Highway Safety Improvement Program

Data Driven Decisions

California
Highway Safety Improvement Program
2014 Annual Report

Prepared by: CA

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

Moving Ahead for Progress in the 21st Century Act or "MAP–21" (Pub. L. 112–141, 126 Stat. 405) was signed in to law July 6, 2012, and continued the Highway Safety Improvement Program (HSIP) as a core program under title 23 United States Code section 148 to reduce fatalities and injuries on all public roadways. Title 23 United States Code section 148(h) requires each state to submit an annual report to the Federal Highway Administration (FHWA) regarding its HSIP implementation and effectiveness and title 23 Code of Federal Regulations sections 924.15(a)(1) and 924.15(a)(2) specify that the report be submitted no later than August 31 of each year.

This annual report describes the progress being made to implement projects and the status of program evaluations for the HSIP as described in Title 23 United States Code section 148, and for High-Risk Rural Roads (HR3) (23 U.S.C. § 148(g)). The Railway-Highway Crossings (23 U.S.C. § 130(g) reports is submitted to FHWA directly by the California Public Utility Commission as a separate report.

Under the "MAP–21" (Pub. L. 112–141, July 6, 2012; 126 Stat. 405), the High-Risk Rural Roads program was merged into the HSIP for safety improvements on public rural roadways that meet the functional classification requirements of title 23 United States Code section 148(a)(1). In addition to the above, in accordance with title 23 United States Code section 164 repeat intoxicated transfer funds, approximately $25.4 million was obligated for alcohol impaired driving countermeasures. These funds will be used to further support the California Strategic Highway Safety Plan.

Caltrans' Division of Traffic Operations provided information on the State Highway System (SHS) for this report, and Caltrans Division of Local Assistance for local roads and HR3 Program. Caltrans implements the HSIP for State highways by programming and funding projects in the Collision Reduction Category, one of eight categories that make up the State Highway Operation and Protection Program (SHOPP). The Collision Reduction Category is further divided into two programs: Safety Improvement, and Collision Severity Reduction. The Safety Improvement Program is among Caltrans' top priorities in the SHOPP and as a result, all projects that meet the criteria for the Safety Improvement Program are funded. These criteria include a benefit-cost analysis. The projects evaluated in this report include all projects funded by the Collision Reduction Category, which includes both federal HSIP and State highway funds.

Caltrans uses the Transportation System Network database to identify locations with significantly high collision concentrations. The identified locations are systematically investigated to determine probable causes of the collisions in order to implement effective countermeasures to improve safety. Other locations identified for investigation and possible implementation of countermeasures are generated from three Monitoring Programs: Cross Median Collision, Two and Three Lane Cross Centerline Collision, and Wrong Way Collision. Nearly 2,357 traffic safety investigations were processed between 01-01-2013 and 12-31-2013. In addition, 565 "Other Safety" investigations were processed. These safety related investigations, were not generated by TASAS but by citizens calls, letters, emails, etc. Finally, as of February, 2012, Caltrans has implemented a 5-year "California Roadway Departure Safety Implementation Plan" which identified over 7,000 locations for possible low cost countermeasures to systematically implement on many state highways in an effort to reduce roadway departure crashes.

For this year reporting period, the most recent ten-year data was available for 2002 to 2011. During the 2011 calendar year, 1,059 fatal collisions, 46,656 injury collisions, and 85,062 property-damage-only (PDO) collisions were reported on the SHS. Caltrans estimates that these collisions resulted in losses of approximately $9.034 billion.

The HSIP and other State programs have made highways safer through the implementation of highway safety projects. This fact is evident from the fatality rate trends. Between 2002 and 2011, the fatality rate on all State highways has decreased 39 percent. For the same period, the fatality rate on freeways decreased 36 percent, and on non-freeways it decreased 38 percent. During the same period, the annual travel increased by 1.9 percent on all highways. The annual travel on freeways increased 6.7 percent, and on non-freeways it decreased 5.9 percent. Freeway travel accounts for 82.8 percent of travel on the SHS even though freeway road miles account for only 28.9 percent of the SHS.

The reductions in fatality rates have been accomplished by implementing safety projects. Many other improvements such as tree trimming, restriping, or installing warning signs that were requested by Traffic Operations staff and performed by Maintenance staff in the districts also contributed to improved safety. During FY 2013/14, there were 25 Major and Minor A safety projects awarded at a cost of $38.1 million. All of these project types are consistent with one or more of the 17 challenge areas identified in California's Strategic Highway Safety Plan (SHSP).

The effectiveness of the State HSIP was measured by comparing collision data before and after safety improvements were implemented at project sites. These projects have been completed between 7/1/2009 and 6/30/2010. Three years of collision data before project implementation was compared with available collision data after project implementation. A total of 92 projects were considered in the evaluation. Analysis of collision data was based on 147 highway locations as some of the projects contained more than one highway location. The cost of

implementing these projects was 149 million. The annual savings, in terms of reductions in collision frequency and severity, was estimated at $72.7 million. This translates to an average savings of $1.45 billion or a benefit-cost ratio of 9.8 to1, assuming a project life of 20 years.

Finally, a set of 4 performance measures including: number of fatalities, number of fatalities per 100 Million Vehicle Mile of Travel (MVMT), number of persons injured, and number of persons injured per 100 MVMT for three road classifications (i.e., freeways, non-freeways, and all highways) were calculated. The performance measures were calculated for each of the past 6 years (i.e., 2007 to 2011). Derivation of performance measures defined as the 5 year rolling averages was based on data from 2002 to 2011. The rolling averages show a decreasing trends indicating improvement in safety on all road classifications analyzed. Note that Caltrans currently does not compile collision data for *severe* injury as a separate category. However, data is available for injury category that is comprised of severe injury, visible injury, and complaint of pain. Therefore, the performance measures were developed for injury as a whole.

MAP-21 is putting focus in certain areas; accordingly, older driver and pedestrian fatality and sever injury rates per capita. The 5 year moving average for fatal + injury from 2009 to 2011 are trending downward and therefore the implementation of the special rule as set by MAP 21 does not apply at this time. These numbers are from all roadways in the state, not just state highways.

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

If District, how are the HSIP funds allocated?

☐ Formula

☐ Crash Data

☐ Population

☒ Other On the state highway system, all projects that meet established safety criteria are programmed. Caltrans' Division of Local Assistance manages the local agency share of HSIP funds, prepares guidelines and solicits project from local agencies.

Describe how local roads are addressed as part of Highway Safety Improvement Program.

Caltrans' Division of Local Assistance (DLA) uses an HSIP application benefit-cost tool to provide a consistent, data-driven methodology for ranking local roadway (non-State owned and operated) project applications on a statewide basis. This tool was developed by the DLA in conjunction with the University of California, Berkeley, Safe Transportation Research and Education Center. The DLA HSIP also provides the Local Roadway Safety Manual for California Local Road Owners and directly incorporates UC Berkeley's Transportation Injury Mapping System website to assist applicants applying for local HSIP funds. These tools and resources encourage local agencies to: proactively analyze their roadway networks for the highest crash locations; and develop and submit applications with the greatest chance of reducing fatalities and serious injuries.

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

☐ Design

☐ Planning

☐ Maintenance

☒ Operations

☐ Governors Highway Safety Office

☒ Other: Other-Headquarters Traffic Safety and Mobility program in partnership with 12 district offices plan safety projects on the state highway system. Caltrans' Division of Local Assistance in conjunction with local agencies plan projects on local roads.

Briefly describe coordination with internal partners.

On the State Highway System, Traffic Safety and Mobility Program in Headquarters within the Division of Traffic Operations works with the 12 Caltrans' district offices to develop Project Initiation Documents for Headquarters approval and proceeding with project programming. For local roads, Caltrans Division of Local Assistance (DLA) staff manages the local agency share of HSIP funds in conjunction with its local agency partners. The DLA prepares the HSIP guidelines and solicits project applications from local agencies.

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

☐ Metropolitan Planning Organizations

☐ Governors Highway Safety Office

☐ Local Government Association

☒ Other: Other-see optional description

Caltrans has been working with close to 400 safety stakeholders from 170 public and private agencies and organizations to develop the SHSP. Although there is no direct involvement with external partners with respect to HSIP planning, all safety projects developed and implemented are consistent with one or more of the SHSP strategies. Caltrans' Division of Local Assistance, in conjunction with its local agency partners, is involved in planning projects on local roads.

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.

Eligibility of HSIP funds under MAP-21 now includes more flexibility in the types of projects and States are no longer required to certify they have met various safety infrastructure needs in order to fund non-infrastructure projects. HSIP continues to focus on significantly reducing traffic fatalities and serious injuries on all public roads. HSIP also continues to require a data-driven, strategic approach to improving highway safety on all public roads. However, MAP-21 has made some significant changes in HSIP in the types of projects eligible. Eligibility of HSIP funds under MAP-21 now includes more flexibility in the types of projects and states are no longer required to certify they have met various safety infrastructure needs in order to fund non-infrastructure projects. An HSIP project is now any strategy, activity or infrastructure and non-infrastructure types of projects on a public road that is consistent with the data-driven state's Strategic Highway Safety Plan (SHSP) and must support the state's safety performance targets.

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-Two- and Three-Lane Cross Centerline Collision Mon	☒ Other: Other-Local Road Program	☒ Other: Other-Wrong-Way Monitoring Program

Program: **Median Barrier**

Date of Program Methodology: **11/15/1977**

What data types were used in the program methodology?

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

What project identification methodology was used for this program?

☒ Crash frequency

☐ Expected crash frequency with EB adjustment

☐ Equivalent property damage only (EPDO Crash frequency)

☐ EPDO crash frequency with EB adjustment

☐ Relative severity index

☒ Crash rate

☐ Critical rate

☐ Level of service of safety (LOSS)

☐ Excess expected crash frequency using SPFs

☐ Excess expected crash frequency with the EB adjustment

☐ Excess expected crash frequency using method of moments

☐ Probability of specific crash types

☐ Excess proportions of specific crash types

☐ Other

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

☐ Yes

☒ No

How are highway safety improvement projects advanced for implementation?

☐ Competitive application process

☐ Selection committee

☐ Other

☒ Other-Any project that meets the established median barrier criteria for project selection is programmed

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

☒ Relative Weight in Scoring

☐ Rank of Priority Consideration

☐ Ranking based on B/C

☐ Available funding

☐ Incremental B/C

☐ Ranking based on net benefit

☐ Other

☒ Any project that meets 100

accident and volume warrants for median barrier are programmed

Program: **Roadway Departure**

Date of Program Methodology: **11/15/2004**

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 crashes only	☐ Population	☒ Functional classification
☒ Other-Fatal + Injury	☒ Lane miles	☒ Roadside features
☒ Other-Fatal + Injury carshes on Wet pavement	☐ Other	☐ Other
☒ Other-Fatal + Injury Carshes in dark lighting		
☒ Other-Fatal + Injury carshes resulting in overturned vehicle		

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-7 criteria including F+I crashes per year per mile, F/(F+I), shoulder width, crashes, in dark, on wet pavement, and overturned Veh. were used

☒ Other-Additionally, a systematic approach involving deploying a relatively high number of low-cost countermeasures at long segments of roadway selected based on crash history, roadway type, geometry, volume, etc was utilized

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-Almost 25% of high collision concentrations prioritized based on 7 criteria are selected. This is combined with a list of longer highway segments identified based on collision history, roadway type, geometric characteristics and B/C using CMF

Select the processes used to prioritize projects for implementation. For the methods selected, indicate the relative importance of each process in project prioritization. Enter either the weights or numerical

rankings. If weights are entered, the sum must equal 100. If ranks are entered, indicate ties by giving both processes the same rank and skip the next highest rank (as an example: 1, 2, 2, 4).

☒ Relative Weight in Scoring

☐ Rank of Priority Consideration

☐ Ranking based on B/C

☐ Available funding

☐ Incremental B/C

☐ Ranking based on net benefit

☐ Other

☒ top 25% of run-off-road concentration locations with higher scores +100% of identified long segments selected based on collision frequency, roadway type, geometric characteristics and traffic volume	100

Program: **Other-Two- and Three-Lane Cross Centerline Collision Mon**

Date of Program Methodology: **1/15/1985**

What data types were used in the program methodology?

Crashes	*Exposure*	*Roadway*
☐ All crashes	☐ Traffic	☐ Median width
☒ Fatal crashes only	☐ Volume	☐ Horizontal curvature

☐ Fatal and serious injury crashes only	☐ Population	☒ Functional classification
☐ Other	☒ Lane miles	☐ Roadside features
	☐ Other	☐ Other

What project identification methodology was used for this program?

☒ Crash frequency

☐ Expected crash frequency with EB adjustment

☐ Equivalent property damage only (EPDO Crash frequency)

☐ EPDO crash frequency with EB adjustment

☐ Relative severity index

☒ Crash rate

☐ Critical rate

☐ Level of service of safety (LOSS)

☐ Excess expected crash frequency using SPFs

☐ Excess expected crash frequency with the EB adjustment

☐ Excess expected crash frequency using method of moments

☐ Probability of specific crash types

☐ Excess proportions of specific crash types

☐ Other

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

☐ Yes

☒ No

How are highway safety improvement projects advanced for implementation?

☐ Competitive application process

☐ Selection committee

☒ Other-All projects meeting established criteria programmed

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

☒ Relative Weight in Scoring

☐ Rank of Priority Consideration

☐ Ranking based on B/C

☐ Available funding

☐ Incremental B/C

☐ Ranking based on net benefit

☐ Other

☒ crash frequency and rate 100

Program: **Other-Local Road Program**

Date of Program Methodology: **9/3/2010**

What data types were used in the program methodology?

Crashes	*Exposure*	*Roadway*
☒ All crashes	☐ Traffic	☐ Median width

☐ Fatal crashes only	☐ Volume	☐ Horizontal curvature
☐ Fatal and serious injury crashes only	☐ Population	☐ Functional classification
☐ Other	☐ Lane miles	☐ Roadside features
	☐ Other	☐ Other

What project identification methodology was used for this program?

☒ Crash frequency

☐ Expected crash frequency with EB adjustment

☐ Equivalent property damage only (EPDO Crash frequency)

☐ EPDO crash frequency with EB adjustment

☐ Relative severity index

☐ Crash rate

☐ Critical rate

☐ Level of service of safety (LOSS)

☐ Excess expected crash frequency using SPFs

☐ Excess expected crash frequency with the EB adjustment

☐ Excess expected crash frequency using method of moments

☐ Probability of specific crash types

☐ Excess proportions of specific crash types

☒ Other-Collision History (5 years minimum), Collision Reduction Factors, Life of Improvement, Project Costs

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

If no, describe the methodology used to identify local road projects as part of this program.

