Highway Safety Improvement Program
Data Driven Decisions

Washington
Highway Safety Improvement Program
2013 Annual Report

Prepared by: WA

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 Washington state HSIP program funds both local safety (70%) and state highway safety (30%) programs. The program continues to be successful (8.87 B/C for projects completed in 2009). Projects going forward using HSIP funds target the top two (both priority one) infrastructure focus areas identified in the SHSP (Run-Off-the-Road & Intersections).

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.

The state uses a data-driven process to determine HSIP funding levels for state vs local roads. Our current SHSP (www.targetzero.com) has specific priority levels for types/causes/categories of fatal & serious injury crashes (some based on crash type, others based on driver behaviors, others based on user type). The top 2 infrastructure related priorities are Run-Off-the-Road crashes (priority 1) and Intersection crashes (priority 2). Evaluating crashes statewide for a 5 year period, we identify how many fatal & serious injury run-off-road crashes and how many fatal & serious injury intersection-related crashes occurred. That data is evaluated to see how

many were on local agency responsibility roads compared to state responsibility roads. The HSIP funding is split by percentage based on that data. Currently, that means that the state receives 30% of HSIP funds and local agencies receive 70% of HSIP funds.

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

☒Design

☒Planning

☐Maintenance

☒Operations

☐Governors Highway Safety Office

☒Other: Other-Highways & Local Programs

☒Other: Other-Risk

☒Other: Other-Program Management

Briefly describe coordination with internal partners.

Oversight for the 70% of the HSIP funds that are directed to local agencies is assigned to the Highways & Local Programs division for management (to identify local agency priorities, distribution of funds between counties & cities, individual project selection, etc.).

Oversight for the 30% of the HSIP funds that are directed to the state is managed by our Highway Safety Executive Committee (HSEC). We do not have a specific highway safety office within the DOT. Instead, safety is part of everyone's responsibility. As such, safety oversight by HSEC provides an opportunity for major affected programs to provide input on safety issues. The HSEC is comprised of program directors from Design, Planning, Operations, Highways & Local Programs, Risk, and Program Management.

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

☐Metropolitan Planning Organizations

☐Governors Highway Safety Office

☐Local Government Association

☒Other: Other-Panel of local agencies

The Highways & Local Programs division oversees the planning of HSIP funds for local agencies. In developing program methodology, local agency representatives are included in the decision-making process for agreement/modifications to programs. Those local agency representatives are identified with assistance from local government associations (city & county).

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.

Program Methodology
Select the programs that are administered under the HSIP.

☐Median Barrier	☐Intersection	☒Safe Corridor
☐Horizontal Curve	☐Bicycle Safety	☐Rural State Highways

☐Skid Hazard   ☐Crash Data   ☐Red Light Running Prevention

☐Roadway Departure   ☐Low-Cost Spot Improvements ☐Sign Replacement And Improvement

☐Local Safety   ☐Pedestrian Safety   ☐Right Angle Crash

☐Left Turn Crash   ☐Shoulder Improvement   ☐Segments

☒Other: Other-State - Collision Analysis Corridors   ☒Other: Other-State - Collision Analysis Locations   ☒Other: Other-State - Intersection Analysis Locations

☒Other: Other-Local - City Safety Program   ☒Other: Other-Local - County Safety Program

The state HSIP program focuses on Collision Analysis Corridors (CACs), which are generally focused on Roadway Departure safety. The program also focuses on Collision Analysis Locations (CALs) and Intersection Analysis Locations (IALs) which are both generally related to Intersection safety.

The local HSIP program focuses on a County Safety program - primarily Roadway Departure with some Intersection, and a City Safety Program - primarily Intersection. It also funds the Corridor Safety Program on city & county roadways.

Program: **Safe Corridor**

Date of Program Methodology: **1/1/2004**

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   ☐ 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-Agreement between program managers at WSDOT and the Governor's Highway Safety Office, based on data & local leadership

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   3

      ☐Incremental B/C

      ☐Ranking based on net benefit

      ☐Cost Effectiveness

      ☒Fatal & serious injury crash   1
      history

      ☒Local leadership & interest   2

Program: **Other-State - Collision Analysis Corridors**

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

What data types were used in the program methodology?

Crashes

☐ All crashes

☐ Fatal crashes only

☐ Fatal and serious injury crashes only

☒ Other-Fatal, serious, and evident injury crashes only

Exposure

☐ Traffic

☐ Volume

☐ Population

☒ Lane miles

☐ Other

Roadway

☐ Median width

☐ Horizontal curvature

☐ Functional classification

☐ Roadside features

☐ 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   1

☒Available funding   2

☐Incremental B/C

☐Ranking based on net benefit

☐Cost Effectiveness

Program: **Other-State - Collision Analysis Locations**

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

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   ☐ Population   ☐ Functional classification
crashes only

☒ Other-Fatal, serious, and   ☐ Lane miles   ☐ Roadside features
evident injury crashes only

                               ☐ 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   1

    ☒ Available funding   2

    ☐ Incremental B/C

    ☐ Ranking based on net benefit

    ☐ Cost Effectiveness

Program: **Other-State - Intersection Analysis Locations**

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

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   ☐ Population   ☐ Functional classification
crashes only

☒ Other-Fatal, serious, and   ☐ Lane miles   ☐ Roadside features
evident injury crashes only

                                   ☐ 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   1

   ☒Available funding   2

   ☐Incremental B/C

   ☐Ranking based on net benefit

☐Cost Effectiveness

Program: **Other-Local - City Safety Program**

Date of Program Methodology: **1/1/2011**

What data types were used in the program methodology?

Crashes   *Exposure*   *Roadway*

☐All crashes   ☐Traffic   ☐Median width

☐Fatal crashes only   ☐Volume   ☐Horizontal curvature

☒Fatal and serious injury   ☐Population   ☐Functional classification
crashes only

☐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: **Other-Local - County Safety Program**

Date of Program Methodology: **1/1/2009**

What data types were used in the program methodology?

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

What project identification methodology was used for this program?

☒ Crash frequency

☐ Expected crash frequency with EB adjustment

☐ Equivalent property damage only (EPDO Crash frequency)

☐ EPDO crash frequency with EB adjustment

☐Relative severity index

☐Crash rate

☐Critical rate

☐Level of service of safety (LOSS)

☐Excess expected crash frequency using SPFs

☐Excess expected crash frequency with the EB adjustment

☐Excess expected crash frequency using method of moments

☐Probability of specific crash types

☐Excess proportions of specific crash types

☐Other

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

☒Yes

☐No

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-Allocation of funds to each county based on rate of fatal & serious injury crashes per mile

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

☐Relative Weight in Scoring

☒Rank of Priority Consideration

    ☐Ranking based on B/C

    ☒Available funding   1

    ☐Incremental B/C

    ☐Ranking based on net benefit

    ☐Cost Effectiveness

For the county safety program, while the allocation is based on available funding, each county is required to meet certain criteria for approval for project award.

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

45

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

45% is an estimate. The majority of county projects have been systemic in nature (it is a risk-based program). Some of the state & city funds have been for systemic improvements, others for spot locations.

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.

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)	223496410	20 %	140408767	14 %
HRRRP (SAFETEA-LU)	4350000	0 %	4340799	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)	55510000	5 %	55510000	5 %

State and Local Funds	805673931	73 %	805673931	78 %
Other HES	21955882	2 %	21955732	2 %
Totals	1110986223	100%	1027889229	100%

This table shows the funds spent on safety from 2005-2013 in the state of Washington. (2003-2013 for state funds)
Obligation amounts are as of 5/14/13.

Note that this information does not include any behavioral safety funds (administered through the Washington Traffic Safety Commission - our Governor's Highway Safety Office). This information also does not include direct local agency funds used for safety (which can be significant). Finally, note that the state safety funds listed are only those provided directly through the state safety program. However, other programs (paving, for example) also spend significant funds on safety that are not accounted for here.

Other federal funds listed are ARRA funds.

HSIP Program includes:
HSIP - Data Improvement - $181,948 programmed, $181,948 obligated
HSIP - Rural 2 Lane (2005) - $16,914,214 programmed, $16,914,214 obligated
HSIP - Intersections/Corridors (2006) - $10,085,465 programmed, $10,085,465 obligated
HSIP - Invitational (2008) - $15,628,390 programmed, $14,498,108 obligated
HSIP - County Safety (2010) - $45,590,928 programmed, $31,107,238 obligated
HSIP - City Safety (2012) - $50,000,000 programmed, $8,496,645 obligated
HSIP - Quick Response (2013) - $28,000,000 programmed, $2,029,684 obligated
HSIP - State - $57,095,465 programmed, $57,095,465 obligated

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

$295,312,292.00

How much funding is obligated to local safety projects?

$212,215,298.00

For the same time period as the previous question, 2005-2013.

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

$0.00

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

$0.00

Does not include behavioral safety funds administered through the Washington Traffic Safety Commission (our Governor's Highway Safety Office).

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.

The biggest impediment to obligating HSIP funds has been getting realistic schedules for local agency projects. To assist in this effort going forward, several additional milestones are being required for project proposals to help local agencies identify and understand what an accurate schedule for a HSIP project might be. In addition, more strict deadlines for obligation are being set, or projects will lose awarded funding.

Describe any other aspects of the general Highway Safety Improvement Program implementation progress on which you would like 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
Chelan County - Malaga-Alcoa Hwy	Lighting Intersection lighting	7 Numbers	180000	180000	HSIP (Section 148)	Rural Major Collector	0	0	County Highway Agency	Improving the design and operation of highway intersections	2.5.A3 - Reduce motor vehicle collisions at intersections (install illumination where appropriate)
Clallam County - Laird Rd	Roadside Roadside grading	0.86 Miles	150000	150000	HSIP (Section 148)	Rural Major Collector	0	0	County Highway Agency	Minimizing the consequences of leaving the road	1.2.B6 - Minimize the consequences of leaving the roadway (improve the clear zone, enhance roadside safety by flattening

											slopes and removing hazardous objects)
Clallam County - Sequim-Dungeness Way	Roadside Barrier-metal	1.17 Miles	252000	252000	HSIP (Section 148)	Rural Major Collector	0	0	County Highway Agency	Minimizing the consequences of leaving the road	1.2.B4 - Minimize the consequences of leaving the roadway (install guardrail/barriers where necessary)
Clark County - Timmens Rd/Washougal River Rd/Hyatt Rd/Lockwood Creek Rd/179th St/Bratton Rd	Roadside Barrier-metal	6 Numbers	500000	500000	HSIP (Section 148)	Rural Principal Arterial - Other	0	0	County Highway Agency	Minimizing the consequences of leaving the road	1.2.B4 - Minimize the consequences of leaving the roadway (install guardrail/barriers where necessary)
Cowlitz County - Rose Valley	Roadside Barrier-metal	7 Numbers	498000	498000	HSIP (Section 148)	Rural Major Collector	0	0	County Highway Agency	Minimizing the consequen	1.2.B4 - Minimize the consequence

Rd/Old 99/Kalama River Rd/Tower Rd/Delameter Rd/Woodside Dr/Mount Pleasant Rd										ces of leaving the road	s of leaving the roadway (install guardrail/barriers where necessary)
Douglas County - McNeil Canyon Rd	Alignment Horizontal and vertical alignment	5.45 Miles	806000	806000	HSIP (Section 148)	Rural Major Collector	0	0	County Highway Agency	Keeping vehicles in the roadway	1.2.A3 - Reduce run-off-the-road collisions (improve roadway geometrics)
Garfield County - Peola Rd/Pomeroy Rd/Meadow Creek Rd/Kirby Mayview Rd	Roadway delineation Longitudinal pavement markings - new	4 Numbers	492000	492000	HSIP (Section 148)	Rural Minor Collector	0	0	County Highway Agency	Keeping vehicles in the roadway	1.2.A5 - Reduce run-off-the-road collisions (improve roadway signage and delineation)

