Highway Safety Improvement Program

Data Driven Decisions

Nebraska
Highway Safety Improvement Program
2013 Annual Report

Prepared by: NE

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

During State FY 2013, the Nebraska Department of Roads increased the emphasis of its HSIP program from planning projects at individual sites to systemic improvements. The impetus for these projects was the fact that Nebraska had been falling behind in obligating its HSIP funds. Systemic projects let this year included countdown pedestrian signal heads and durable pavement markings on multi-lane highways. More of these types of projects are being planned for future years including bridge anti-icing systems, guardrail replacement, durable pavement markings on 2-lane highways, shoulder rumble strips, and adaptive signal systems. The expectation is that more of these kinds of projects will be developed in the future. Projects at individual locations are still an important part of the HSIP and include roundabouts, intersection improvements, overtime enforcement, etc. The Department continues to sponsor a High Risk Rural Roads committee and these types of projects will still be developed when they can be identified.

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 road projects are regularly funded under the HSIP. City governments are encouraged to submit potential projects to the NDOR for consideration for HSIP funding. Representatives of the state's two largest cities, Omaha and Lincoln, regularly attend Safety Committee meetings and officials from the smaller cities are always welcome. Representatives from the Nebraska LTAP Center and the Nebraska Highway Superintendents Association sit on the High Risk Rural Road committee. The number of projects built on local roads varies from year to year. During State FY 2013, two HSIP projects let were on local roads. In addition, most of Nebraska's High

Risk Rural Roads projects have been built on local roads. Many local projects, especially intersection improvements in Omaha and Lincoln, are not listed here because they are located on state highways.

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

☒Design

☒Planning

☐Maintenance

☒Operations

☒Governors Highway Safety Office

☒Other: Other-Traffic Engineering

☒Other: Other-Highway Safety

☒Other: Other-Local Projects

☒Other: Other-Program Management

☒Other: Other-Rail & Public Transportation

Briefly describe coordination with internal partners.

All of the above named disciplines play a role in the HSIP process. Highway Safety prepares collision diagrams, spot maps, or lists of high accident locations and presents them to committee members at their monthly meetings. They coordinate with the engineering divisions to get estimated project costs, from which they calculate benefit-cost ratios. They also complete evaluations of completed projects and present them to the group for use in making future decisions. All HSIP projects are approved by either the NDOR Safety Committee or the Strategic Safety Infrastructure Team. The usual procedure is for an approved HSIP project to be assigned to Roadway Design Division, Traffic Engineering Division, or the Local Projects Section of Materials and Research Division as the lead element, depending on the type of project and whether or not it is on a local road. These units work with Project Management to get the

project scheduled and to make sure it is progressing adequately through the steps in the Clarity software, which is used for project programming. This includes the important step of working with the Environmental Section to make sure all environmental concerns are met. The lead units either design the project or oversee the design of a consultant and prepare the project for letting. If railroad property is involved in the project, Rail & Public Transportation Division must also be consulted. The Operations Division has taken the lead on projects involving bridge anti-icing systems, adaptive signal control, and dynamic message signs, which require systems engineering analysis. The NDOR has begun using the Highway Safety Manual procedures in the analysis and evaluation of some HSIP projects.

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

☐ Metropolitan Planning Organizations

☒ Governors Highway Safety Office

☒ Local Government Association

☒ Other: Other-City of Omaha Public Works Department

☒ Other: Other-City of Lincoln Public Works Department

☒ Other: Other-FHWA Division Office

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-None

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

None.

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: **Intersection**

Date of Program Methodology: **7/1/2006**

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	☐ Population	☐ Functional classification

crashes only

☐ Other

☒ Lane miles

☐ Other

☐ Roadside features

☒ Other-Land Use

☒ Other-Median Type

☒ Other-Number of Lanes

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	3
☒ Available funding	2
☐ Incremental B/C	
☐ Ranking based on net benefit	
☐ Cost Effectiveness	
☒ Design and Project Development Time	1

Program: **Roadway Departure**

Date of Program Methodology: **7/1/2006**

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-Land Use
		☒ Other-Median Type
		☒ Other-Number of Lanes

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	3
☒ Available funding	2
☐ Incremental B/C	
☐ Ranking based on net benefit	
☐ Cost Effectiveness	
☒ Design and Project Development Time	1

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

86

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:

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

During the past year, Nebraska began using the Highway Safety Manual methodology for calculating some benefit-cost ratios and other safety measures. Although we used the systemic approach in the past, this year we greatly increased our use of it, as seen in the increase in the percentage of total HSIP funds used for systemic projects from 11% to 86%.

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)	18874842	70 %	14469165	73 %
HRRRP (SAFETEA-LU)	0	0 %		
HRRR Special Rule				
Penalty Transfer - Section 154				
Penalty Transfer – Section 164	6204754	23 %	3660275	18 %
Incentive Grants - Section 163				
Incentive Grants (Section 406)				
Other Federal-aid Funds (i.e. STP, NHPP)				
State and Local Funds	1758972	7 %	1699466	9 %
Totals	26838568	100%	19828906	100%

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

$2,137,468.00

How much funding is obligated to local safety projects?

$988,272.00

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

$1,776,330.00

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

$1,768,682.00

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

$6,204,754.00

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.

Previous problems with obligating local projects and getting local projects through the NEPA process in a timely manner have largely been resolved. Now the major impediment is the amount of time needed to get through all the steps in the federal process.

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
00877 Statewide Highway Countdown Pedestrian Heads	Pedestrians and bicyclists Pedestrian signal - install new at intersection	110 Numbers	280152	312280	HSIP (Section 148)	Varies			State Highway Agency	Making walking and street crossing easier	Provide pedestrians with better information at signalized intersections
00887A Statewide "Click It or Ticket" Mobilization	Non-infrastructure	1 Numbers	111600	124003	HSIP (Section 148)	Not Applicable			Not Applicable	Increasing seat belt use and improving airbag effectiveness	Conduct seat belt enforcement campaigns
00887B "You Drink, You Drive, You Lose"	Non-infrastructure	1 Numbers	202500	225003	HSIP (Section 148)	Not Applicable			Not Applicable	Reducing impaired driving	Increase number of DUI checkpoint

Mobilization											s
00887C NDOR Safety Education Commercials	Non-infrastructure	1 Numbers	150000	150103	Penalty Transfer – Section 164	Not Applicable			Not Appplicable	Increasing driver safety awareness	Educate highway users on safety issues
00887D "Click It or Ticket" Mobilization	Non-infrastructure	1 Numbers	350000	350103	Penalty Transfer – Section 164	Not Applicable			Not Applicable	Increasing seat belt use and improving airbag effectiveness	Conduct seat belt enforcement campaigns
00887E Advertising for "You Drink, You Drive, You Lose"	Non-infrastructure	1 Numbers	250000	250103	Penalty Transfer – Section 164	Not Applicable			Not Applicable	Reducing impaired driving	Increase number of DUI checkpoints
00887F NSP Overtime for Safety Demos	Non-infrastructure	1 Numbers	35750	35853	Penalty Transfer – Section 164	Not Applicable			Not Applicable	Increasing driver safety awareness	Educate highway users on safety issues
00887G Nebraska	Non-infrastructur	1 Number	68832	76583	HSIP (Section	Not			Not	Increasing driver safety	Educate highway

Safety Center - Kearney -- PI&E	e	s			148)	Applicable			Applicable	awareness	users on safety issues
00887H Enforcement Grants for "You Drink, You Drive, You Lose"	Non-infrastructure	1 Numbers	350000	388892	HSIP (Section 148)	Not Applicable			Not Applicable	Reducing impaired driving	Increase number of DUI checkpoints
00887J PI&E for Targeted Demographics	Non-infrastructure	1 Numbers	250000	277881	HSIP (Section 148)	Not Applicable			Not Applicable	Increasing driver safety awareness	Provide enhanced education to lower usage groups
12928 Lincoln -- NB I-180 Ramp at Superior Street (1)	Intersection geometry Auxiliary lanes - add right-turn lane	1 Numbers	121500	124470	HSIP (Section 148)	Urban Principal Arterial - Other	24700	40	City of Municipal Highway Agency	Improving the design and operation of highway intersections	Provide additional right-turn lanes at intersections
12928 Lincoln -- NB I-180 Ramp at Superior	Intersection geometry Auxiliary lanes - add right-turn	1 Numbers	438584	449128	Penalty Transfer – Section	Urban Principal Arterial - Other	24700	40	City of Municipal Highway Agency	Improving the design and operation of highway	Provide additional right-turn lanes at intersectio

Street (2)	lane				164					intersections	ns
13226 District 1 - Districtwide	Roadway delineation Longitudinal pavement markings - remarking	100 Miles	1716990	2604424	HSIP (Section 148)	Varies			State Highway Agency	Keeping vehicles in the roadway	Provide enhanced pavement markings
22371 Omaha - F St./16th St. & Spring Lake Drive	Intersection traffic control Modify control - traffic signal to roundabout	1 Numbers	531467	633713	Penalty Transfer – Section 164	Urban Minor Arterial	6692	30	City of Municipal Highway Agency	Improving the design and operation of highway intersections	Replace signalized intersections with roundabouts
22429 Omaha - 84th & L Street (1)	Intersection geometry Auxiliary lanes - add left-turn lane	1 Numbers	45536	46152	HSIP (Section 148)	Urban Principal Arterial - Other	69572	45	City of Municipal Highway Agency	Improving the design and operation of highway intersections	Provide additional left-turn lanes at intersections
22429 Omaha - 84th & L Street (2)	Intersection geometry Auxiliary lanes - add left-turn	1 Numbers	1347958	1352402	Penalty Transfer – Section 164	Urban Principal Arterial - Other	69572	45	City of Municipal Highway Agency	Improving the design and operation of highway	Provide additional left-turn lanes at intersectio

	lane									intersections	ns
22448 Scribner North	Roadside Barrier-metal	4 Numbers	302433	856999	HSIP (Section 148)	Rural Principal Arterial - Other	5819	60	State Highway Agency	Minimizing the consequences of leaving the road	Upgrade outdated bridge rail
22461 Omaha - 30th & McKinley Street	Intersection geometry Auxiliary lanes - modify left-turn lane offset	1 Numbers	355945	402634	HSIP (Section 148)	Urban Principal Arterial - Other	26852	45	City of Municipal Highway Agency	Improving the design and operation of highway intersections	Re-align approaches to provide better sight distance
22496 Omaha - Pedestrian Countdown Signals - Phase 2	Pedestrians and bicyclists Pedestrian signal - install new at intersection	Numbers	456805	507561	HSIP (Section 148)	Varies			City of Municipal Highway Agency	Making walking and street crossing easier	Provide pedestrians with better information at signalized intersections
22552 District 2 - Districtwide	Roadway delineation Longitudinal pavement markings -	82 Miles	2090343	2724714	HSIP (Section 148)	Varies			State Highway Agency	Keeping vehicles in the roadway	Provide enhanced pavement markings

	remarking										
32163 NW of Columbus - Jct. of US-81 & N-22	Intersection geometry Auxiliary lanes - modify right-turn lane offset	1 Numbers	157186	244429	HSIP (Section 148)	Urban Principal Arterial - Other	9670	65	State Highway Agency	Improving the design and operation of highway intersections	Provide offset right-turn lanes to improve visibility
32203 District 3 - Districtwide	Roadway delineation Longitudinal pavement markings - remarking	82 Miles	2708590	195527 6	HSIP (Section 148)	Varies			State Highway Agency	Keeping vehicles in the roadway	Provide enhanced pavement markinggs
42734 District 4 - Districtwide	Roadway delineation Longitudinal pavement markings - remarking	93 Miles	3288668	234258 6	HSIP (Section 148)	Varies			State Highway Agency	Keeping vehicles in the roadway	Provide enhanced pavement markings
51523 District 5 - Districtwide	Roadway delineation Longitudinal pavement markings - remarking	83 Miles	2677559	181125 3	HSIP (Section 148)	Varies			State Highway Agency	Keeping vehicles in the roadway	Provide enhanced pavement markings

61576 District 6 - Districtwide	Roadway delineation Longitudinal pavement markings - remarking	30 Miles	853165	949072	HSIP (Section 148)	Varies			State Highway Agency	Keeping vehicles in the roadway	Provide enhanced pavement markings

