Highway Safety Improvement Program

Data Driven Decisions

New Mexico
Highway Safety Improvement Program
2013 Annual Report

Prepared by: NM

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

Answer:

One can commonly categorize highway safety into three elements: Driver/Pedestrian Vehicle, and the Roadway. One can also categorize traffic safety programs into four functional groups: Education (of the driver/pedestrian/ bicyclist), Enforcement (of traffic and vehicle related laws), Emergency Medical Response (to a traffic crash involving injuries and fatalities), and Engineering (physical improvements to facilities or systems that improve the safety of the transportation network). The NM Highway Safety Improvement Program (HSIP) is a data-driven, strategic approach that addresses the highway element and the engineering functional group as part of a more comprehensive transportation safety program operated by others both within and outside of the New Mexico Department of Transportation (NMDOT).

All 68,384 centerline miles of public roadways in New Mexico are subject to analysis for safety issues by the NM HSIP. The latest estimate (based on Table HM 20 of FHWA Statistics 2010, published December 2011) of the universe of public roadway centerline miles in New Mexico, stratified by functional class is as follows:

Roadway Functional Classification

Rural	Urban	Total (Centerline Miles)
Interstates		
848	152	1,000
Other Freeways & Expressways		
0	5	5

Other Principal Arterials		
1,856	695	2,551
Minor Arterials		
1,949	638	2,587
Rural Major Collectors		
3,916	0	3,916
Rural Minor Collectors		
3,140	0	3,140
Functionally Local Roadways		
48,761	5,002	53,763
Urban Collectors		
0	1,416	1,416
NM Total Public Roadways		
60,470	7,908	68,378

The NM HSIP operates in compliance with the current federal surface transportation act in effect, Moving Ahead for Progress in the 21st Century Act (MAP-21), and the latest set of Hazard Elimination Program regulations promulgated by the Federal Highway Administration that are authorized by Section 148 of MAP-21.

The NM HSIP also operates in compliance with the multi-agency New Mexico Comprehensive Transportation Safety Plan (NM CTSP). The NM CTSP is a jointly sponsored, multiple State of New Mexico agency document which addresses the requirements for a Strategic Highway Safety Plan (SHSP) as mandated under MAP-21. It was originally adopted in August 2006 with an update adopted in December 2010. The NM CTSP was further amended in December 2011 and March 2012. The NM CTSP also fulfills the 23 USC 148 statutory requirement that the NM HSIP must develop and implement a State strategic highway safety plan. The NM CTSP is a multi-modal, umbrella type strategic plan that describes proposed high priority traffic safety countermeasures as strategies that are intended to achieve the plan's goal to fatalities to motorists, transit riders, bicyclists, and pedestrians on New Mexico's surface transportation network. The NM CTSP as updated now has the goal of reducing total crash fatalities from Year 2008 to Year 2030 by fifty percent. The Year 2008 magnitude of annual fatalities is calculated as

the past five-year (2004 to 2008) average or 455, and thus the Year 2030 goal of fifty percent fewer annual fatalities is then calculated to be 227. The NM CTSP contains explicit objectives to achieve this goal. The major NM CTSP Emphasis Areas that relate to the NM HSIP are: Reduce Lane Departure Crashes; Reduce Fatigued and Distracted Driving; Reduce Intersection-Related Crashes; and, Improve Safety for Special Road Users: Pedestrians, Cyclists, Motorcyclists, and Elder Drivers.

The HSIP process is comprised of three main components: planning, implementation, and evaluation. The planning component includes processes for problem identification, countermeasure selection, and project selection. Implementation addresses project programming and funding distribution guidelines. Evaluation provides information for conducting before/after evaluations of locations where safety projects were constructed. The HSIP's responsibility is to systematically analyze roadways utilizing crash data to identify roadway (state highway, tribal and county roads, city streets, etc.) locations, sections, and elements in New Mexico determined to be hazardous or forecasted with the likelihood of becoming hazardous to vehicular or pedestrian travel. From these analyses, suggested countermeasures in the form of safety improvement projects can be recommended, and Federal funding can be applied to implement them. The NM HSIP develops, prioritizes, and selects engineering roadway safety improvement projects on a statewide basis. The FHWA, New Mexico Division Office provides program oversight and Federal aid for these safety projects. In addition to state highways; tribal roads, city streets, and county roads are eligible for Federal aid safety projects.

All projects included in the New Mexico HSIP must conform to one of the emphasis area strategies outlined in the most recent version of the CTSP.

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.

Answer:

Local city streets, county roads, and tribal roads are addressed in the same fashion as state highways.

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

☒Design

☒Planning

☐Maintenance

☒Operations

☒Governors Highway Safety Office

☒Other: Other-NM DOT, Traffic Technical Support Bureau

Briefly describe coordination with internal partners.

In November 2012 NMDOT Traffic Technical Support Bureau, HSIP Unit issued a statewide call for proposed safety project or non-construction safety program applications with documented evidence of safety hazards to justify funding the requested project or program for safety funds. During December 2012 through April 2013 this unit reviewed new proposed safety project applications submitted by the following: Metropolitan Planning Organizations for metropolitan area local governments; Rural Transportation Planning Organizations for all other local government cities, counties and tribes from non-metropolitan regions, from NMDOT regional design offices, from six NMDOT District Offices, from NMDOT Rail and Transit Bureau, from NMDOT ITS Bureau, and from the NMDOT Traffic Records Section. In April 2013 the State Traffic Engineer, the Director of the Program Management Division, Director of the Traffic Safety Division, Deputy Secretary for Programs and Infrastructure and one District Engineer met as the NMDOT Safety Project Selection Committee and studied reviews and recommendations concerning the safety project applications. The NMDOT Safety Project Engineer and the FHWA New Mexico Division Safety/Pavement Engineer also attended the committee as advisory members. The committee selected which applications to reject and which ones to study further by initiating a road safety audit funded by the NM HSIP and which projects to recommend for approval and for forwarding to the FHWA New Mexico Division requesting concurrence for federal HSIP funding of the proposed safety projects or safety programs. For all the projects or programs that received concurrence, they were then programmed in

appropriate metropolitan Transportation Improvement Programs and the New Mexico State Transportation Improvement Program (STIP) to begin the HSIP safety project or safety program development and implementation phase.

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

☒Metropolitan Planning Organizations

☒Governors Highway Safety Office

☒Local Government Association

☒Other: Other-NMDOT Traffic Safety Division; Metropolitan Planning Organizations (MPO); Regional Planning Organizations (RPO); Tribal Governments; Municipalities; and Counties.

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-As of July 1, 2012 soliciting statewide suggested conceptual safety projects was suspended by NMDOT General Office. It was re-instated in November 2012 and continued through June 30, 2013.

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

No further information.

Program Methodology

Select the programs that are administered under the HSIP.

☒ Median Barrier	☒ Intersection	☐ Safe Corridor
☐ Horizontal Curve	☒ Bicycle Safety	☒ Rural State Highways
☐ Skid Hazard	☐ Crash Data	☐ Red Light Running Prevention
☒ Roadway Departure	☒ Low-Cost Spot Improvements	☐ Sign Replacement And Improvement
☒ Local Safety	☒ Pedestrian Safety	☐ Right Angle Crash
☐ Left Turn Crash	☐ Shoulder Improvement	☐ Segments
☐ Other:		

Program: **Median Barrier**

Date of Program Methodology: **8/31/2012**

What data types were used in the program methodology?

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

What project identification methodology was used for this program?

☐ Crash frequency

☐ Expected crash frequency with EB adjustment

☐ Equivalent property damage only (EPDO Crash frequency)

☐ EPDO crash frequency with EB adjustment

☐ Relative severity index

☐ Crash rate

☐ Critical rate

☐ Level of service of safety (LOSS)

☐ Excess expected crash frequency using SPFs

☐ Excess expected crash frequency with the EB adjustment

☐ Excess expected crash frequency using method of moments

☐ Probability of specific crash types

☐ Excess proportions of specific crash types

☐ Other

☒ Other-Systemic Improvements based on national research that median barriers can reduce cross median crashes by nearly 100%.

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-NMDOT State Traffic Engineer approves automatically all reasonable freeway narrow median barrier system proposed safety projects immediately and forwards to FHWA NM Divsion for

concurrence.

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 100

☐ Incremental B/C

☐ Ranking based on net benefit

☐ Cost Effectiveness

Program: **Intersection**

Date of Program Methodology: **8/31/2012**

What data types were used in the program methodology?

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

☐ Other

☐ Lane miles

☐ Roadside features

☒ Other-Pedestian Volume and Bicyclist Volume

☐ 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
- ☒ Available funding 100
- ☐ Incremental B/C
- ☐ Ranking based on net benefit
- ☐ Cost Effectiveness

Program: **Bicycle Safety**

Date of Program Methodology: **8/31/2012**

What data types were used in the program methodology?

Crashes	*Exposure*	*Roadway*
☒ All crashes	☒ Traffic	☐ Median width
☐ Fatal crashes only	☒ Volume	☐ Horizontal curvature
☐ Fatal and serious injury crashes only	☐ Population	☐ Functional classification
☒ Other-Bicyclist involved crashes	☐ Lane miles	☒ Roadside features
	☒ Other-Bicyclist volume	☒ Other-Current roadway lane width and bicycle lanes and designated bicycle routes
	☒ Other-Observed Bicyclist traffic from safety studies	

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

☒ Available funding 100

☐ Incremental B/C

☐ Ranking based on net benefit

☐ Cost Effectiveness

Program: **Rural State Highways**

Date of Program Methodology: **8/31/2012**

What data types were used in the program methodology?

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

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

☒ Available funding 100

☐ Incremental B/C

☐ Ranking based on net benefit

☐ Cost Effectiveness

Program: **Roadway Departure**

Date of Program Methodology: **8/31/2012**

What data types were used in the program methodology?

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

What project identification methodology was used for this program?

☒ Crash frequency

☐ Expected crash frequency with EB adjustment

☐ Equivalent property damage only (EPDO Crash frequency)

☐ EPDO crash frequency with EB adjustment

☒ Relative severity index

☒ Crash rate

☐ Critical rate

☐ Level of service of safety (LOSS)

☐ Excess expected crash frequency using SPFs

☐ Excess expected crash frequency with the EB adjustment

☐ Excess expected crash frequency using method of moments

☐ Probability of specific crash types

☐ Excess proportions of specific crash types

☐ Other

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

☒ Yes

☐ No

If yes, are local road projects identified using the same methodology as state roads?

☒ Yes

☐ No

How are highway safety improvement projects advanced for implementation?