HSIP Application Benefit-Cost Tool

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
- ☐ Incremental B/C
- ☐ Ranking based on net benefit
- ☐ Other

Program: **Other-Wrong-Way Monitoring Program**

Date of Program Methodology: **1/15/1985**

What data types were used in the program methodology?

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

What project identification methodology was used for this program?

☒ Crash frequency

☐ Expected crash frequency with EB adjustment

☐ Equivalent property damage only (EPDO Crash frequency)

☐ EPDO crash frequency with EB adjustment

☐ Relative severity index

☒ Crash rate

☐ Critical rate

☐ Level of service of safety (LOSS)

☐ Excess expected crash frequency using SPFs

☐ Excess expected crash frequency with the EB adjustment

☐ Excess expected crash frequency using method of moments

☐ Probability of specific crash types

☐ Excess proportions of specific crash types

☐ Other

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

☐ Yes

☒ No

How are highway safety improvement projects advanced for implementation?

☐ Competitive application process

☐ Selection committee

☒ Other-Any identified location that meets the established criteria is programed for implementation.

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

☒ Relative Weight in Scoring

☐ Rank of Priority Consideration

☐ Ranking based on B/C	
☐ Available funding	
☐ Incremental B/C	
☐ Ranking based on net benefit	
☐ Other	
☒ Any identified location that meets the established criteria is programmed for implementation	100

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

10

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 Other-Median Barrier

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-Existing criteria for selection of run-off-road concentrations is complemented with systematic approach deploying high No. of cost effective countermeasures targeting long Rd. segments identified based on crash history, road type, geometry, volume.

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

1) Caltrans is currently undertaking a research project to develop safety performance functions for highways, intersections and ramps to be used in Safety Analyst system which is consistent with the methodology in Highway Safety Manual (Type-I & Type-II performance functions). The goal is to replace the existing TASAS system with a more advanced Safety Analyst tool in our safety program.

2) A comprehensive set of Performance Functions for various road types, intersections and ramps are being developed that will impact our identification of locations with high collisions concentrations.

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)	177406000	100 %	80448100	100 %
HRRRP (SAFETEA-LU)				
HRRR Special Rule				
Penalty Transfer - Section 154				
Penalty Transfer – Section 164				
Incentive Grants - Section 163				
Incentive Grants (Section 406)				
Other Federal-aid Funds (i.e. STP, NHPP)				
State and Local Funds				

Other See Optional Description	5	0 %	5	0 %
Totals	177406005	100%	80448105	100%

Please see attached file to question 17. We have been able to provide the obligated fund for various categories listed in the table, but unable to specify the programming fund for the various categories requested in question 17 except the HSIP (section 148) category. Since ORT does not allow us to specify the obligated fund while leaving the programming fund column as blank, we provided the data as complete as we can as an attachment to question 17.

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

$49,781,456.00

How much funding is obligated to local safety projects?

$49,781,456.00

Caltrans' Division of Local Assistance (DLA) manages the local agency share of HSIP funds, prepares guidelines and solicits project from local agencies. DLA was not able to provide the programmed fund value requested in this question. Since ORT does not allow us to check mark the question as complete, we assumed the same value ($49,781,456) for programmed fund.
Also, DLA provided the following summary information (extracted from one of the attached file to question 23, the file for local road program). Also see the optional description for question 17.

DLA Summary:
HSIP Dollars Approved (FTIP Approval Date: 7/1/13 to 6/30/14) =$148,652,300
HSIP Dollars Obligated (Construction Authorization Date: 7/1/13 to 6/30/14) =$49,781,456
% HSIP Dollars Obligated =33.5%

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

$0.00

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

$0.00

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

$25,369,973.00

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

$0.00

The $25369973 was the amount of fund from section 164 transferred into HSIP. Information regarding transfer of fund from HSIP to other program was not available from our Division of Budget or programming. We assumed zero transfer of fund from HSIP into other programs in order to complete the question (ORT functionality requirement).

Discuss impediments to obligating Highway Safety Improvement Program funds and plans to overcome this in the future.

None

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
See attached file	Parking Parking - other	Numbers	5	5	HSIP (Section 148)	Urban Major Collector	1	1	2	Data	this is a dummy project. Please see the attached file

There are two attached files to this question. One, provides the list of awarded projects on the state highway system during FY 2013-14, and the other provides the list of projects selected on local roads by Caltrans Division of Local Assistance.

Progress in Achieving Safety Performance Targets

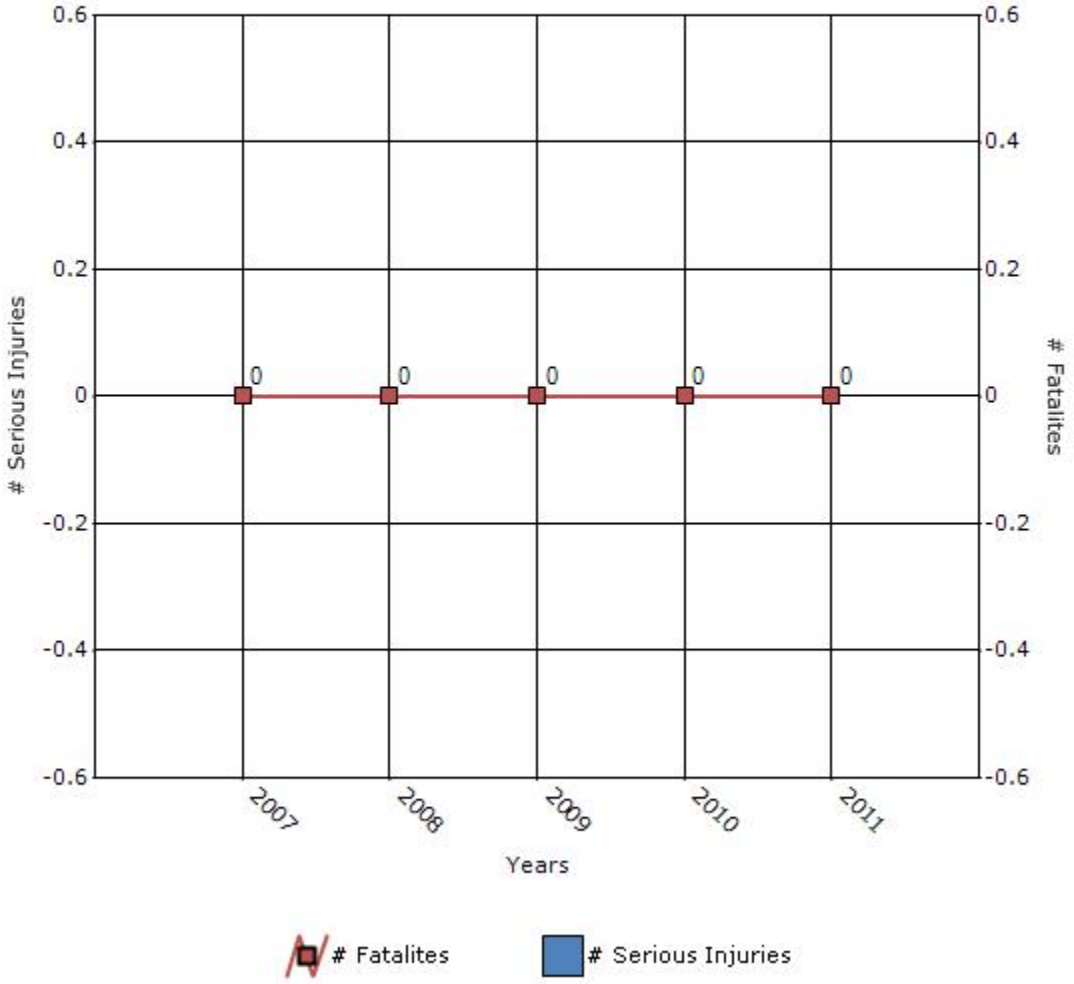
Overview of General Safety Trends

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

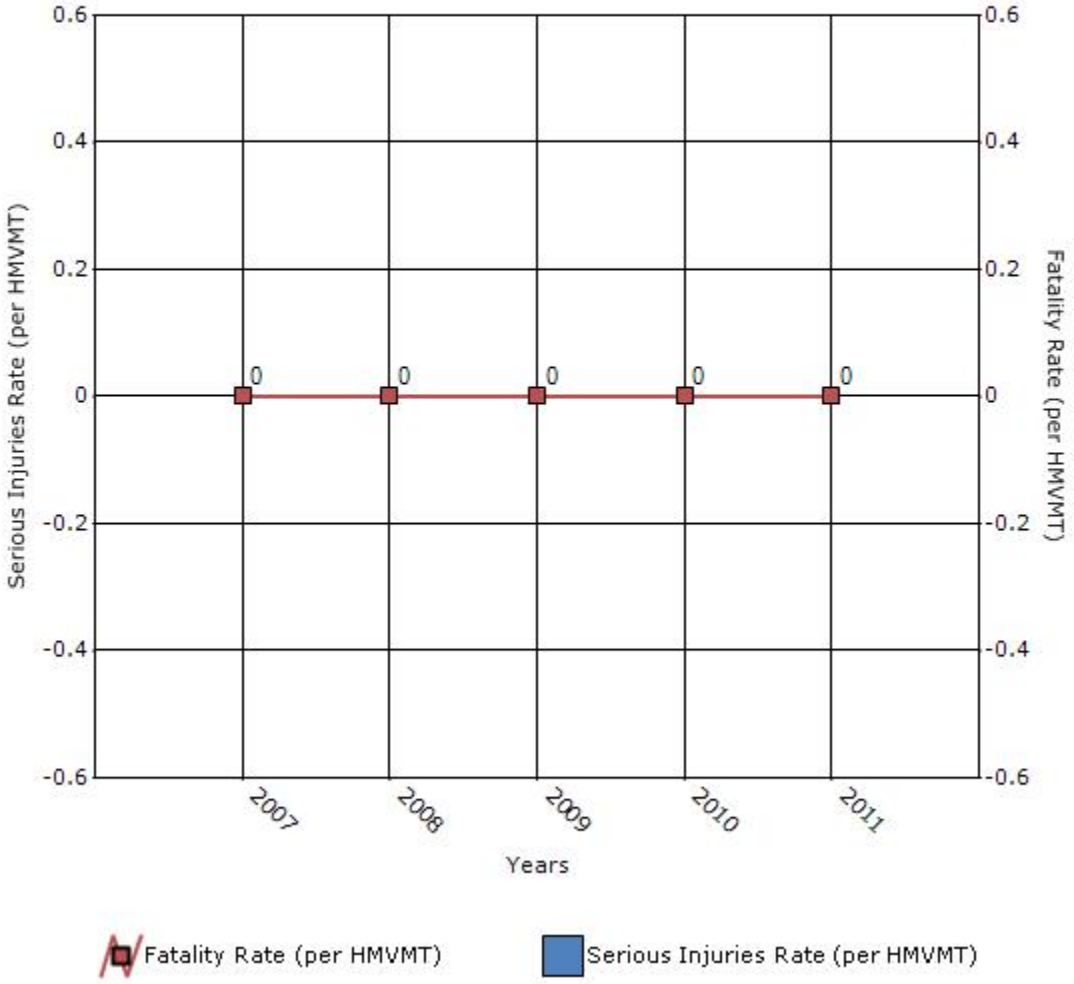
Performance Measures*	2007	2008	2009	2010	2011
Number of fatalities	0	0	0	0	0
Number of serious injuries	0	0	0	0	0
Fatality rate (per HMVMT)	0	0	0	0	0
Serious injury rate (per HMVMT)	0	0	0	0	0

