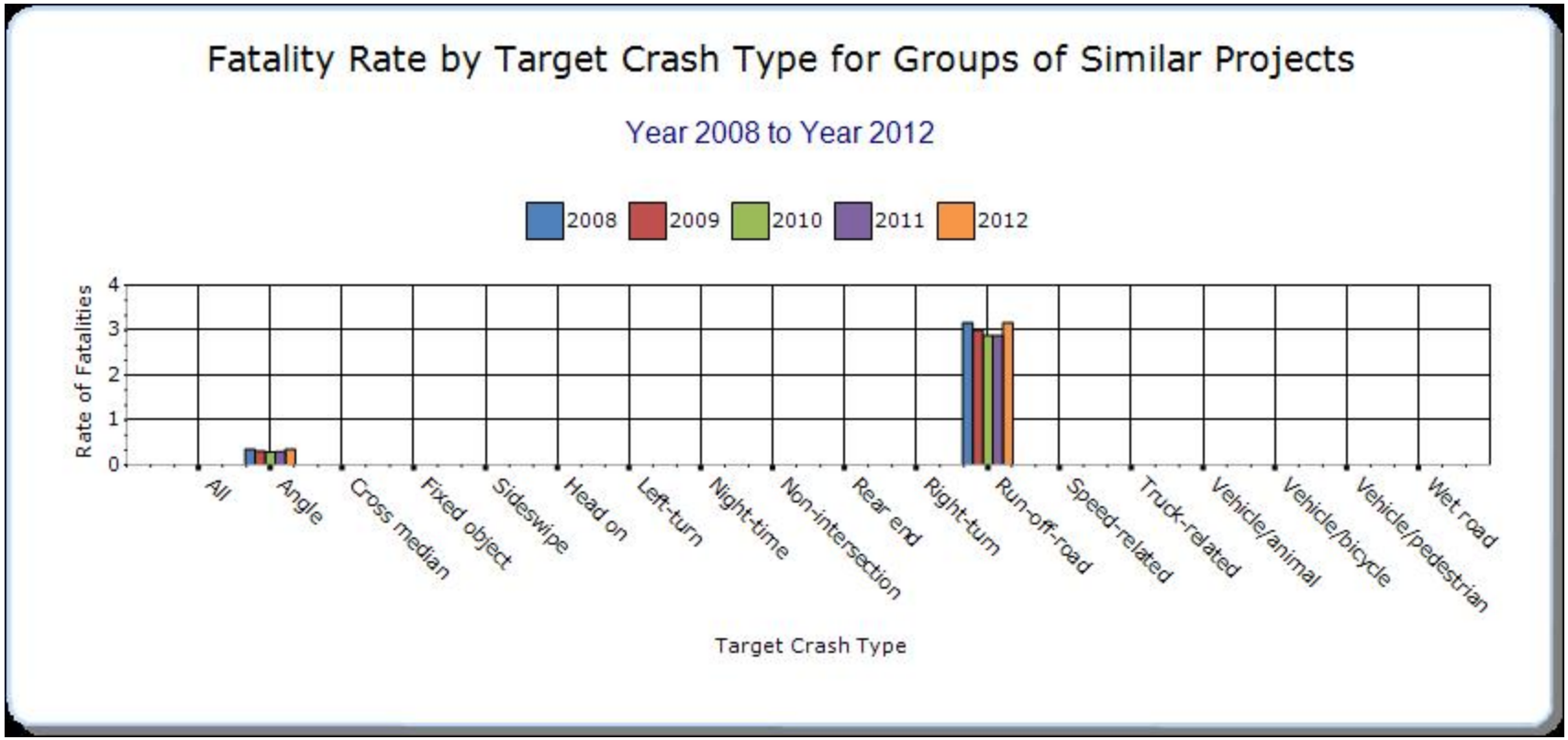
Present the overall effectiveness of groups of similar types of projects.