Progress in Achieving Safety Performance Targets

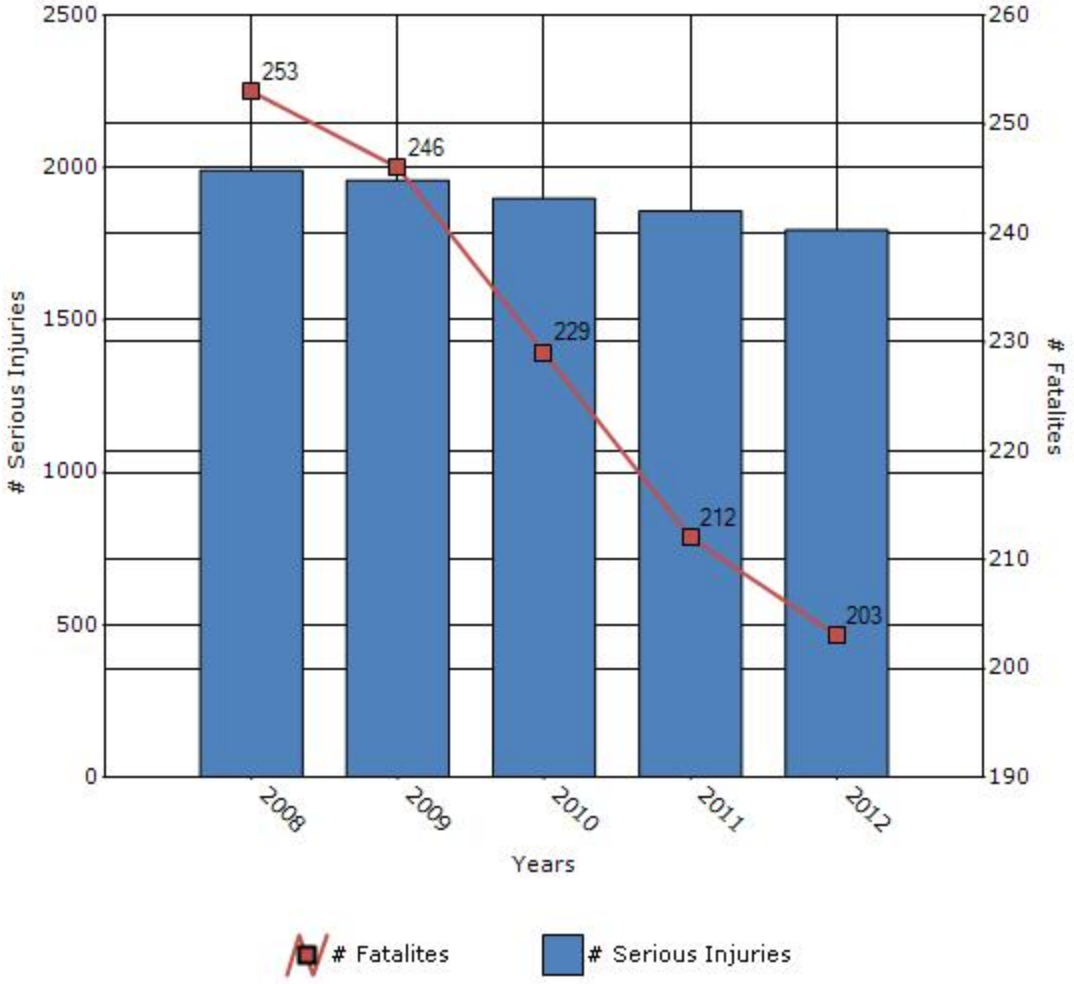
Overview of General Safety Trends

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

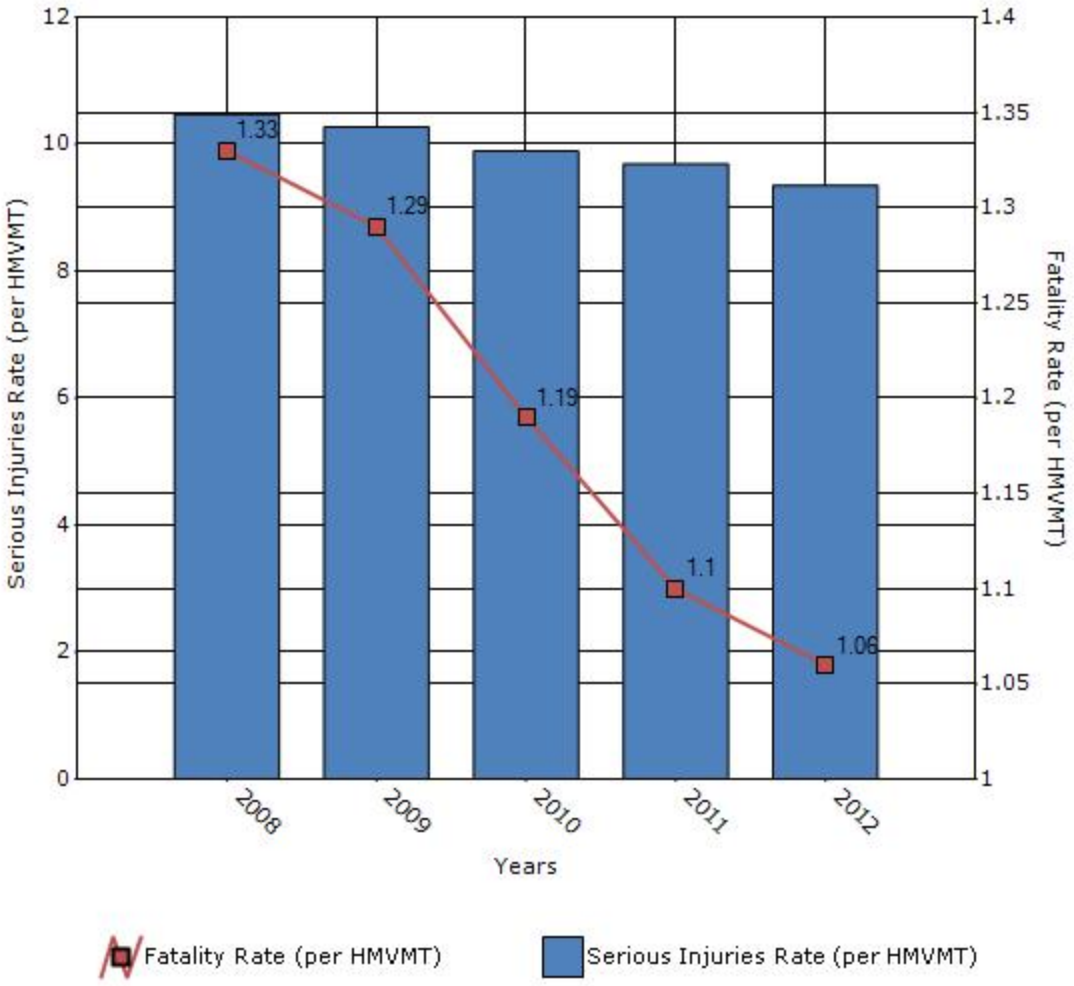
Performance Measures*	2008	2009	2010	2011	2012
Number of fatalities	253	246	229	212	203
Number of serious injuries	1991	1958	1898	1858	1795
Fatality rate (per HMVMT)	1.33	1.29	1.19	1.1	1.06
Serious injury rate (per HMVMT)	10.47	10.27	9.89	9.69	9.35

*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

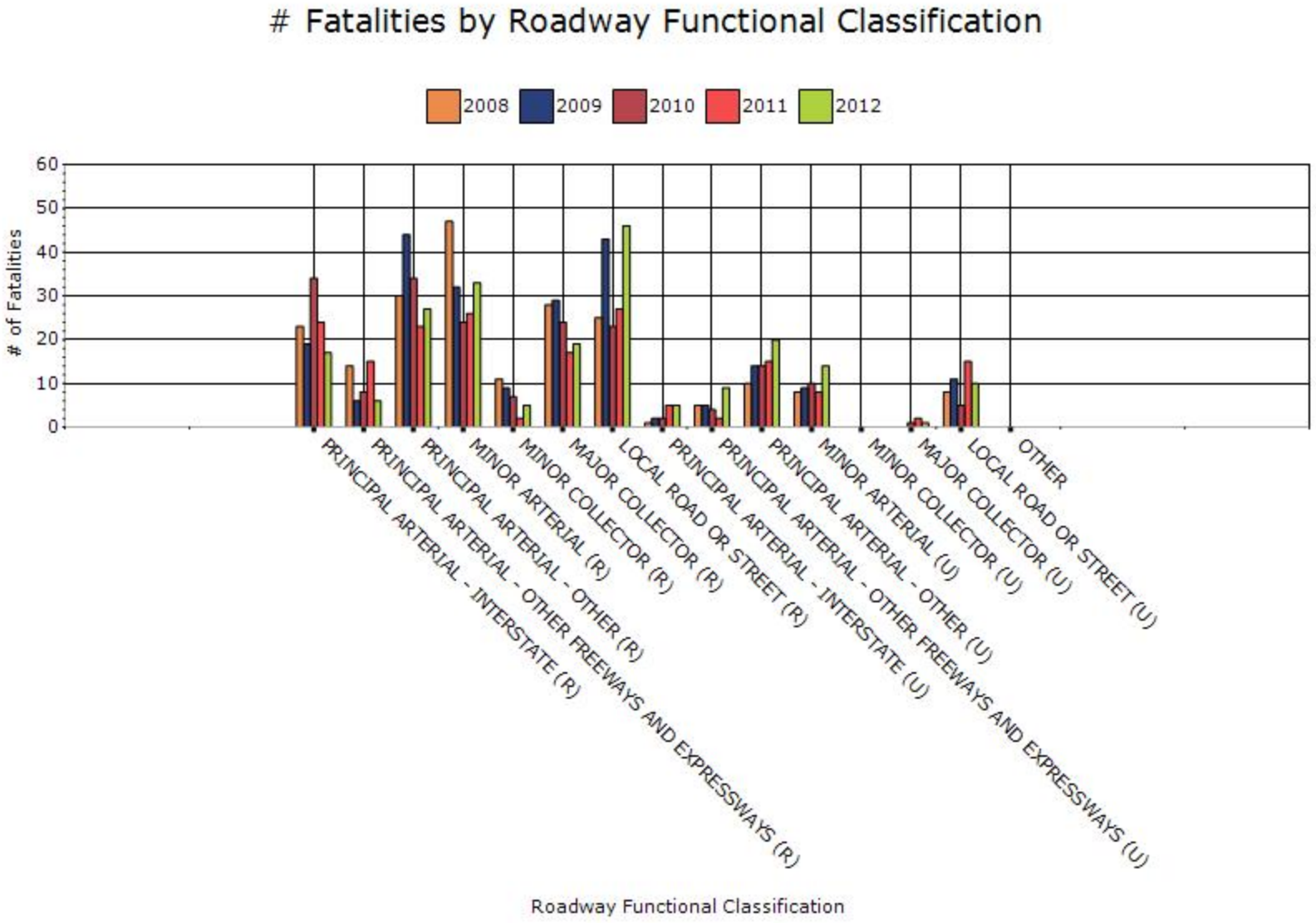


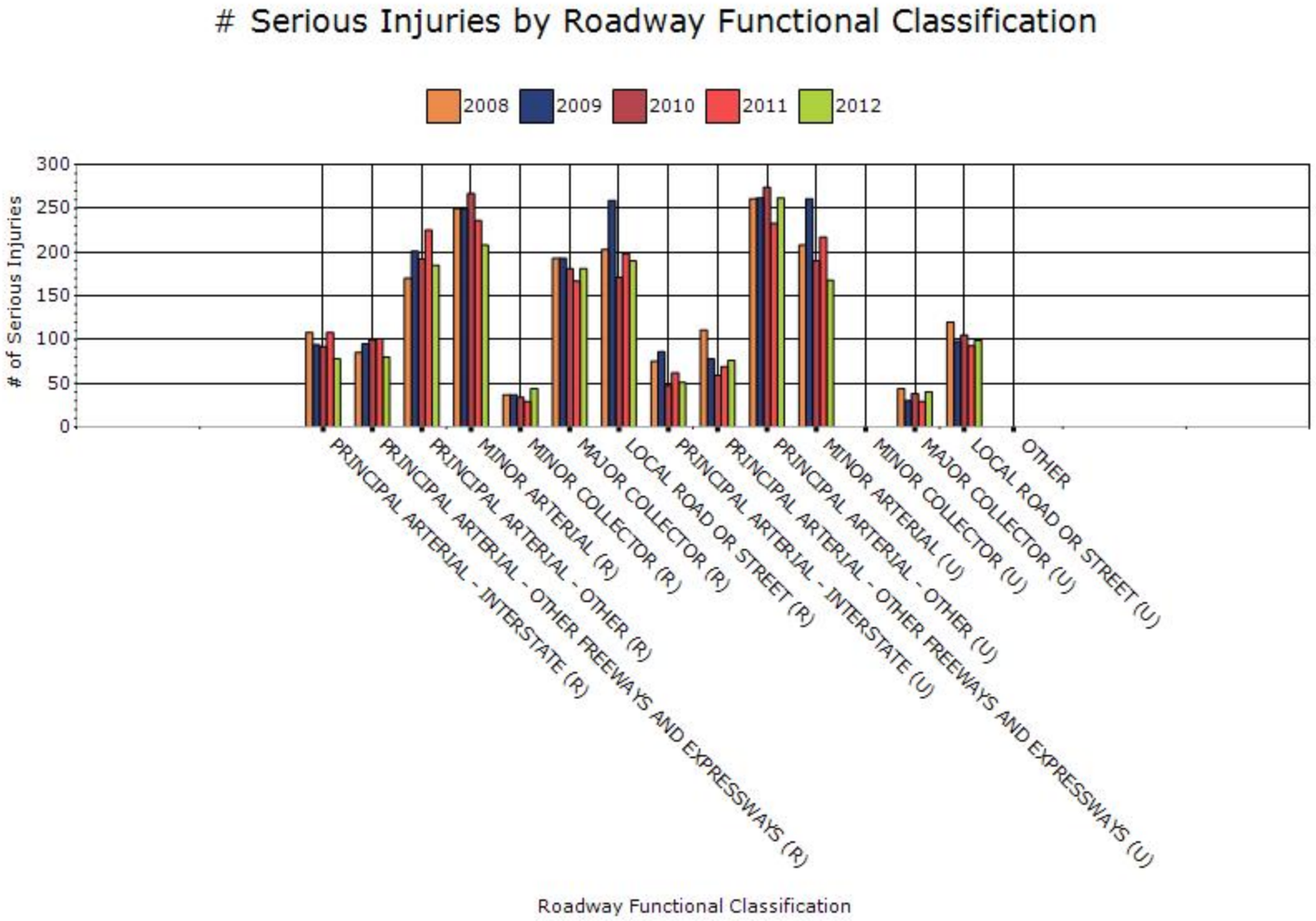
To the maximum extent possible, present performance measure* data by functional classification and ownership.