*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

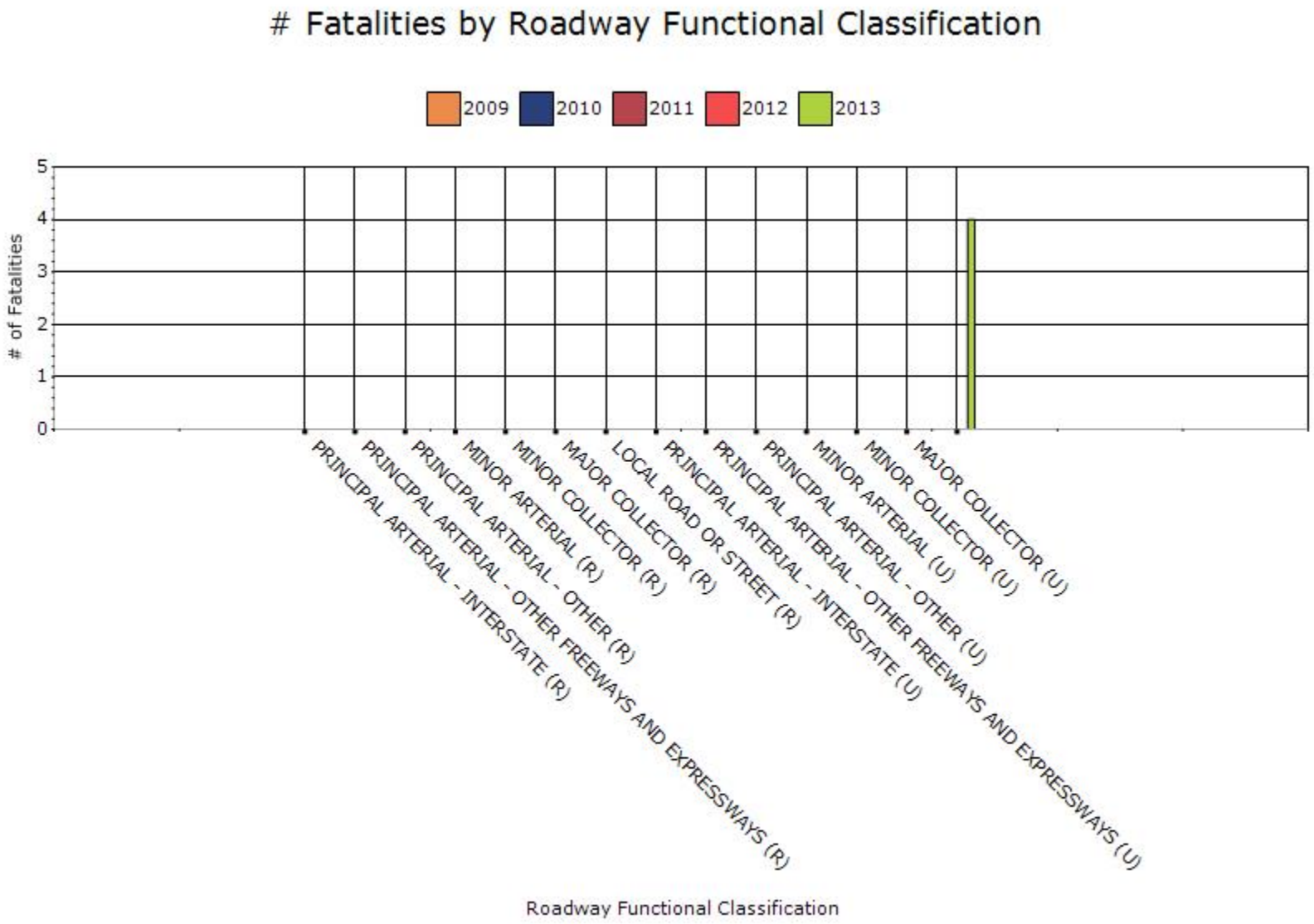


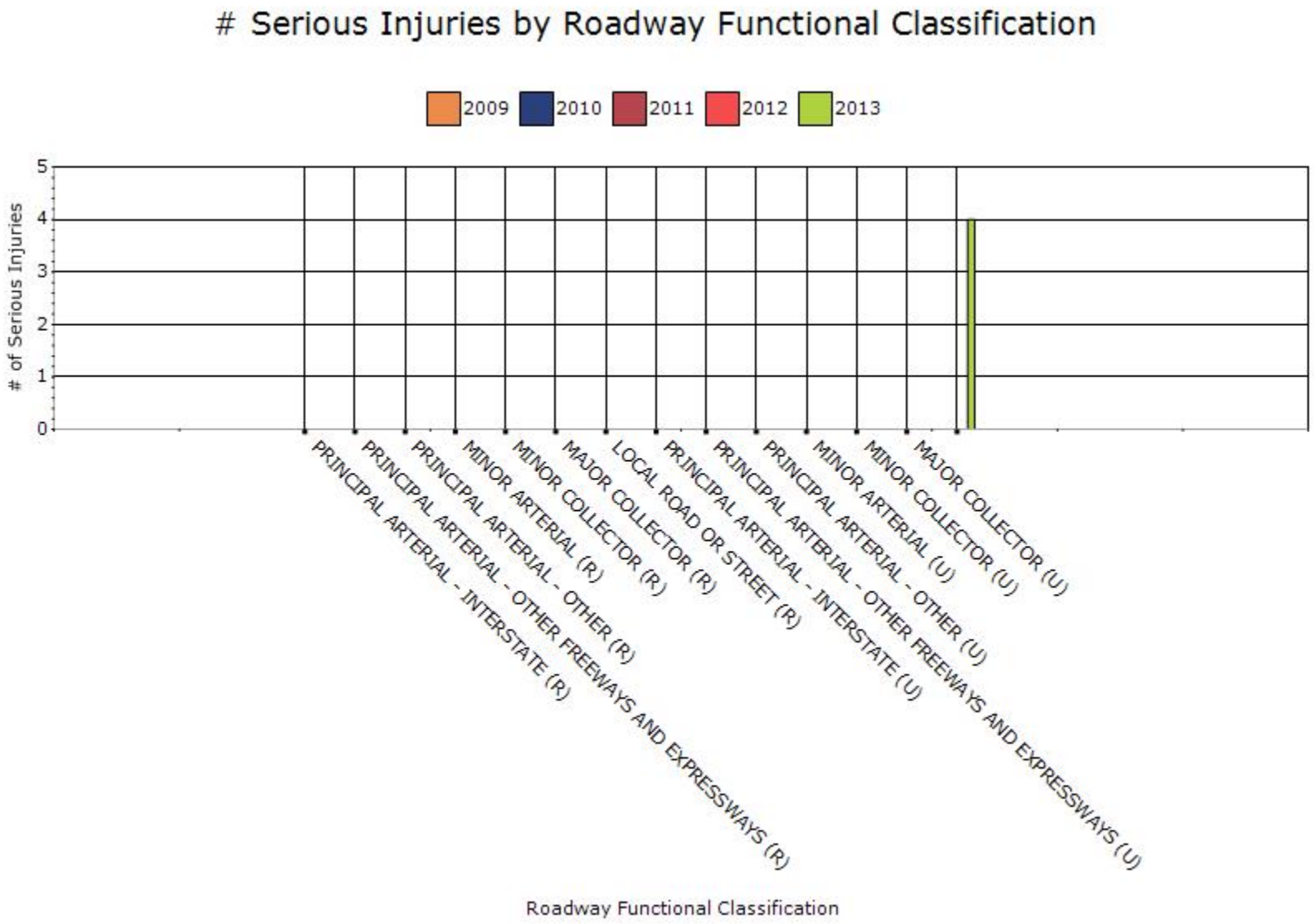
To the maximum extent possible, present performance measure* data by functional classification and ownership.

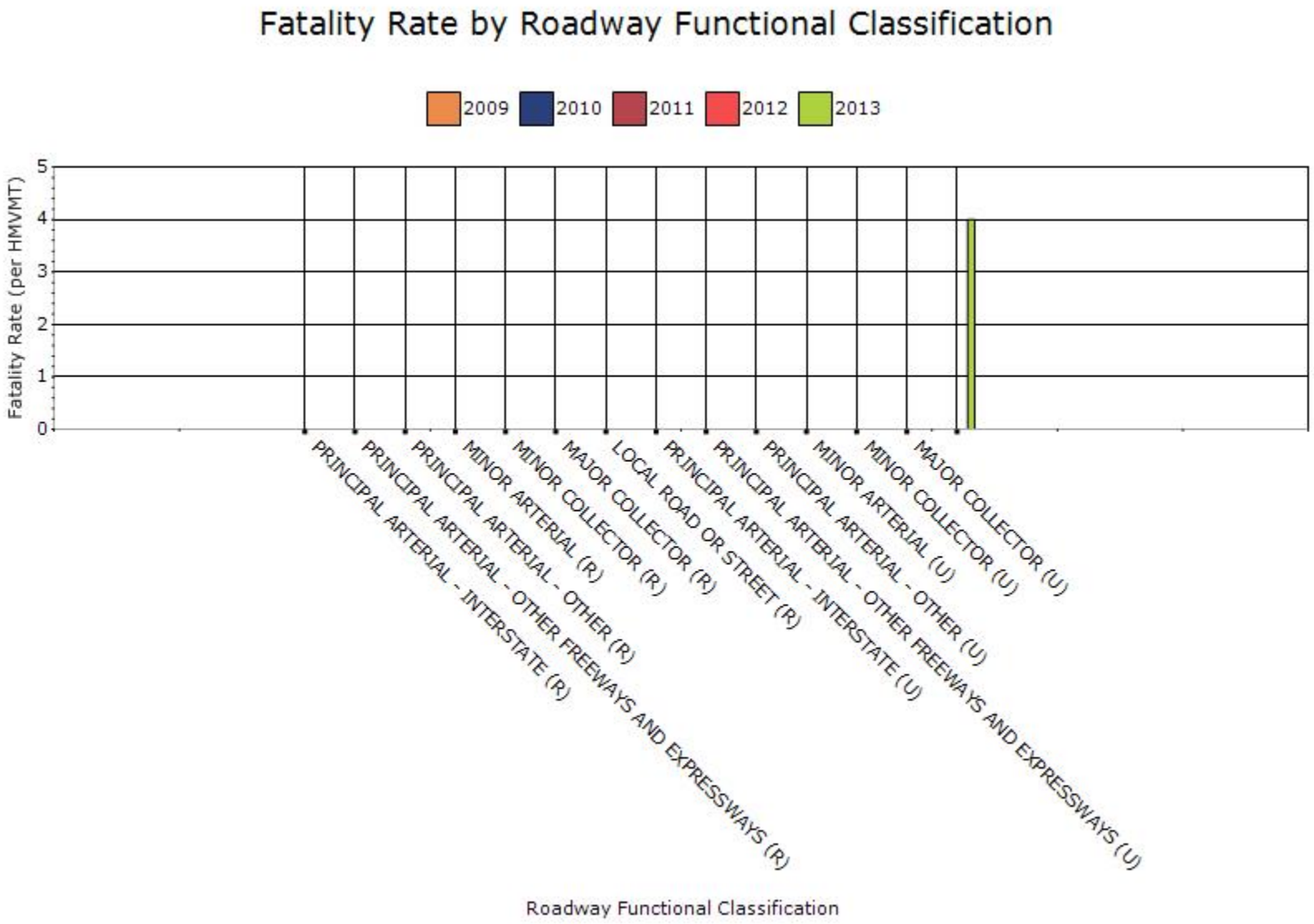
Year - 2013

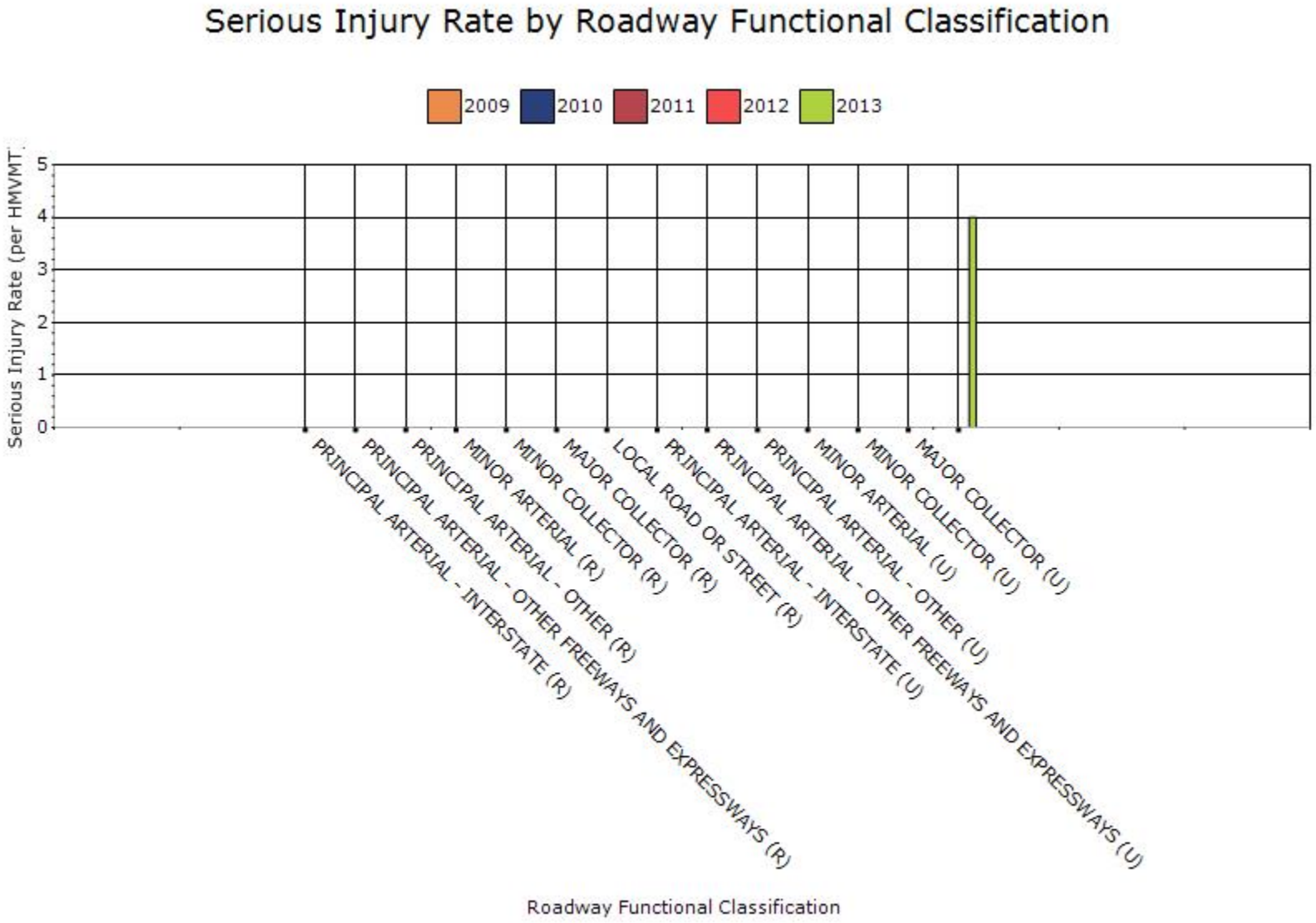
Function Classification	Number of fatalities	Number of serious injuries	Fatality rate (per HMVMT)	Serious injury rate (per HMVMT)
RURAL PRINCIPAL ARTERIAL - INTERSTATE	0	0	0	0
RURAL PRINCIPAL ARTERIAL - OTHER FREEWAYS AND EXPRESSWAYS	0	0	0	0
RURAL PRINCIPAL ARTERIAL - OTHER	0	0	0	0
RURAL MINOR ARTERIAL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

ARTERIAL - INTERSTATE				
URBAN PRINCIPAL ARTERIAL - OTHER FREEWAYS AND EXPRESSWAYS	0	0	0	0
URBAN PRINCIPAL ARTERIAL - OTHER	0	0	0	0
URBAN MINOR ARTERIAL	0	0	0	0
URBAN MINOR COLLECTOR	0	0	0	0
URBAN MAJOR COLLECTOR	0	0	0	0
FREEWAYS (SEE OPTIONAL DESCRIPTION)	4	4	4	4


Fatalities by Roadway Functional Classification
2009
2010
2011
2012
2013
# of Fatalities
0
1
2
3
4
5
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)
Roadway Functional Classification