☐ Competitive application process

☒ selection committee

☐ Other

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

☒ Relative Weight in Scoring

☐ Rank of Priority Consideration

☐ Ranking based on B/C

☒ Available funding 100

☐ Incremental B/C

☐ Ranking based on net benefit

☐ Cost Effectiveness

Program: **Low-Cost Spot Improvements**

Date of Program Methodology: **8/31/2012**

What data types were used in the program methodology?

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

What project identification methodology was used for this program?

☒ Crash frequency

☐ Expected crash frequency with EB adjustment

☐ Equivalent property damage only (EPDO Crash frequency)

☐ EPDO crash frequency with EB adjustment

☐ Relative severity index

☐ Crash rate

☐ Critical rate

☐ Level of service of safety (LOSS)

☐ Excess expected crash frequency using SPFs

☐ Excess expected crash frequency with the EB adjustment

☐ Excess expected crash frequency using method of moments

☐ Probability of specific crash types

☐ Excess proportions of specific crash types

☐ Other

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

☒ Yes

☐ No

If yes, are local road projects identified using the same methodology as state roads?

☒ Yes

☐ No

How are highway safety improvement projects advanced for implementation?

☐ Competitive application process

☒ selection committee

☐ Other

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

☒ Relative Weight in Scoring

☐ Rank of Priority Consideration

☐ Ranking based on B/C

☒ Available funding 100

☐ Incremental B/C

☐ Ranking based on net benefit

☐ Cost Effectiveness

Program: **Local Safety**

Date of Program Methodology: **8/31/2012**

What data types were used in the program methodology?

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

☐ Other ☐ Other

What project identification methodology was used for this program?

☐ Crash frequency

☐ Expected crash frequency with EB adjustment

☐ Equivalent property damage only (EPDO Crash frequency)

☐ EPDO crash frequency with EB adjustment

☐ Relative severity index

☐ Crash rate

☐ Critical rate

☐ Level of service of safety (LOSS)

☐ Excess expected crash frequency using SPFs

☐ Excess expected crash frequency with the EB adjustment

☐ Excess expected crash frequency using method of moments

☐ Probability of specific crash types

☐ Excess proportions of specific crash types

☐ Other

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

☒ Yes

☐ No

If yes, are local road projects identified using the same methodology as state roads?

☒ Yes

☐ No

How are highway safety improvement projects advanced for implementation?

☐ Competitive application process

☒ selection committee

☐ Other

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

☒ Relative Weight in Scoring

☐ Rank of Priority Consideration

☐ Ranking based on B/C

☒ Available funding 100

☐ Incremental B/C

☐ Ranking based on net benefit

☐ Cost Effectiveness

Program: **Pedestrian Safety**

Date of Program Methodology: **8/31/2012**

What data types were used in the program methodology?

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

☐ Fatal crashes only	☐ Volume	☐ Horizontal curvature
☐ Fatal and serious injury crashes only	☐ Population	☐ Functional classification
☒ Other-Pedestrian involved crashes	☐ Lane miles	☐ Roadside features
	☒ Other-Pedestrian traffic	☒ Other-Observed Pedestrian behavior from safety studies

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	
☒ Available funding	100
☐ Incremental B/C	
☐ Ranking based on net benefit	
☐ Cost Effectiveness	

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

5

Highway safety improvment program funds are used to address which of the following systemic improvments?

☒Cable Median Barriers

☐Traffic Control Device Rehabilitation

☐Install/Improve Signing

☐Upgrade Guard Rails

☐Safety Edge

☐Add/Upgrade/Modify/Remove Traffic Signal

☒Other Other-Install improved signs and striping on freeway exit ramps to reduce wrong way travel crashes on freeways

☒Other Other-From our most recent funds programmed, 5% of highway safety improvement program funds were used to address systemic improvements.

☒Rumble Strips

☐Pavement/Shoulder Widening

☒Install/Improve Pavement Marking and/or Delineation

☐Clear Zone Improvements

☐Install/Improve Lighting

☒Other Other-Rumble stripes, pavement markings on top of existing shoulder rumble strips

☒Other Other-Install ITS Type improvements on select regional work trip commuter corridors to reduce secondary crashes

What process is used to identify potential countermeasures?

☐Engineering Study

☐Road Safety Assessment

☒Other: Other-Various analyses of the New Mexico surface transportation network are employed, where observations of current transportation operations, including current physical attributes, combined with various types of data including person trips, traffic volume

☒Other: Other-Resultant analyses may determine such statistics as crash frequency, crash rate or observed hazardous traffic conditions as a result of performance of an engineering safety study or road safety audit.

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-None

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

Beginning in July 2013 the New Mexico DOT is currently formulating a new set of proposed New Mexico Highway Safety Improvement Program procedures affecting the methodology of seeking, reviewing, and forwarding for FHWA NM Division consideration for concurrence in funding proposed safety improvement projects or safety programs for programming and implementation. This new set of procedures propose to replace the current once a year formal review of proposed safety projects and programs with a continuous year round review and decision making by the NMDOT General Office Project Selection Committee and the NMDOT General Office Traffic Technical Support Bureau staff of proposed safety project and proposed safety program applications.

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)	22729203	97 %	12227202.17	100 %
HRRRP (SAFETEA-LU)	698000	3 %	0	0 %
HRRR Special Rule				
Penalty Transfer - Section 154				
Penalty Transfer – Section 164				
Incentive Grants - Section 163				
Incentive Grants (Section 406)				
Other Federal-aid Funds (i.e. STP, NHPP)				
State and Local Funds				
Totals	23427203	100%	12227202.17	100%

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

$4,896,023.00

How much funding is obligated to local safety projects?

$949,599.00

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

$0.00

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

$0.00

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

$0.00

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

$10,000,000.00

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

The primary impediment to implementing potential safety countermeasure strategies is always the associated cost and available funds. Although they cannot be determined until strategies are proposed, the NMDOT anticipates the following general impediments or difficulties (in addition to cost/ funding impediments) to successfully implementing potential safety strategies:

- Lack of favor or desirability with certain stakeholder groups such as the public or with particular road users' interest groups that could limit or result in non-approval of the implementation of a strategy
- Need for multi-agency coordination and cooperation
- Law enforcement prioritization processes and personnel shortages
- Inability to implement a safety strategy due to environmental impacts
- Incomplete and inaccurate crash reports and traffic volume counts for the off system county roads and tribal roads

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

no further information

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 attachment for list of Projects											