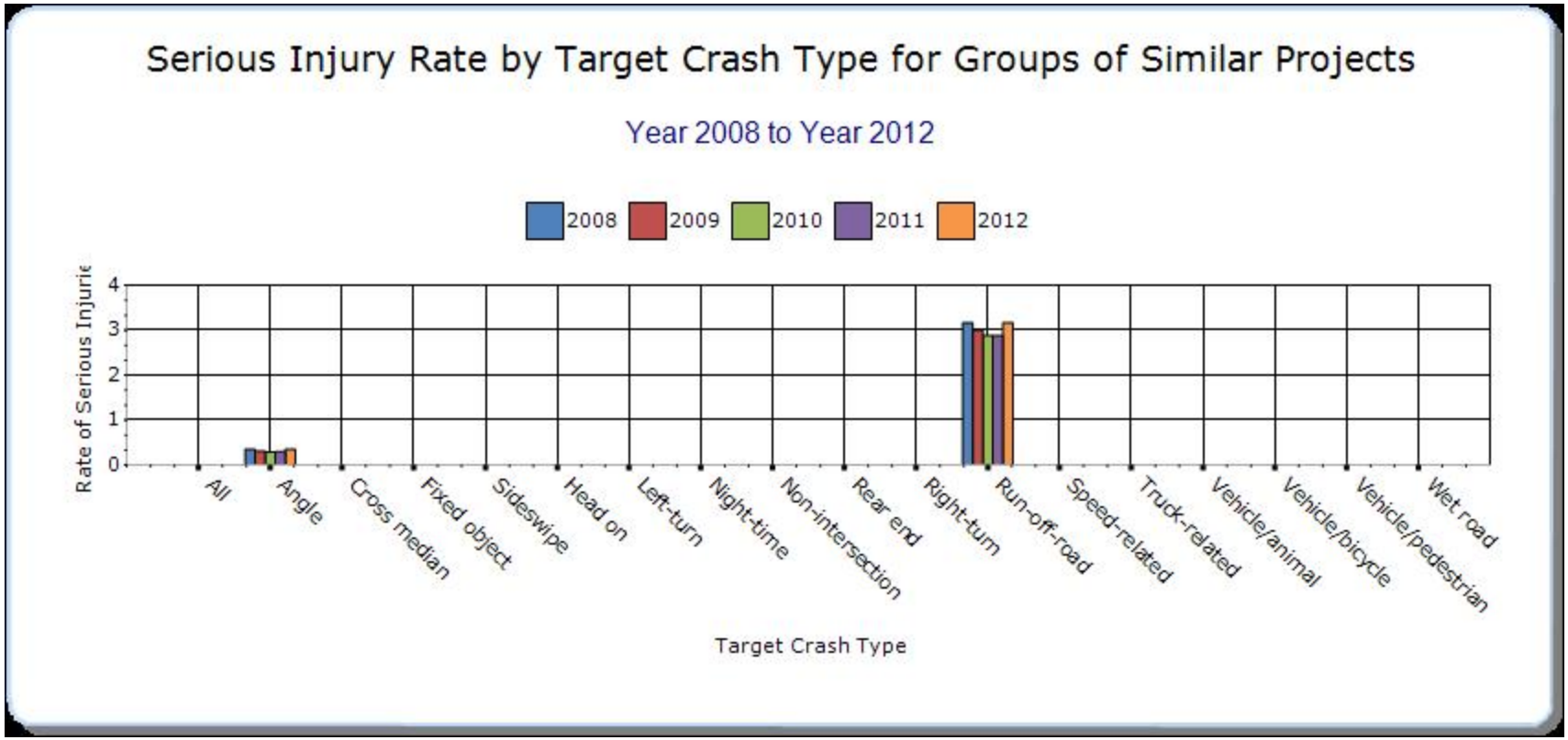
Year - 2012

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
Rural State Highways	**Run-off-road**	**1894**	**26463**	**2.62**	**36.66**	**0**	**0**	**0**
Intersection	Angle	841	36087	0.35	15	0	0	0
Roadway Departure	Run-off-road	1314	21576	0.55	8.97	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
4000
3000
2000
1000
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
60000
50000
40000
30000
20000
10000
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


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
1
2
3
4
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