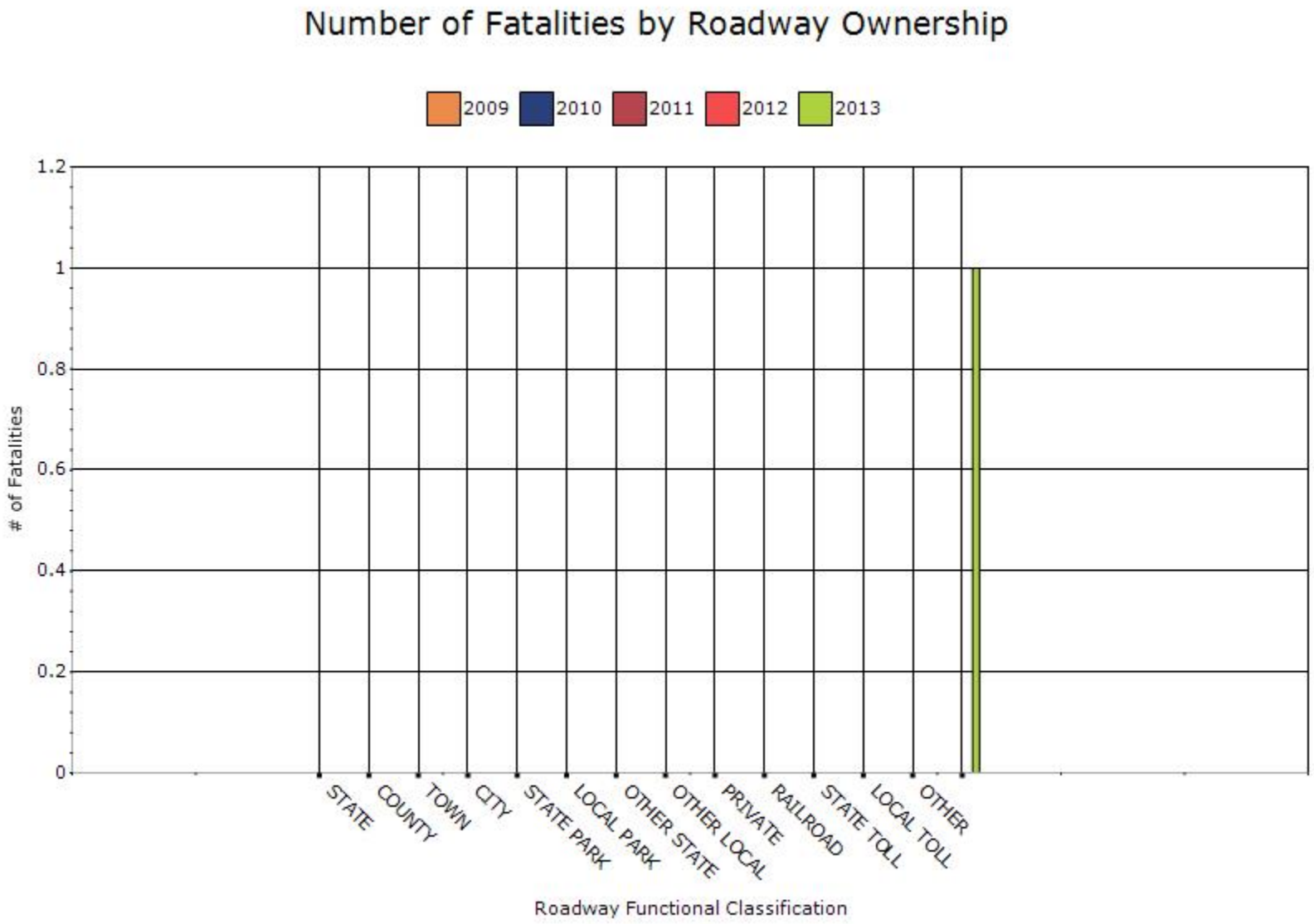

Serious Injuries by Roadway Functional Classification
2009
2010
2011
2012
2013
# of Serious Injuries
0
1
2
3
4
5
PRINCIPAL ARTERIAL - INTERSTATE (R)
PRINCIPAL ARTERIAL - OTHER FREEWAYS AND EXPRESSWAYS (R)
PRINCIPAL ARTERIAL - OTHER (R)
MINOR ARTERIAL (R)
MINOR COLLECTOR (R)
MAJOR COLLECTOR (R)
LOCAL 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)
Roadway Functional Classification

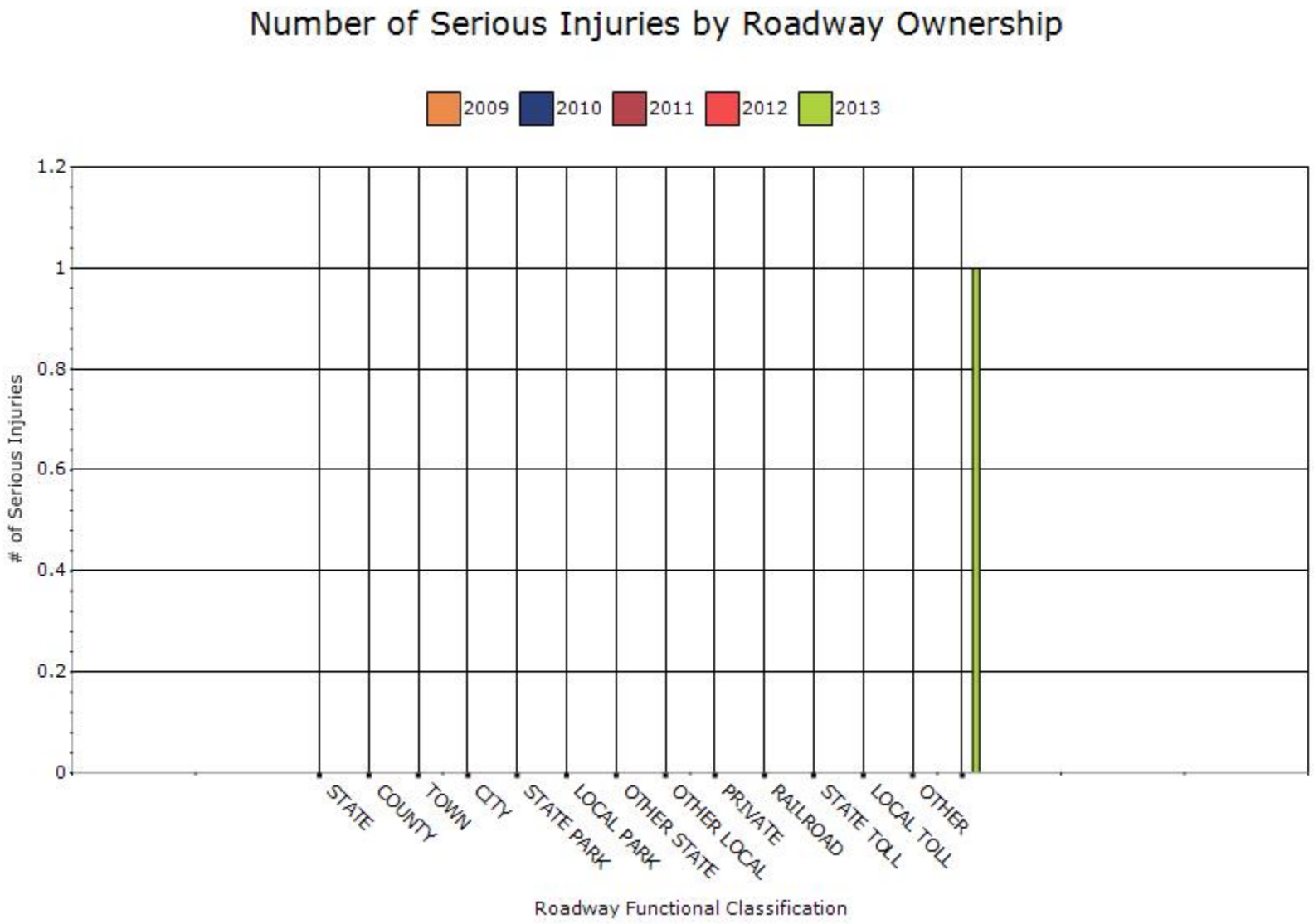

Fatality Rate by Roadway Functional Classification
2009
2010
2011
2012
2013
Fatality Rate (per HMVMT)
0
1
2
3
4
5
PRINCIPAL ARTERIAL - INTERSTATE (R)
PRINCIPAL ARTERIAL - OTHER FREEWAYS AND EXPRESSWAYS (R)
PRINCIPAL ARTERIAL - OTHER (R)
MINOR ARTERIAL (R)
MINOR COLLECTOR (R)
MAJOR COLLECTOR (R)
LOCAL 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)
Roadway Functional Classification


Serious Injury Rate by Roadway Functional Classification
2009
2010
2011
2012
2013
Serious Injury Rate (per HMVMT)
0
1
2
3
4
5
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)
Roadway Functional Classification

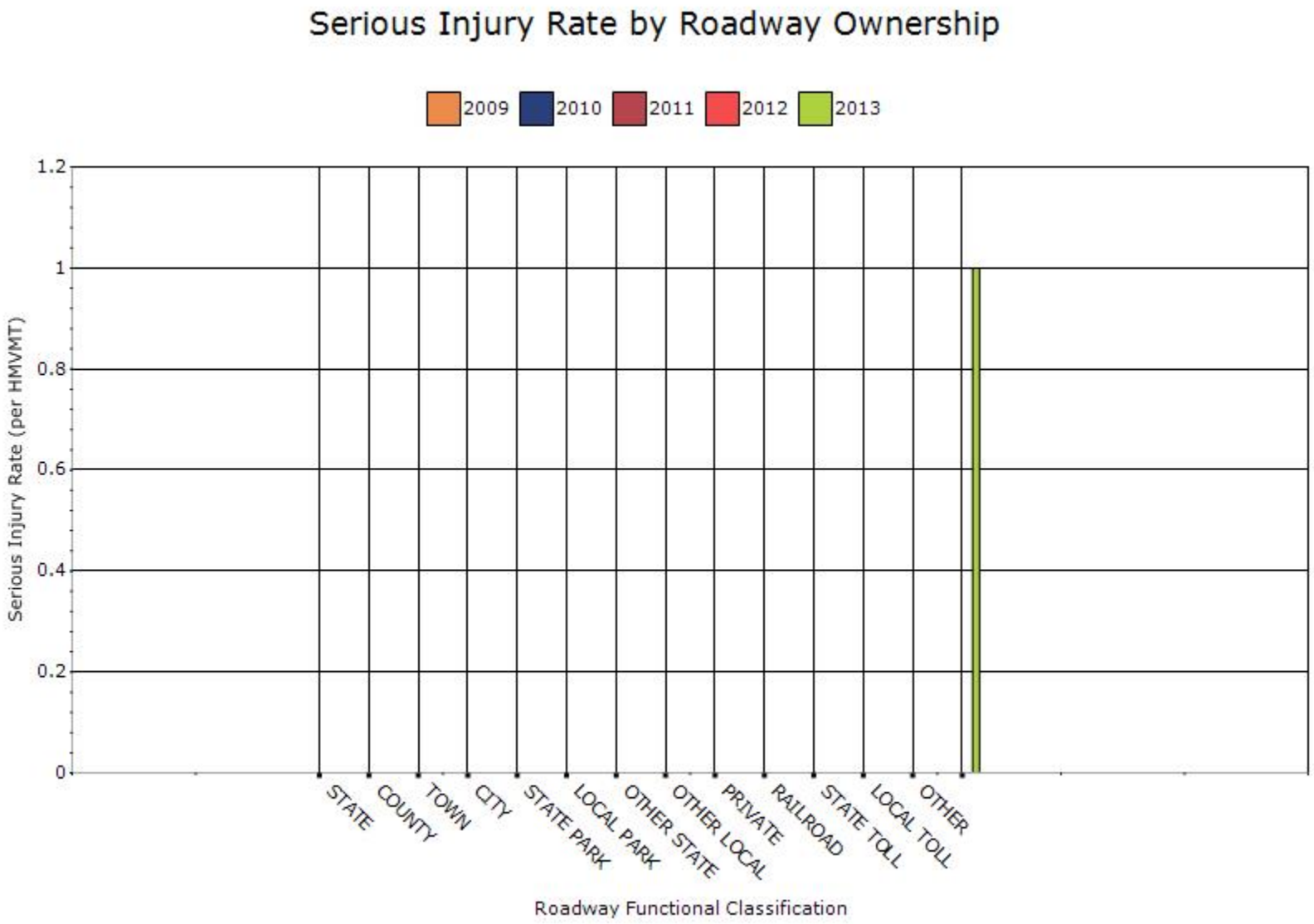
Year - 2013

Roadway Ownership	Number of fatalities	Number of serious injuries	Fatality rate (per HMVMT)	Serious injury rate (per HMVMT)
STATE HIGHWAY AGENCY	0	0	0	0
COUNTY HIGHWAY AGENCY	0	0	0	0
TOWN OR TOWNSHIP HIGHWAY AGENCY	0	0	0	0
CITY OF MUNICIPAL HIGHWAY AGENCY	0	0	0	0
STATE PARK, FOREST, OR RESERVATION AGENCY	0	0	0	0
LOCAL PARK, FOREST OR RESERVATION AGENCY	0	0	0	0
OTHER STATE AGENCY	0	0	0	0
OTHER LOCAL AGENCY	0	0	0	0
PRIVATE (OTHER THAN RAILROAD)	0	0	0	0
RAILROAD	0	0	0	0
STATE TOLL AUTHORITY	0	0	0	0
LOCAL TOLL AUTHORITY	0	0	0	0
OTHER PUBLIC INSTRUMENTALITY (E.G. AIRPORT, SCHOOL, UNIVERSITY)	0	0	0	0
STATE FREEWAYS (SEE OPTIONAL DESCRIPTION)	1	1	1	1


Number of Fatalities by Roadway Ownership
2009
2010
2011
2012
2013
1.2
1
0.8
0.6
0.4
0.2
0
# of Fatalities
STATE
COUNTY
TOWN
CITY
STATE PARK
LOCAL PARK
OTHER STATE
OTHER LOCAL
PRIVATE
RAILROAD
STATE TOLL
LOCAL TOLL
OTHER
Roadway Functional Classification


Number of Serious Injuries by Roadway Ownership
2009
2010
2011
2012
2013
1.2
1
0.8
0.6
0.4
0.2
0
# of Serious Injuries
STATE
COUNTY
TOWN
CITY
STATE PARK
LOCAL PARK
OTHER STATE
OTHER LOCAL
PRIVATE
RAILROAD
STATE TOLL
LOCAL TOLL
OTHER
Roadway Functional Classification


Fatality Rate by Roadway Ownership
2009
2010
2011
2012
2013
1.2
1
0.8
0.6
0.4
0.2
0
Fatality Rate (per HMVMT)
STATE
COUNTY
TOWN
CITY
STATE PARK
LOCAL PARK
OTHER STATE
OTHER LOCAL
PRIVATE
RAILROAD
STATE TOLL
LOCAL TOLL
OTHER
Roadway Functional Classification


Serious Injury Rate by Roadway Ownership
2009
2010
2011
2012
2013
Serious Injury Rate (per HMVMT)
1.2
1
0.8
0.6
0.4
0.2
0
STATE
COUNTY
TOWN
CITY
STATE PARK
LOCAL PARK
OTHER STATE
OTHER LOCAL
PRIVATE
RAILROAD
STATE TOLL
LOCAL TOLL
OTHER
Roadway Functional Classification

The input values (last row) in the table are random (non-real). These random values are input in order to check the question complete to comply with the ORT functionality.

Actual performance measure for 3 road classifications and ownership information are provided in the EXCEL file attached to this question. Data for the default classifications and the data for years requested are not available. The most recent calendar data available to us was for 2011. The 5 year rolling averages for 2011 are calculated based on annual collision and travel data for 2007 to 2011. Four performance measures for 3 road types (i.e., Freeways, Non-Freeways, and All-Highways) on the SHS, are summarized in the table that is attached to the question.