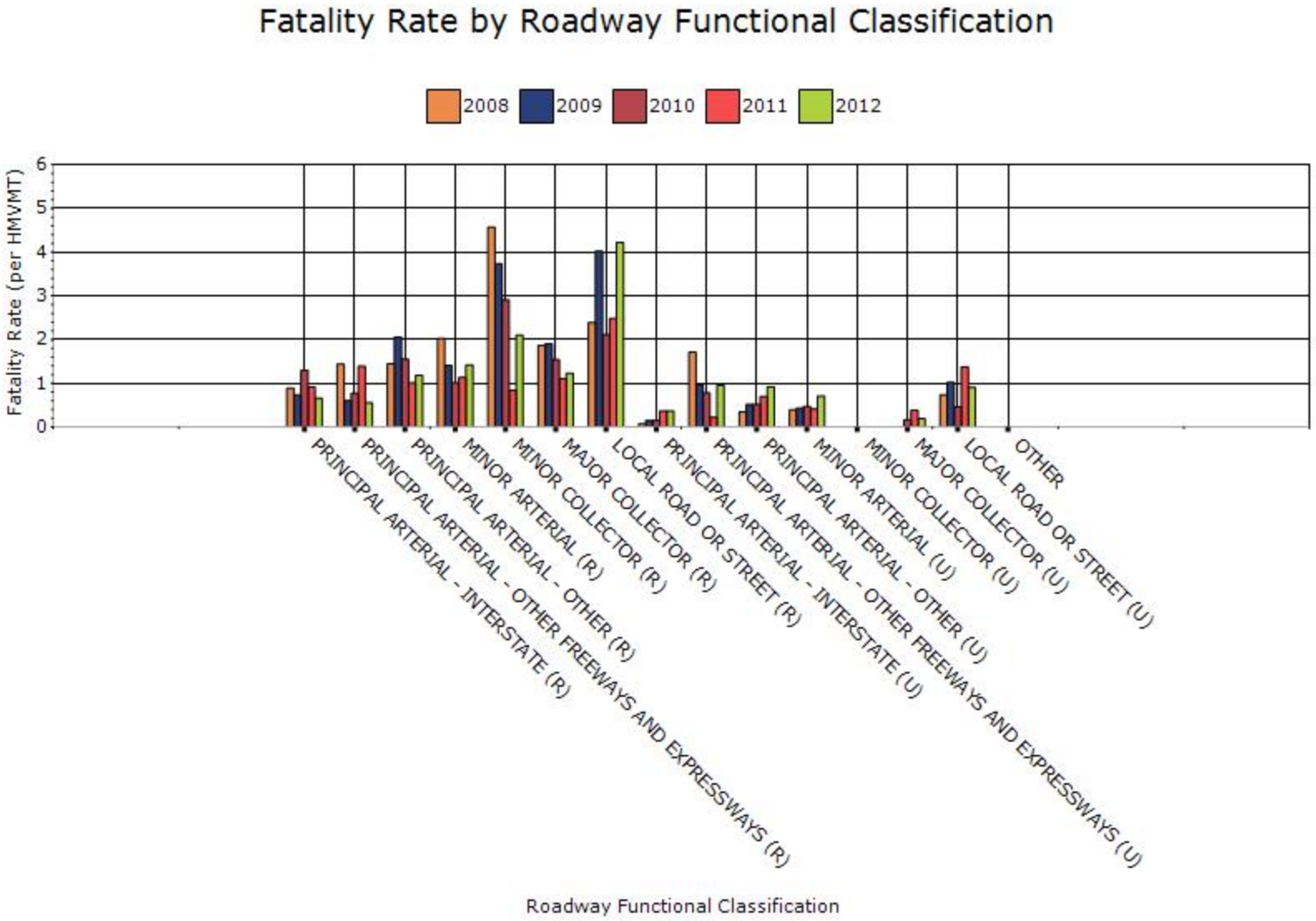
Year - 2012

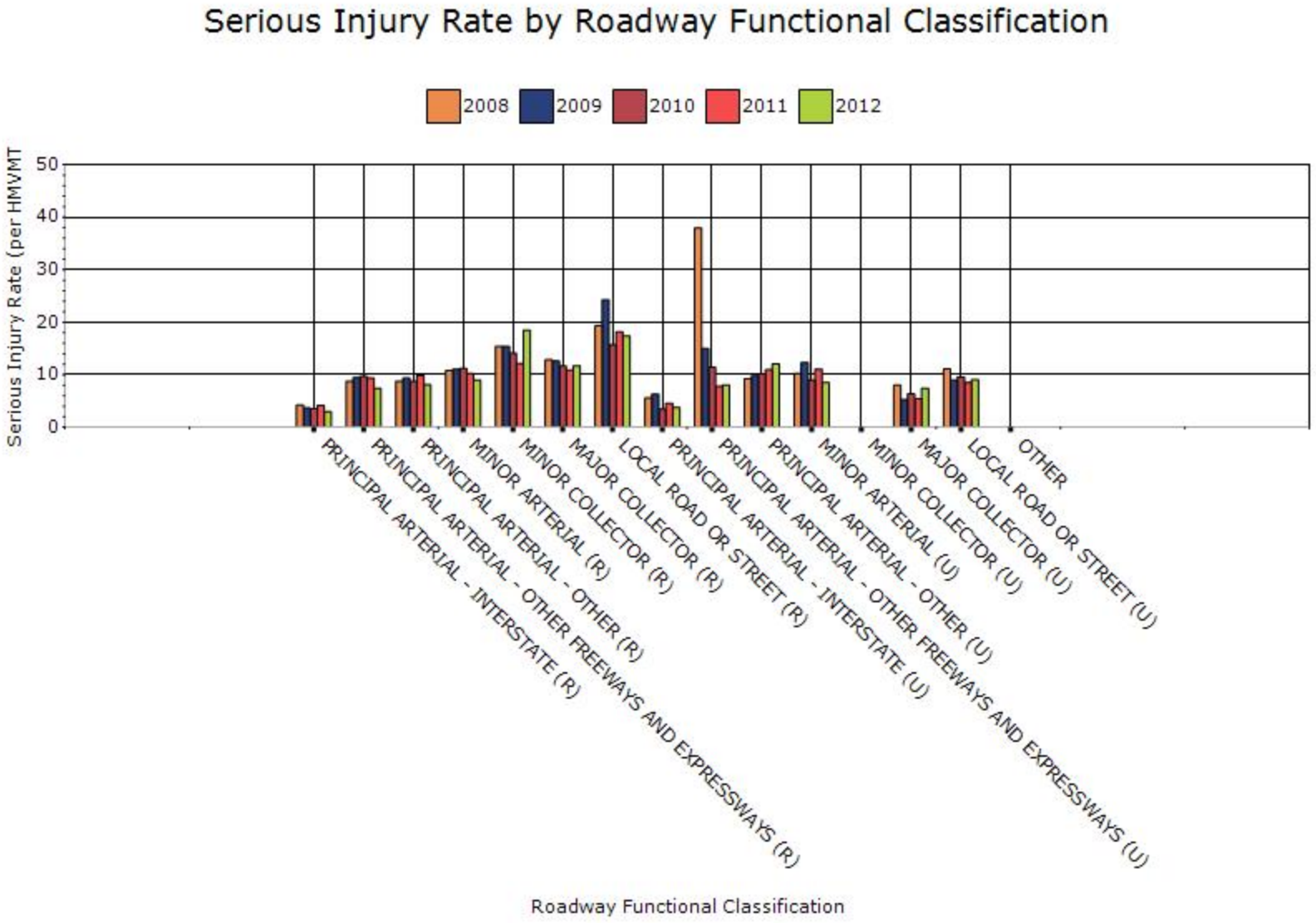
Function Classification	Number of fatalities	Number of serious injuries	Fatality rate (per HMVMT)	Serious injury rate (per HMVMT)
RURAL PRINCIPAL ARTERIAL - INTERSTATE	17	78	0.66	3
RURAL PRINCIPAL ARTERIAL - OTHER FREEWAYS AND EXPRESSWAYS	6	80	0.56	7.42
RURAL PRINCIPAL ARTERIAL - OTHER	27	185	1.18	8.09
RURAL MINOR ARTERIAL	33	208	1.42	8.97
RURAL MINOR COLLECTOR	5	44	2.1	18.45
RURAL MAJOR COLLECTOR	19	181	1.23	11.69
RURAL LOCAL ROAD OR STREET	46	190	4.22	17.4
URBAN PRINCIPAL	5	51	0.37	3.72

ARTERIAL - INTERSTATE				
URBAN PRINCIPAL ARTERIAL - OTHER FREEWAYS AND EXPRESSWAYS	9	76	0.95	8.03
URBAN PRINCIPAL ARTERIAL - OTHER	20	262	0.92	12.1
URBAN MINOR ARTERIAL	14	168	0.71	8.54
URBAN MINOR COLLECTOR	0	0	0	0
URBAN MAJOR COLLECTOR	1	40	0.19	7.43
URBAN LOCAL ROAD OR STREET	10	99	0.91	9.04
OTHER	0	0	0	0
OTHER	0	0	0	0


Fatalities by Roadway Functional Classification
2008
2009
2010
2011
2012
# of Fatalities
60
50
40
30
20
10
0
PRINCIPAL ARTERIAL - INTERSTATE (R)
PRINCIPAL ARTERIAL - OTHER FREEWAYS AND EXPRESSWAYS (R)
PRINCIPAL ARTERIAL - OTHER (R)
MINOR ARTERIAL (R)
MINOR COLLECTOR (R)
MAJOR COLLECTOR (R)
LOCAL ROAD OR STREET (R)
PRINCIPAL ARTERIAL - INTERSTATE (U)
PRINCIPAL ARTERIAL - OTHER FREEWAYS AND EXPRESSWAYS (U)
PRINCIPAL ARTERIAL - OTHER (U)
MINOR ARTERIAL (U)
MINOR COLLECTOR (U)
MAJOR COLLECTOR (U)
LOCAL ROAD OR STREET (U)
OTHER
Roadway Functional Classification


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

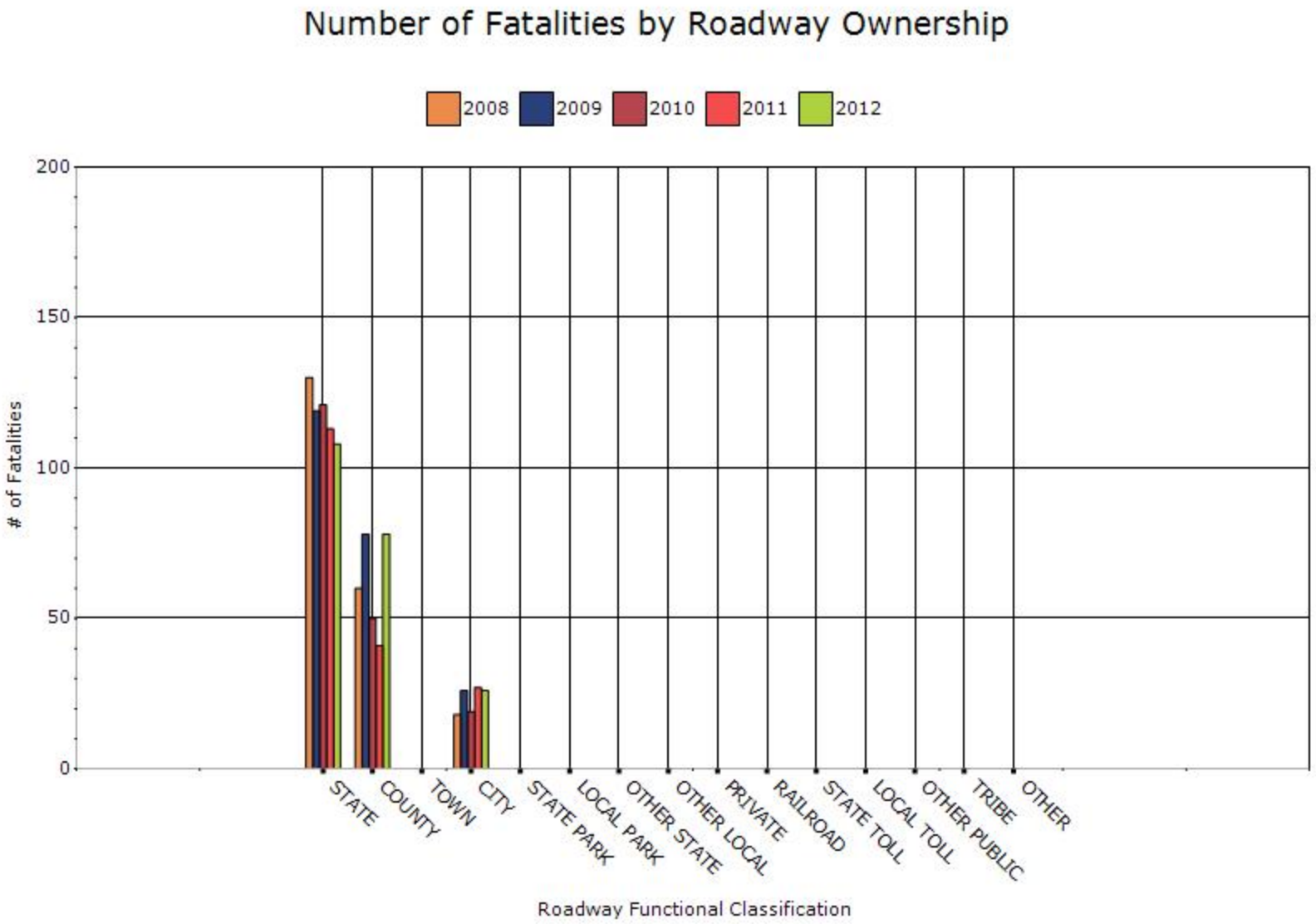

Fatality Rate by Roadway Functional Classification
2008
2009
2010
2011
2012
Fatality Rate (per HMVMT)
0
1
2
3
4
5
6
PRINCIPAL ARTERIAL - INTERSTATE (R)
PRINCIPAL ARTERIAL - OTHER FREEWAYS AND EXPRESSWAYS (R)
PRINCIPAL ARTERIAL - OTHER (R)
MINOR ARTERIAL (R)
MINOR COLLECTOR (R)
MAJOR COLLECTOR (R)
LOCAL 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