Progress in Achieving Safety Performance Targets

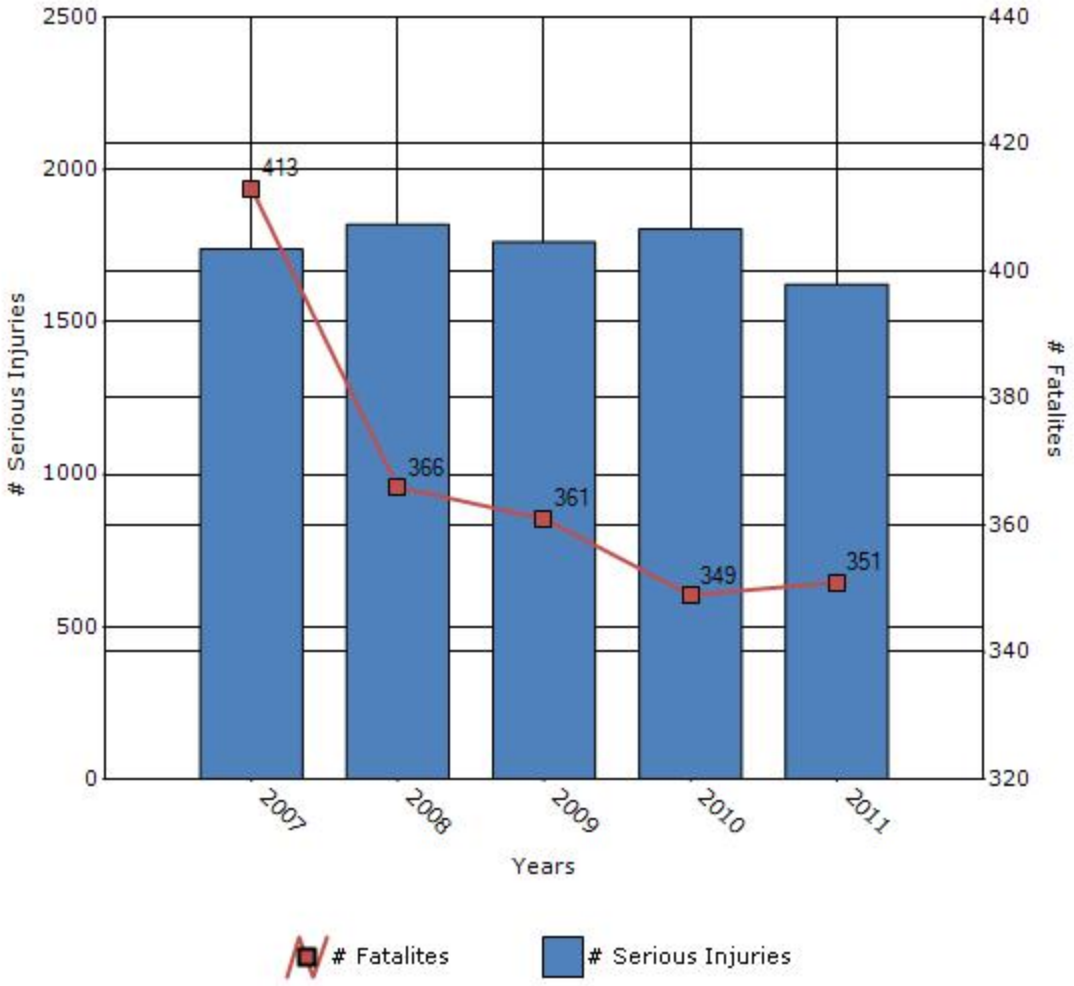
Overview of General Safety Trends

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

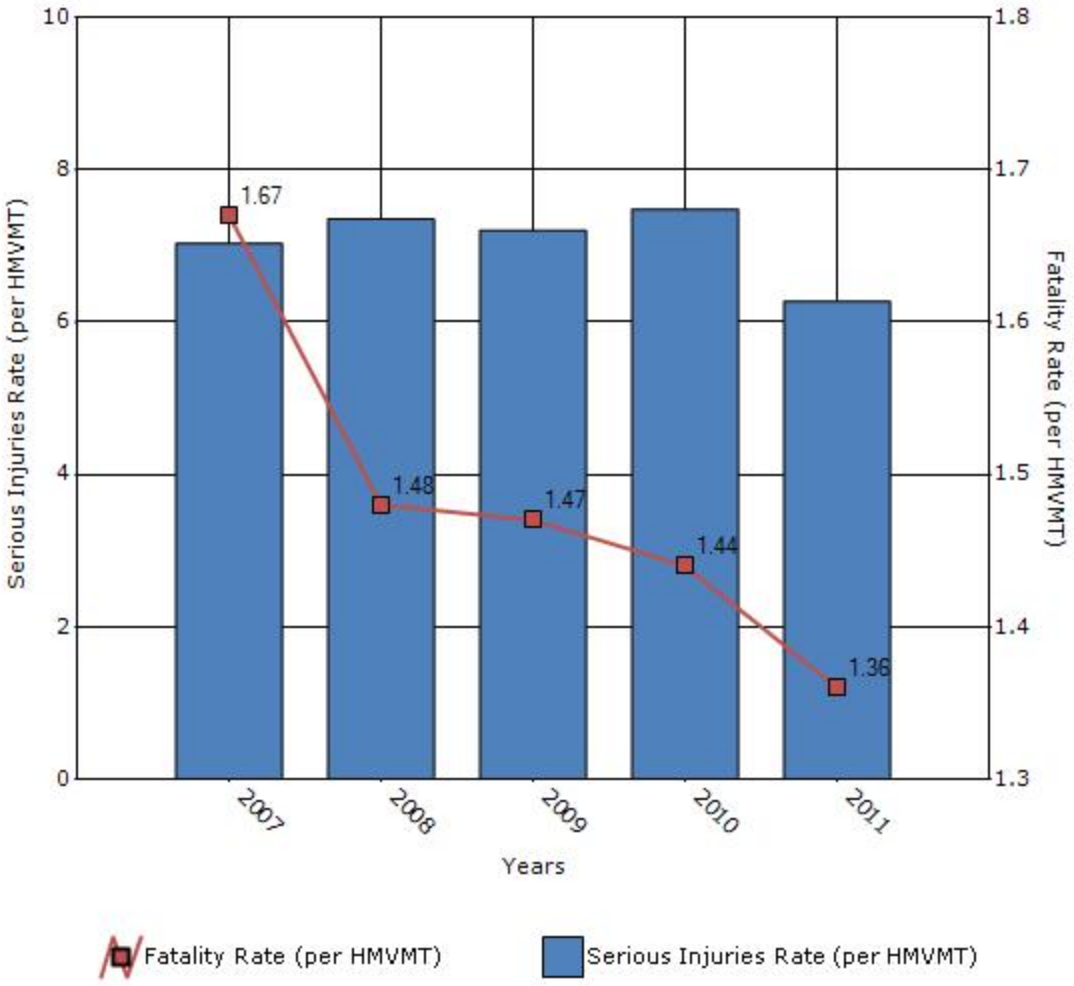
Performance Measures*	2007	2008	2009	2010	2011
Number of fatalities	413	366	361	349	351
Number of serious injuries	1739	1820	1763	1806	1624
Fatality rate (per HMVMT)	1.67	1.48	1.47	1.44	1.36
Serious injury rate (per HMVMT)	7.03	7.35	7.2	7.48	6.27

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

Number of Fatalities and Serious injuries for the Last Five Years



Rate of Fatalities and Serious injuries for the Last Five Years

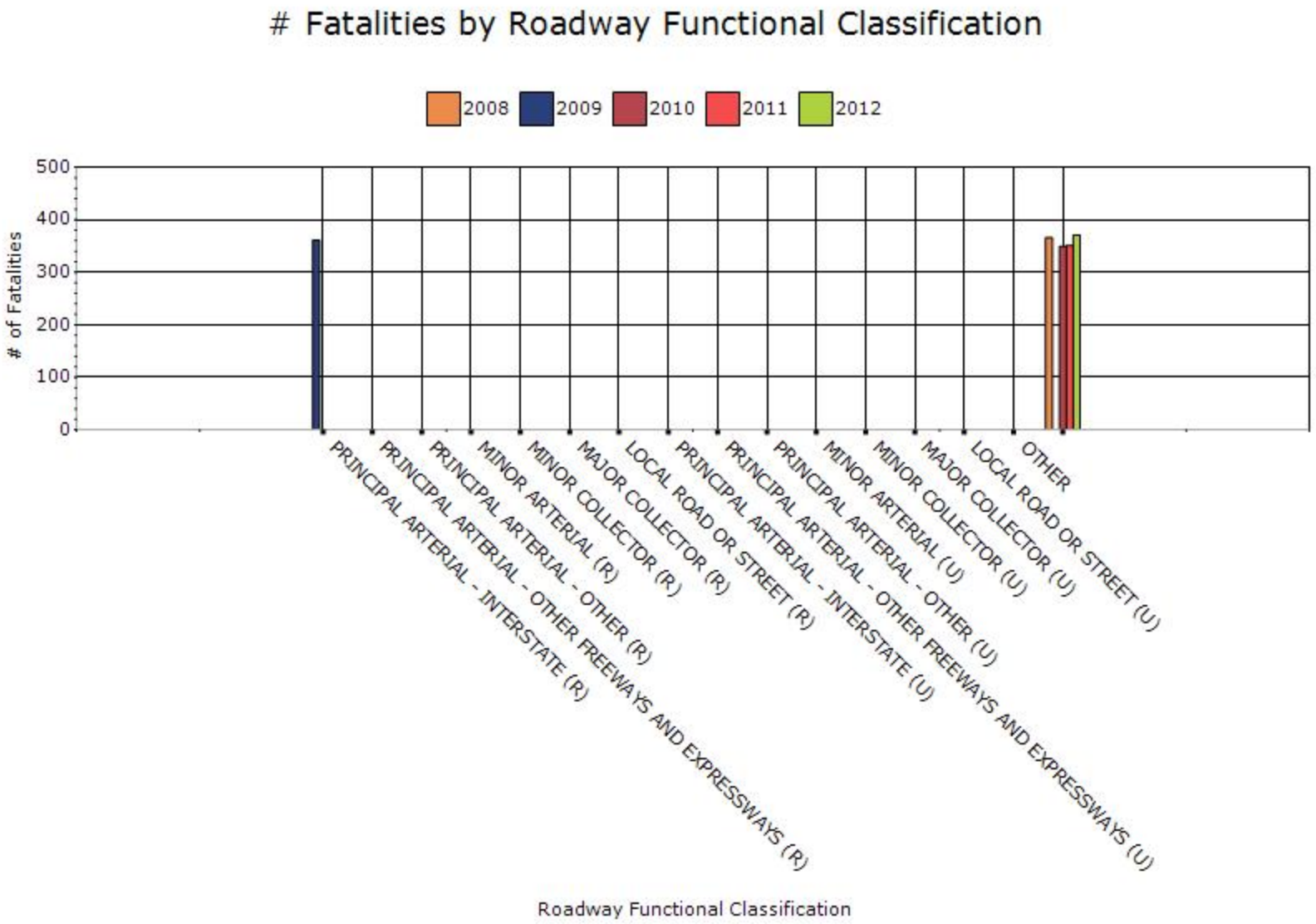


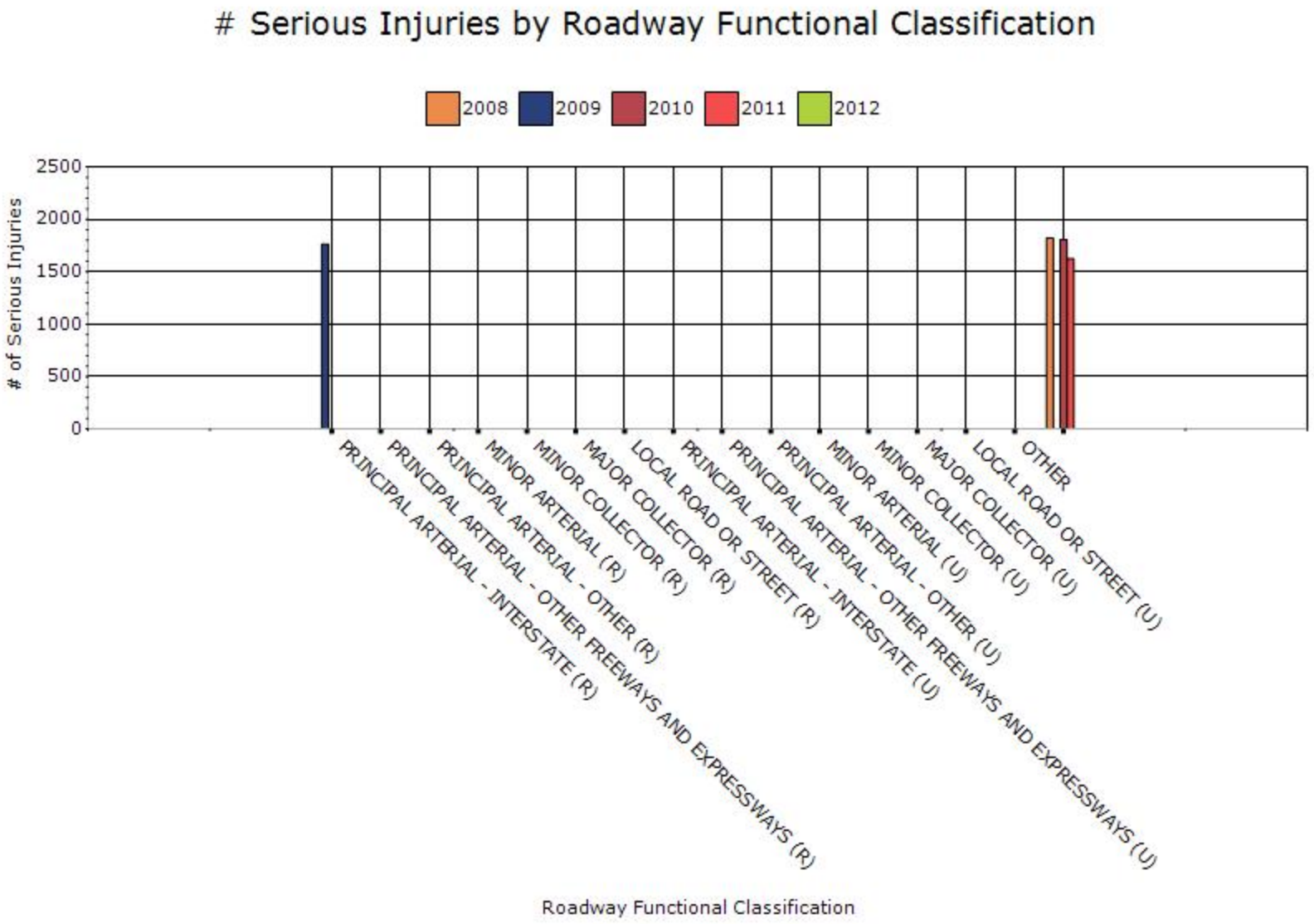
To the maximum extent possible, present performance measure* data by functional classification and ownership.