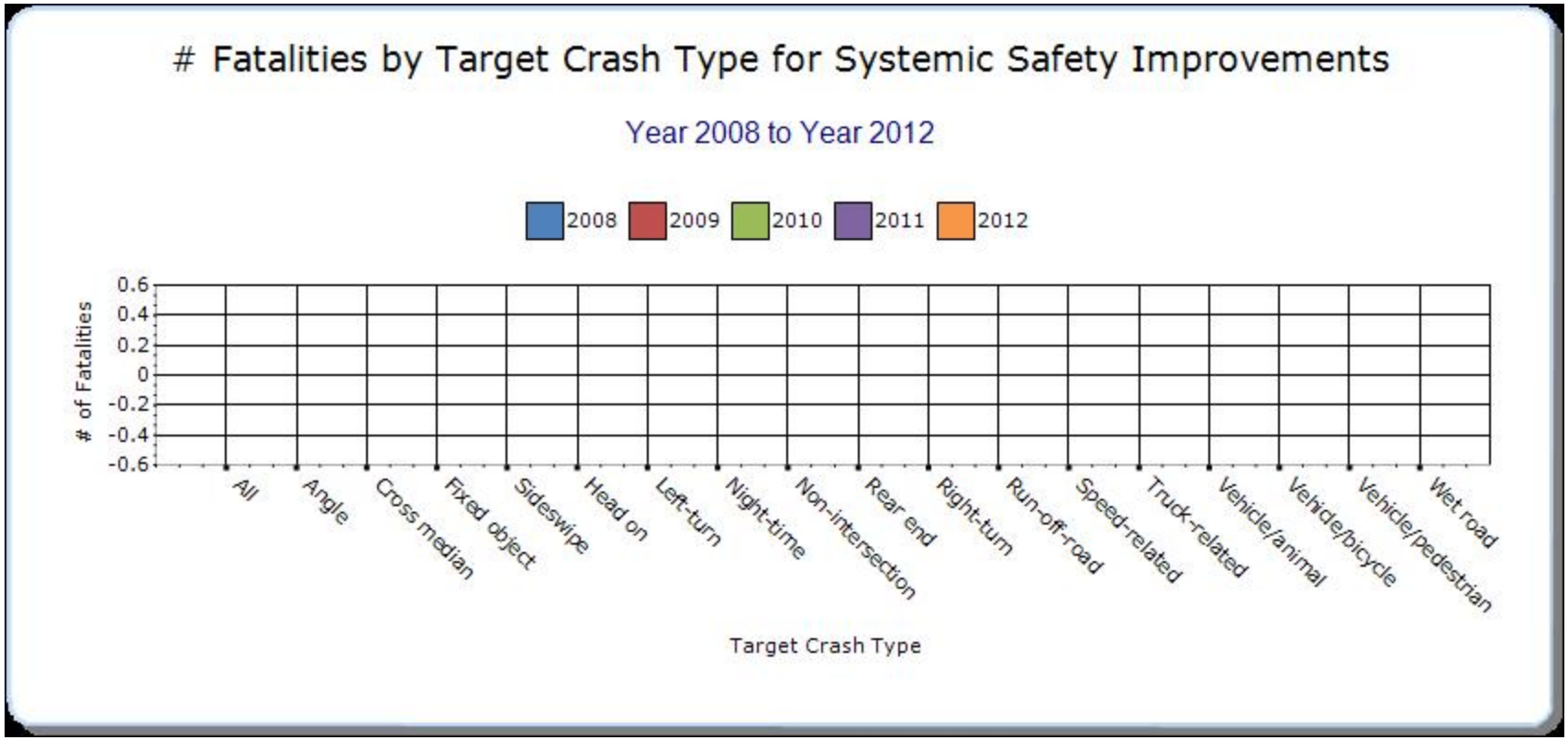

Serious Injury Rate by Target Crash Type for Groups of Similar Projects
Year 2008 to Year 2012
2008
2009
2010
2011
2012
Rate of Serious Injurie
4
3
2
1
0
All
Angle
Cross median
Fixed object
Sideswipe
Head on
Left-turn
Night-time
Non-intersection
Rear end
Right-turn
Run-off-road
Speed-related
Truck-related
Vehicle/animal
Vehicle/bicycle
Vehicle/pedestrian
Wet road
Target Crash Type