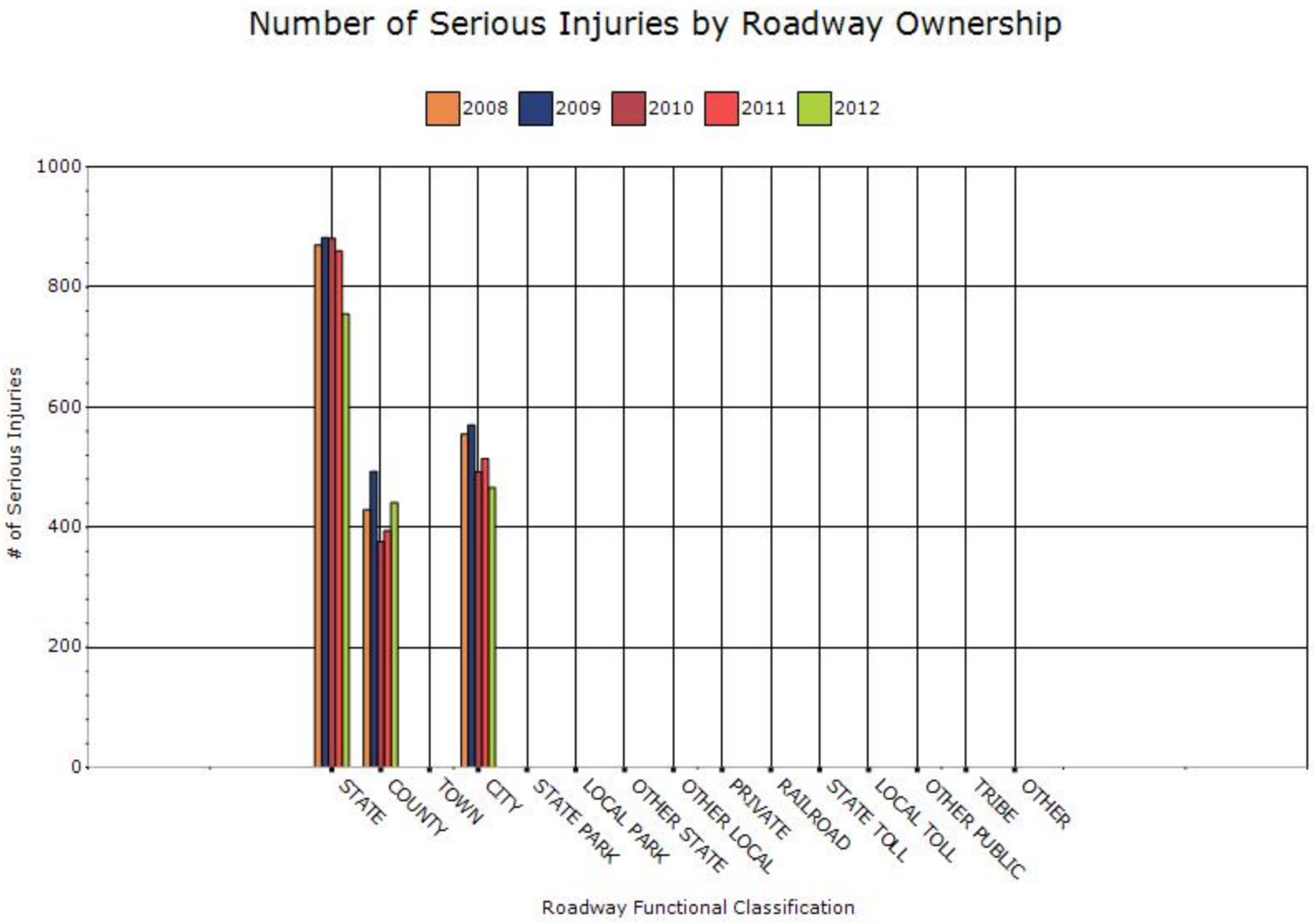

Serious Injury Rate by Roadway Functional Classification
2008
2009
2010
2011
2012
Serious Injury Rate (per HMVMT
50
40
30
20
10
0
PRINCIPAL ARTERIAL - INTERSTATE (R)
PRINCIPAL ARTERIAL - OTHER FREEWAYS AND EXPRESSWAYS (R)
PRINCIPAL ARTERIAL - OTHER (R)
MINOR ARTERIAL (R)
MINOR COLLECTOR (R)
MAJOR COLLECTOR (R)
LOCAL ROAD OR STREET (R)
PRINCIPAL ARTERIAL - INTERSTATE (U)
PRINCIPAL ARTERIAL - OTHER FREEWAYS AND EXPRESSWAYS (U)
PRINCIPAL ARTERIAL - OTHER (U)
MINOR ARTERIAL (U)
MINOR COLLECTOR (U)
MAJOR COLLECTOR (U)
LOCAL ROAD OR STREET (U)
OTHER
Roadway Functional Classification

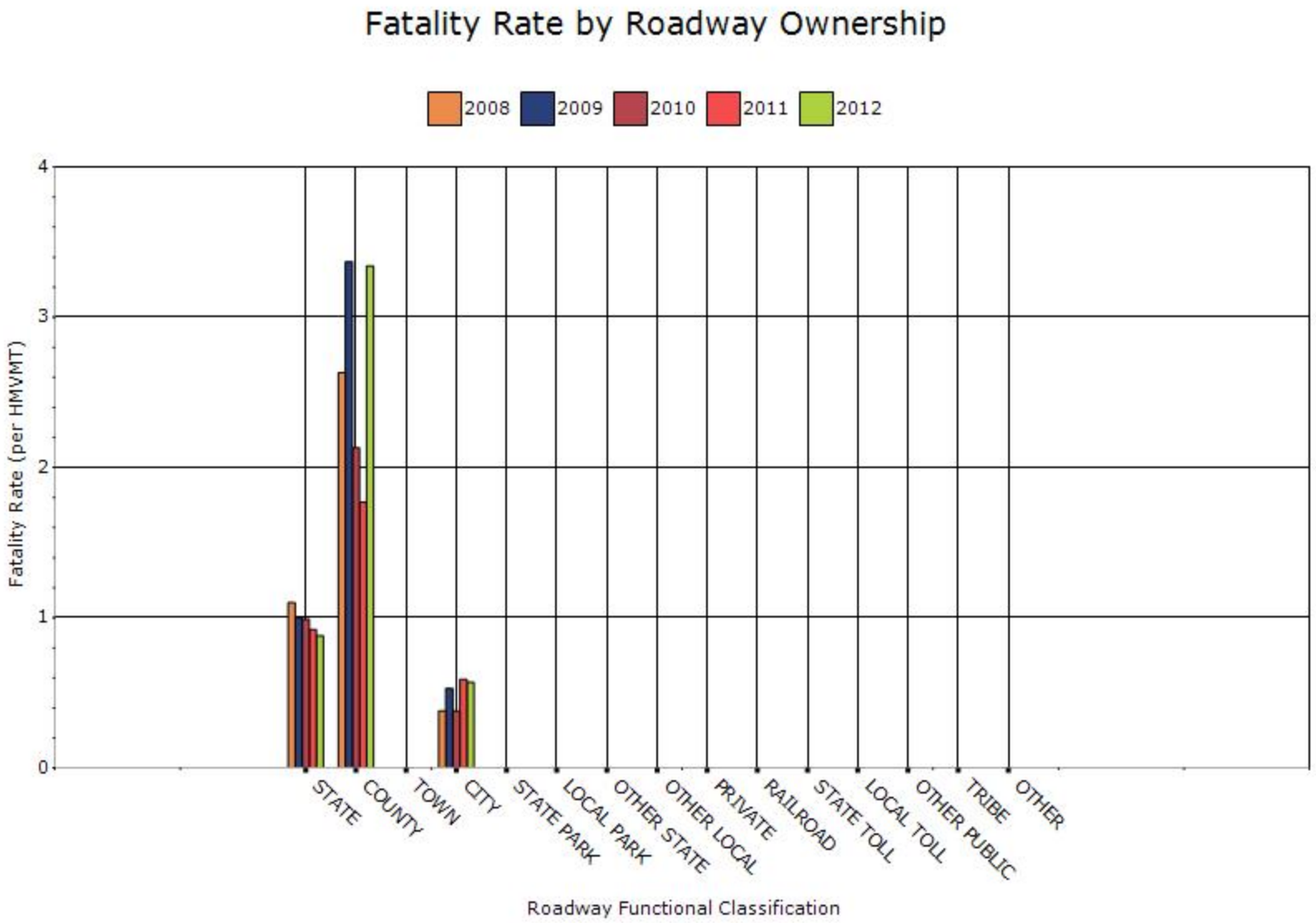
Year - 2012

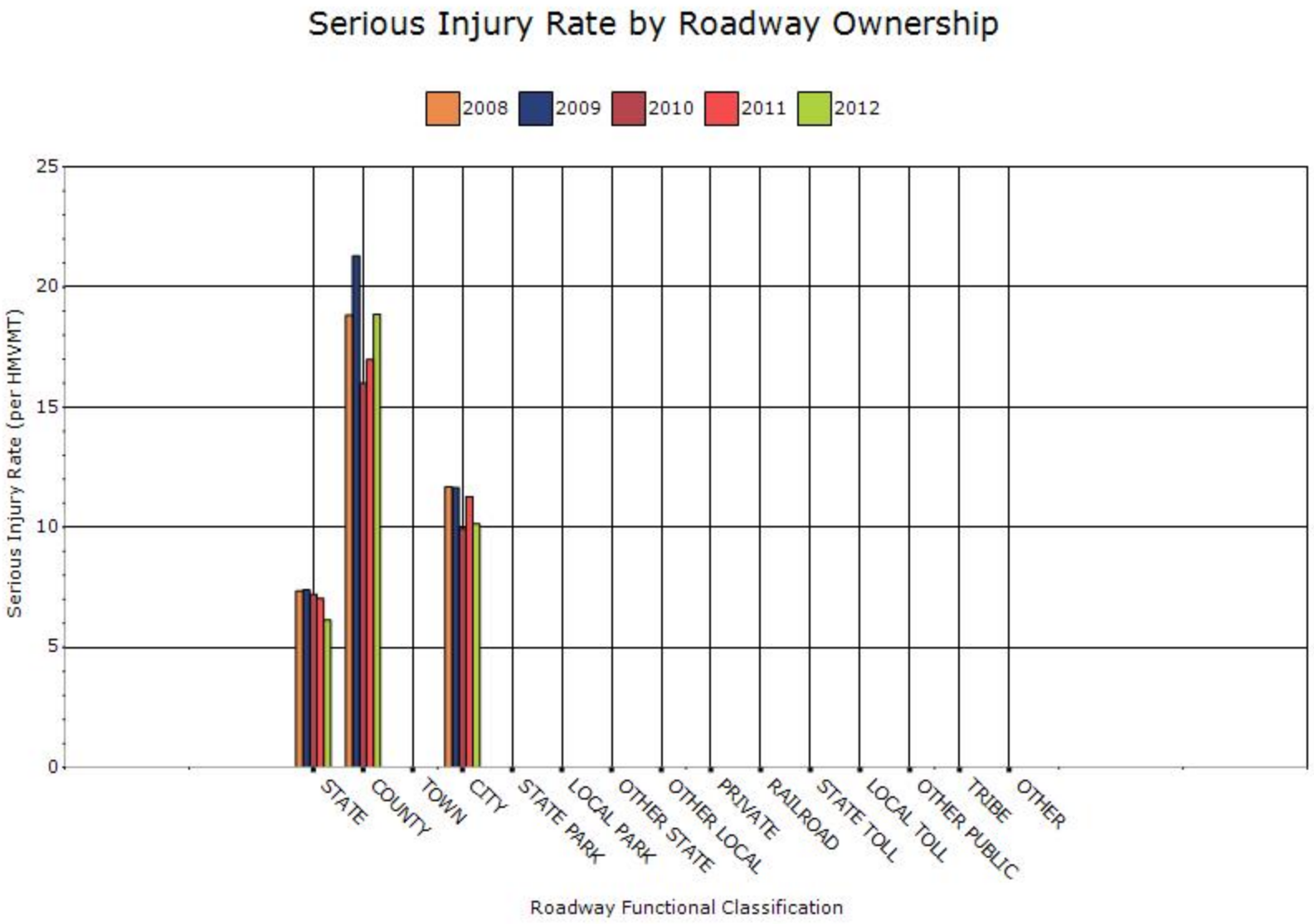
Roadway Ownership	Number of fatalities	Number of serious injuries	Fatality rate (per HMVMT)	Serious injury rate (per HMVMT)
STATE HIGHWAY AGENCY	108	755	0.88	6.14
COUNTY HIGHWAY AGENCY	78	441	3.34	18.87
TOWN OR TOWNSHIP HIGHWAY AGENCY	0	0	0	0
CITY OF MUNICIPAL HIGHWAY AGENCY	26	466	0.57	10.14
STATE PARK, 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
200
150
100
50
0
# of Fatalities
STATE
COUNTY
TOWN
CITY
STATE PARK
LOCAL PARK
OTHER STATE
OTHER LOCAL
PRIVATE
RAILROAD
STATE TOLL
LOCAL TOLL
OTHER PUBLIC
TRIBE
OTHER
Roadway Functional Classification