Grays Harbor County - Middle Satsop Rd	Alignment Horizontal and vertical alignment	1 Numbers	1500000	1500000	HSIP (Section 148)	Rural Major Collector	0	0	County Highway Agency	Keeping vehicles in the roadway	1.2.A3 - Reduce run-off-the-road collisions (improve roadway geometrics)
Grays Harbor County - Countywide	Shoulder treatments Pave existing shoulders	17 Numbers	500000	500000	HSIP (Section 148)	Rural Major Collector	0	0	County Highway Agency	Keeping vehicles in the roadway	1.2.A3 - Reduce run-off-the-road collisions (improve roadway geometrics)
Island County - Camano Dr	Roadway Rumble strips - center	5.75 Miles	157000	157000	HSIP (Section 148)	Rural Major Collector	0	0	County Highway Agency	Keeping vehicles in the roadway	1.2.A2 - Reduce run-off-the-road collisions (install rumble strips where appropriate)
City of Issaquah - E Lake Sammamish Pkwy &	Intersection geometry Auxiliary lanes - add left-turn lane	1 Numbers	400000	400000	HSIP (Section 148)		0	0	City of Municipal Highway Agency	Improving the design and operation of highway	2.5.A2 - Reduce motor vehicle collisions at intersections

SE 56th St											intersectio ns	(implement geometric improvement s where appropriate)
City of Kennewick - Citywide	Intersection traffic control Modify traffic signal - add flashing yellow arrow	29 Numb ers	540000	540000	HSIP (Sectio n 148)	Urban Principal Arterial - Other	0	0	City of Municip al Highway Agency	Improving the design and operation of highway intersectio ns	2.5.A1 - Reduce motor vehicle collisions at intersections (implement traffic control and operational improvement s where appropriate)
Kitsap County - Countywid e	Roadside Barrier- metal	13 Numb ers	500000	500000	HSIP (Sectio n 148)	Rural Principal Arterial - Other	0	0	County Highway Agency	Minimizing the consequen ces of leaving the road	1.2.B4 - Minimize the consequence s of leaving the roadway (install guardrail/bar riers where necessary)
Klickitat	Roadway Roadway	2.65	193300	193300	HSIP	Rural	0	0	County	Keeping	1.2.A3 -

County - Snowden Rd	widening - travel lanes	Miles	0	0	(Section 148)	Major Collector			Highway Agency	vehicles in the roadway	Reduce run-off-the-road collisions (improve roadway geometrics)
Klickitat County - Snowden Rd	Roadside Barrier-metal	9 Miles	432000	432000	HSIP (Section 148)	Rural Major Collector	0	0	County Highway Agency	Minimizing the consequences of leaving the road	1.2.B4 - Minimize the consequences of leaving the roadway (install guardrail/barriers where necessary)
City of Longview - SR 4 & NE Nichols	Intersection traffic control Modify traffic signal - modernization/replacement	1 Numbers	500000	500000	HSIP (Section 148)	Urban Principal Arterial - Other	0	0	City of Municipal Highway Agency	Improving the design and operation of highway intersections	2.5.A2 - Reduce motor vehicle collisions at intersections (implement geometric improvements where appropriate)
City of Lynnwood -	Intersection traffic control Intersection	1 Numb	175000	175000	HSIP (Section	Urban Collector	0	0	City of Municip	Improving the design	2.5.A1 - Reduce

Alderwood Mall Blvd & 40th Ave	traffic control - other	ers			n 148)				al Highway Agency	and operation of highway intersectio ns	motor vehicle collisions at intersections (implement traffic control and operational improvement s where appropriate)
Mason County - Countywide	Roadway signs and traffic control Sign sheeting - upgrade or replacement	8 Numb ers	476000	476000	HSIP (Sectio n 148)	Rural Major Collector	0	0	County Highway Agency	Keeping vehicles in the roadway	1.2.A5 - Reduce run- off-the-road collisions (improve roadway signage and delineation)
Okanogan County - Patterson Lake Rd/Old Riverside Hwy/Toats Coulee Rd/Twisp- Winthrop	Roadside Barrier- metal	5 Numb ers	496000	496000	HSIP (Sectio n 148)	Rural Major Collector	0	0	County Highway Agency	Minimizing the consequen ces of leaving the road	1.2.B4 - Minimize the consequence s of leaving the roadway (install guardrail/bar riers where necessary)

Eastside Rd/Loomis-Oroville Rd											
Pend Oreille County - Deer Valley Rd/Southshore Diamond Rd/LeClerc Rd	Roadside Barrier-metal	3 Numbers	395000	395000	HSIP (Section 148)	Rural Minor Collector	0	0	County Highway Agency	Minimizing the consequences of leaving the road	1.2.B4 - Minimize the consequences of leaving the roadway (install guardrail/barriers where necessary)
Pierce County - Spanaway Loop Rd	Intersection geometry Auxiliary lanes - add left-turn lane	1 Numbers	400000	400000	HSIP (Section 148)	Urban Principal Arterial - Other	0	0	County Highway Agency	Improving the design and operation of highway intersections	2.5.A2 - Reduce motor vehicle collisions at intersections (implement geometric improvements where appropriate)
Pierce County - Orville Rd/304th St/Cramer	Roadside Barrier-metal	5 Numbers	362000	362000	HSIP (Section 148)	Rural Major Collector	0	0	County Highway Agency	Minimizing the consequences of leaving the	1.2.B4 - Minimize the consequences of leaving the roadway

Rd KPN/118th Ave/John Rd							road			(install guardrail/barriers where necessary)
Pierce County - 8th Ave S & 288th St S/8th Ave S & 304th St S/8th Ave E & 304th St E	Intersection traffic control Intersection flashers - add overhead (continuous)	3 Numbers	138000	138000	HSIP (Section 148)	Rural Major Collector	0	0	County Highway Agency	Improving the design and operation of highway intersections	2.5.A1 - Reduce motor vehicle collisions at intersections (implement traffic control and operational improvements where appropriate)
City of Renton - SR 900 & Duvall Ave	Intersection geometry Auxiliary lanes - add left-turn lane	1 Numbers	396000	396000	HSIP (Section 148)	Urban Principal Arterial - Other	0	0	City of Municipal Highway Agency	Improving the design and operation of highway intersections	2.5.A2 - Reduce motor vehicle collisions at intersections (implement geometric improvements where appropriate)
City of	Intersection traffic	1	72000	72000	HSIP	Urban	0	0	City of	Improving	2.5.A1 -

Shoreline - 15th Ave & 150th St	control Intersection traffic control - other	Numbers			(Section 148)	Principal Arterial - Other			Municipal Highway Agency	the design and operation of highway intersections	Reduce motor vehicle collisions at intersections (implement traffic control and operational improvements where appropriate)
City of Shoreline - SR 99	Access management Grassed median - extend existing	1.01 Miles	1105000	1105000	HSIP (Section 148)	Urban Principal Arterial - Other	0	0	City of Municipal Highway Agency	Improving the design and operation of highway intersections	2.5.A2 - Reduce motor vehicle collisions at intersections (implement geometric improvements where appropriate)
Skagit County - Best Rd & McLean Rd	Intersection traffic control Modify control - two-way stop to roundabout	1 Numbers	800000	800000	HSIP (Section 148)	Rural Major Collector	0	0	County Highway Agency	Improving the design and operation of highway intersectio	2.5.A2 - Reduce motor vehicle collisions at intersections (implement geometric

										ns	improvements where appropriate)
City of Spokane - Mission St & S Riverton	Access management Access management - other	1 Numbers	34000	34000	HSIP (Section 148)	Urban Principal Arterial - Other	0	0	City of Municipal Highway Agency	Improving the design and operation of highway intersections	2.5.A2 - Reduce motor vehicle collisions at intersections (implement geometric improvements where appropriate)
Spokane County - Deer Park-Milan/Palouse Hwy/Trails Rd/Cheney-Plaza Rd	Roadway Rumble strips - center	4 Numbers	498000	498000	HSIP (Section 148)	Rural Major Collector	0	0	County Highway Agency	Reducing head-on and across-median crashes	3.1.A1 - Reduce opposite-direction multi-vehicle collisions (implement centerline treatments such as rumble strips to reduce head-on crashes on all two lane

											highways where possible)
Thurston County - Morris Rd	Alignment Horizontal curve realignment	1 Numbers	216000	216000	HSIP (Section 148)	Rural Minor Collector	0	0	County Highway Agency	Keeping vehicles in the roadway	1.2.A3 - Reduce run-off-the-road collisions (improve roadway geometrics)
City of Vancouver - Andresen Rd & 40th St	Intersection geometry Auxiliary lanes - add left-turn lane	1 Numbers	335000	335000	HSIP (Section 148)	Urban Principal Arterial - Other	0	0	City of Municipal Highway Agency	Improving the design and operation of highway intersections	2.5.A2 - Reduce motor vehicle collisions at intersections (implement geometric improvements where appropriate)
City of Vancouver - Thurston Way & Parkway Dr	Intersection geometry Auxiliary lanes - add left-turn lane	1 Numbers	273000	273000	HSIP (Section 148)	Urban Minor Arterial	0	0	City of Municipal Highway Agency	Improving the design and operation of highway intersections	2.5.A2 - Reduce motor vehicle collisions at intersections (implement geometric

											improvements where appropriate)
City of Vancouver - Thurston Way & Vancouver Mall Dr	Intersection geometry Auxiliary lanes - add left-turn lane	1 Numbers	270000	270000	HSIP (Section 148)	Urban Minor Arterial	0	0	City of Municipal Highway Agency	Improving the design and operation of highway intersections	2.5.A2 - Reduce motor vehicle collisions at intersections (implement geometric improvements where appropriate)

A couple of possible online reporting tool suggestions:

1) For project output options, it might be worthwhile to have more than just numbers or miles as options. For the numbers category, some of these projects (depending on the countermeasure used) are measured in number of roads, number of intersections, or number of curves.

2) I did not see a countermeasure option for adding a new signal at an intersection. This seems like a standard option that should be in the list.

Also, a few of the functional class types did not input correctly (even though they were selected using the template provided). The ORT requested each of these to be reported under Other.

## 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*	2007	2008	2009	2010	2011
Number of fatalities	569	519	493	461	454
Number of serious injuries	2718	2551	2648	2481	2122
Fatality rate (per HMVMT)	1	0.94	0.87	0.8	0.8
Serious injury rate (per HMVMT)	4.78	4.62	4.67	4.31	3.74