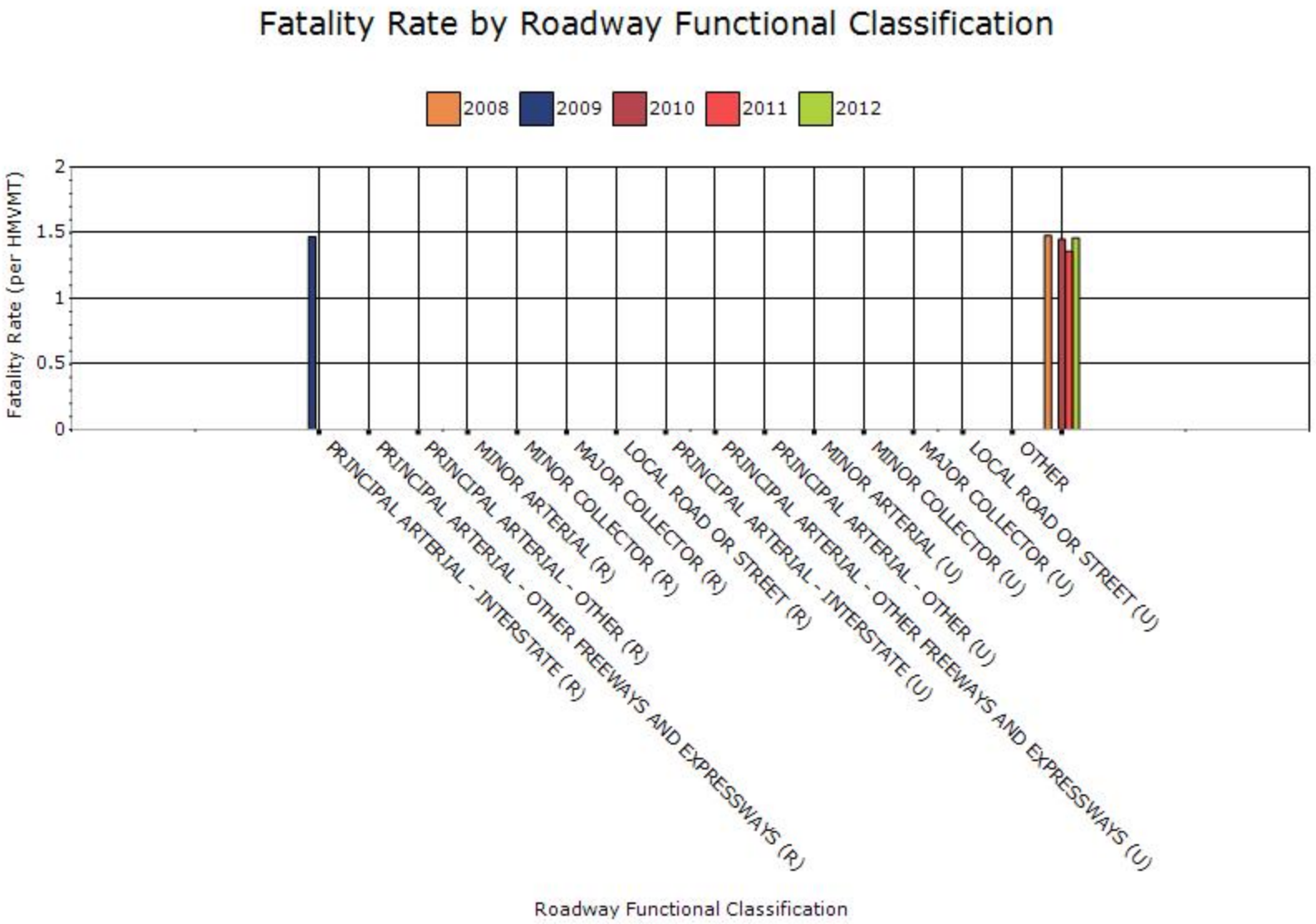
Year - 2012

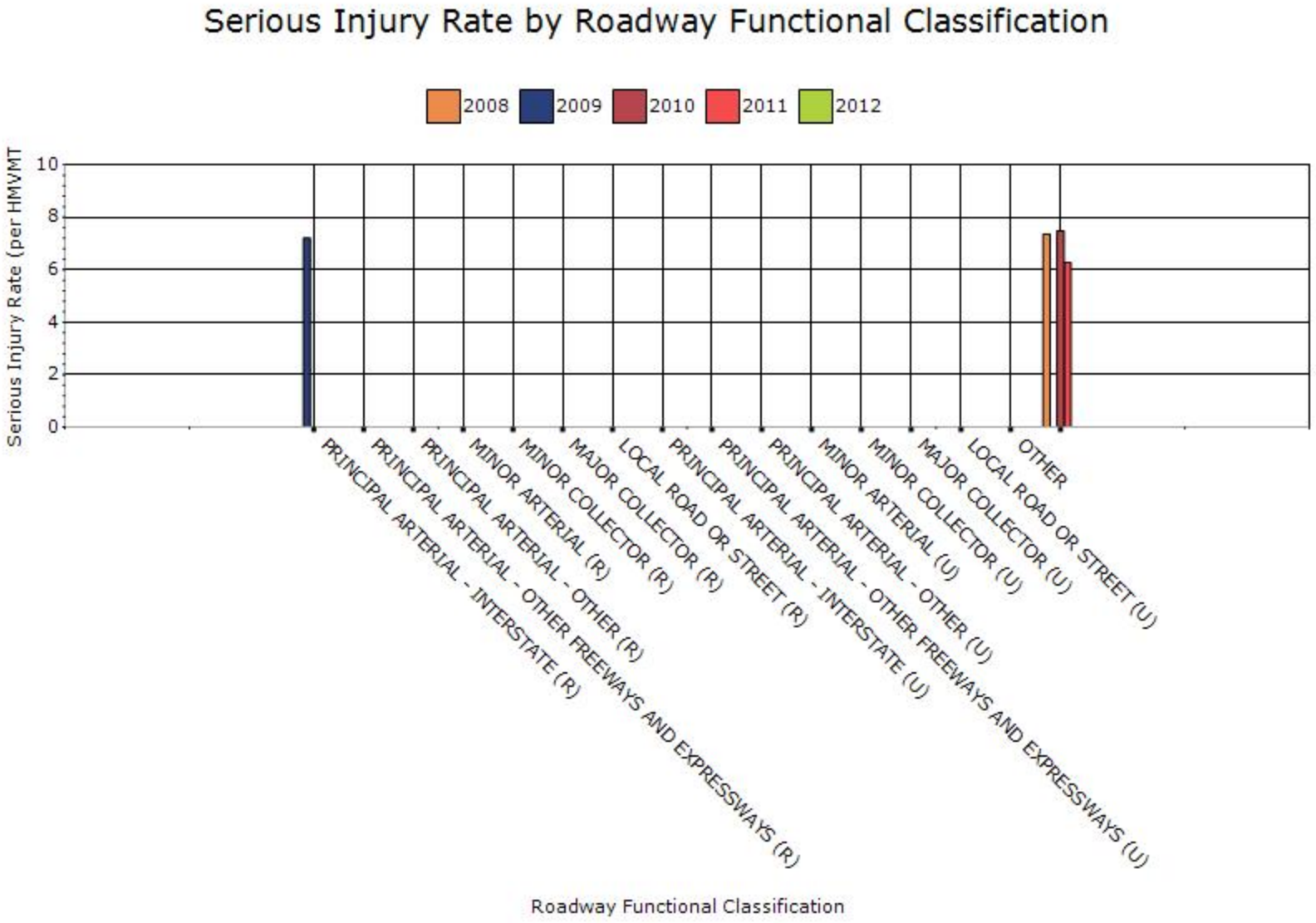
Function Classification	Number of fatalities	Number of serious injuries	Fatality rate (per HMVMT)	Serious injury rate (per HMVMT)
RURAL PRINCIPAL ARTERIAL - INTERSTATE	0	0	0	0
RURAL PRINCIPAL ARTERIAL - OTHER FREEWAYS AND EXPRESSWAYS	0	0	0	0
RURAL PRINCIPAL ARTERIAL - OTHER	0	0	0	0
RURAL MINOR ARTERIAL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

ARTERIAL - INTERSTATE				
URBAN PRINCIPAL ARTERIAL - OTHER FREEWAYS AND EXPRESSWAYS	0	0	0	0
URBAN PRINCIPAL ARTERIAL - OTHER	0	0	0	0
URBAN MINOR ARTERIAL	0	0	0	0
URBAN MINOR COLLECTOR	0	0	0	0
URBAN MAJOR COLLECTOR	0	0	0	0
URBAN LOCAL ROAD OR STREET	0	0	0	0
OTHER	0	0	0	0
ALL FUNCTIONAL CLASSES COMBINED	371	0	1.46	0
ALL FUNCTIONAL CLASSES COMBINED	371	0	1.46	0


Fatalities by Roadway Functional Classification
2008
2009
2010
2011
2012
# of Fatalities
500
400
300
200
100
0
PRINCIPAL ARTERIAL - INTERSTATE (R)
PRINCIPAL ARTERIAL - OTHER FREEWAYS AND EXPRESSWAYS (R)
PRINCIPAL ARTERIAL - OTHER (R)
MINOR ARTERIAL (R)
MINOR COLLECTOR (R)
MAJOR COLLECTOR (R)
LOCAL ROAD OR STREET (R)
PRINCIPAL ARTERIAL - INTERSTATE (U)
PRINCIPAL ARTERIAL - OTHER FREEWAYS AND EXPRESSWAYS (U)
PRINCIPAL ARTERIAL - OTHER (U)
MINOR ARTERIAL (U)
MINOR COLLECTOR (U)
MAJOR COLLECTOR (U)
LOCAL ROAD OR STREET (U)
OTHER
Roadway Functional Classification


Serious Injuries by Roadway Functional Classification
2008
2009
2010
2011
2012
# of Serious Injuries
2500
2000
1500
1000
500
0
PRINCIPAL ARTERIAL - INTERSTATE (R)
PRINCIPAL ARTERIAL - OTHER FREEWAYS AND EXPRESSWAYS (R)
PRINCIPAL ARTERIAL - OTHER (R)
MINOR ARTERIAL (R)
MINOR COLLECTOR (R)
MAJOR COLLECTOR (R)
LOCAL ROAD OR STREET (R)
PRINCIPAL ARTERIAL - INTERSTATE (U)
PRINCIPAL ARTERIAL - OTHER FREEWAYS AND EXPRESSWAYS (U)
PRINCIPAL ARTERIAL - OTHER (U)
MINOR ARTERIAL (U)
MINOR COLLECTOR (U)
MAJOR COLLECTOR (U)
LOCAL ROAD OR STREET (U)
OTHER
Roadway Functional Classification