Number of Serious Injuries by Roadway Ownership
2008
2009
2010
2011
2012
1000
800
600
400
200
0
# of Serious Injuries
STATE
COUNTY
TOWN
CITY
STATE PARK
LOCAL PARK
OTHER STATE
OTHER LOCAL
PRIVATE
RAILROAD
STATE TOLL
LOCAL TOLL
OTHER PUBLIC
TRIBE
OTHER
Roadway Functional Classification


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


Serious Injury Rate by Roadway Ownership
2008
2009
2010
2011
2012
Serious Injury Rate (per HMVMT)
25
20
15
10
5
0
STATE
COUNTY
TOWN
CITY
STATE PARK
LOCAL PARK
OTHER STATE
OTHER LOCAL
PRIVATE
RAILROAD
STATE TOLL
LOCAL TOLL
OTHER PUBLIC
TRIBE
OTHER
Roadway Functional Classification

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

Total fatalities dropped to 181 in 2011, the fewest in the state since 1944. This continued a two-year span of significant decreases in fatalities. Since then, however, fatalities have increased to over 200, 212 in 2012. So far in 2013 fatalities are slightly above the 2012 totals. The number of serious injuries and total crashes continue to trend downward.

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)	2.04	1.94	1.82	1.66	1.49
Serious injury rate (per capita)	7.4	7.41	7.22	7.04	6.9
Fatality and serious injury rate (per capita)	9.44	9.35	9.04	8.7	8.39

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

Calculation method:

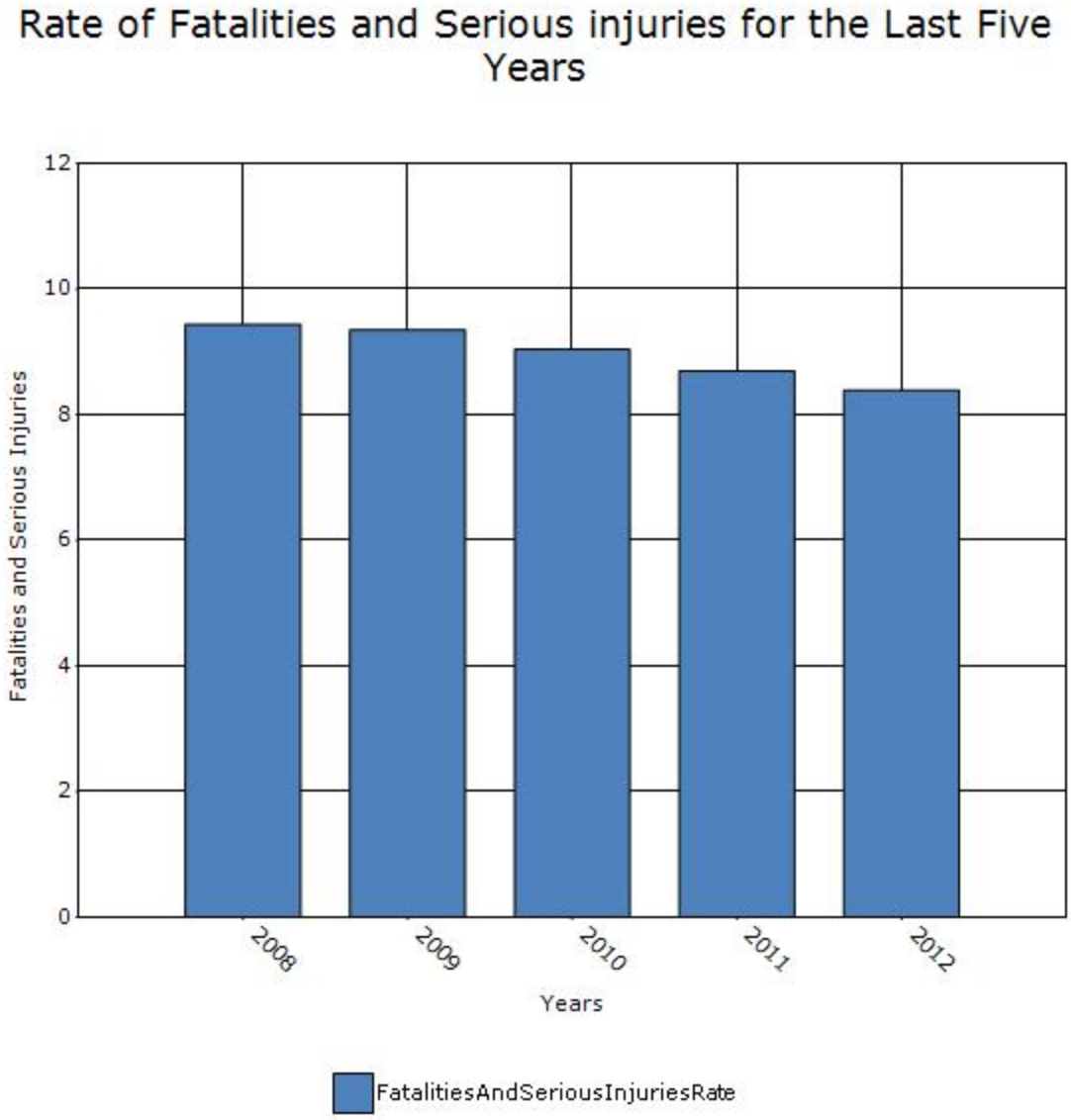
Number of casualties (fatalities, A-injuries, or fatalities + A-injuries) for each year/

Nebraska population age 65 & up for each year x

10,000

=

Casualties per 10,000 population



Does the older driver special rule apply to your state?

No

Assessment of the Effectiveness of the Improvements (Program Evaluation)

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

☐ None

☒ Benefit/cost

☒ Policy change

☐ Other:

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

☐ Shift Focus to Fatalities and Serious Injuries

☐ Include Local Roads in Highway Safety Improvement Program

☐ Organizational Changes

☐ None

☒ Other: Other-Switching the emphasis from individual locations to systemic projects.

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

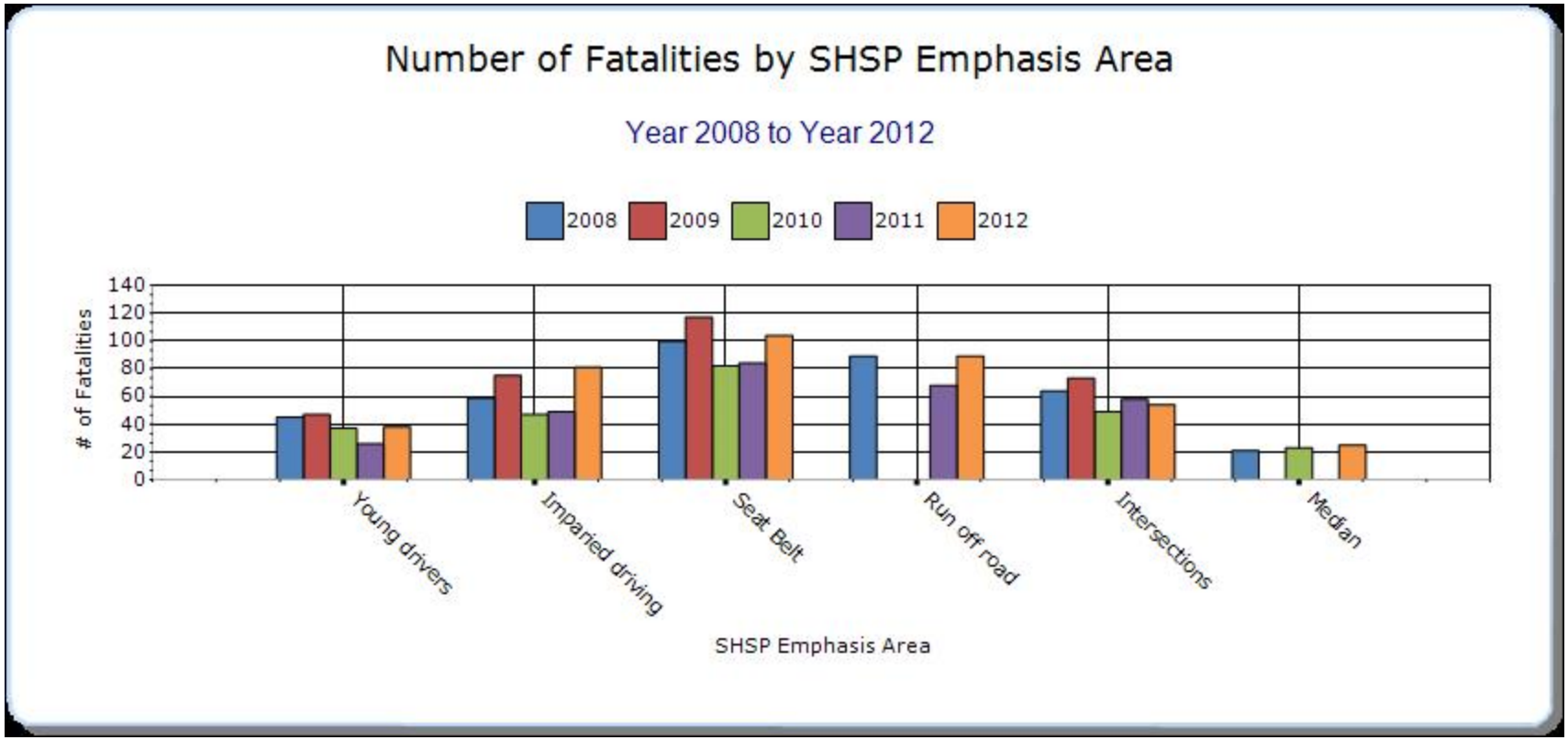
We have begun concentrating on more expensive systemic projects to improve a larger portion of the highway system and to obligate more of our HSIP funds.