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

Number of Fatalities and Serious injuries for the Last Five Years
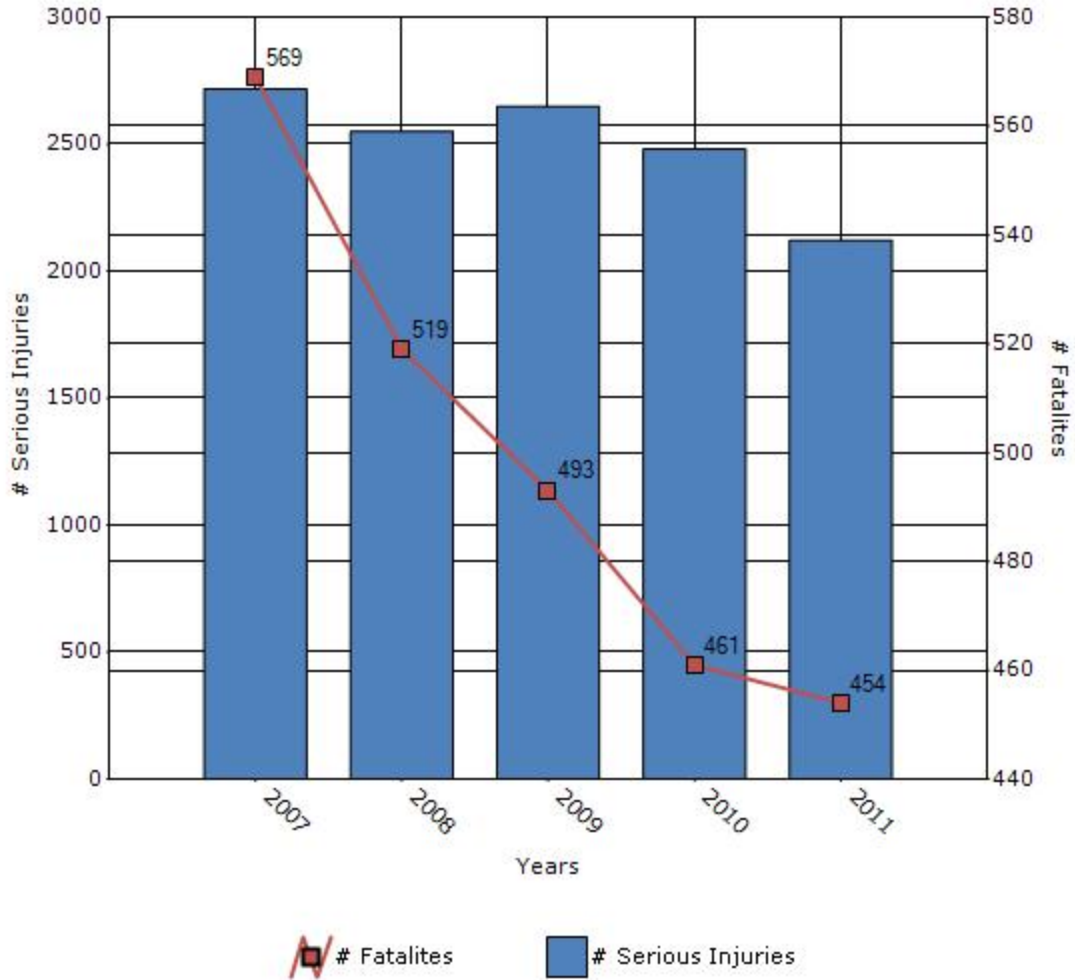
## Rate of Fatalities and Serious injuries for the Last Five Years
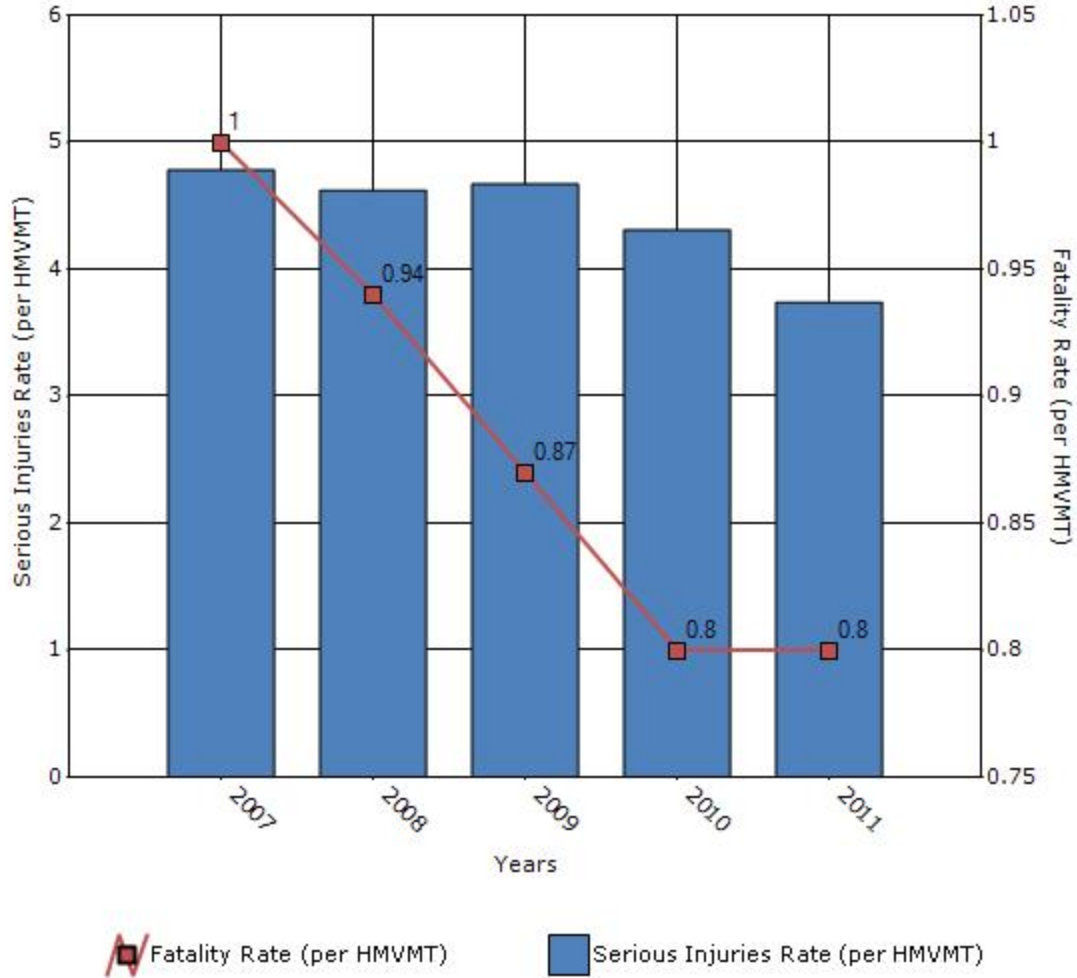
**To the maximum extent possible, present performance measure* data by functional classification and ownership.**

Year - 2012

Function Classification	Number of fatalities	Number of serious injuries	Fatality rate (per HMVMT)	Serious injury rate (per HMVMT)
RURAL PRINCIPAL ARTERIAL - INTERSTATE	18	51	0	0
RURAL PRINCIPAL ARTERIAL - OTHER FREEWAYS AND EXPRESSWAYS	19	45	0	0
RURAL PRINCIPAL ARTERIAL - OTHER	37	89	0	0
RURAL MINOR ARTERIAL	37	107	0	0
RURAL MINOR COLLECTOR	14	74	0	0
RURAL MAJOR COLLECTOR	72	234	0	0
RURAL LOCAL ROAD OR STREET	17	70	0	0
URBAN PRINCIPAL	26	134	0	0

ARTERIAL - INTERSTATE				
URBAN PRINCIPAL ARTERIAL - OTHER FREEWAYS AND EXPRESSWAYS	25	107	0	0
URBAN PRINCIPAL ARTERIAL - OTHER	38	220	0	0
URBAN MINOR ARTERIAL	27	144	0	0
URBAN MINOR COLLECTOR	0	0	0	0
URBAN MAJOR COLLECTOR	7	27	0	0
URBAN LOCAL ROAD OR STREET	5	27	0	0
OTHER	0	0	0	0
OTHER	0	0	0	0

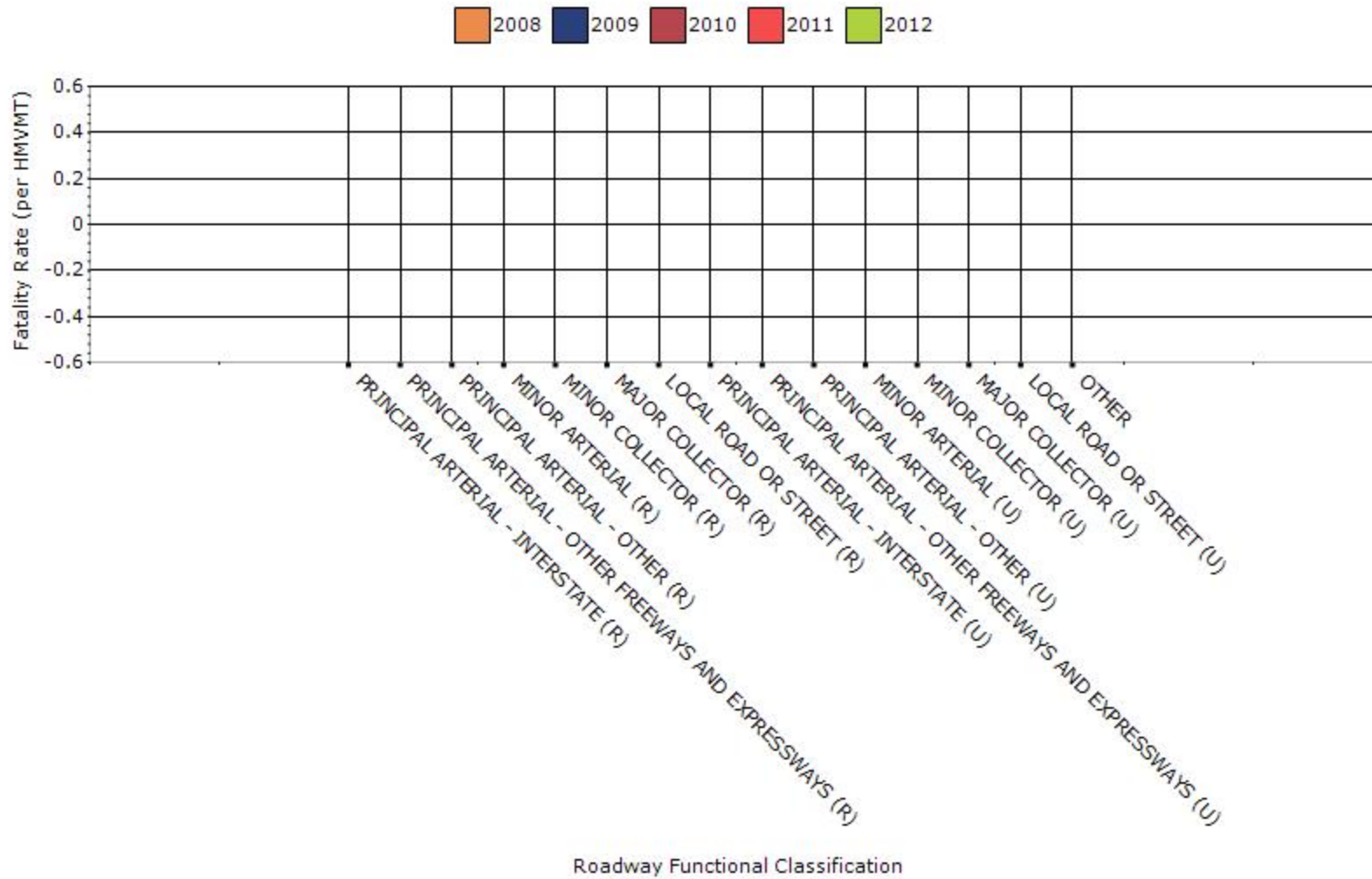# Fatalities by Roadway Functional Classification