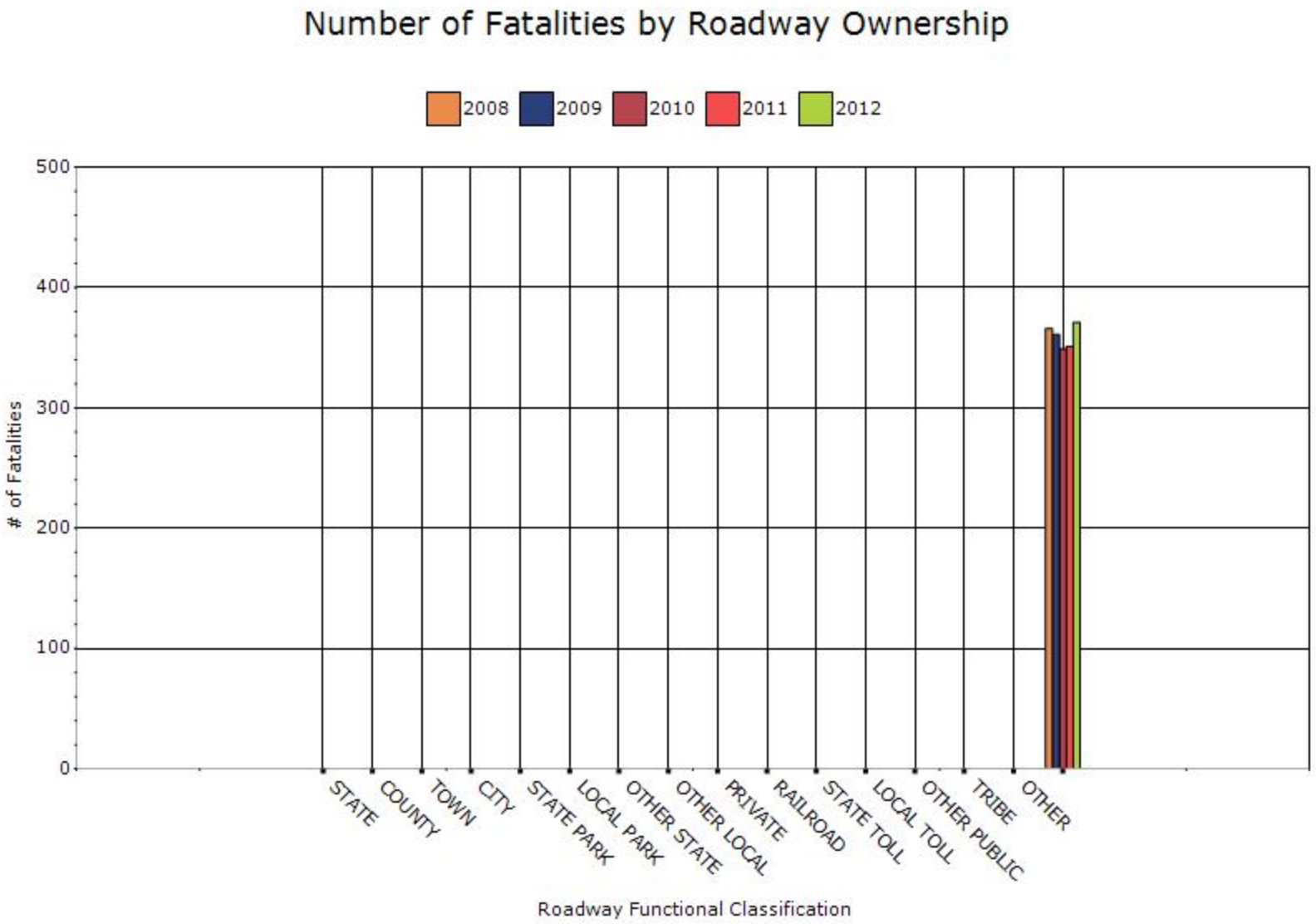

Fatality Rate by Roadway Functional Classification
2008
2009
2010
2011
2012
Fatality Rate (per HMVMT)
2
1.5
1
0.5
0
PRINCIPAL ARTERIAL - INTERSTATE (R)
PRINCIPAL ARTERIAL - OTHER FREEWAYS AND EXPRESSWAYS (R)
PRINCIPAL ARTERIAL - OTHER (R)
MINOR ARTERIAL (R)
MINOR COLLECTOR (R)
MAJOR COLLECTOR (R)
LOCAL ROAD OR STREET (R)
PRINCIPAL ARTERIAL - INTERSTATE (U)
PRINCIPAL ARTERIAL - OTHER FREEWAYS AND EXPRESSWAYS (U)
PRINCIPAL ARTERIAL - OTHER (U)
MINOR ARTERIAL (U)
MINOR COLLECTOR (U)
MAJOR COLLECTOR (U)
LOCAL ROAD OR STREET (U)
OTHER
Roadway Functional Classification

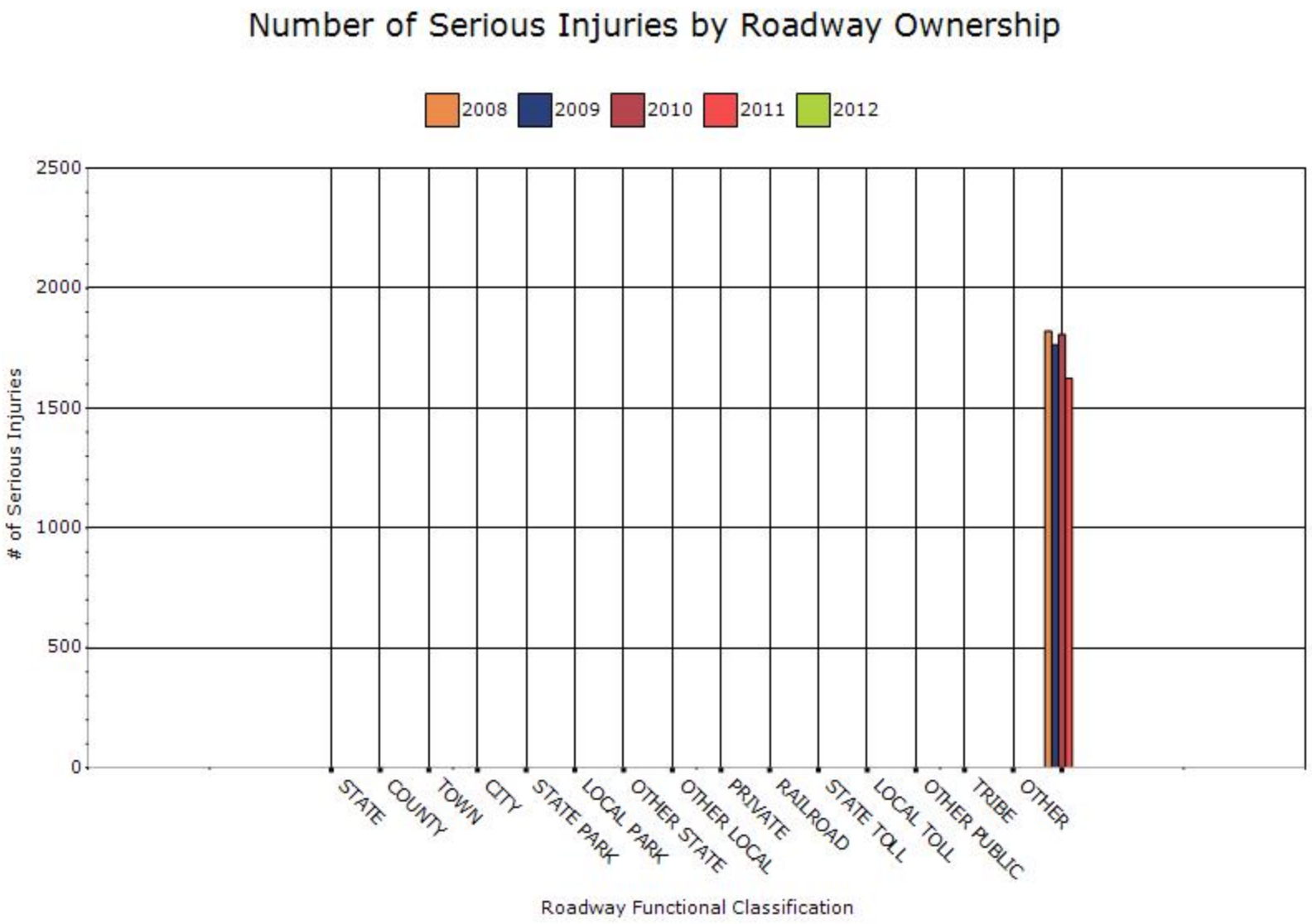

Serious Injury Rate by Roadway Functional Classification
2008
2009
2010
2011
2012
Serious Injury Rate (per HMVMT
10
8
6
4
2
0
PRINCIPAL ARTERIAL - INTERSTATE (R)
PRINCIPAL ARTERIAL - OTHER FREEWAYS AND EXPRESSWAYS (R)
PRINCIPAL ARTERIAL - OTHER (R)
MINOR ARTERIAL (R)
MINOR COLLECTOR (R)
MAJOR COLLECTOR (R)
LOCAL ROAD OR STREET (R)
PRINCIPAL ARTERIAL - INTERSTATE (U)
PRINCIPAL ARTERIAL - OTHER FREEWAYS AND EXPRESSWAYS (U)
PRINCIPAL ARTERIAL - OTHER (U)
MINOR ARTERIAL (U)
MINOR COLLECTOR (U)
MAJOR COLLECTOR (U)
LOCAL ROAD OR STREET (U)
OTHER
Roadway Functional Classification