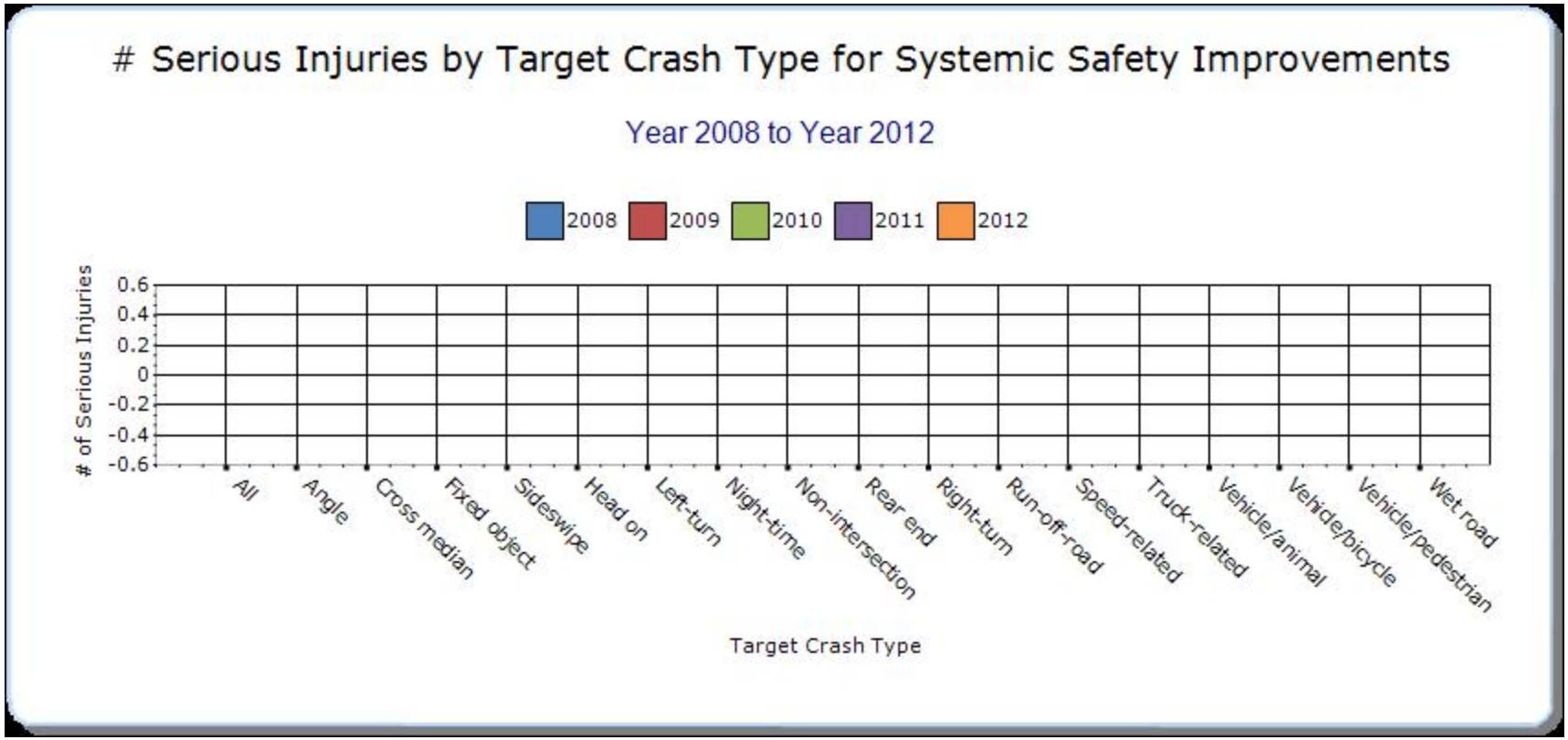
Systemic Treatments