Roadway Functional Classification

Serious Injuries by Roadway Functional Classification
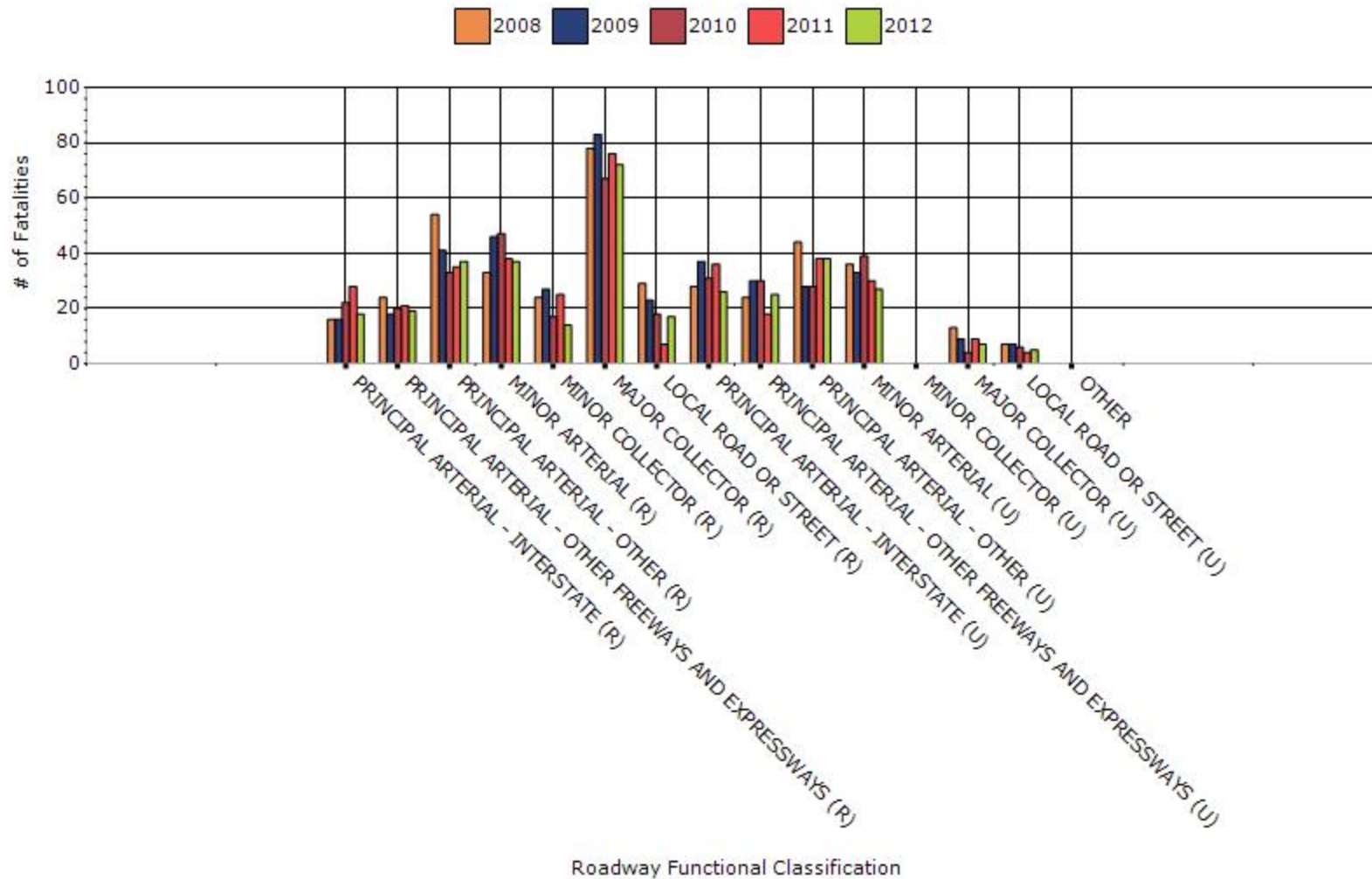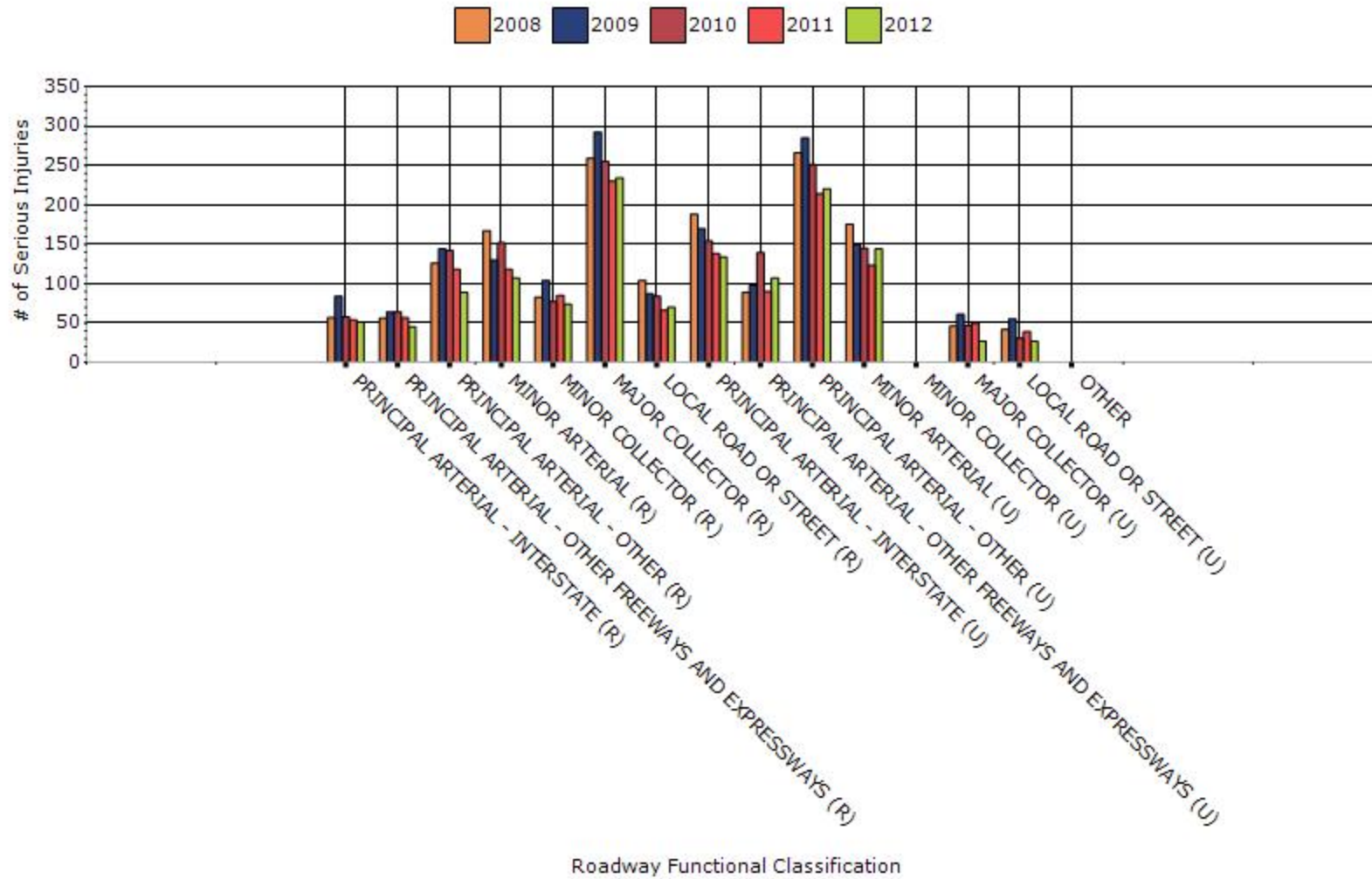
Roadway Functional Classification

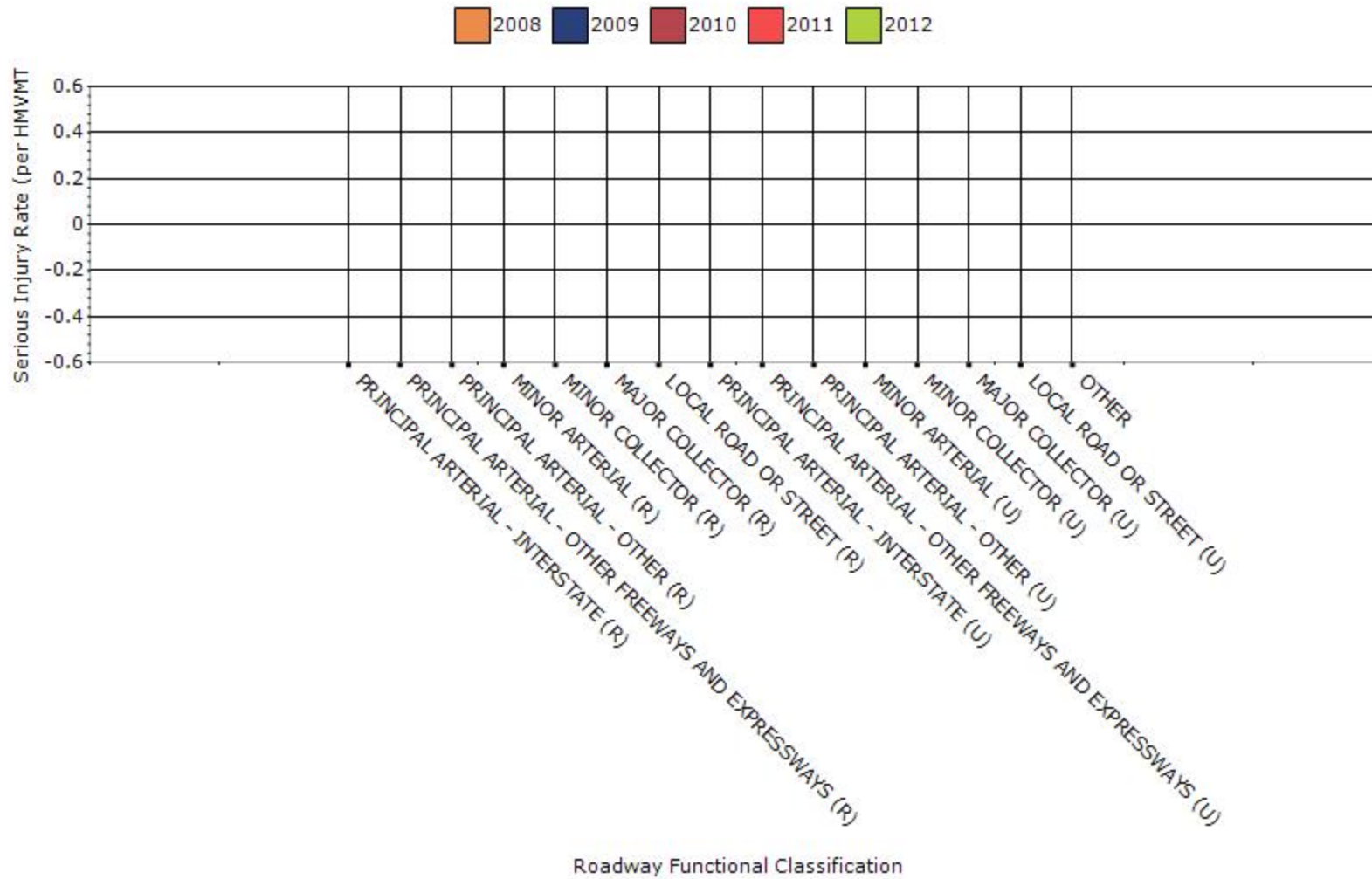## Fatality Rate by Roadway Functional Classification