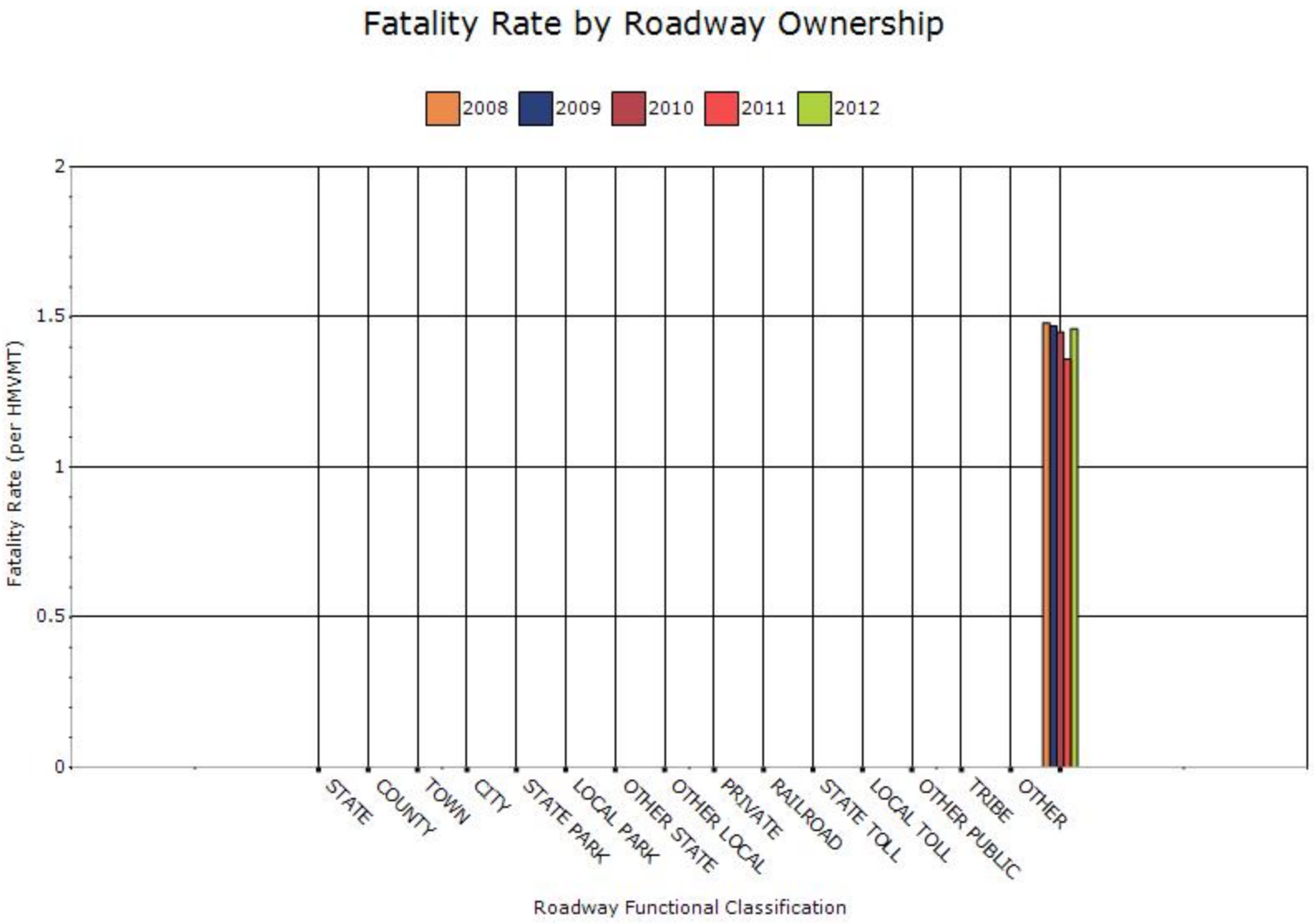
Year - 2012

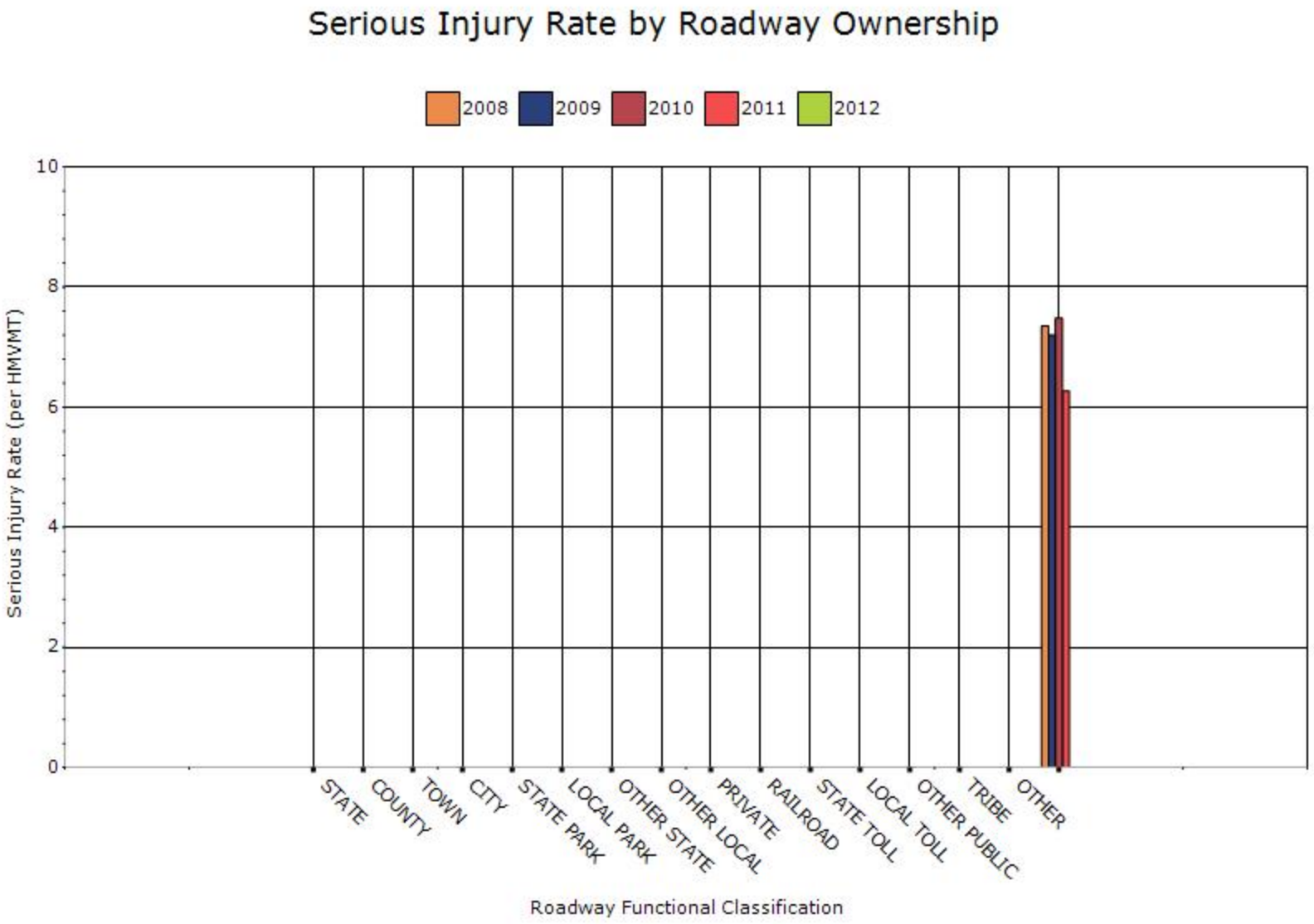
Roadway Ownership	Number of fatalities	Number of serious injuries	Fatality rate (per HMVMT)	Serious injury rate (per HMVMT)
STATE HIGHWAY AGENCY	0	0	0	0
COUNTY HIGHWAY AGENCY	0	0	0	0
TOWN OR TOWNSHIP HIGHWAY AGENCY	0	0	0	0
CITY OF MUNICIPAL HIGHWAY AGENCY	0	0	0	0
STATE PARK, FOREST, OR RESERVATION AGENCY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

RAILROAD	0	0	0	0
STATE TOLL AUTHORITY	0	0	0	0
LOCAL TOLL AUTHORITY	0	0	0	0
OTHER PUBLIC INSTRUMENTALITY (E.G. AIRPORT, SCHOOL, UNIVERSITY)	0	0	0	0
INDIAN TRIBE NATION	0	0	0	0
OTHER	0	0	0	0
ALL PUBLIC ROADWAYS	371	0	1.46	0
ALL PUBLIC ROADWAYS	371	0	1.46	0


Number of Fatalities by Roadway Ownership
2008
2009
2010
2011
2012
500
400
300
200
100
0
# of Fatalities
STATE
COUNTY
TOWN
CITY
STATE PARK
LOCAL PARK
OTHER STATE
OTHER LOCAL
PRIVATE
RAILROAD
STATE TOLL
LOCAL TOLL
OTHER PUBLIC
TRIBE
OTHER
Roadway Functional Classification


Number of Serious Injuries by Roadway Ownership
2008
2009
2010
2011
2012
2500
2000
1500
1000
500
0
# of Serious Injuries
STATE
COUNTY
TOWN
CITY
STATE PARK
LOCAL PARK
OTHER STATE
OTHER LOCAL
PRIVATE
RAILROAD
STATE TOLL
LOCAL TOLL
OTHER PUBLIC
TRIBE
OTHER
Roadway Functional Classification


Fatality Rate by Roadway Ownership
2008
2009
2010
2011
2012
Fatality Rate (per HMVMT)
2
1.5
1
0.5
0
STATE
COUNTY
TOWN
CITY
STATE PARK
LOCAL PARK
OTHER STATE
OTHER LOCAL
PRIVATE
RAILROAD
STATE TOLL
LOCAL TOLL
OTHER PUBLIC
TRIBE
OTHER
Roadway Functional Classification


Serious Injury Rate by Roadway Ownership
2008
2009
2010
2011
2012
Serious Injury Rate (per HMVMT)
10
8
6
4
2
0
STATE
COUNTY
TOWN
CITY
STATE PARK
LOCAL PARK
OTHER STATE
OTHER LOCAL
PRIVATE
RAILROAD
STATE TOLL
LOCAL TOLL
OTHER PUBLIC
TRIBE
OTHER
Roadway Functional Classification

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

No further information.