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

The most recent annual collision data was available for 2011. Our 2012 data will be available after August 2014. Caltrans implements the HSIP for State highways by programming and funding projects in the Collision Reduction Category, one of eight categories that make up the State Highway Operation and Protection Program (SHOPP). The Collision Reduction Category is further divided into two programs: Safety Improvement, and Collision Severity Reduction. The Safety Improvement Program is among Caltrans' top priorities in the SHOPP and as a result, all projects that meet the criteria for the Safety Improvement Program are funded. These criteria include a benefit-cost analysis. The projects evaluated in this report include all projects funded by the Collision Reduction Category, which includes both federal HSIP and State highway funds.

Caltrans uses the Transportation System Network database to identify locations with significantly high collision concentrations. The identified locations are systematically investigated to determine probable causes of the collisions in order to implement effective countermeasures to improve safety. Other locations identified for investigation and possible implementation of countermeasures are generated from three Monitoring Programs: Cross Median Collision, Two and Three Lane Cross Centerline Collision, and Wrong Way Collision. Nearly 2,357 traffic safety investigations were processed between 01-01-2013 and 12-31-2013. In addition, 565 "Other Safety" investigations were processed. These safety related investigations, were not generated by TASAS but by citizens calls, letters, emails, etc. Finally, as of February, 2012, Caltrans has implemented a 5-year "California Roadway Departure Safety Implementation Plan" which identified over 7,000 locations for possible low cost countermeasures to systematically implement on many state highways in an effort to reduce roadway departure crashes.

For this year reporting period, the most recent ten-year data was available for 2002 to 2011. During the 2011 calendar year, 1,059 fatal collisions, 46,656 injury collisions, and 85,062 property-damage-only (PDO) collisions were reported on the SHS. Caltrans estimates that these collisions resulted in losses of approximately $9.034 billion.

The HSIP and other State programs have made highways safer through the implementation of highway safety projects. This fact is evident from the fatality rate trends. Between 2002 and 2011, the fatality rate on all State highways has decreased 39 percent. For the same period, the fatality rate on freeways decreased 36 percent, and on non-freeways it decreased 38 percent. During the same period, the annual travel increased by 1.9 percent on all highways. The annual travel on freeways increased 6.7 percent, and on non-freeways it decreased 5.9 percent. Freeway travel accounts for 82.8 percent of travel on the SHS even though freeway road miles account for only 28.9 percent of the SHS.

The reductions in fatality rates have been accomplished by implementing safety projects. Many other improvements such as tree trimming, restriping, or installing warning signs that were requested by Traffic Operations staff and performed by Maintenance staff in the districts also contributed to improved safety. During FY 2013/14, there were 25 Major and Minor A safety projects awarded at a cost of $38.1 million. All of these project types are consistent with one or more of the 17 challenge areas identified in California's Strategic Highway Safety Plan (SHSP).

The effectiveness of the State HSIP was measured by comparing collision data before and after safety improvements were implemented at project sites. These projects have been completed between 7/1/2009 and 6/30/2010. Three years of collision data before project implementation was compared with the available collision data after project implementation. A total of 92 projects were considered in the evaluation. Analysis of collision data was based on 147 highway locations as some of the projects contained more than one highway location. The cost of implementing these projects was 149 million. The annual savings, in terms of reductions in collision frequency and severity, was estimated at $72.7 million. This translates to an average savings of $1.45 billion or a benefit-cost ratio of 9.8 to1, assuming a project life of 20 years.

Application of Special Rules

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

Older Driver Performance Measures	**2009**	**2010**	**2011**	**2012**	**2013**
Fatality rate (per capita)	0	0	0	0	0
Serious injury rate (per capita)	0	0	0	0	0
Fatality and serious injury rate (per capita)	0	0	0	0	0

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

Data was retrieved from CHP SWITRS data source : http://www.chp.ca.gov/switrs/ . The number of people 65 years of age and older (per 1,000 total population) are shown in Table below.

Calculate Fatal + Injury Rate for 2011

Fatal + Injury crashes in years 2007 to 2011 for Drivers and Pedestrians 65 years of age and older /Population in years 2007 to 2011 = X_i i = 2007 to 2011

Fatal + Injury Rate for 2011: Sum(X_i)/5 *i* = 2007 to 2011

Calculate Fatal + Injury Rate for 2009

Fatal + Injury Rate for 2009: Sum(X_i)/5 *i* = 2005 to 2009

Compare Rate from 2009 to Rate from 2011

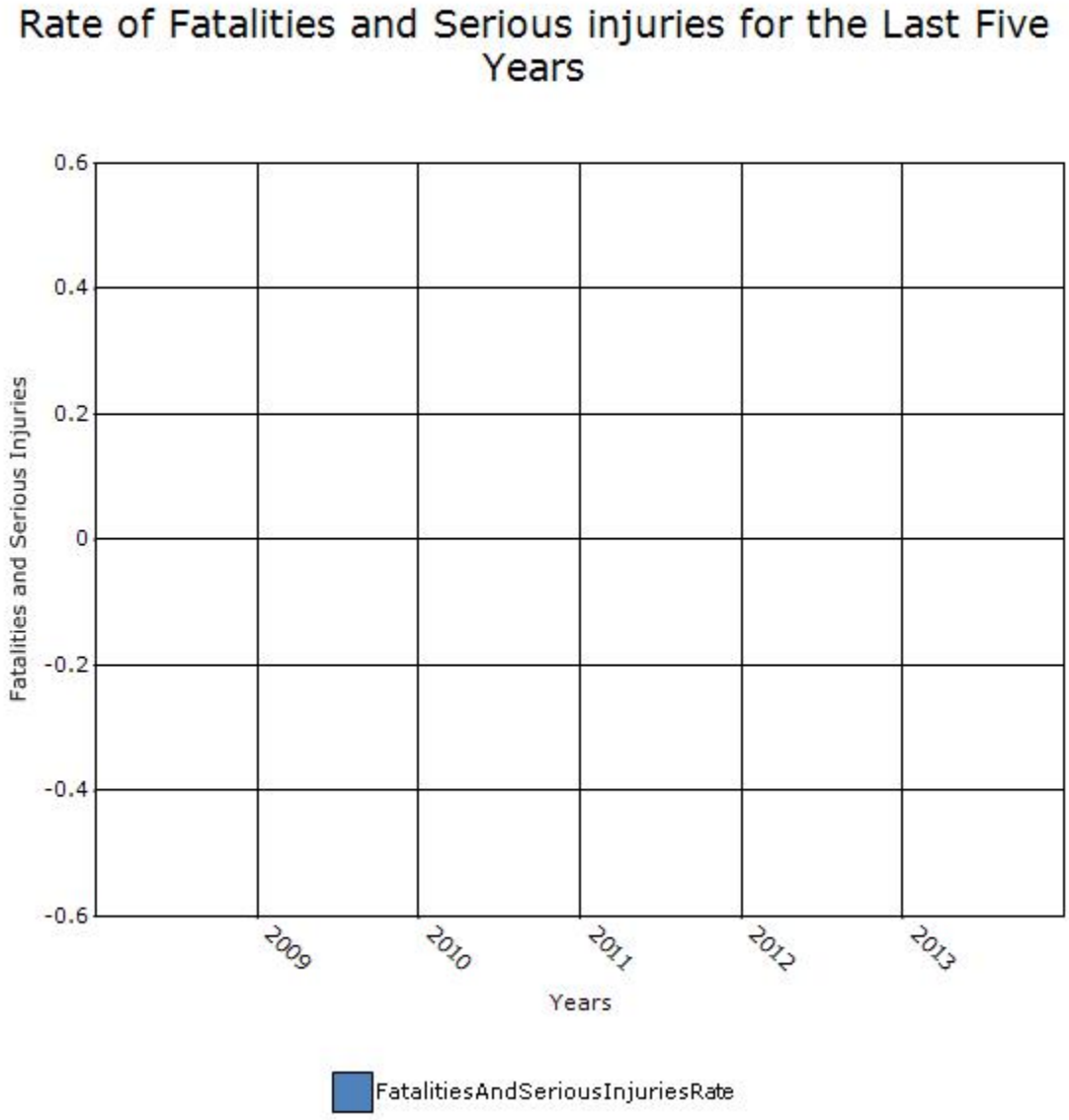
Is there is an increase in the calculated rates between the periods ending in 2009 and 2011 States should consider the rate to have increased and the Special Rule applies.

	2004	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**
Pop. 65 and older/1000 (FHWA)	105	105	108	109	112	112	114	117
Fatality Rate	6.12	5.87	5.74	5.93	4.88	4.88	4.68	4.68
Injury Rate*	246.76	236.16	225.56	221.8	208.8	208.8	205.38	205.39
Fatality and Injury Rate*	252.89	242.03	231.3	213.88	213.69	213.69	210.05	210.08

*Includes all levels of injuries, not just serious injury

For 2011 : Sum (213.88+207.93+ 213.69+210.05+210.07)/5 = 211.13
For 2009 : Sum (242.03+231.30+ 213.88+207.93+ 213.69)/5= 221.76

Change in Rate = - 10.64



Does the older driver special rule apply to your state?

No

Assessment of the Effectiveness of the Improvements (Program

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:

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

1. The Division of Traffic Operations went through organizational changes, where traffic safety and mobility strategies were organized under a single coordinated management.

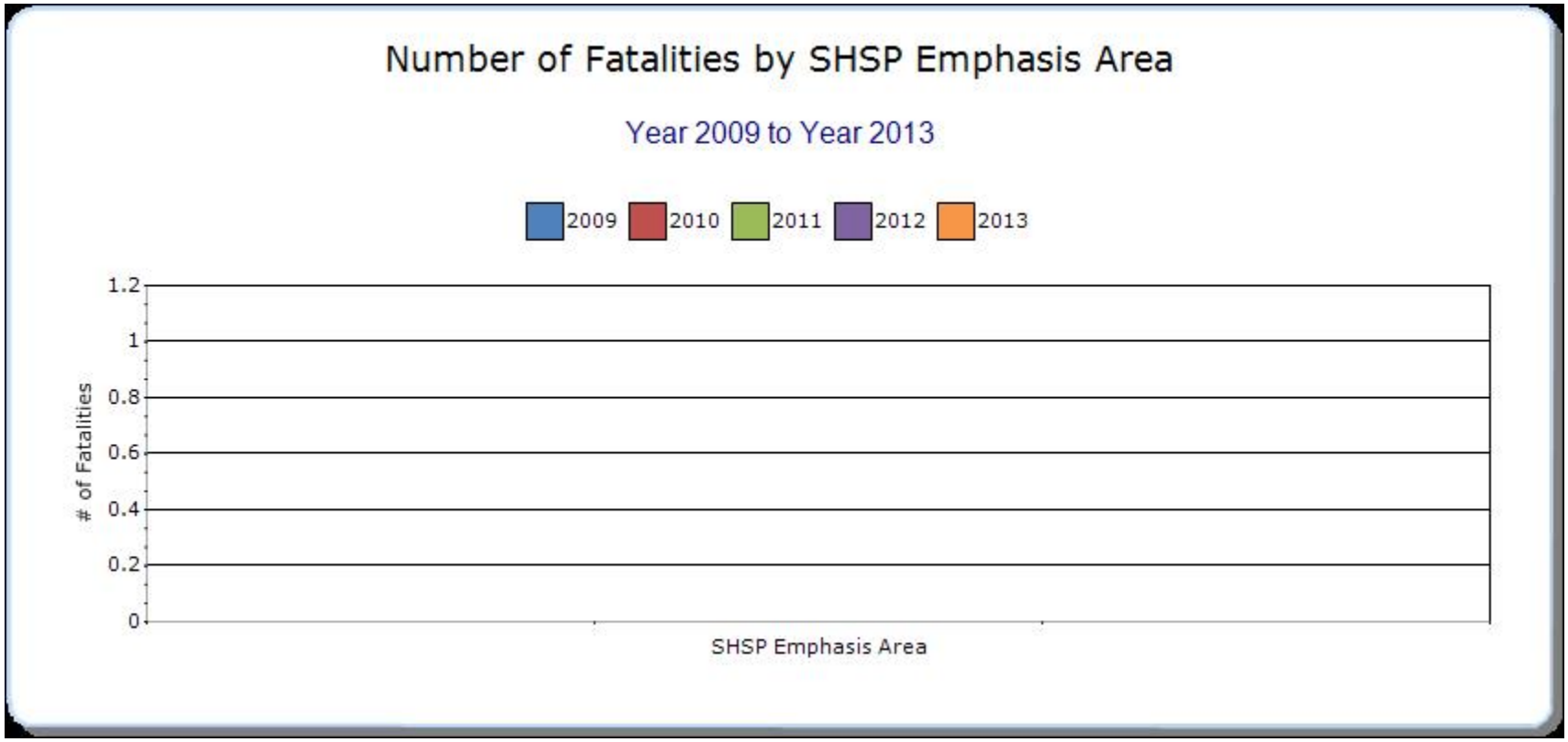
2. Roadway Departure systematic approach has been added to the existing approach of identifying highway spot improvement to our run-off-road collisions.