Roadway Functional Classification

Serious Injury Rate by Roadway Functional Classification

☐ 2008   ☐ 2009   ☐ 2010   ☐ 2011   ☐ 2012

Serious Injury Rate (per HMVMT)
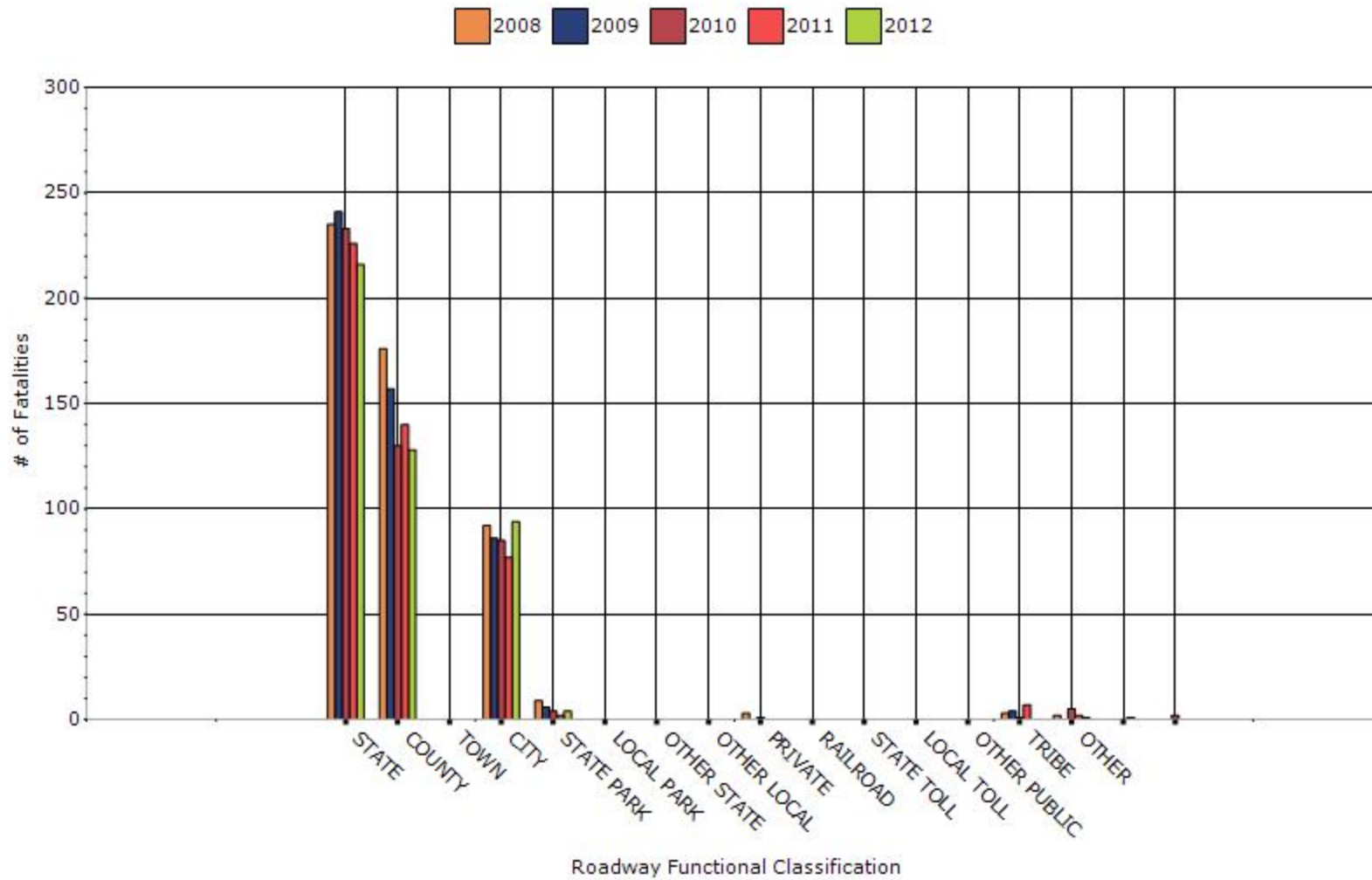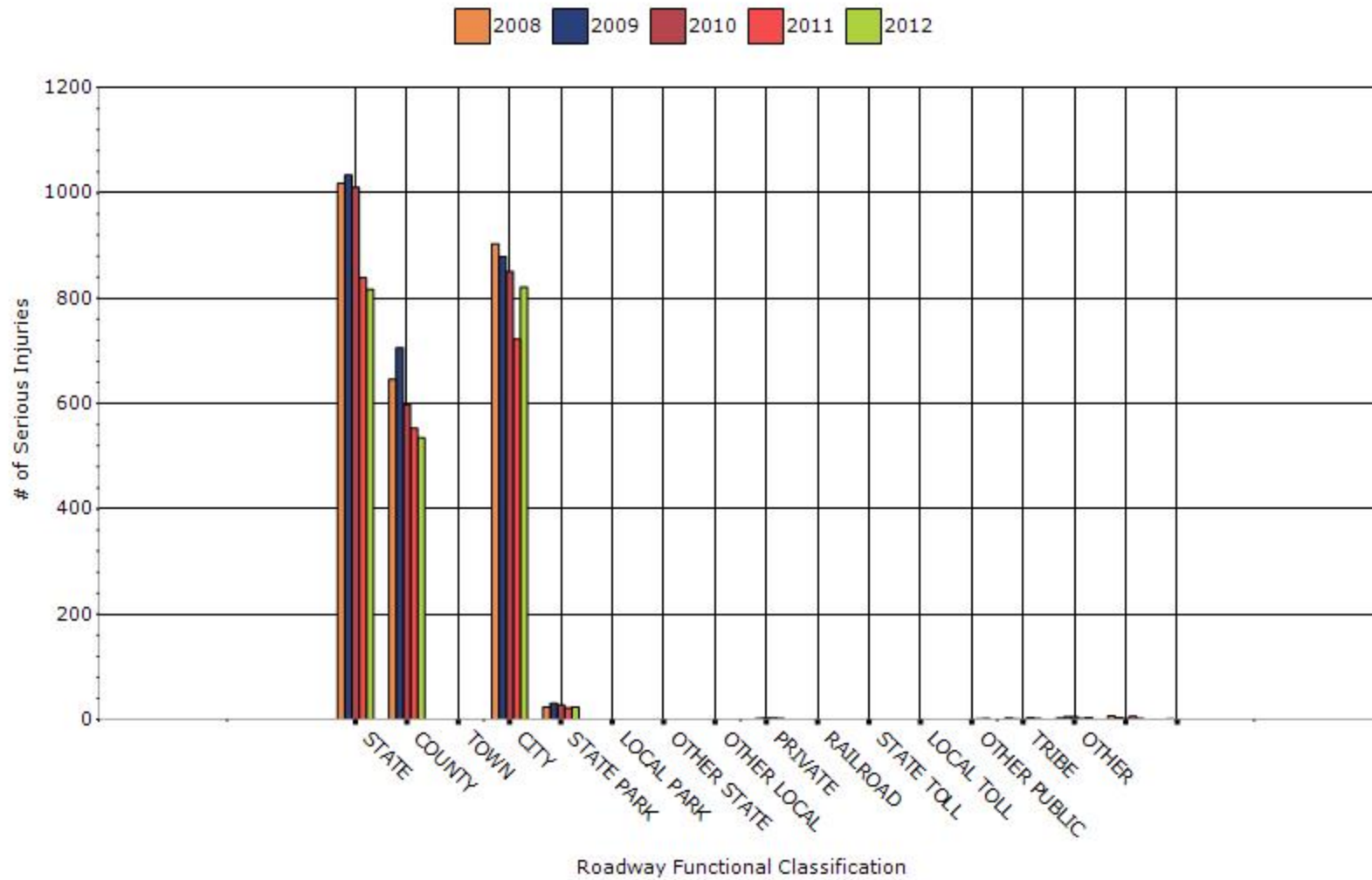
Roadway Functional Classification

Year - 2012

Roadway Ownership	Number of fatalities	Number of serious injuries	Fatality rate (per HMVMT)	Serious injury rate (per HMVMT)
STATE HIGHWAY AGENCY	216	817	0.68	2.57
COUNTY HIGHWAY AGENCY	128	535	1.36	5.67
TOWN OR TOWNSHIP HIGHWAY AGENCY	0	0	0	0
CITY OF MUNICIPAL HIGHWAY AGENCY	94	821	0.62	5.41
STATE PARK, FOREST, OR RESERVATION AGENCY	4	24	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	2	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	2	0	0
INDIAN TRIBE NATION	0	2	0	0
OTHER	1	4	0	0
FEDERAL	0	2	0	0
NATIONAL PARK	0	0	0	0
NATIONAL PARK	0	0	0	0

Number of Fatalities by Roadway Ownership

Number of Serious Injuries by Roadway Ownership

Fatality Rate by Roadway Ownership

Serious Injury Rate by Roadway Ownership

Legend: 2008, 2009, 2010, 2011, 2012

Y-axis: Serious Injury Rate (per HMVMT)

X-axis: Roadway Functional Classification

Categories: STATE, COUNTY, TOWN, CITY, STATE PARK, LOCAL PARK, OTHER STATE, OTHER LOCAL, PRIVATE, RAILROAD, STATE TOLL, LOCAL TOLL, OTHER PUBLIC, TRIBE, OTHER
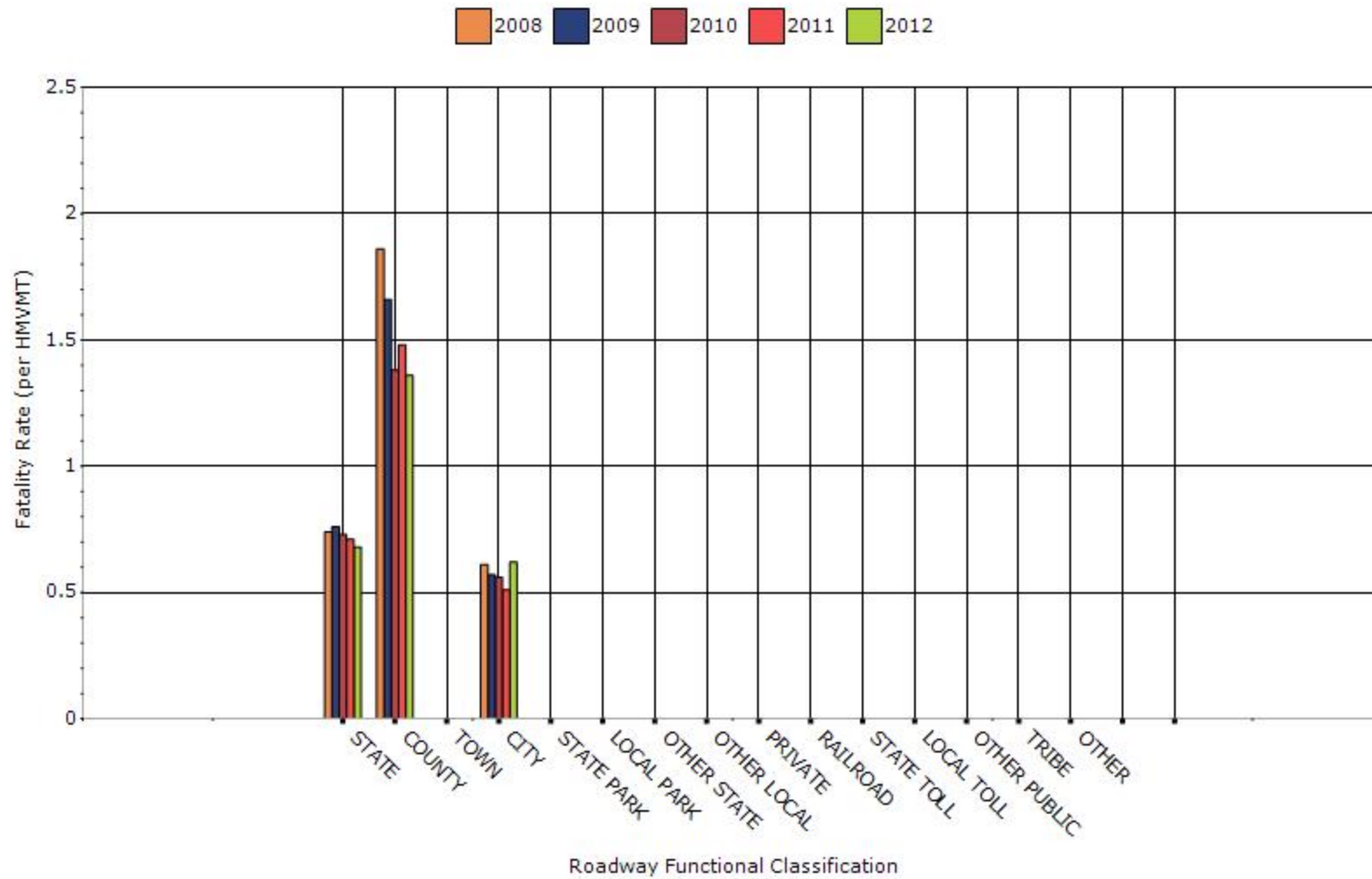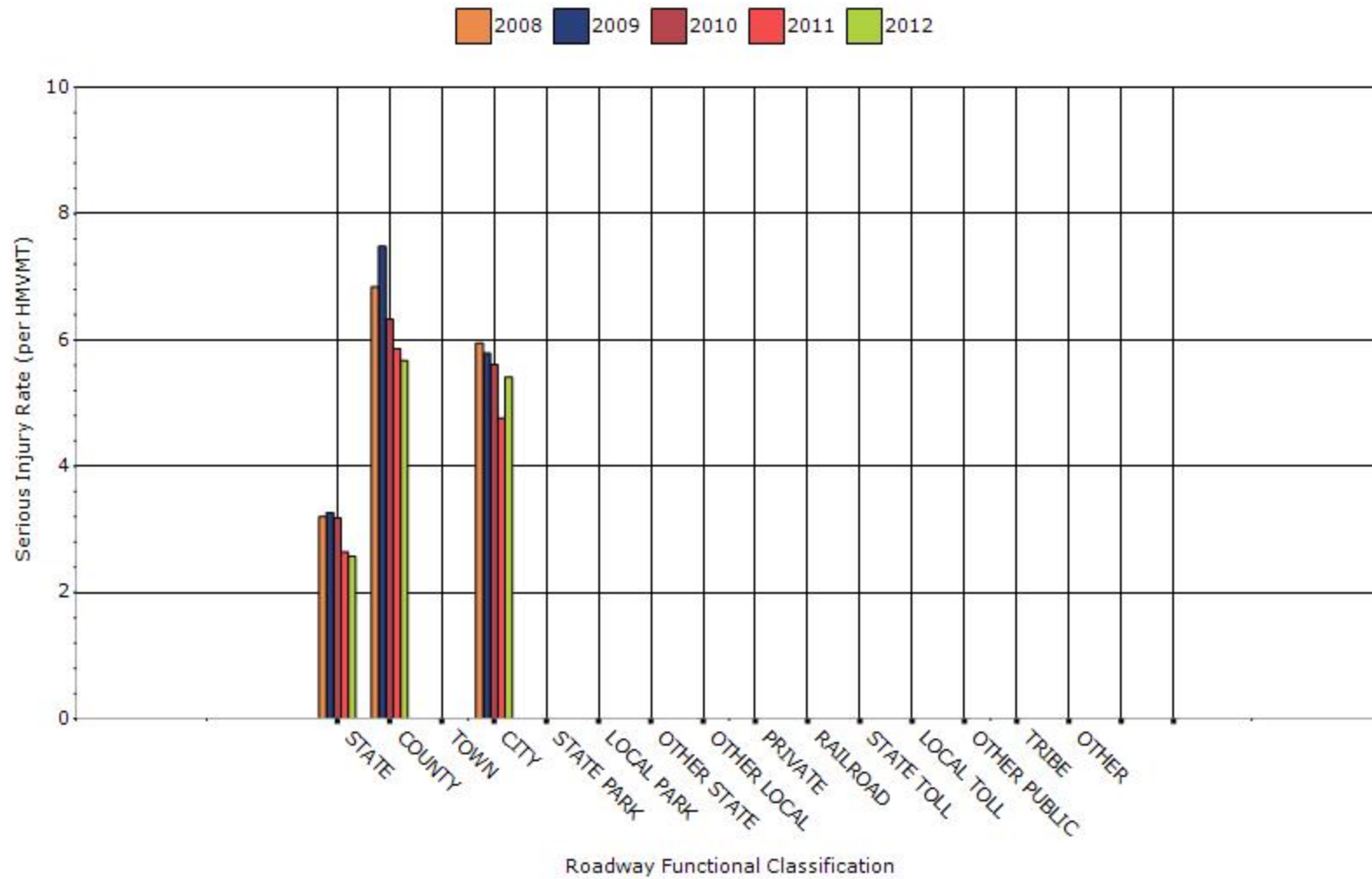
The functional classification data ONLY includes state and county road data. Our state database does not include federal functional classification for crashes on city streets or miscellaneous roadways. So the rural information should be accurate. The urban information would change significantly. This also means that an accurate rate per facility type cannot be provided either.