Application of Special Rules

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

Older Driver Performance Measures	**2008**	**2009**	**2010**	**2011**	**2012**
Fatality rate (per capita)	0.2	0.28	0.23	0.26	0
Serious injury rate (per capita)	0.92	0.81	1.05	0.75	0
Fatality and serious injury rate (per capita)	1.12	1.09	1.28	1	0

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

Year	Senior (65+) Fatalities

2007	39
2008	27

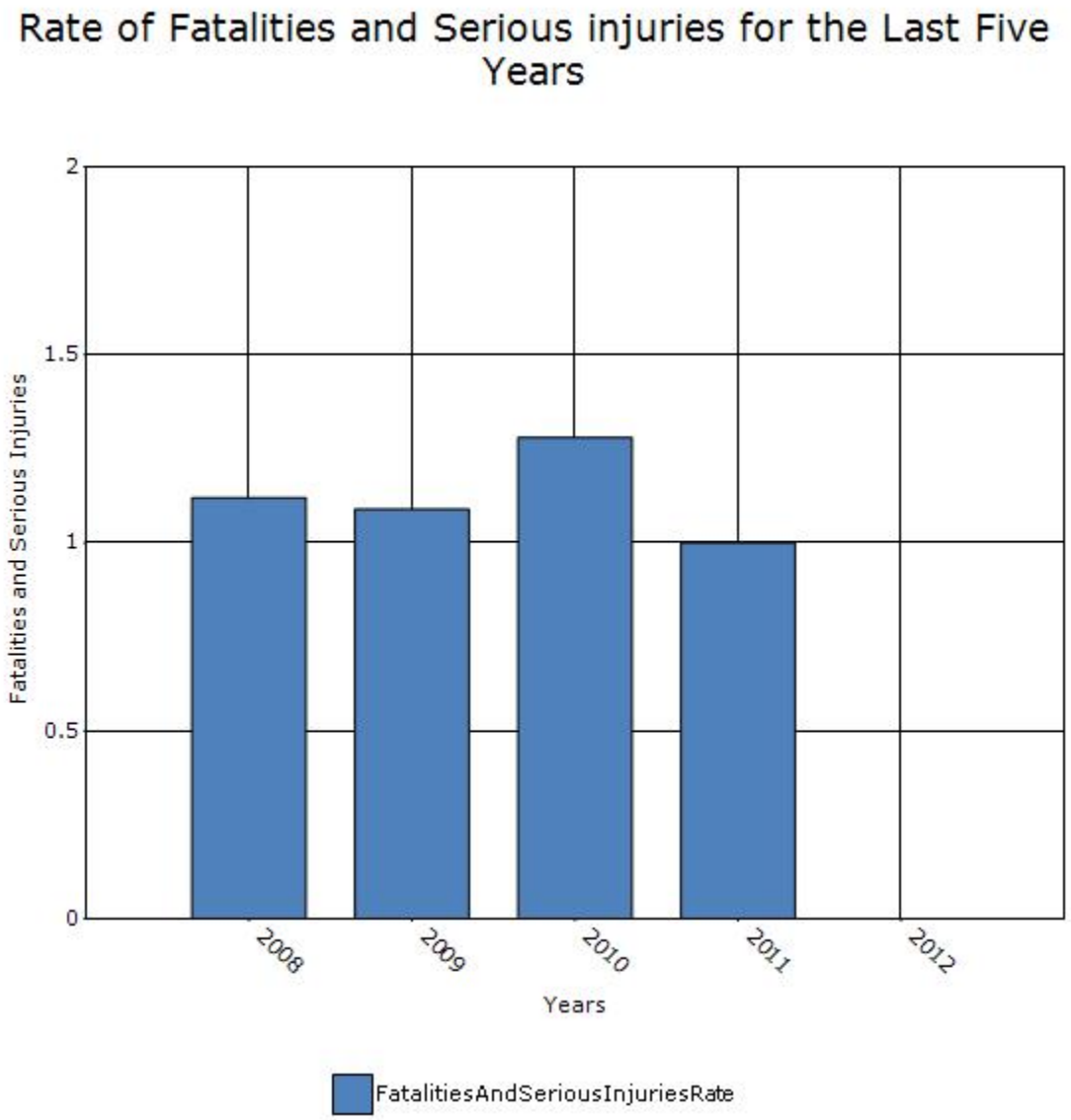
2009	37
2010	31
2011	35

5.47

1.1

year	Senior fatalities	Age 65+ population per 1000 Total NM Population	Senior Fatality Rate per capita	Senior serious injuries	Age 65+ population per 1000 Total NM Population	Senior class A Serious Injury Rate per capita

2007	39	128	0.304688	87	128	0.679688
2008	27	132	0.204545	121	132	0.916667
2009	37	132	0.280303	107	132	0.810606
2010	31	135	0.22963	140	133	1.052632
2011	35	136	0.257353	102	136	0.75



Does the older driver special rule apply to your state?

No

Assessment of the Effectiveness of the Improvements (Program Evaluation)

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

☐ None

☐ Benefit/cost

☐ Policy change

☒ Other: Other-Statewide reduction in number of fatalities and serious injuries

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.

During the current reporting period of July 1, 2012 to June 30, 2013, the New Mexico DOT HSIP policies changed beginning in July 2012 by halting any further solicitation of proposed safety project applications from public agencies throughout the state, due to a poor set of applications received during early 2012. Then in December 2012 the policy changed again, to reinstating a policy of solicitation and accepting safety project applications from throughout the state, with a deadline of February 1, 2013 for site specific proposed projects or programs plus acceptance and review anytime for certain select proposed systemic safety improvement projects. As the reporting period ended on June 30, 2013, the NM HSIP began internal development work and discussions on changing the safety project application policy once again.

From July 1, 2013 through August 29, 2013 and continuing on into September 2013, the NM HSIP staff will work on revising the NM HSIP project application procedures to include a component where all Regional (non-metropolitan area) Transportation Planning Organizations (RTPOs) and metropolitan planning organizations (MPOs), as representative of their local member governments, will be pre-certified as meeting the FHWA HSIP requirements as part of its safety conscious transportation planning process in their transportation planning work programs. Such pre-certified organizations will be allocated a certain portion of potential HSIP funds allocated to New Mexico as goals for them to submit safety project or program applications with a composite cost meeting or exceeding such HSIP funds allocated to them to encourage them to submit more worthwhile applications that could be approved by the NMDOT and forwarded to FHWA NM Division for consideration. The format of this pre-certified procedure will be similar to *the Transportation Alternatives Program* (TAP) federal funds pre-certification process previously established for these RTPOs and MPOs in New Mexico. It will also propose a year-round continuous period for all eligible agencies in NM to submit HSIP safety project or safety program applications for consideration for funding.

When the NM HSIP staff will have a draft version revised NM HSIP project application procedures for review sometime in September 2013, it will coordinate with Jessica Griffin of the NMDOT, Planning Division, Government to Government Section to schedule a joint MPO/RTPO work session meeting where all MPO/RTPO staff will get to review and suggest further revisions to such a draft NM HSIP project application procedures document. When this document is successfully revised, it will then be sent to FHWA NM Division for their review and either concurrence or rejection.

Once FHWA NM Division has concurred on a new set of application procedures they would go into effect immediately.

SHSP Emphasis Areas

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

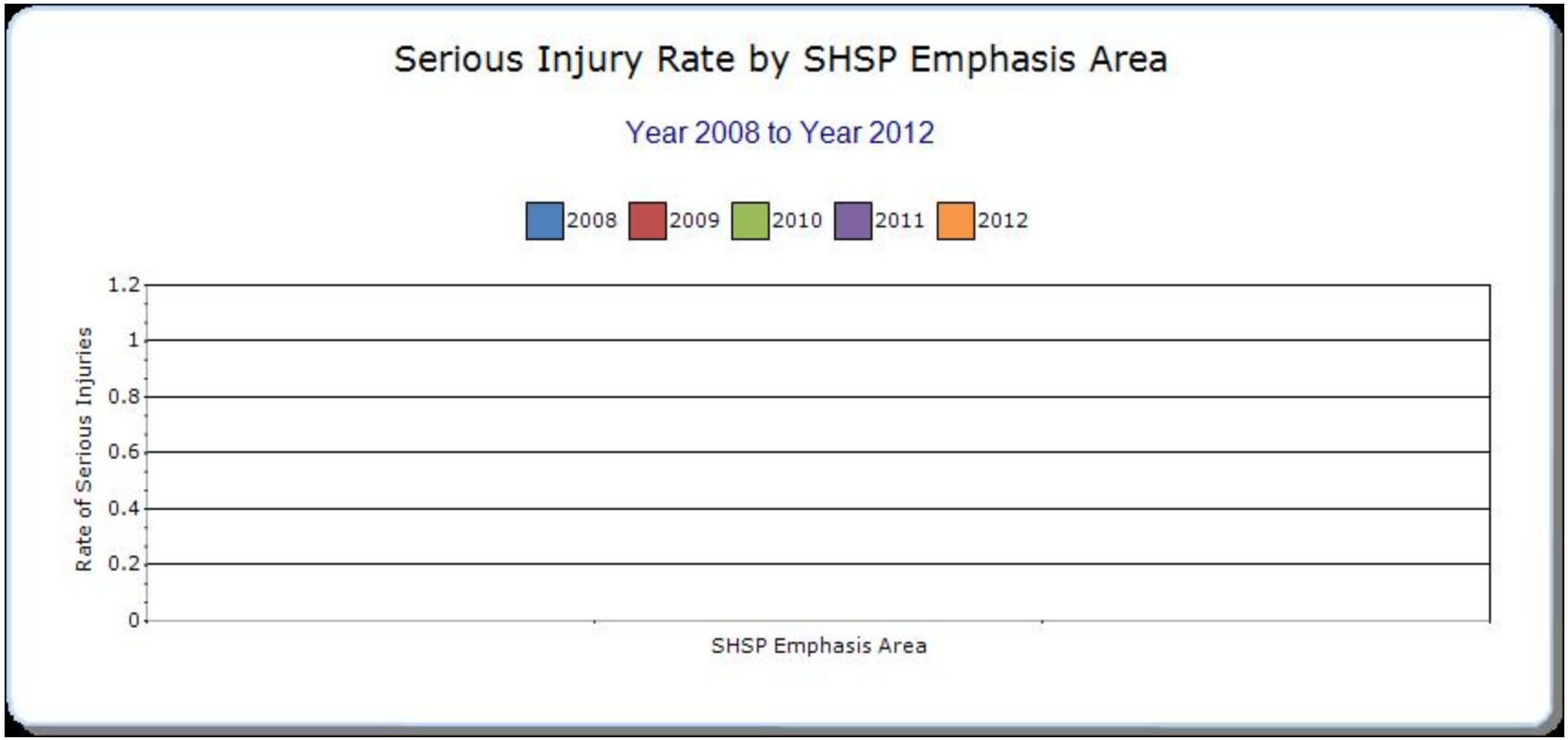
Year - 2012

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
All NM SHSP (Comprehensive Transportation Safety Plan) Emphasis Areas Combined	All	371	0	1.46	0	0	0	0