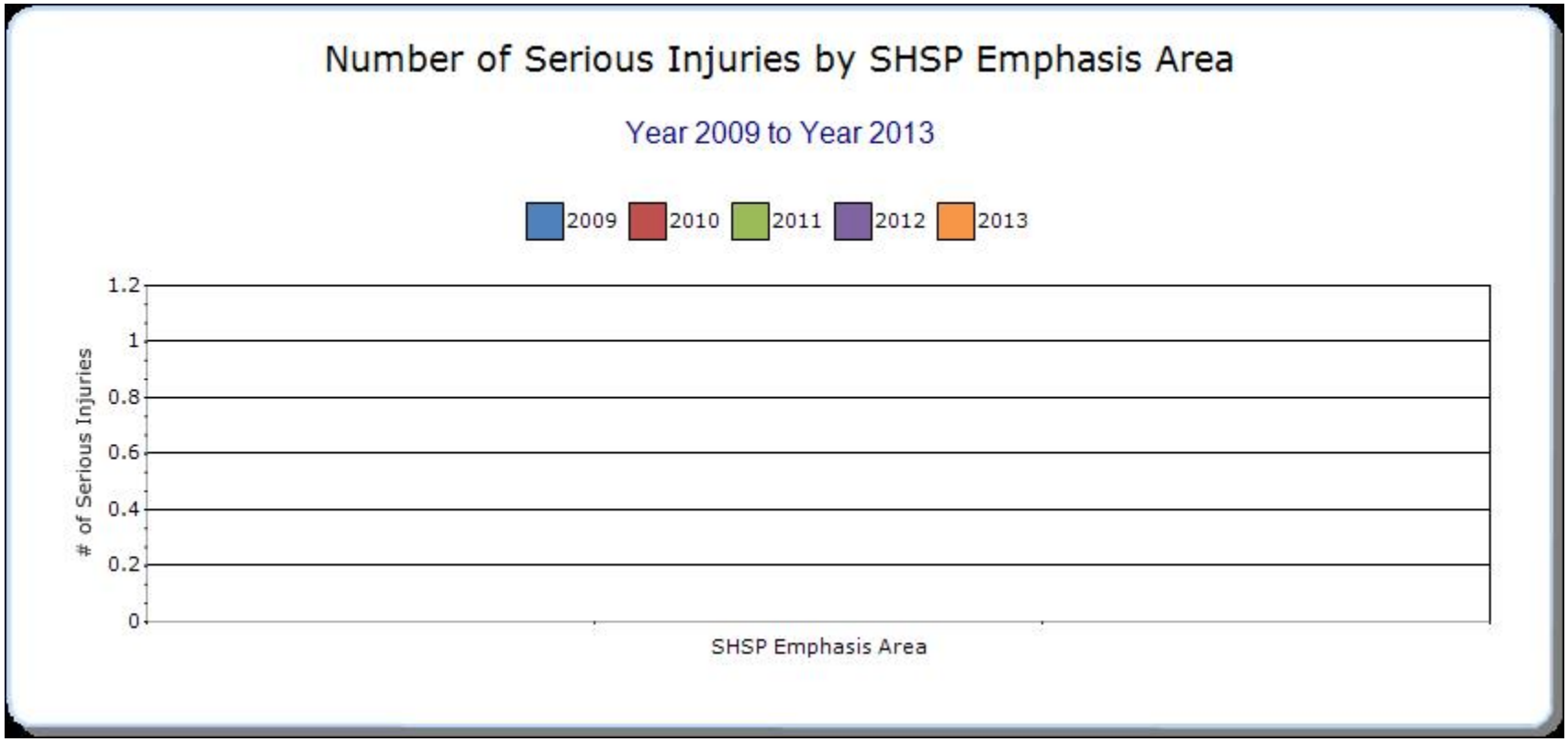
SHSP Emphasis Areas

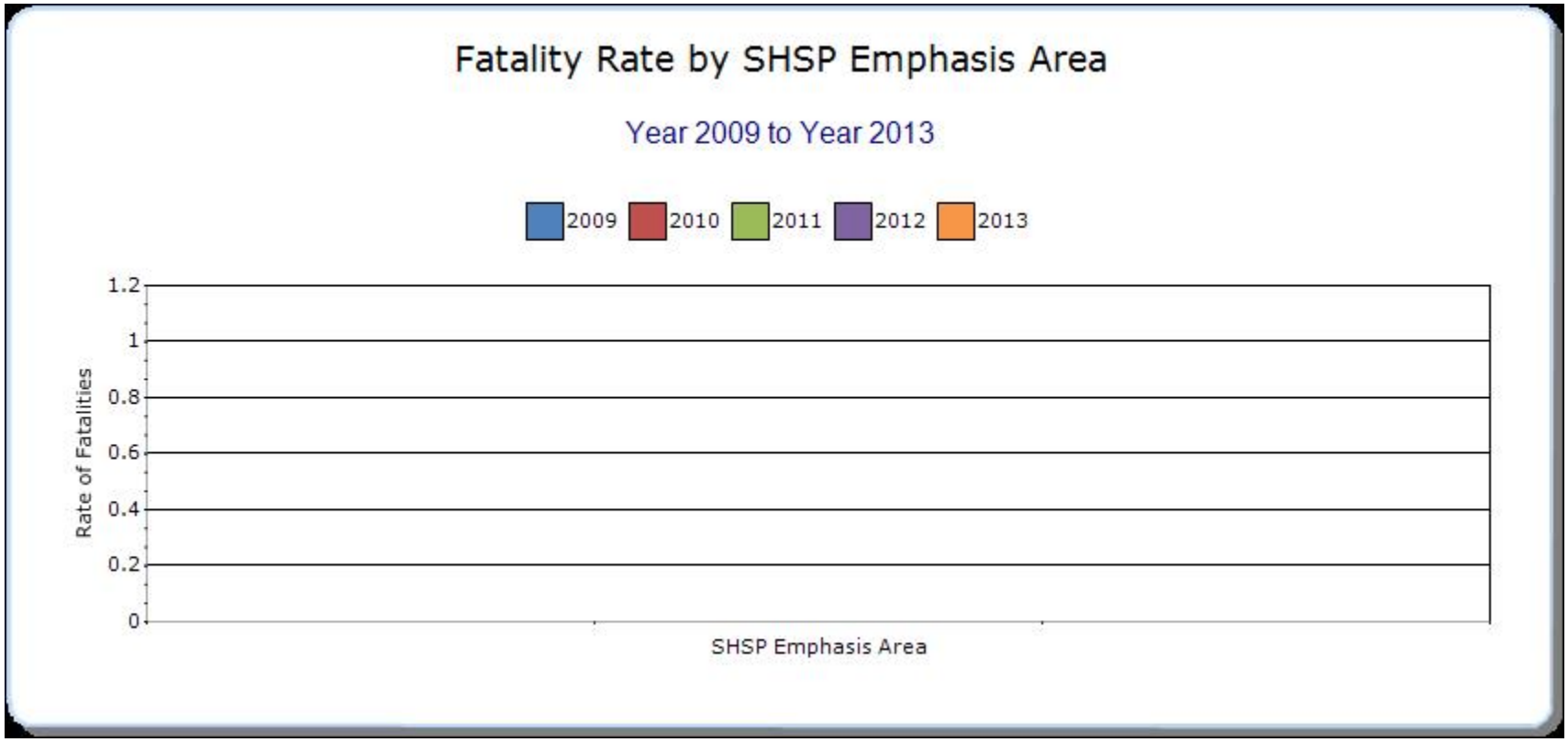
For each SHSP emphasis area that relates to the HSIP, present trends in emphasis area performance measures.

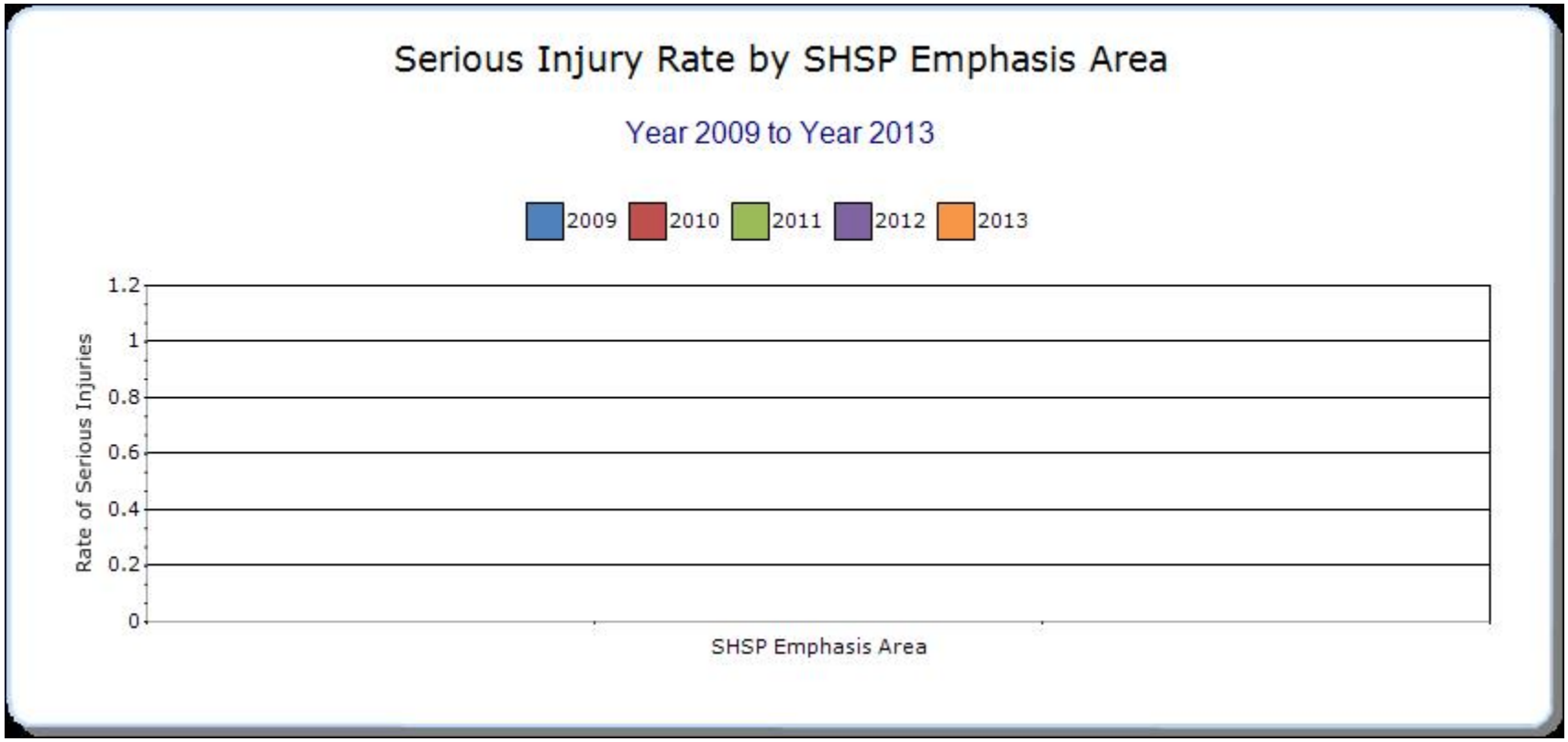
Year - 2013

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
See attached file to this question		0	0	0	0	0	0	0
See the optional description	Speed-related	1	1	1	1	1	1	1


Number of Fatalities by SHSP Emphasis Area
Year 2009 to Year 2013
2009
2010
2011
2012
2013
1.2
1
0.8
0.6
0.4
0.2
0
# of Fatalities
SHSP Emphasis Area


Number of Serious Injuries by SHSP Emphasis Area
Year 2009 to Year 2013
2009
2010
2011
2012
2013
1.2
1
0.8
0.6
0.4
0.2
0
# of Serious Injuries
SHSP Emphasis Area


Fatality Rate by SHSP Emphasis Area
Year 2009 to Year 2013
2009
2010
2011
2012
2013
1.2
1
0.8
0.6
0.4
0.2
0
Rate of Fatalities
SHSP Emphasis Area



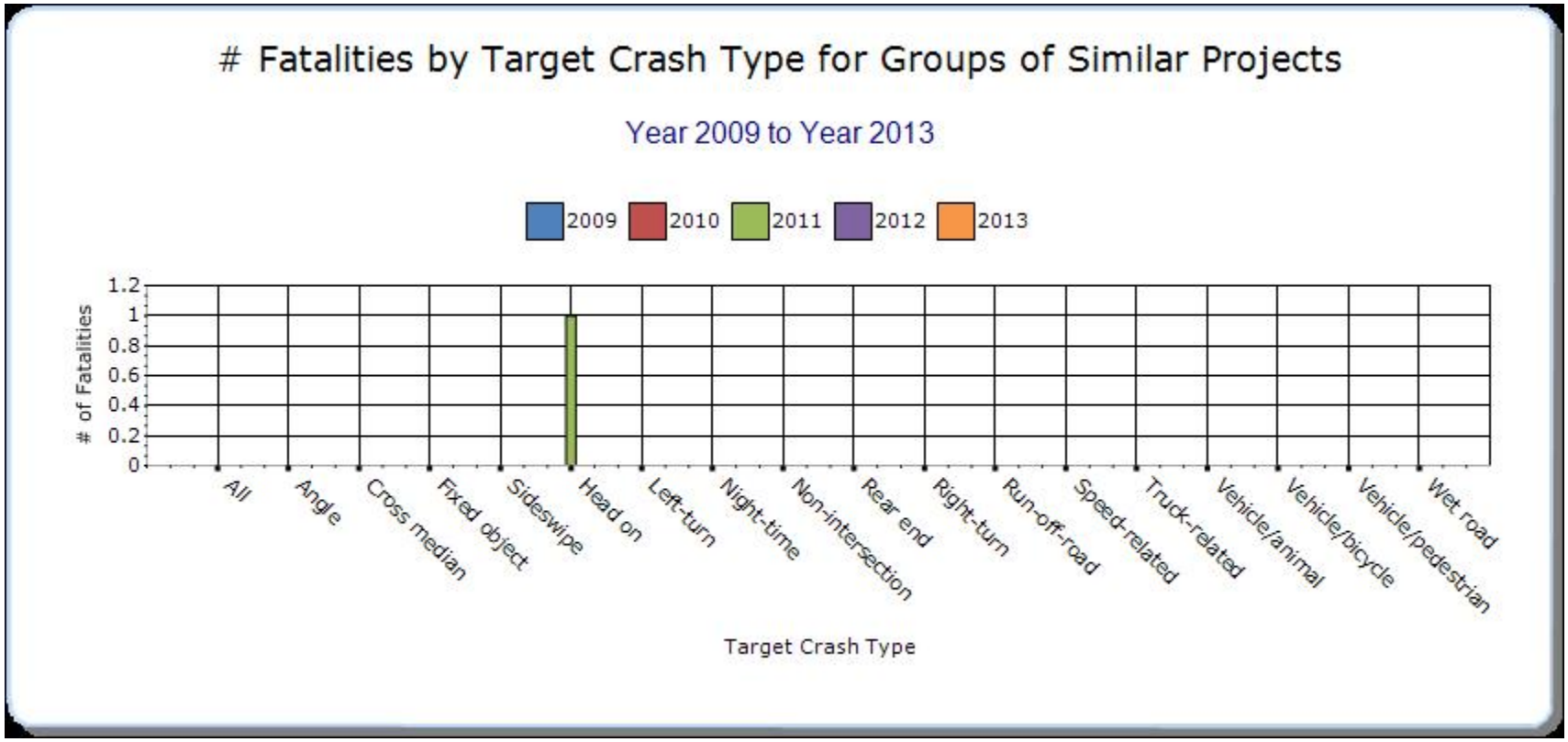
The most recent data available in our DOT is for 2011. The default data year in this question extends to 2013. Also as noted previously, our injury level include all severity levels including severe, visible, and complaint of pain injuries. For these reasons, the performance measures for Caltrans SHSP emphasis areas are included as an attached file to this question.