For the roadway ownership data, the rates (for all years) are based on 2010 splits between jurisdiction types. VMT data is only available for state/county/city jurisdiction types, so this is the only rate data provided.

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

Application of Special Rules

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

Older Driver Performance Measures	2008	2009	2010	2011	2012
Fatality rate (per capita)	0.77	0.48	0.59	0.7	0
Serious injury rate (per capita)	1.72	1.52	1.84	1.43	0
Fatality and serious injury rate (per capita)	2.48	1.99	2.43	2.13	0

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

FHWA shared the following information on population (# people 65+ per 1000 state population):
2005 = 111, 2006 = 115, 2007 = 117, 2008 = 120, 2009 = 120, 2010 = 123, 2011 = 126

Calculate rate to 0.01, round final result to 0.1. Rate calculation example:
2011 F+SI Rate = [(2011 F+SI / Pop) + (2010 F+SI / Pop) + (2009 F+SI / Pop) + (2008 F+SI / Pop) + (2007 F+SI / Pop)] / 5

FARS (for fatalities) and WSDOT state collision repository (for serious injuries) shows older road users (65+) in crashes as:
2005 = 104 fatalities, 215 serious injuries
2006 = 69 fatalities, 197 serious injuries
2007 = 74 fatalities, 175 serious injuries
2008 = 92 fatalities, 206 serious injuries
2009 = 57 fatalities, 182 serious injuries
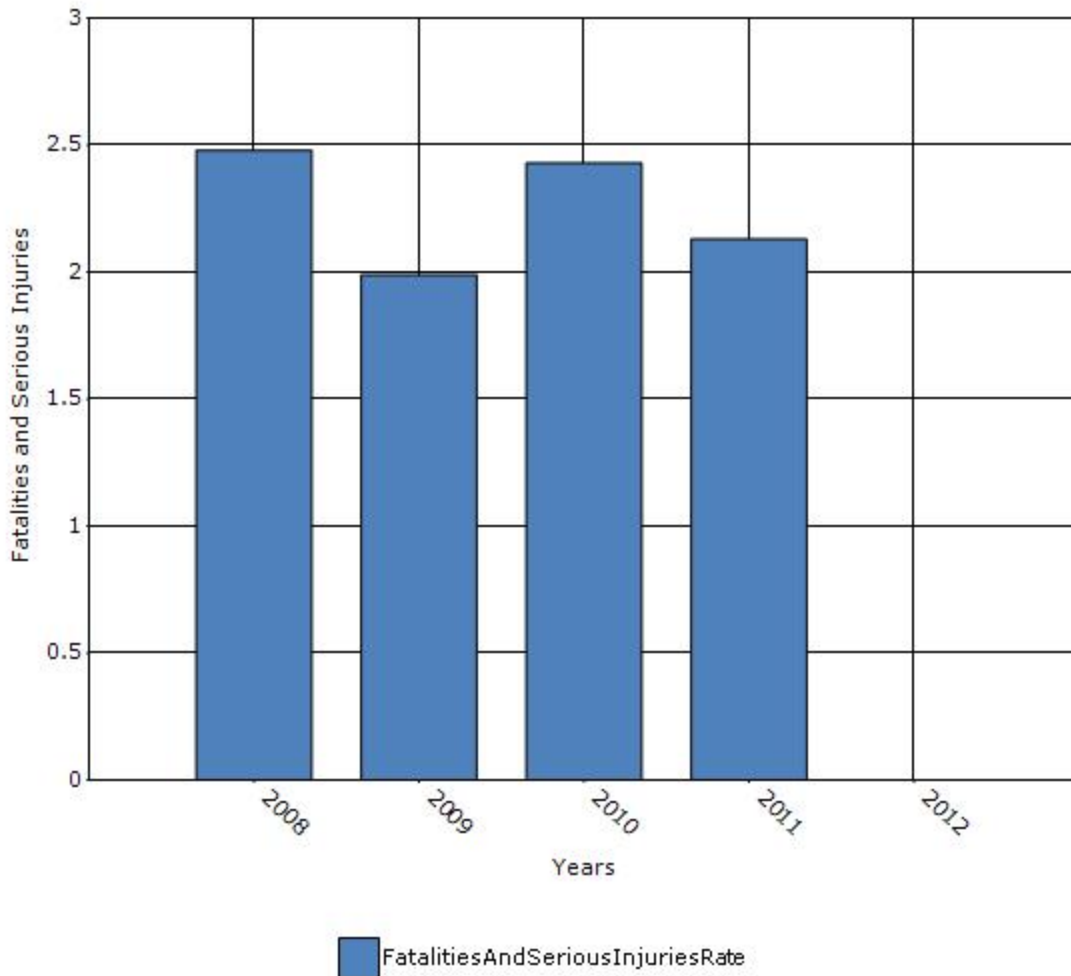2010 = 73 fatalities, 226 serious injuries
2011 = 88 fatalities, 180 serious injuries

The rates in the table above are calculated simply as # / Pop = Rate.

2005-2009 Combined Rate (see equation above) = 2.36 or 2.4

2007-2011 Combined Rate (see equation above) = 2.23 or 2.2

Rate of Fatalities and Serious injuries for the Last Five Years

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:

B/C ratio calculated using projects completed in 2009. Before data is from 2006-2008. After data is from 2010-2012.

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:

Focus is already on fatal & serious injury collisions, and includes local roads.

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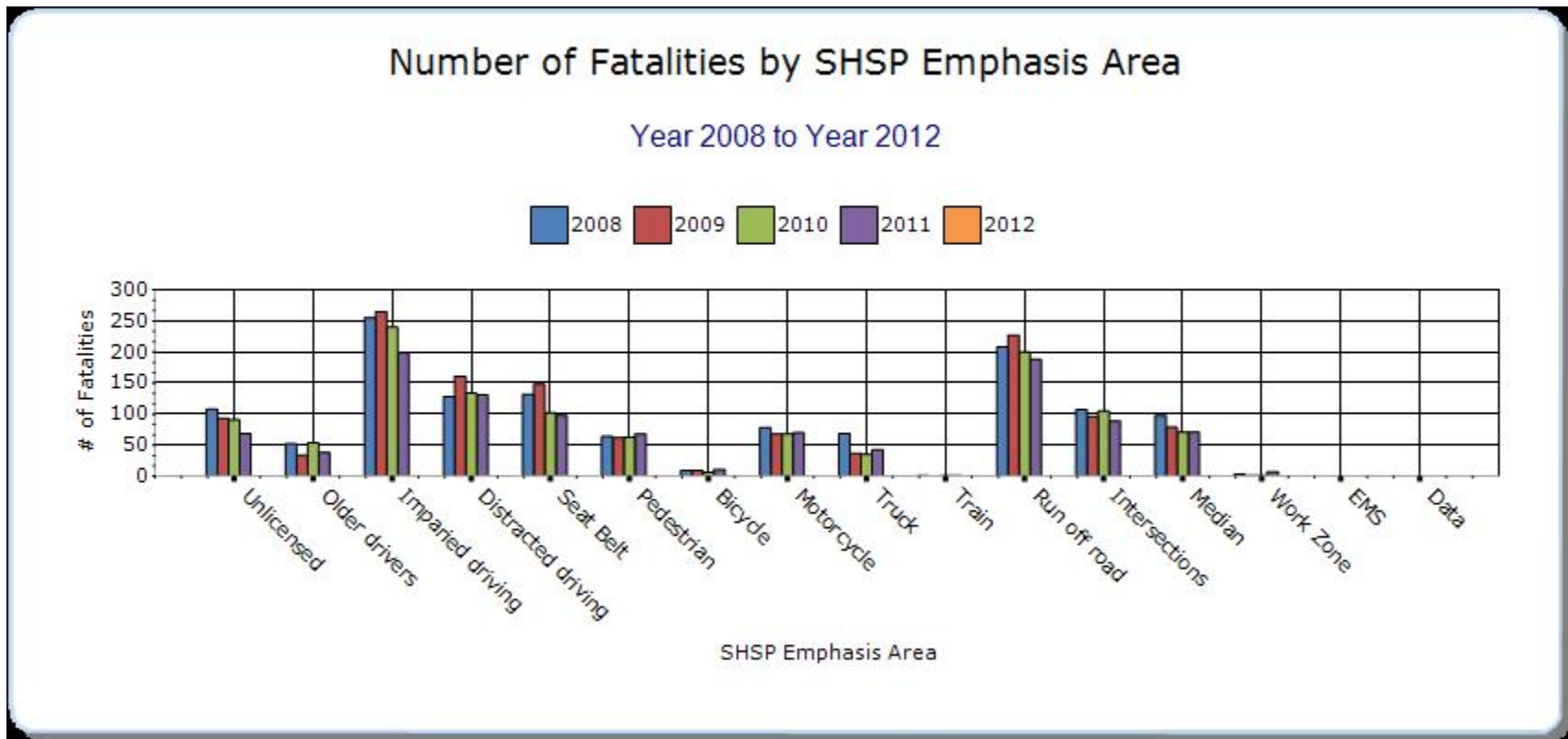
SHSP Emphasis Areas