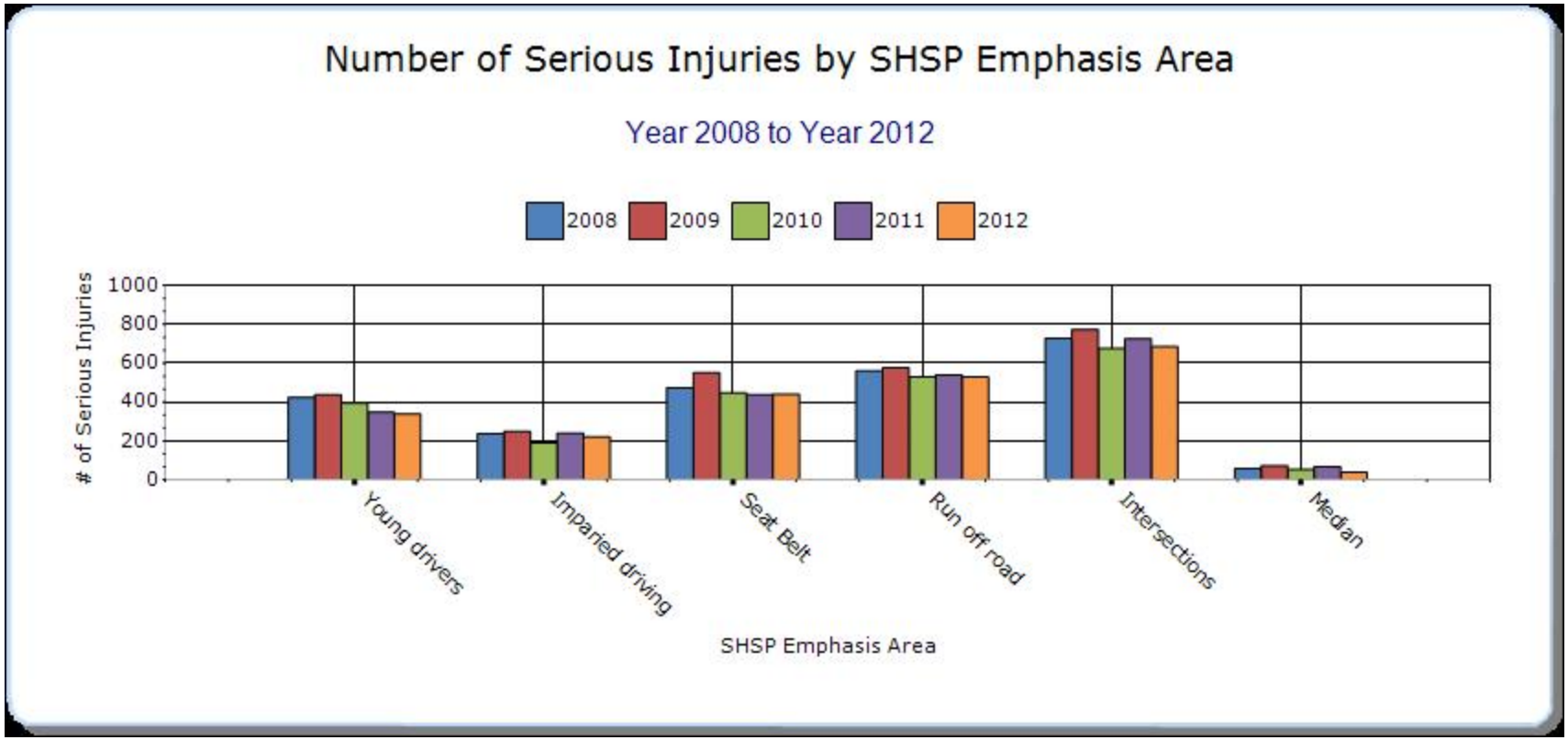
SHSP Emphasis Areas

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

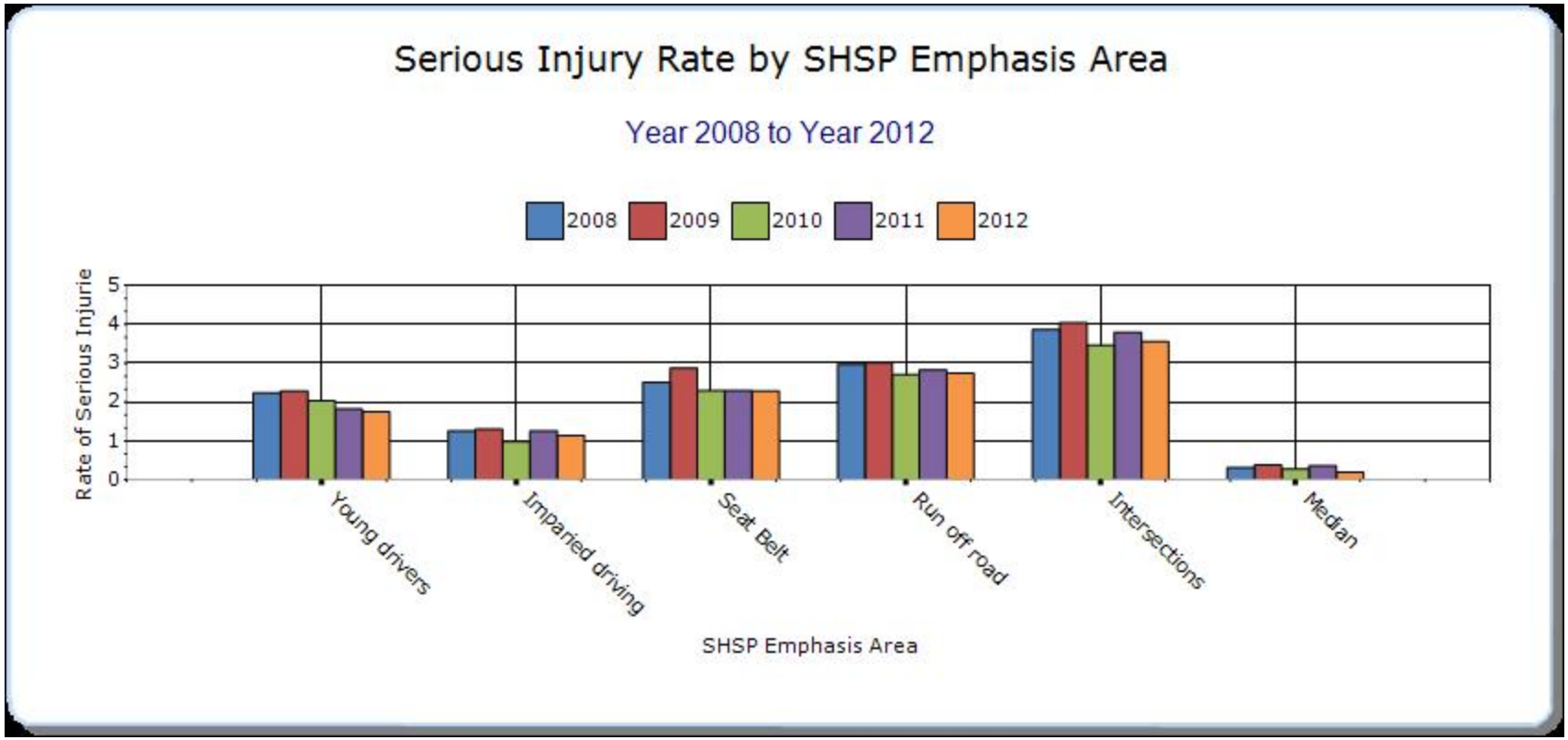
Year - 2012

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	**Younger driver crashes**	**38**	**339**	**0.2**	**1.75**	**0**	**0**	**0**
Reducing impaired driving	Impaired driving crashes	81	221	0.42	1.14	0	0	0
Increasing seat belt use and improving airbag effectiveness	Unbelted occupant injuries	104	441	0.54	2.28	0	0	0
Keeping vehicles in the roadway	Run-off-road	89	529	0.46	2.74	0	0	0
Improving the design and operation of highway intersections	Intersection crashes	54	685	0.28	3.55	0	0	0
Reducing head-on and across-median crashes	Head on	25	39	0.13	0.2	0	0	0


Number of Fatalities by SHSP Emphasis Area
Year 2008 to Year 2012
2008
2009
2010
2011
2012
# of Fatalities
140
120
100
80
60
40
20
0
Young drivers
Impaired driving
Seat Belt
Run off road
Intersections
Median
SHSP Emphasis Area


Number of Serious Injuries by SHSP Emphasis Area
Year 2008 to Year 2012
2008
2009
2010
2011
2012
# of Serious Injuries
1000
800
600
400
200
0
Young drivers
Imparied driving
Seat Belt
Run off road
Intersections
Median
SHSP Emphasis Area


Fatality Rate by SHSP Emphasis Area
Year 2008 to Year 2012
2008
2009
2010
2011
2012
Rate of Fatalities
0.8
0.6
0.4
0.2
0
Young drivers
Imparied driving
Seat Belt
Run off road
Intersections
Median
SHSP Emphasis Area

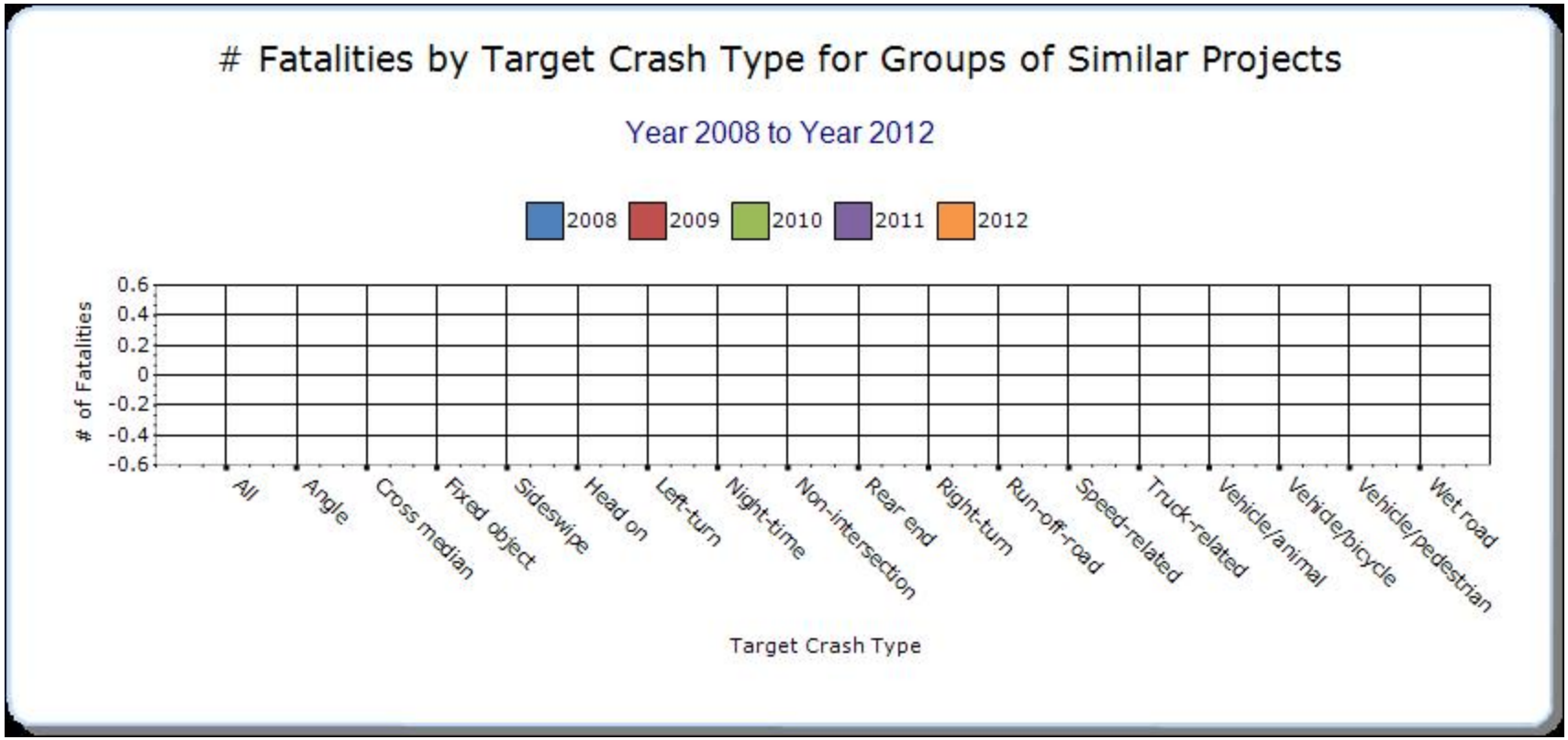

Serious Injury Rate by SHSP Emphasis Area
Year 2008 to Year 2012
2008
2009
2010
2011
2012
Rate of Serious Injurie
5
4
3
2
1
0
Young drivers
Impaired driving
Seat Belt
Run off road
Intersections
Median
SHSP Emphasis Area