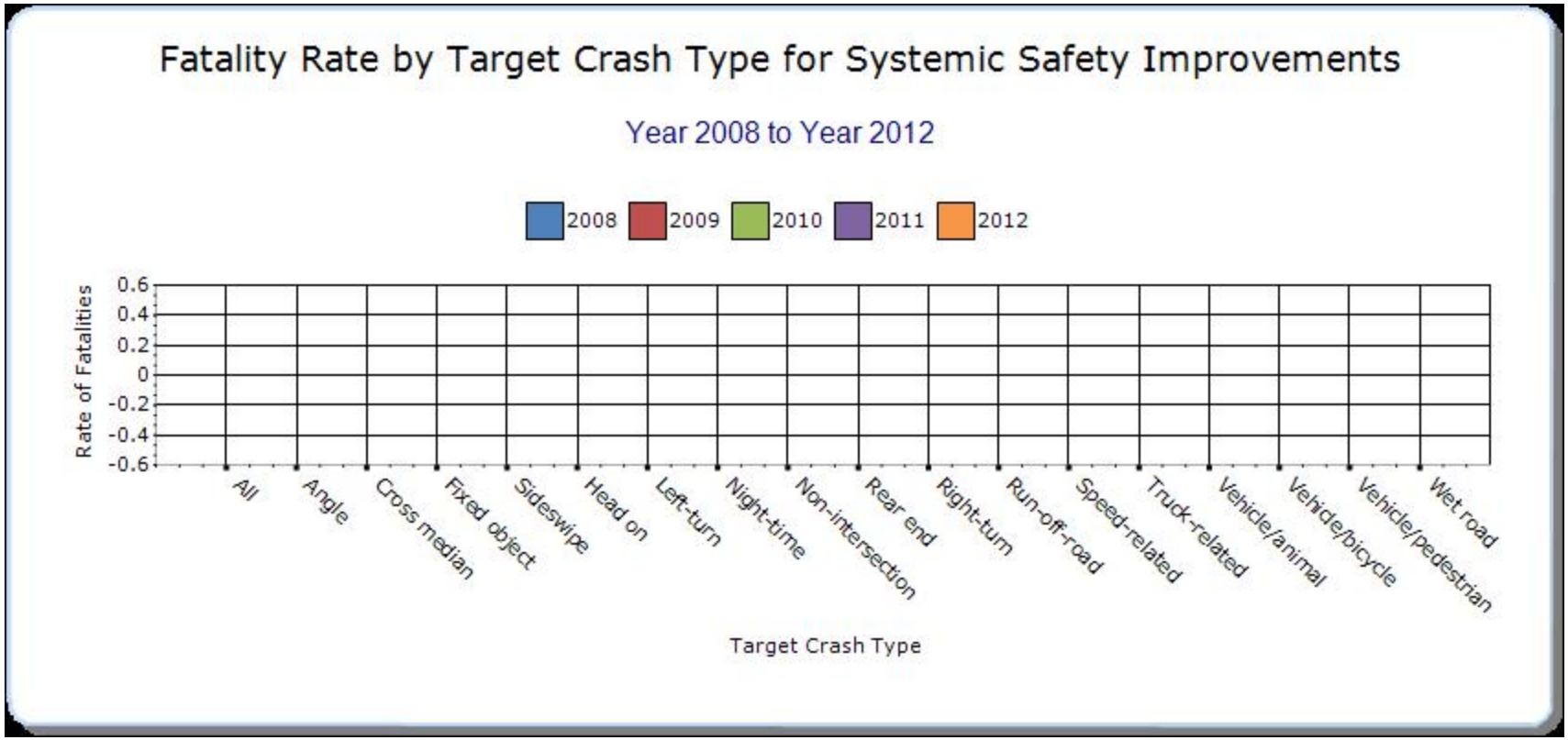
Present the overall effectiveness of systemic treatments..