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
Ensuring drivers are licensed and fully competent		0	0	0	0	0	0	0
Sustaining proficiency in older drivers		0	0	0	0	0	0	0
Reducing impaired driving		0	0	0	0	0	0	0
Keeping drivers alert		0	0	0	0	0	0	0
Increasing seat belt use and improving airbag effectiveness		0	0	0	0	0	0	0
Making walking and street crossing easier		0	0	0	0	0	0	0
Ensuring safer bicycle travel		0	0	0	0	0	0	0
Improving motorcycle safety and increasing		0	0	0	0	0	0	0

motorcycle awareness							
Making truck travel safer	0	0	0	0	0	0	0
Reducing vehicle-train crashes	0	0	0	0	0	0	0
Keeping vehicles in the roadway	0	0	0	0	0	0	0
Improving the design and operation of highway intersections	0	0	0	0	0	0	0
Reducing head-on and across-median crashes	0	0	0	0	0	0	0
Designing safer work zones	0	0	0	0	0	0	0
Enhancing emergency medical capabilities to increase survivability	0	0	0	0	0	0	0
Improving information and decision support systems	0	0	0	0	0	0	0
Speeding	0	0	0	0	0	0	0
Young Drivers (16-25)	0	0	0	0	0	0	0

Drowsy Drivers		0	0	0	0	0	0	0
Wildlife		0	0	0	0	0	0	0
School Bus Involved		0	0	0	0	0	0	0

Number of Fatalities by SHSP Emphasis Area

Year 2008 to Year 2012

2008 2009 2010 2011 2012

Number of Serious Injuries by SHSP Emphasis Area

Year 2008 to Year 2012

Fatality Rate by SHSP Emphasis Area
Year 2008 to Year 2012

Serious Injury Rate by SHSP Emphasis Area
Year 2008 to Year 2012
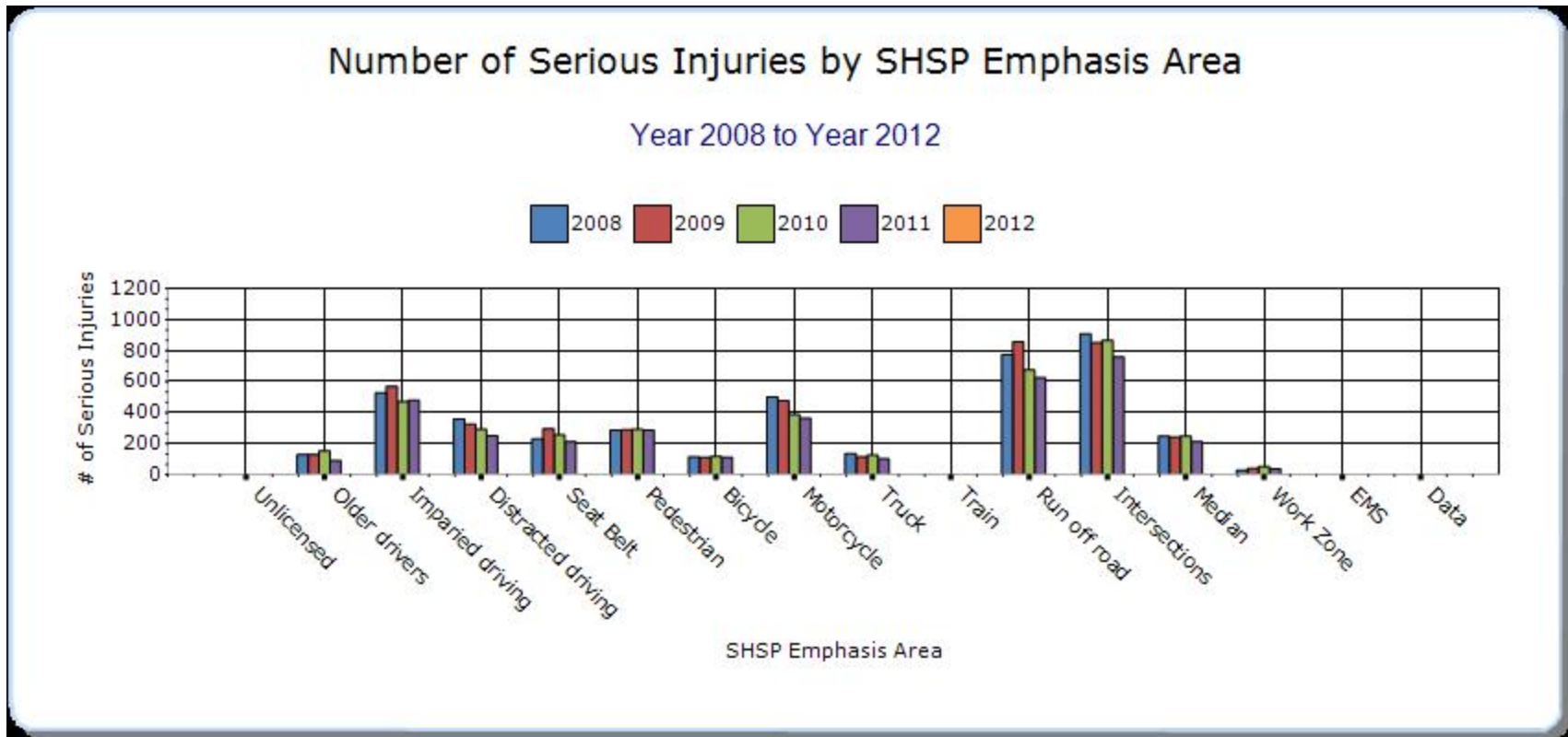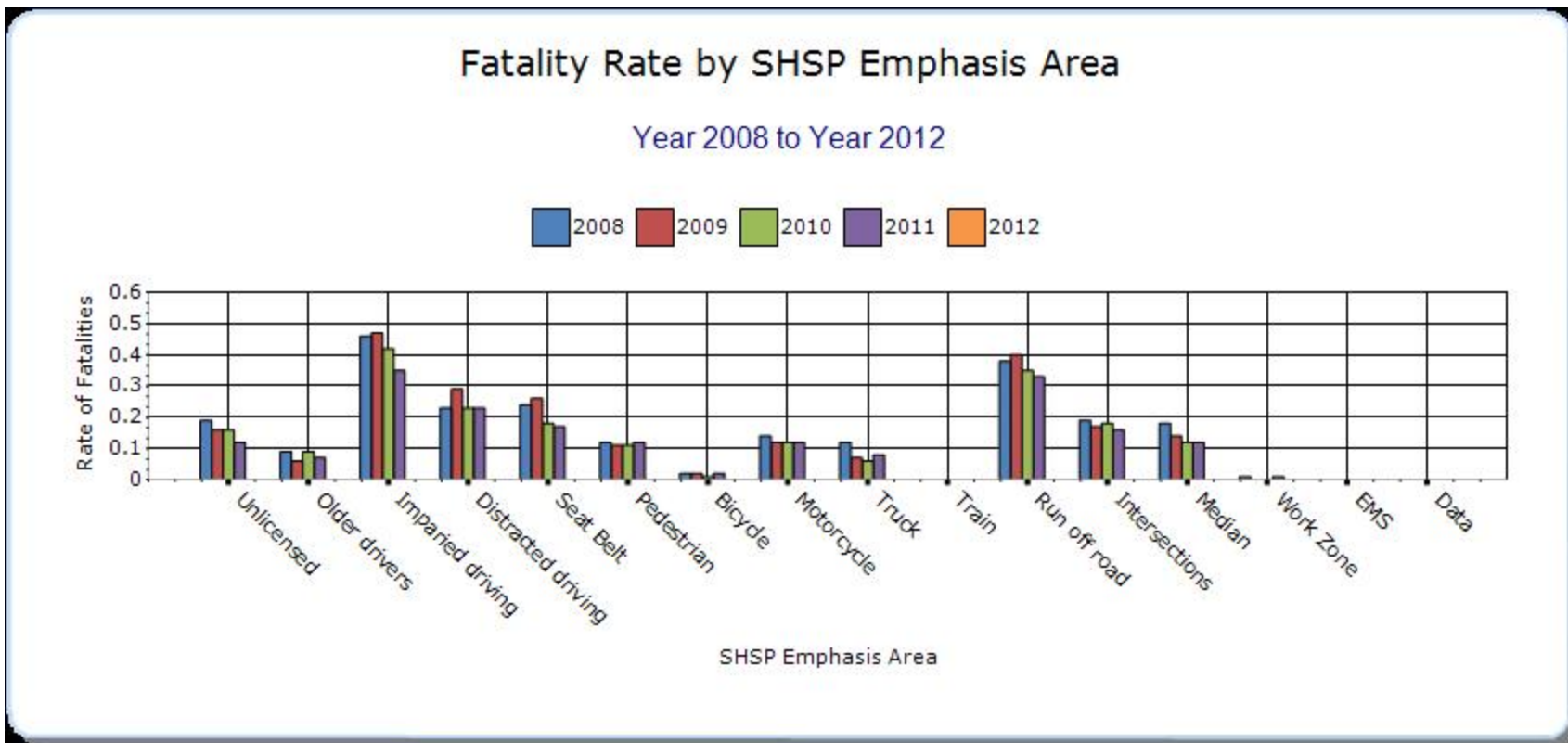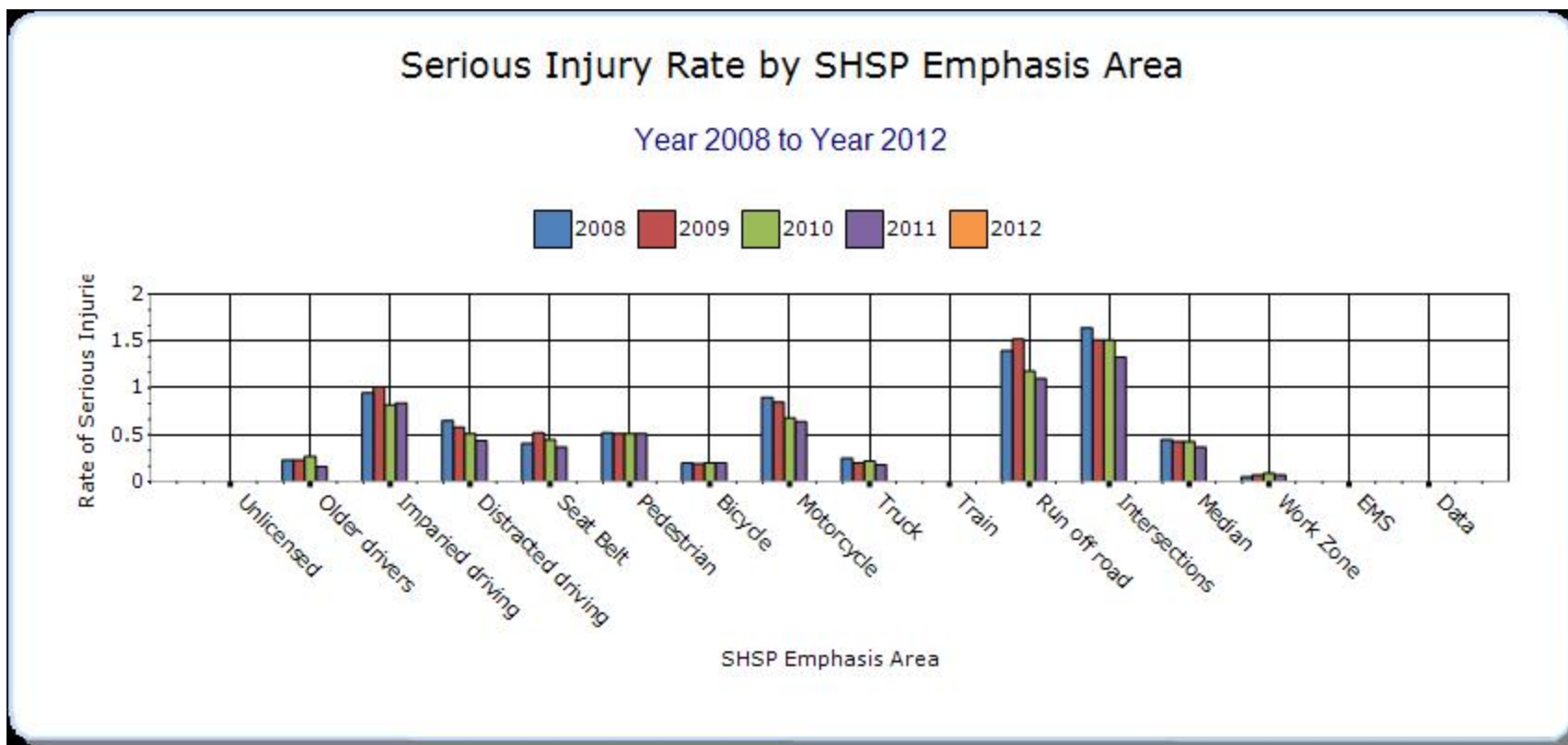
Matched our SHSP priorities as much as possible. State priorities/emphasis areas are set on problem crash types or groups. Consider the following equivalent for reporting purposes:

Ensuring drivers are licensed & fully competent = Unlicensed Drivers - priority 2

Sustaining proficiency in older drivers = Older Drivers (75+) - priority 3

Reducing impaired driving = Impaired Drivers - priority 1

Keeping drivers alert = Distracted Drivers - priority 1

Increasing seat belt use and improving airbag effectiveness = Unrestrained Occupants - priority 2

Making walking and street crossing easier = Pedestrians - priority 2

Ensuring safer bicycle travel = Bicyclists - priority 3

Improving motorcycle safety and increasing motorcycle awareness = Motorcyclists - priority 2

Making truck travel safer = Heavy Trucks - priority 3

Reducing vehicle-train crashes = Vehicle-Train - priority 3

Keeping vehicles in the roadway = Run-Off-the-Road - priority 1

Improving the design and operation of highway intersections = Intersection-Related - priority 1

Reducing head-on and across-median crashes = Opposite Direction - priority 2

Designing safer work zones = Work Zones - priority 3

Enhancing emergency medical capabilities to increase survivability = EMS & Trauma Care - priority 2

Improving information and decision support systems = Traffic Data Systems - priority 1

Also included are:

Speeding - priority 1

Young Drivers (16-25) - priority 1

Drowsy Drivers - priority 3

Wildlife - priority 3

School-Bus Involved - priority 3

Note that serious injury data for unlicensed drivers is not available. So only the fatalities & fatality rates for that item are shown.

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
These programs are funded on a multi-year basis (not individual per year). In addition, the programs target multiple priority areas from the SHSP. Success is measured in the previous question. No individual analysis is done on a per program basis (too difficult to separate between programs, which overlap with other ongoing efforts - any success claimed would not		0	0	0	0	0	0	0

be individual to each program independently).							

Fatalities by Target Crash Type for Groups of Similar Projects

Year 2008 to Year 2012

☐ 2008 ☐ 2009 ☐ 2010 ☐ 2011 ☐ 2012

# of Fatalities

1.2
1
0.8
0.6
0.4
0.2
0

Target Crash Type

Serious Injuries by Target Crash Type for Groups of Similar Projects

Year 2008 to Year 2012

2008 2009 2010 2011 2012

Fatality Rate by Target Crash Type for Groups of Similar Projects

Year 2008 to Year 2012

| | 2008 | | 2009 | | 2010 | | 2011 | | 2012 |

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 Injuries

1.2

1

0.8

0.6

0.4

0.2

0

Target Crash Type

These programs are funded on a multi-year basis (no individual funding or analysis on a yearly basis). The majority of these programs also target multiple crash types from the SHSP. So effectiveness is ultimately measured in the previous question. No individual analysis is provided here.

Systemic Treatments

Present the overall effectiveness of systemic treatments..

Year - 2012

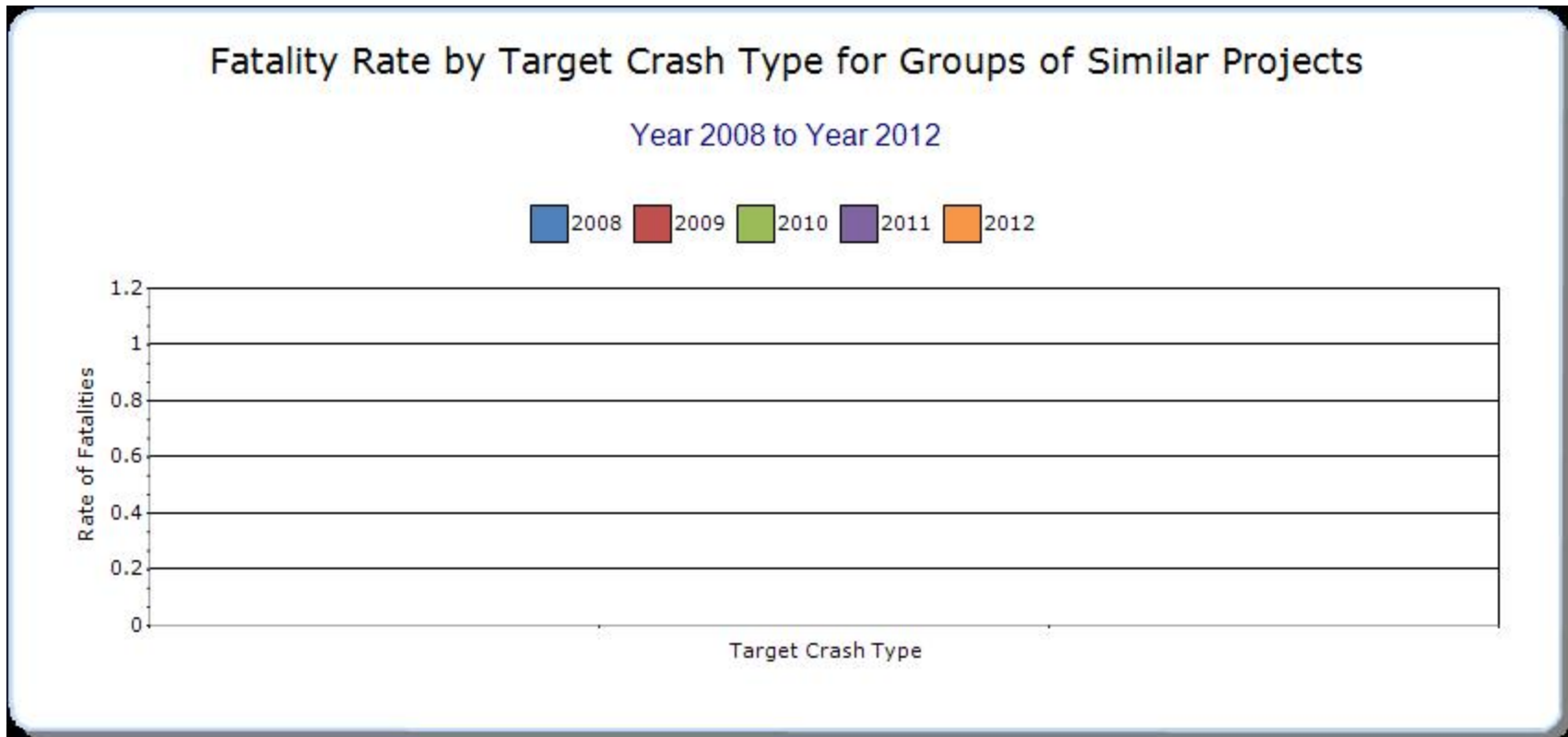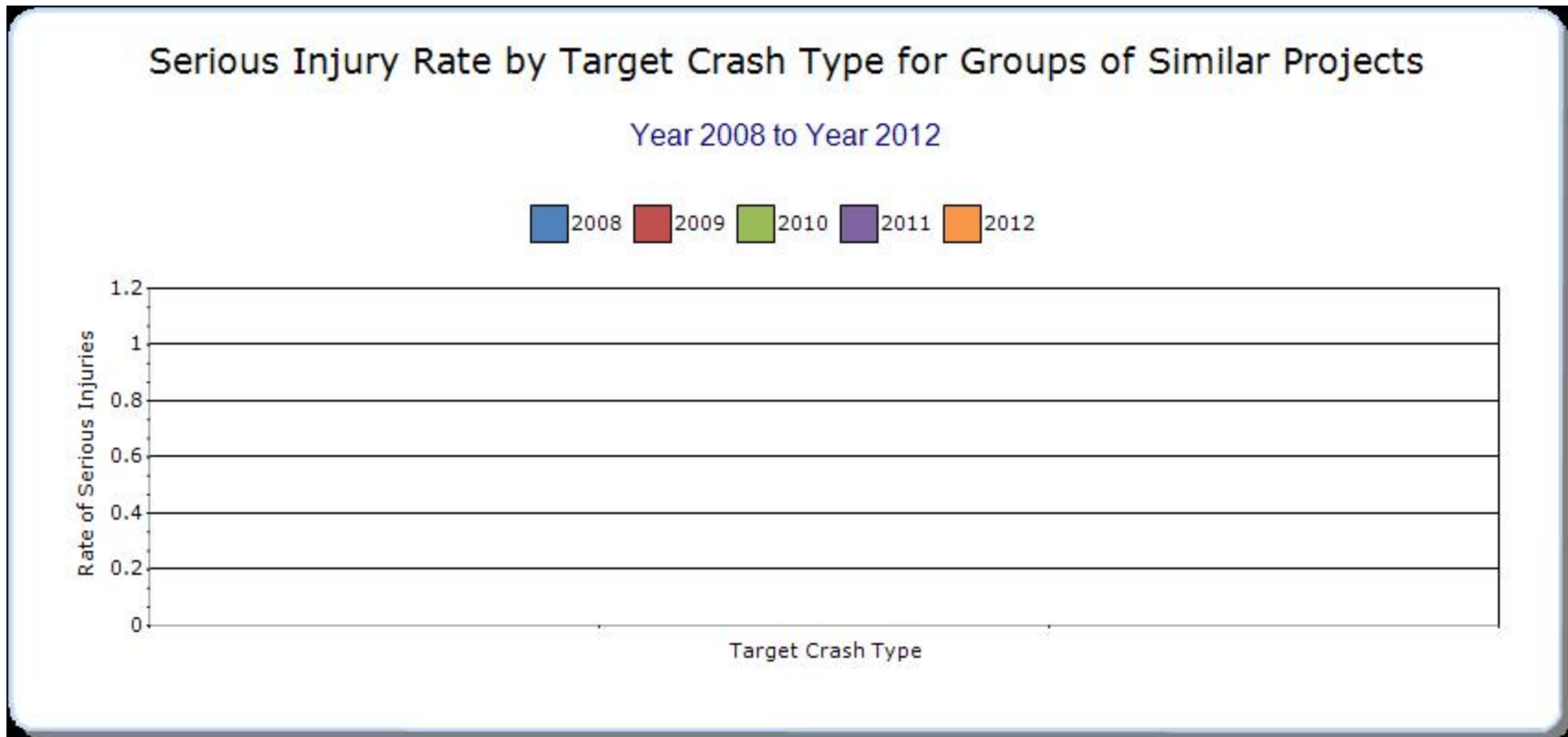| Systemic improvement	Target Crash Type	Number of fatalities	Number of serious injuries	Fatality rate (per HMVMT)	Serious injury rate (per HMVMT)	Other-1	Other-2	Other-3
Separate analysis has not been completed for each of these programs. While rumble strips have an ongoing evaluation, the program is more complex than a simple answer here (we have a variety of rumble strips, such as an extensive centerline rumble strip program on state highways, shoulder rumble strips on the interstate, some combinations of centerline and shoulder rumble		0	0	0	0	0	0	0

strips on two-lane highways, etc.). While programs exist for the other 4 systemic improvements listed here, they have not been individually analyzed for effectiveness (indeed, most would be hard to single out for true effectiveness tracking).								

Fatalities by Target Crash Type for Systemic Safety Improvements

Year 2008 to Year 2012

■ 2008 ■ 2009 ■ 2010 ■ 2011 ■ 2012

(Chart: # of Fatalities vs. Target Crash Type, y-axis from 0 to 1.2, no data plotted)

Serious Injuries by Target Crash Type for Systemic Safety Improvements

Year 2008 to Year 2012

2008   2009   2010   2011   2012

Fatality Rate by Target Crash Type for Systemic Safety Improvements

Year 2008 to Year 2012

2008 2009 2010 2011 2012

Serious Injury Rate by Target Crash Type for Systemic Safety Improvements

Year 2008 to Year 2012

2008 2009 2010 2011 2012

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

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														

Overall results compiled to answer the previous question on B/C for the program.

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.