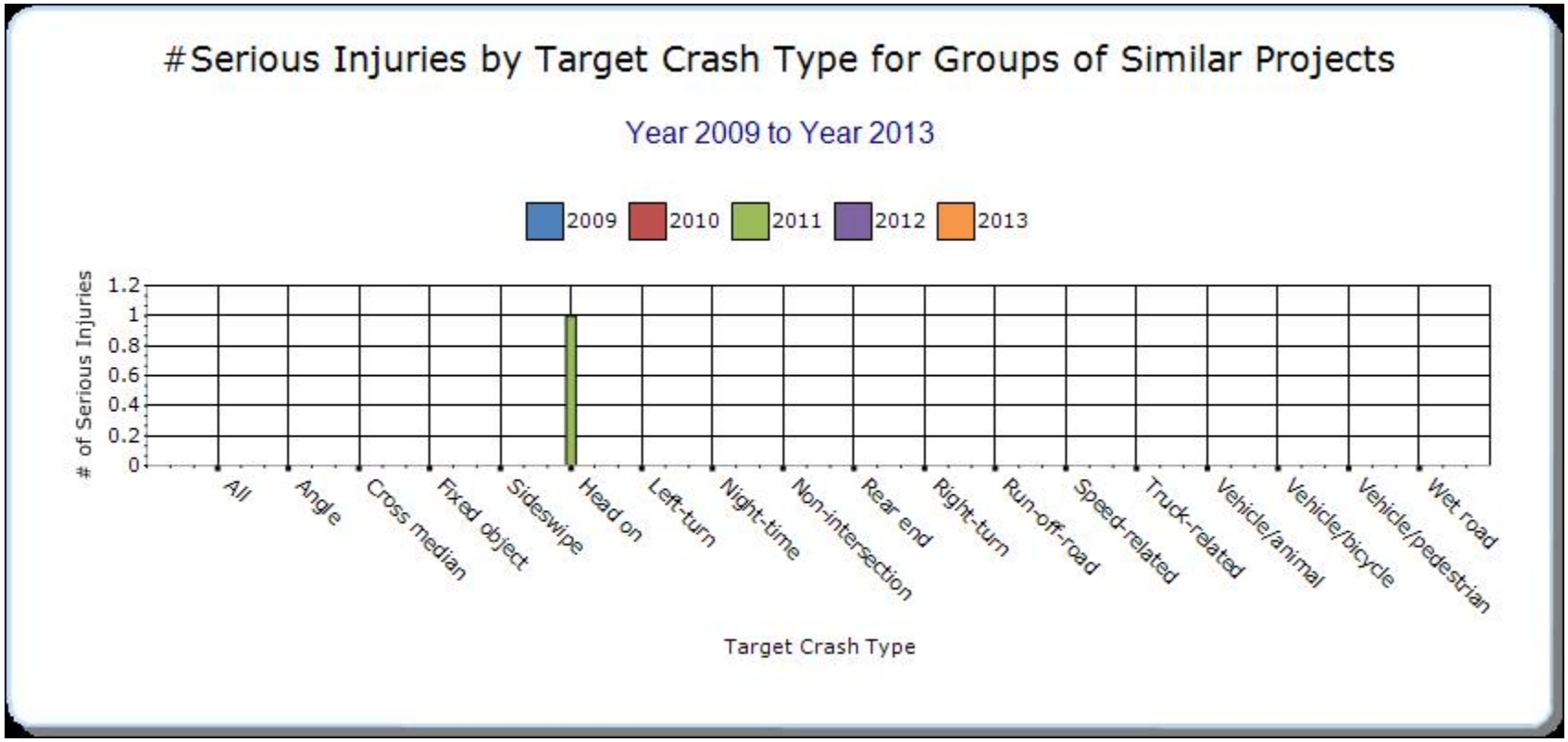
Groups of similar project types

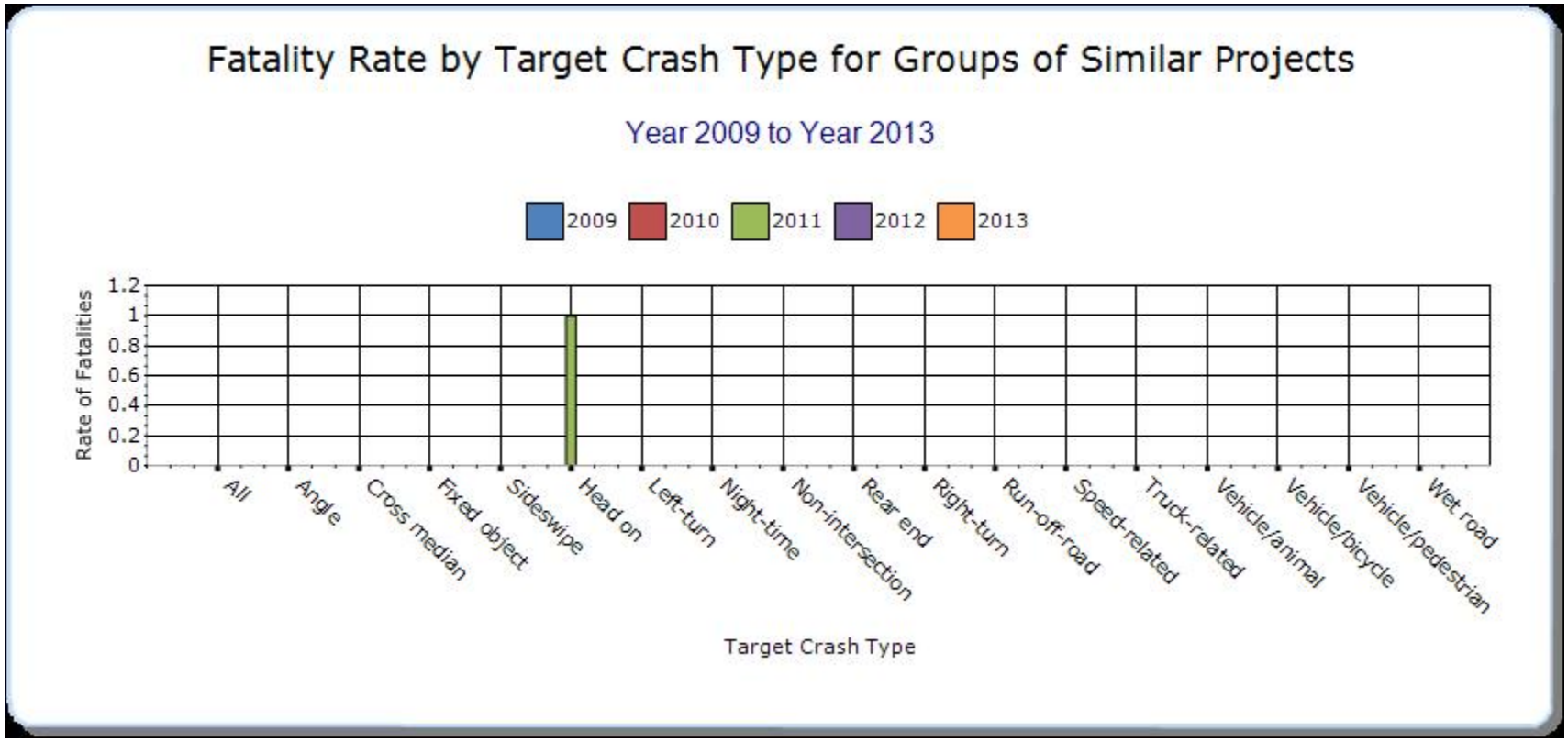
Present the overall effectiveness of groups of similar types of projects.

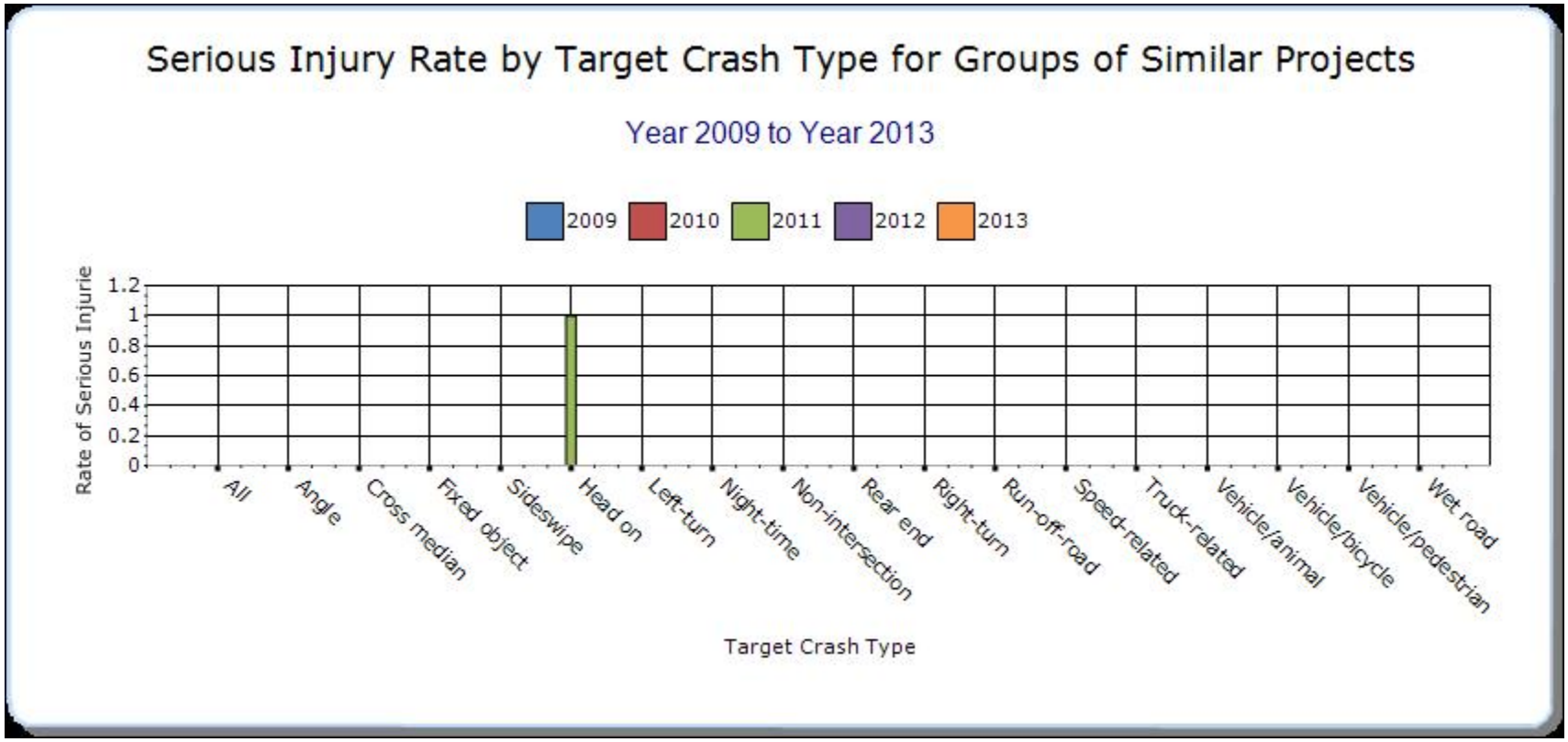
Year - 2011

HSIP Sub-program Types	Target Crash Type	Number of fatalities	Number of serious injuries	Fatality rate (per HMVMT)	Serious injury rate (per HMVMT)	Other-1	Other-2	Other-3
Median Barrier	Head on	1	1	1	1	1	1	1


Fatalities by Target Crash Type for Groups of Similar Projects
Year 2009 to Year 2013
2009
2010
2011
2012
2013
# of Fatalities
1.2
1
0.8
0.6
0.4
0.2
0
All
Angle
Cross median
Fixed object
Sideswipe
Head on
Left-turn
Night-time
Non-intersection
Rear end
Right-turn
Run-off-road
Speed-related
Truck-related
Vehicle/animal
Vehicle/bicycle
Vehicle/pedestrian
Wet road
Target Crash Type


#Serious Injuries by Target Crash Type for Groups of Similar Projects
Year 2009 to Year 2013
2009
2010
2011
2012
2013
# of Serious Injuries
1.2
1
0.8
0.6
0.4
0.2
0
All
Angle
Cross median
Fixed object
Sideswipe
Head on
Left-turn
Night-time
Non-intersection
Rear end
Right-turn
Run-off-road
Speed-related
Truck-related
Vehicle/animal
Vehicle/bicycle
Vehicle/pedestrian
Wet road
Target Crash Type


Fatality Rate by Target Crash Type for Groups of Similar Projects
Year 2009 to Year 2013
2009
2010
2011
2012
2013
Rate of Fatalities
1.2
1
0.8
0.6
0.4
0.2
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



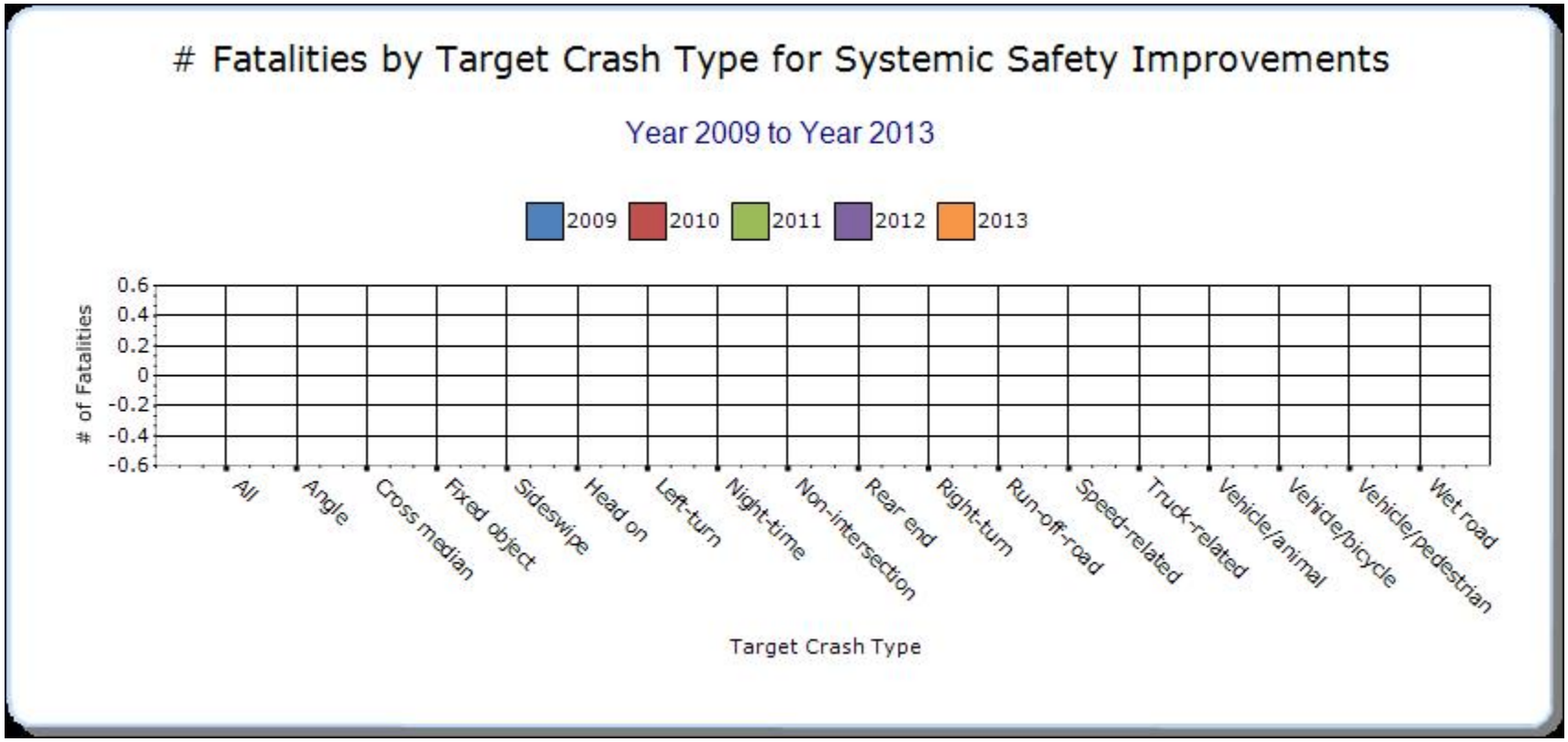
The most recent data available in our DOT is for 2011. The default data year in this question extends to 2013. Also as noted previously, our injury levels include all severity injuries including severe, visible, and complaint of pain. The performance measures for the Sub-programs identified here with the exception of the sub-program "Local Roads" are provided in the attached file to this question.