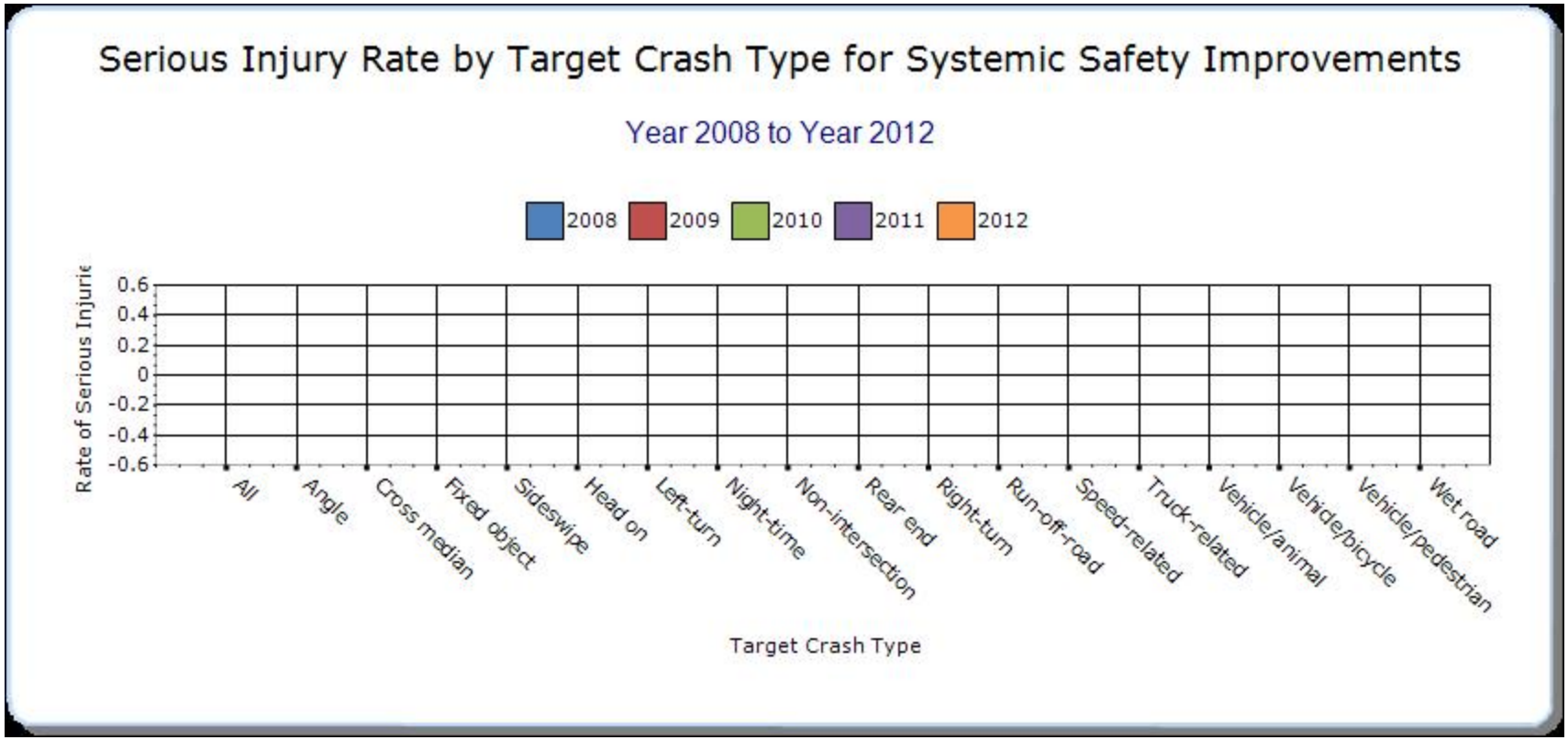
Year - 2012

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



This information is not available by these categories.

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

Texas has invested billions of state funds over the last 8 years to improve safety on our highways. The ability to supplement our federally
funded safety programs with state funded safety programs has had a major impact on the number of safety projects being implemented in
Texas and we are beginning to reap the benefits of these investments in the form of lower fatalities and serious injuries on Texas roadways.

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)
None		Miscellaneous												

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.