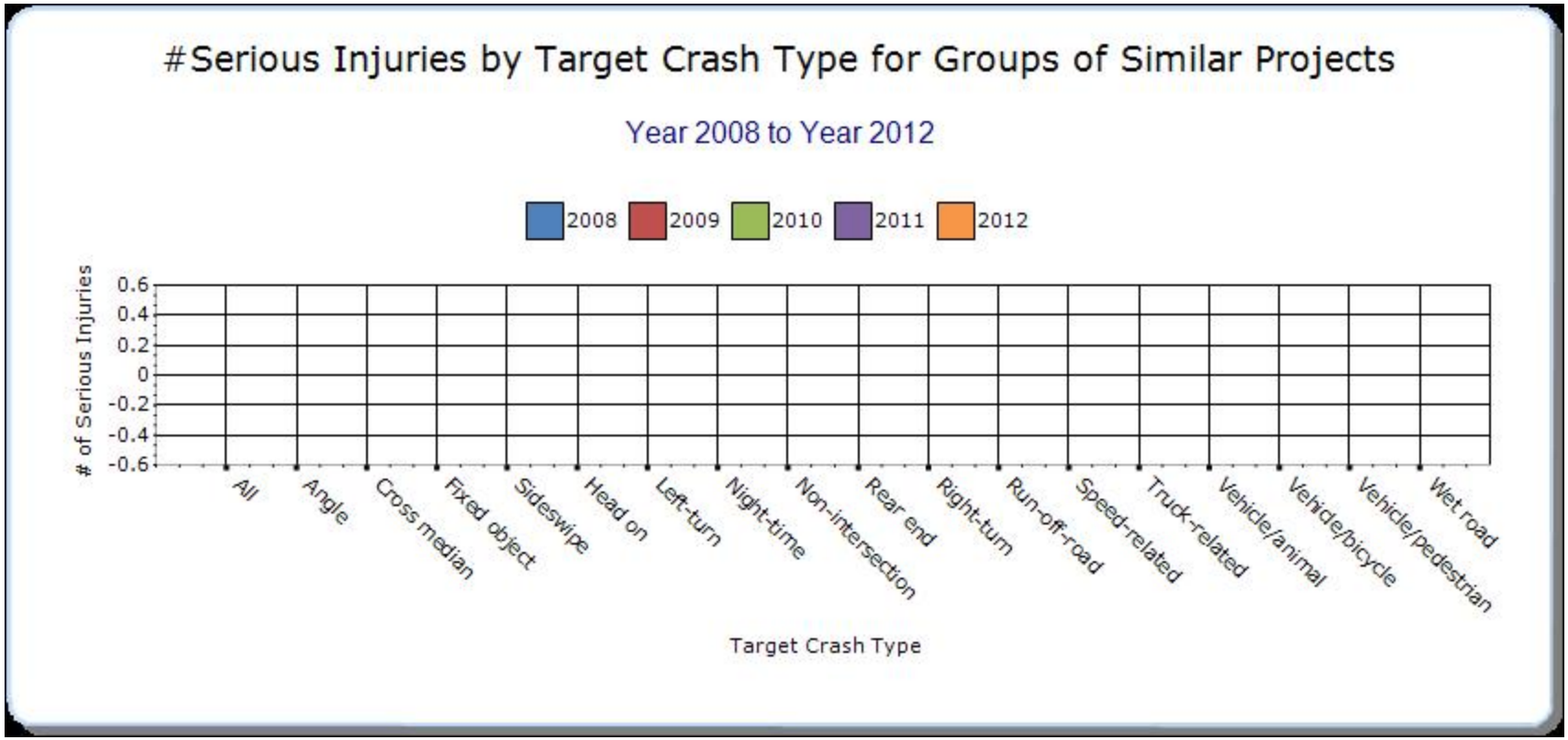
Groups of similar project types

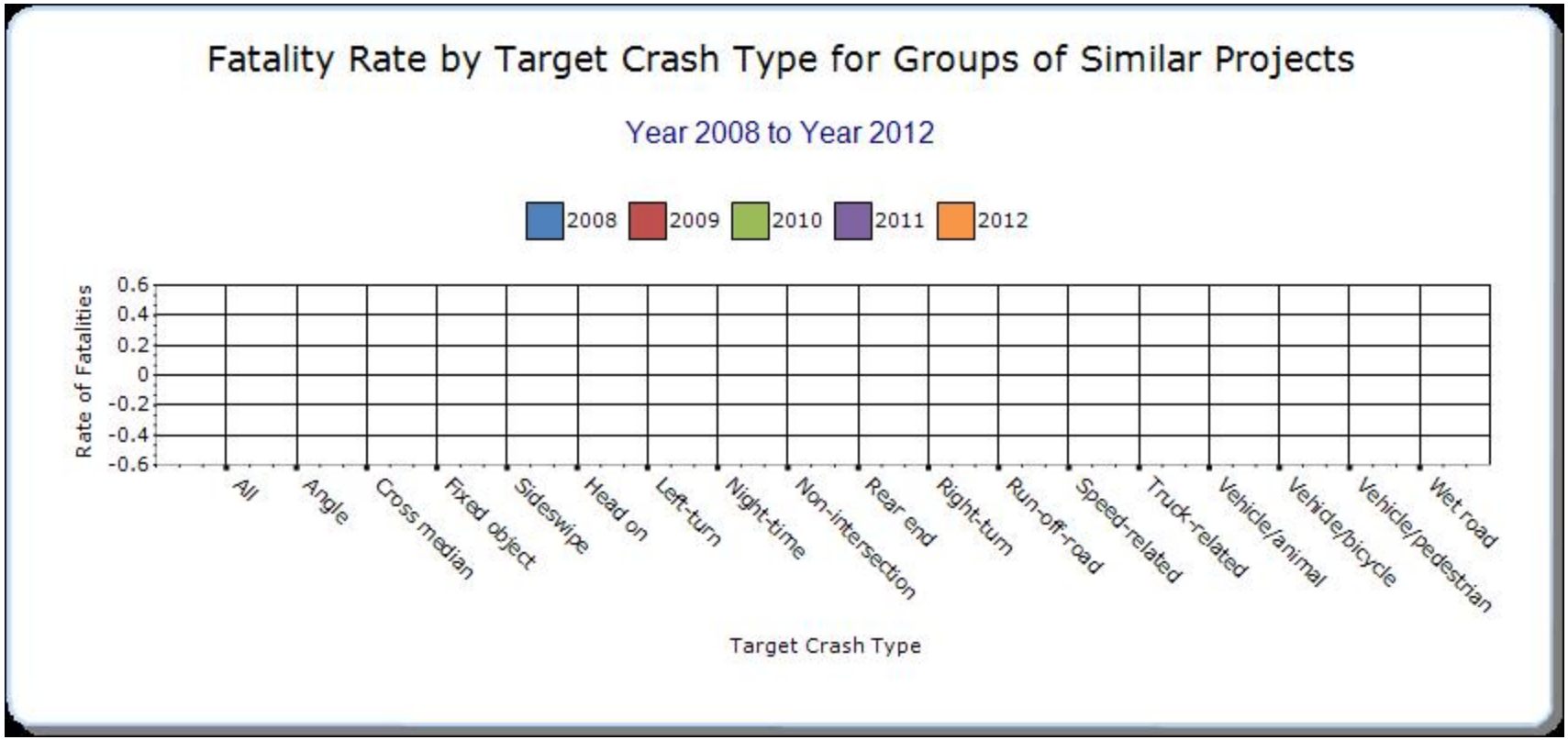
Present the overall effectiveness of groups of similar types of projects.

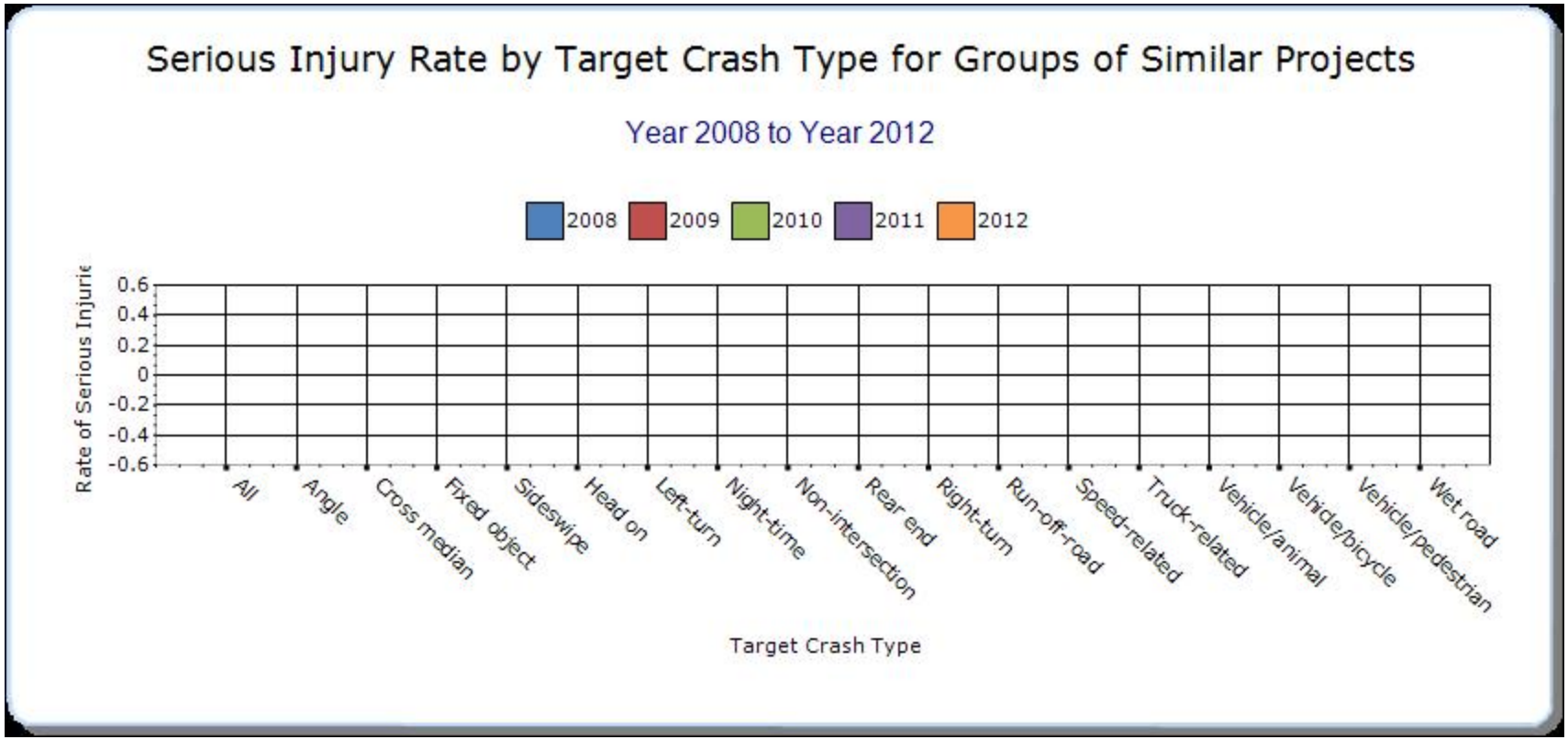
Year - 2012

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
Roadway Departure	**Roadway departure crashes**	**114**	**568**	**0.59**	**2.94**	**0**	**0**	**0**
Intersection	Intersection crashes	54	685	0.28	3.55	0	0	0


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


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


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

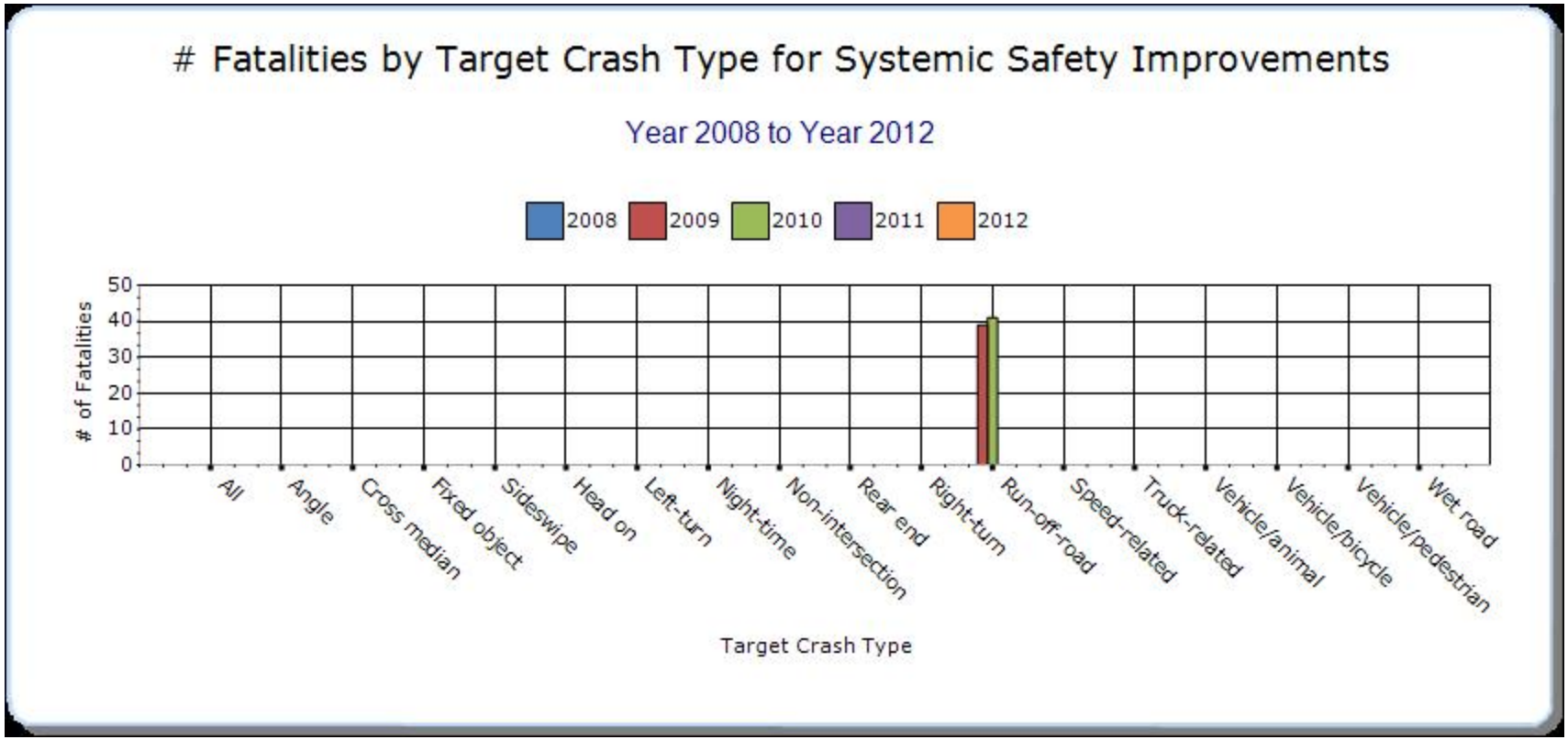

Serious Injury Rate by Target Crash Type for Groups of Similar Projects
Year 2008 to Year 2012
2008
2009
2010
2011
2012
Rate of Serious Injurie
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
All
Angle
Cross median
Fixed object
Sideswipe
Head on
Left-turn
Night-time
Non-intersection
Rear end
Right-turn
Run-off-road
Speed-related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