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


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


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

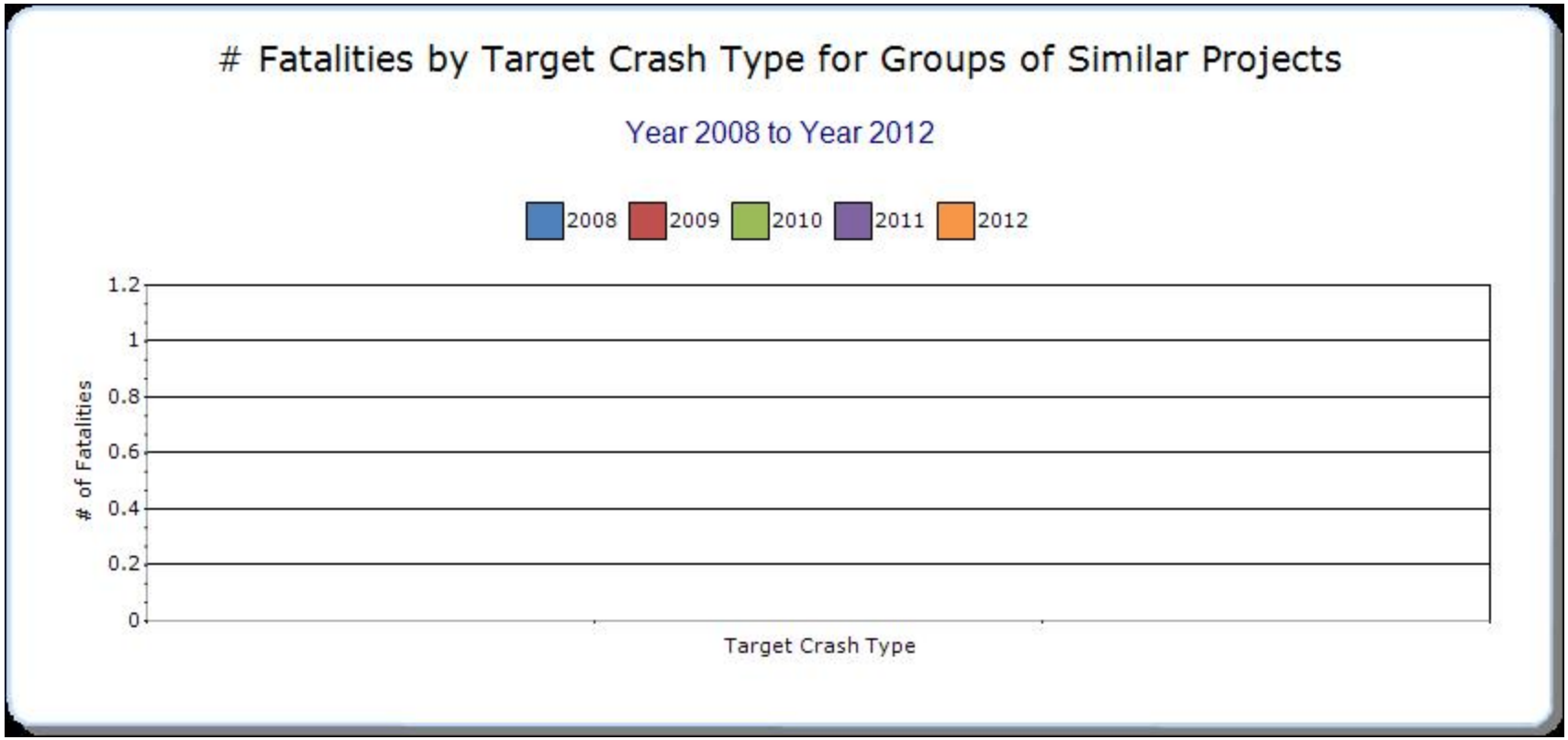

Serious Injury Rate by SHSP Emphasis Area
Year 2008 to Year 2012
2008
2009
2010
2011
2012
1.2
1
0.8
0.6
0.4
0.2
0
Rate of Serious Injuries
SHSP Emphasis Area

Groups of similar project types

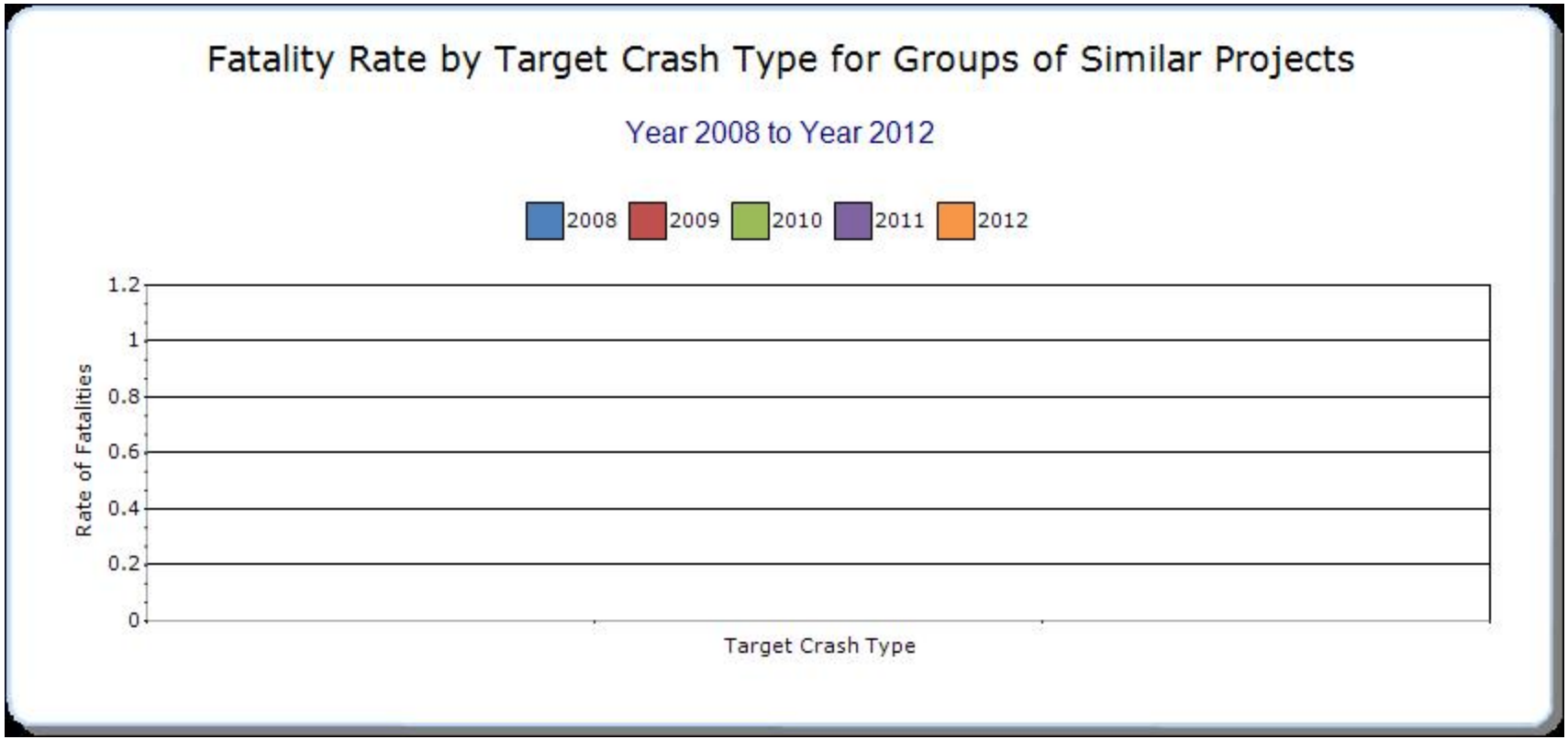
Present the overall effectiveness of groups of similar types of projects.

Year - 2012

HSIP Sub-program Types	Target Crash Type	Number of fatalities	Number of serious injuries	Fatality rate (per HMVMT)	Serious injury rate (per HMVMT)	Other-1	Other-2	Other-3
Fatalities, Serious Injuries, Fatality Rate and Serious injury rate data not available stratified by selected subprograms.		0	0	0	0	0	0	0


Fatalities by Target Crash Type for Groups of Similar Projects
Year 2008 to Year 2012
2008
2009
2010
2011
2012
1.2
1
0.8
0.6
0.4
0.2
0
# of Fatalities
Target Crash Type


#Serious Injuries by Target Crash Type for Groups of Similar Projects
Year 2008 to Year 2012
2008
2009
2010
2011
2012
1.2
1
0.8
0.6
0.4
0.2
0
# of Serious Injuries
Target Crash Type


Fatality Rate by Target Crash Type for Groups of Similar Projects
Year 2008 to Year 2012
2008
2009
2010
2011
2012
1.2
1
0.8
0.6
0.4
0.2
0
Rate of Fatalities
Target Crash Type


Serious Injury Rate by Target Crash Type for Groups of Similar Projects
Year 2008 to Year 2012
2008
2009
2010
2011
2012
1.2
1
0.8
0.6
0.4
0.2
0
Rate of Serious Injuries
Target Crash Type

Systemic Treatments

Present the overall effectiveness of systemic treatments..

Year - 2012

Systemic improvement	Target Crash Type	Number of fatalities	Number of serious injuries	Fatality rate (per HMVMT)	Serious injury rate (per HMVMT)	Other-1	Other-2	Other-3
No data available.		0	0	0	0	0	0	0


Fatalities by Target Crash Type for Systemic Safety Improvements
Year 2008 to Year 2012
2008
2009
2010
2011
2012
1.2
1
0.8
0.6
0.4
0.2
0
# of Fatalities
Target Crash Type


Serious Injuries by Target Crash Type for Systemic Safety Improvements
Year 2008 to Year 2012
2008
2009
2010
2011
2012
1.2
1
0.8
0.6
0.4
0.2
0
# of Serious Injuries
Target Crash Type


Fatality Rate by Target Crash Type for Systemic Safety Improvements
Year 2008 to Year 2012
2008
2009
2010
2011
2012
1.2
1
0.8
0.6
0.4
0.2
0
Rate of Fatalities
Target Crash Type


Serious Injury Rate by Target Crash Type for Systemic Safety Improvements
Year 2008 to Year 2012
2008
2009
2010
2011
2012
1.2
1
0.8
0.6
0.4
0.2
0
Rate of Serious Injuries
Target Crash Type

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

no additional information

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)
No data available														

Optional Attachments

Sections	Files Attached
Progress in Implementing the Projects: Funds Available	HSIP FY2012 Obligation Report 20121203.xlsx
Progress in Implementing the Projects: Funds Available	FY13 Safety Funding Obligation030813.pdf
Progress in Implementing the Projects: Funds Available	HSIP FY2012 Obligation Report 20130208.xlsx
Progress in Implementing the Projects: Funds Available	20130417_safety funding obligation.pdf
Progress in Implementing the Projects: Funds Available	safety funding obligation052913.pdf
Progress in Implementing the Projects: General Listing of Projects	NM HSIP FY2013 Programmed and or Obligated.xlsx
Assessment of the Effectiveness of the Improvements: Overview of General Highway Safety Trends	NM MAP-21 Performance Measures, Safety, Years 2006 to 2011 Statewide Network, Year 2030 Performance Goal, revised.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.