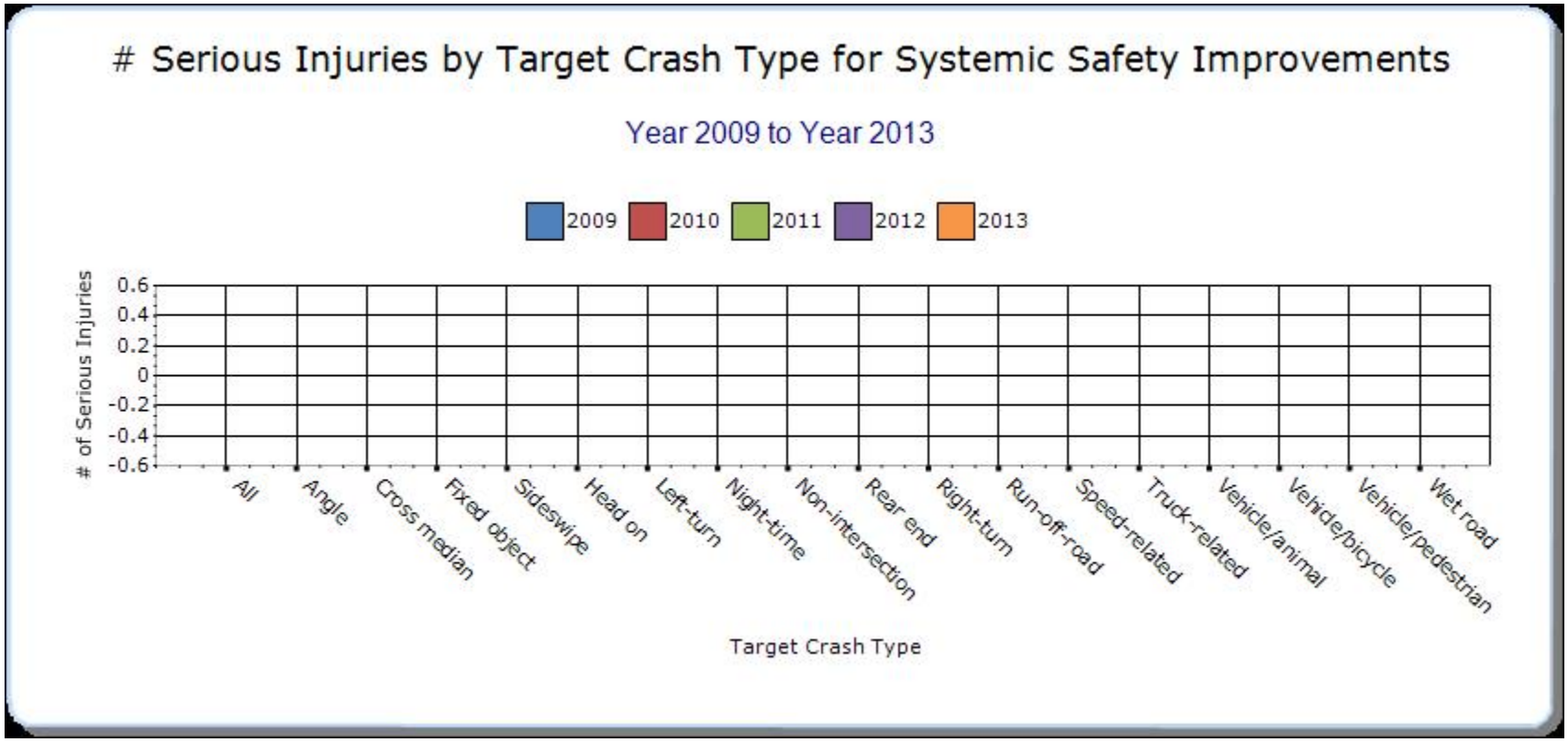
Systemic Treatments

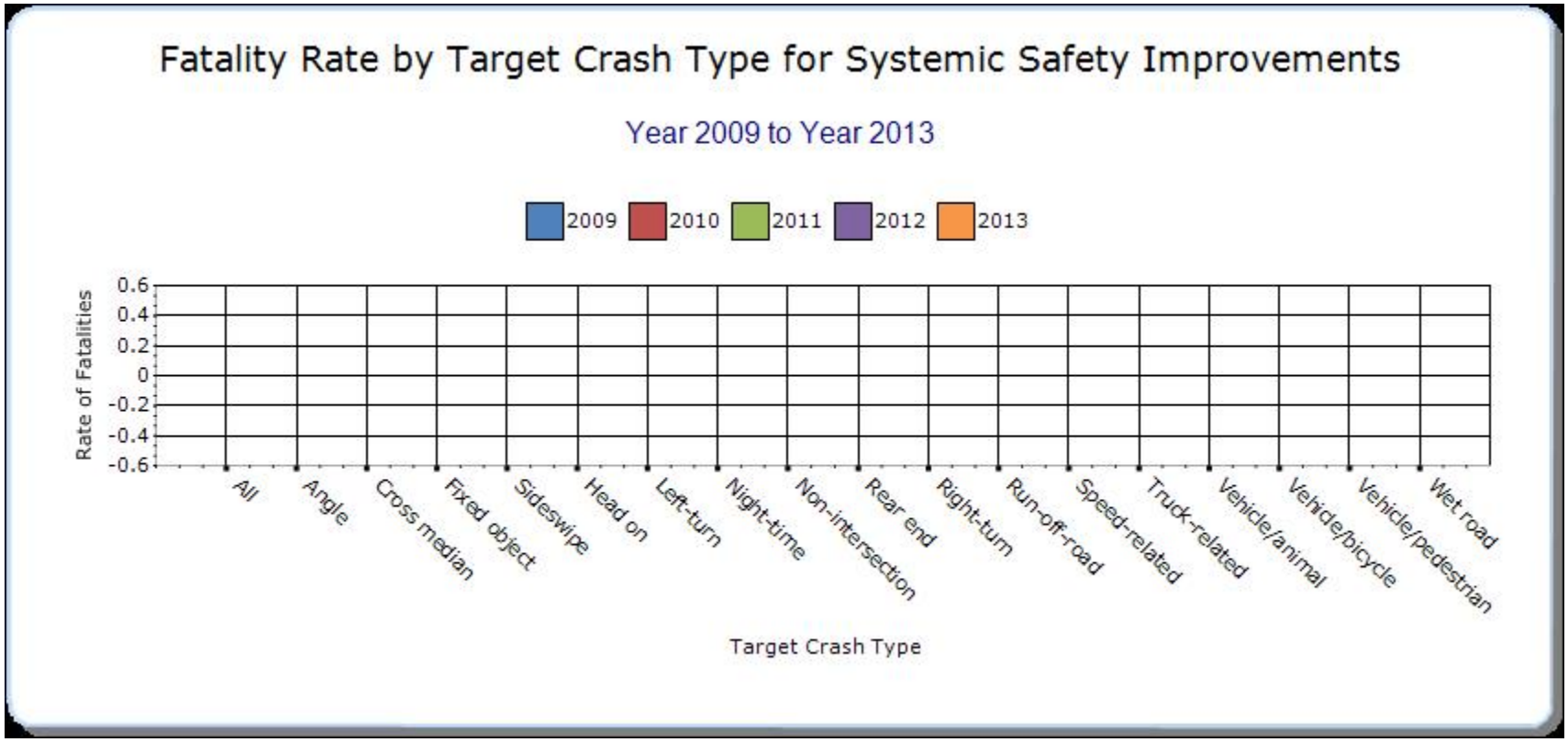
Present the overall effectiveness of systemic treatments.

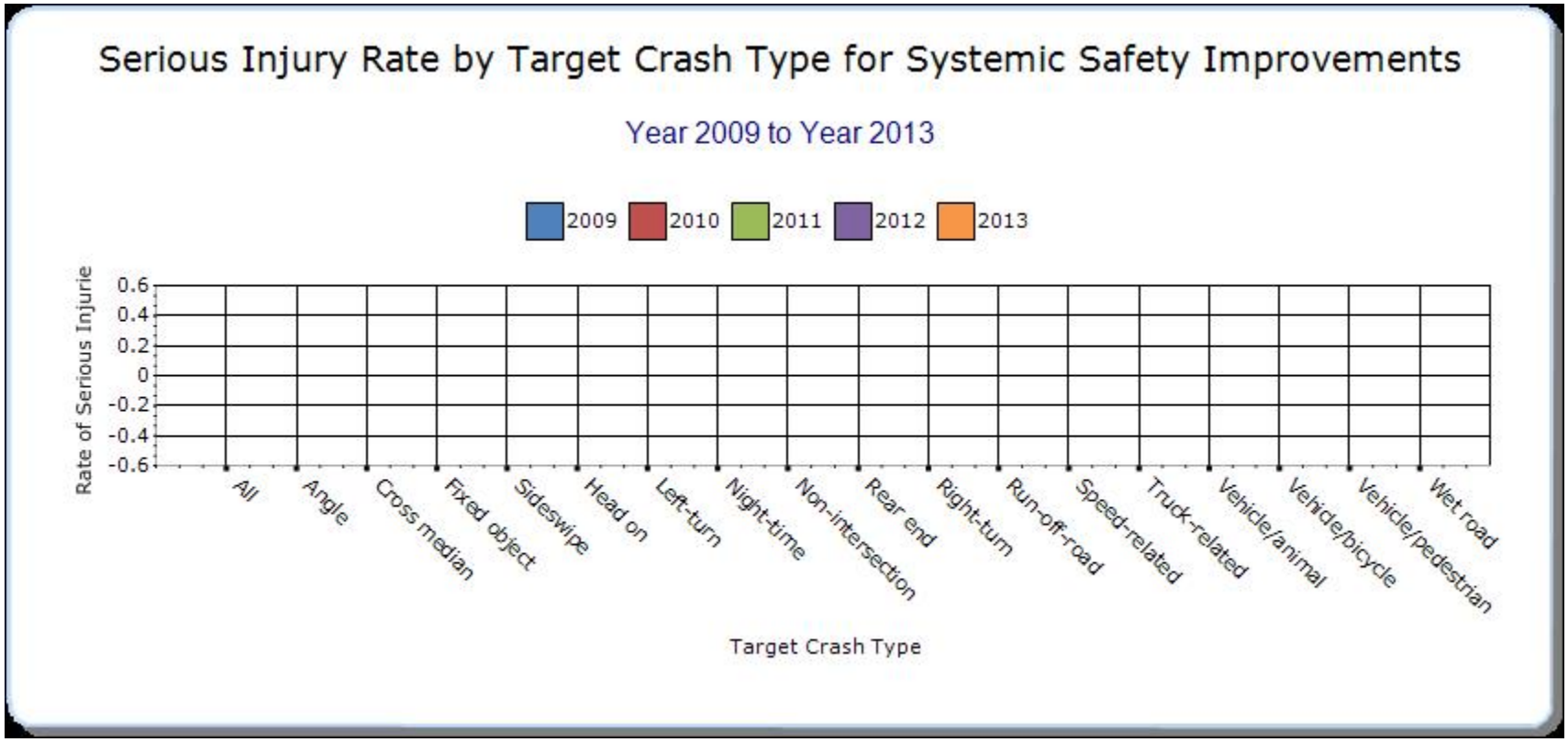
Year - 2011

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
Other-Median Barrier	head on	1	1	1	1	1	1	1


Fatalities by Target Crash Type for Systemic Safety Improvements
Year 2009 to Year 2013
2009
2010
2011
2012
2013
# of Fatalities
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
All
Angle
Cross median
Fixed object
Sideswipe
Head on
Left-turn
Night-time
Non-intersection
Rear end
Right-turn
Run-off-road
Speed-related
Truck-related
Vehicle/animal
Vehicle/bicycle
Vehicle/pedestrian
Wet road
Target Crash Type


Serious Injuries by Target Crash Type for Systemic Safety Improvements
Year 2009 to Year 2013
2009
2010
2011
2012
2013
# of Serious Injuries
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
All
Angle
Cross median
Fixed object
Sideswipe
Head on
Left-turn
Night-time
Non-intersection
Rear end
Right-turn
Run-off-road
Speed-related
Truck-related
Vehicle/animal
Vehicle/bicycle
Vehicle/pedestrian
Wet road
Target Crash Type


Fatality Rate by Target Crash Type for Systemic Safety Improvements
Year 2009 to Year 2013
2009
2010
2011
2012
2013
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



The most recent data available in our DOT is for 2011. The default data year in this question extends to 2013. Also as noted previously, our injury levels include severe, visible, and complaint of pain. The performance measures for Caltrans systemic program (Median Barrier) are included in the attached file to this question.

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

None

Provide project evaluation data for completed projects (optional).

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

Optional Attachments

Sections	Files Attached
Progress in Implementing Projects: Funds Programmed	14) Funding-Question 17 Attachment.xlsx
Progress in Implementing Projects: General Listing of Projects	12) New-CA LOCAL HSIP PROJ ORT (2014.07.09).xlsx
Progress in Implementing Projects: General Listing of Projects	5) Attach_Q23_Proj-State.xlsx
Progress in Achieving Safety Performance Targets: Overview of General Safety Trends	4) Attachment-Question 25.xlsx
Assessment of the Effectiveness of the Improvements (Program Evaluation): SHSP Emphasis Areas	9 Attached-Q32-SHSP-Final.xlsx
Assessment of the Effectiveness of the Improvements (Program Evaluation): Groups of similar project types	8) Attach-Q33-Final.xlsx
Assessment of the Effectiveness of the Improvements (Program Evaluation): Systemic Treatments	10) Attach-Systemic-Q34-Final.xlsx

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.