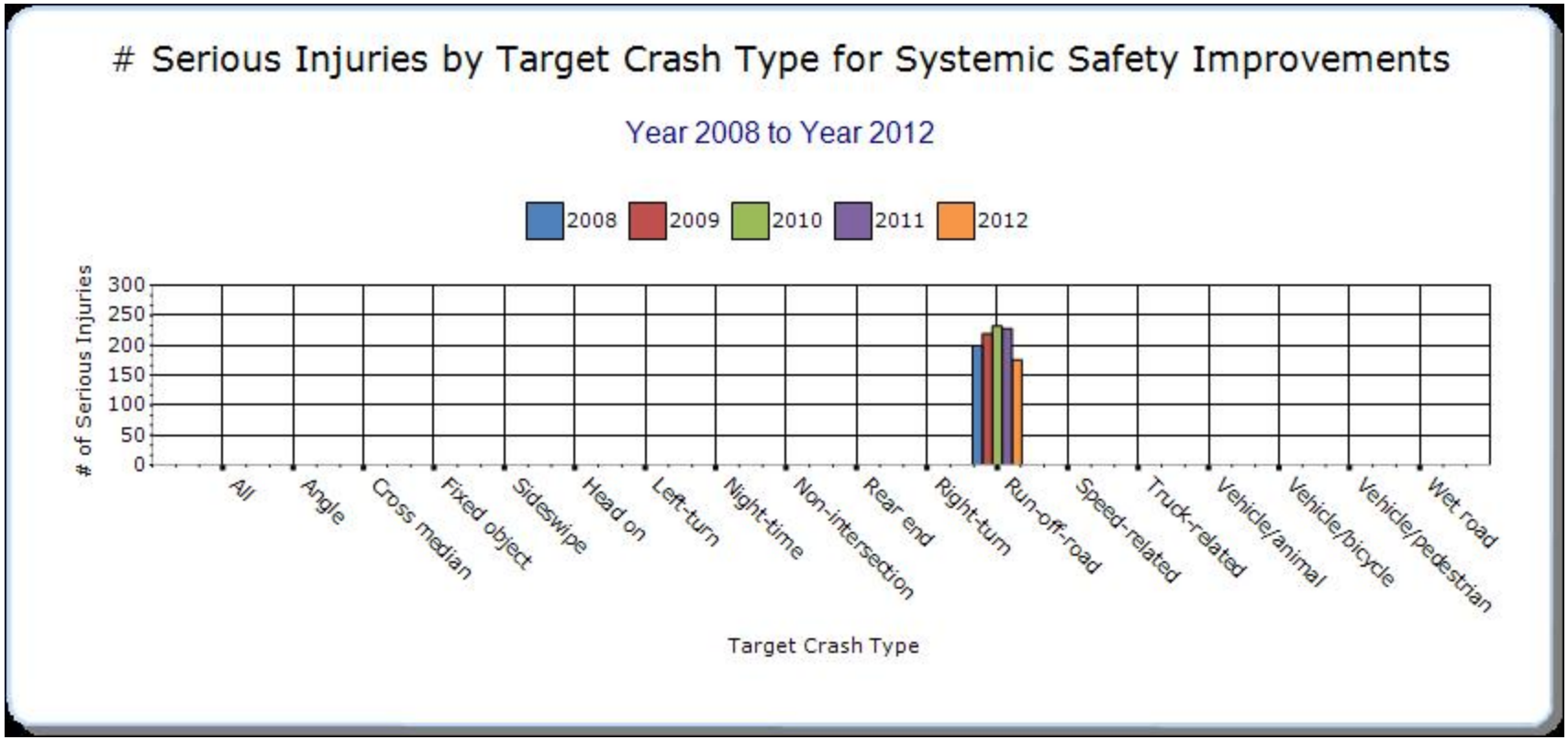
Systemic Treatments

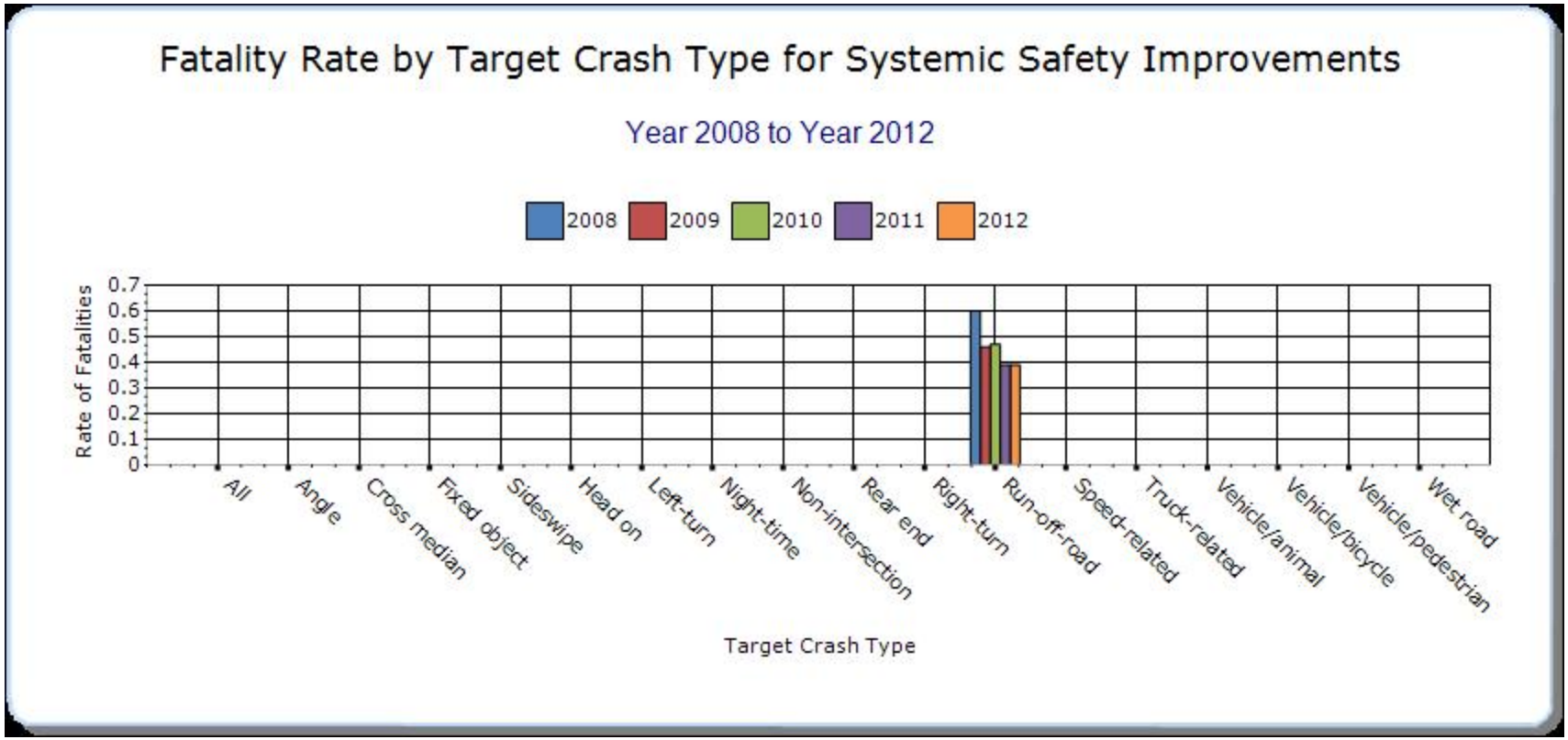
Present the overall effectiveness of systemic treatments..

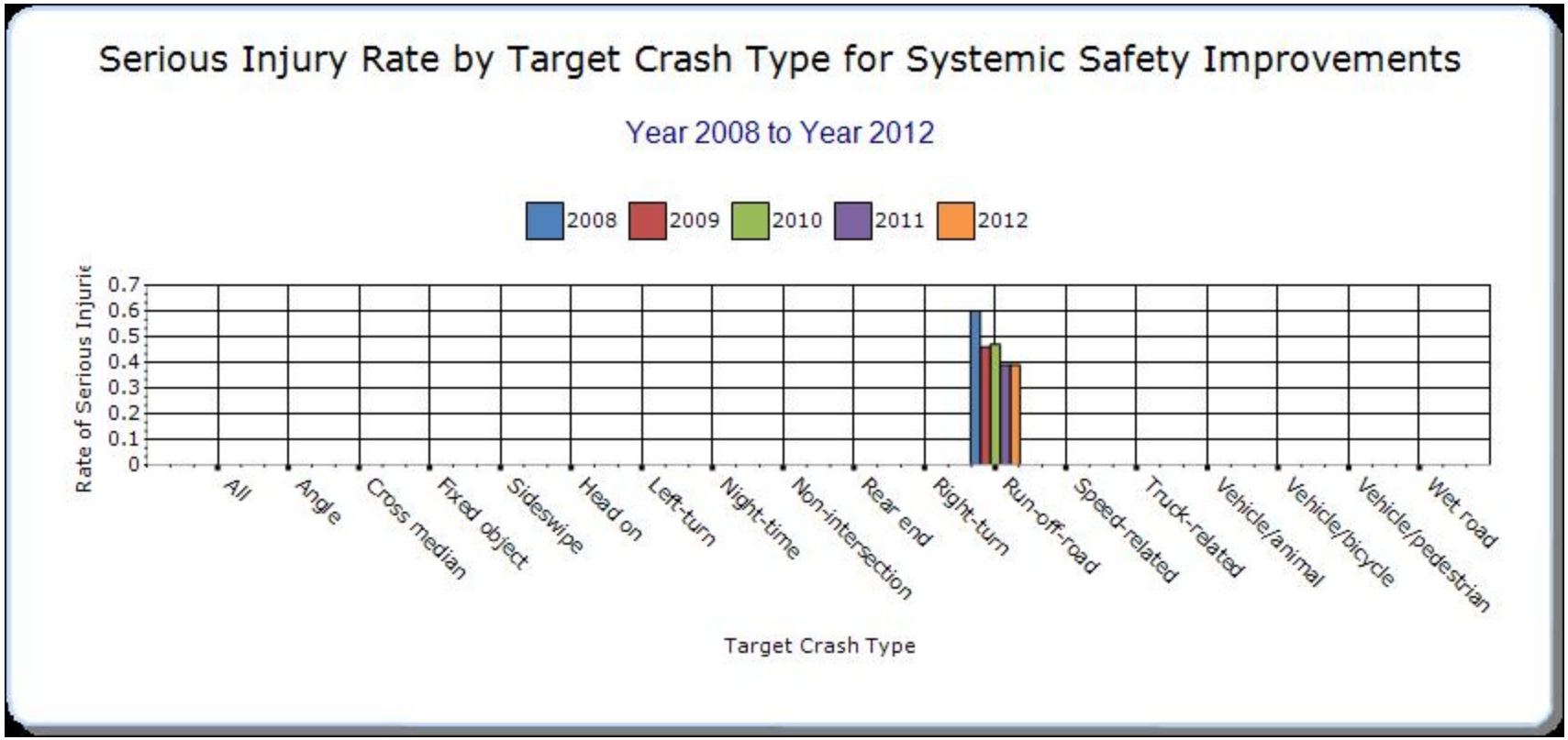
Year - 2012

Systemic improvement	Target Crash Type	Number of fatalities	Number of serious injuries	Fatality rate (per HMVMT)	Serious injury rate (per HMVMT)	Other-1	Other-2	Other-3
Rumble Strips	Run-off-road	0	176	0.39	2	0	0	0


Fatalities by Target Crash Type for Systemic Safety Improvements
Year 2008 to Year 2012
2008
2009
2010
2011
2012
# of Fatalities
50
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 Systemic Safety Improvements
Year 2008 to Year 2012
2008
2009
2010
2011
2012
# of Serious Injuries
300
250
200
150
100
50
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 Systemic Safety Improvements
Year 2008 to Year 2012
2008
2009
2010
2011
2012
Rate of Fatalities
0.7
0.6
0.5
0.4
0.3
0.2
0.1
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



Improvement types with blank crash data totals are either too new to have data or still in the planning phase.

The data included is the annual number of crashes, not a 5-year running average.

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

Evaluations completed for HSIP projects have nearly always shown a positive result.

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)
Lincoln - Cornhusker Highway (US-6) & L55X	Urban Principal Arterial - Other	Intersection geometry	Auxiliary lanes - add left-turn lane	0	2	17	22	41	0	0	4	26	30	1.24
Omaha - 42nd & L Street (US-275)	Urban Principal Arterial - Other	Intersection geometry	Intersection geometry - other	0	1	24	49	74	0	0	9	38	47	25.77
Omaha - 40th & Dodge Street (US-6)	Urban Principal Arterial - Other	Intersection traffic control	Modify traffic signal - modernization/replacement	0	3	30	80	113	0	2	22	75	99	6.04
Lincoln - 27th Street & N-2	Urban Principal Arterial -	Intersection geometry	Auxiliary lanes - add left-turn lane	0	1	66	120	187	0	4	51	98	153	20.04

	Other													
Statewide - 2-Lane Highways	Varies	Shoulder treatments	Shoulder treatments - other	5	61	174	235	475	10	43	127	193	373	20.19

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.