

Nevada Highway Safety Improvement Program 2015 Annual Report

Prepared by: NV

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."

Table of Contents

Disclaimer	ii
Executive Summary	1
Introduction	2
Program Structure	2
Program Administration	2
Program Methodology	8
Progress in Implementing Projects	30
Funds Programmed	30
General Listing of Projects	33
Progress in Achieving Safety Performance Targets	35
Overview of General Safety Trends	35
Application of Special Rules	49
Assessment of the Effectiveness of the Improvements (Program Evaluation)	51
SHSP Emphasis Areas	52
Groups of similar project types	57
Systemic Treatments	62
Project Evaluation	68
Glossary	70

Executive Summary

This annual Highway Safety Improvement Program (HSIP) report for 2015 summarizes the activities of the Nevada Department of Transportation's HSIP as required by MAP-21. MAP-21 continued the HSIP as one of the main core programs under USC Title 23 subsections 148 and 130, and increased the HSIP allocations in the Federal Fiscal Years 2013, 2014 and 2015. Available program funds for the purpose of this report are considered to be those funds obligated during the 2015 federal fiscal year. The activities of the Nevada Department of Transportation (NDOT) are primarily designed to develop safety improvement projects for the following areas:

- Systemic roadway improvements
 - o Safety management plans
 - High crash locations (intersections and roadway segments)
 - o Rural lane departure crash mitigation
 - o Rural intersection low cost safety improvements
 - o Urban intersection related crash mitigation
- Pedestrian related crash mitigation
- Tribal Low Cost Safety Improvements

The crash data on all public roadways contained in this report is extracted from the Nevada Citation and Accident Tracking System (NCATS) and Brazos crash databases, and prepared for Safety Engineering's analysis as a normalized view. After the crash data is downloaded from the NCATS and Brazos databases, it is processed through our geo-location software and is linearly referenced to the statewide street centerline data. The geo-location software tools automate the cleanup of location attributes and assign a spatial location to the crash data through a series of database procedures.

The HSIP program is administered by the NDOT Traffic Safety Engineering section, a centrally located component of the NDOT. The methods used by the Traffic Safety Engineering section to identify, select, implement, and evaluate safety improvement projects have been compiled in the NDOT's "Safety Procedural Manual," implemented in 1980, amended in 1990, and 2010. The draft of the current updated Safety Procedural Manual is in the process of being reviewed with the local FHWA program engineer and NDOT management.

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.

Under the systemic roadway improvements approach, NDOT Traffic Safety Engineering evaluates local roads for safety improvements such as Slope Flattening/Shoulder Widening, Flashing Yellow Arrows, and turn pockets with acceleration/deceleration lanes on rural highways. We are also starting a project that will identify and evaluate curves on local roads for mitigations such as chevrons, advanced signage, and high frictions surfaces.

identity which internal partners are involved with Highway Safety Improvement Program planning.
⊠Design
⊠Planning
Maintenance
⊠Governors Highway Safety Office
Other: Other-District Offices

Briefly describe coordination with internal partners.

NDOT Traffic Safety Engineering coordinates with:

- 1. The NDOT Roadway Design team at many different levels to include, recommend or request the inclusion of safety improvements from strategies identified in the Strategic Highway Safety Program (SHSP), Road Safety Assessments (RSA), Safety Management Plans (SMPs) or locations identified as safety management areas:
- Preliminary Field Design Survey at this level the traffic safety team recommends possible improvements to include into the project based on the review of field conditions.
- Pre-design at this level the traffic safety team evaluates the design concepts for the inclusion of safety improvements and recommends possible safety improvements to include into the project.
- Intermediate design at this level the traffic safety team evaluates the preliminary design for the inclusion of safety improvements and recommends possible safety improvements to include into the project.
- Final design at this level the traffic safety team evaluates the final design for the inclusion of safety improvements.

Also, NDOT Traffic Safety Engineering coordinates with the Roadway Design team to educate them in the latest safety strategies and provides guidance regarding safety improvements and ideas. This includes the utilization of the strategies included in the SHSP, the HSM and the federal guidelines.

- 2. The NDOT Maintenance/Operations division during RSA's, SMPs and miscellaneous field reviews.
- 3. The NDOT Planning division at many different levels to, provide guidance regarding safety improvements in the development of projects and by recommending safety improvements for inclusion into projects that are in the early stage of development. Also, Traffic Safety Engineering coordinates with the Roadway Design Scoping section to initiate and recommend safety improvements into projects that are currently being evaluated. This coordination with the Scoping team also includes the 3R evaluation team when they complete their field reviews for upcoming projects.
- 4. The NDOT Traffic Operations division when developing / implementing safety projects, which includes signal design, lighting design, operational analysis of roadway segments and intersections, and development and discussion of safety strategies, methodologies and guidelines.
- 5. The Governors Highway Safety Office (The Department of Public Safety Office of Traffic Safety, OTS). Traffic Safety Engineering has been coordinating with the OTS since the inception of the SHSP and has funded many behavioral components of the OTS. Because of this long ongoing coordination between Traffic Safety Engineering and OTS, the safety messages continue to reach more and more road users in the state of Nevada which results in achieving our combined performance measures.
- 6. The NDOT District offices to gain knowledge of the locations that are of concern to the district to determine if they are being identified as potential safety project locations.

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

Metropolitan Planning Organizations
☑Governors Highway Safety Office
◯Other: Other-Emergency Medial Services
Other: Other-Tribal associations

Identify any program administration practices used to implement the HSIP that have changed since the last reporting period.
Multi-disciplinary HSIP steering committee
☑Other: Other-No changed in our progam administration practices since 2014

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

Nevada Strategic Highway Safety Plan:

Early in 2014 the Nevada Executive Committee on Traffic Safety (NECTS) approved the inclusion of older and younger drivers, bicyclist, pedestrians and motorcycles as "vulnerable road users". In the fall of 2014, we elevated motorcycles to a Critical Emphasis Area.

The State participated in a FHWA peer to peer exchange with Idaho, Utah, California, Arizona and Maryland. This was held prior to and as a lead into our Safety Summit which was focused on updating our SHSP for 2016- 2020 time frame. The Safety Summit was held in Reno Nevada in March and we had around 250 participants.

Recurring activities for the SHSP included semi-annual meetings of the Nevada Executive Committee on Traffic Safety (NECTS), and quarterly meetings for the SHSP Technical Working Group, five SHSP Critical Emphasis Area (CEA) teams, and the Data Team. Moving forward we will have the 6 CEA's, Intersections, Impaired Driving, Occupant protection, Pedestrians, Lane departures and Motorcycle's.

<u>Behavioral and Enforcement Efforts: Zero Fatalities Campaign and Coordination with the</u> Office of Traffic Safety:

The state of Nevada's Zero Fatalities public outreach campaign persisted in engaging motorists in Federal Fiscal Years 2014 and 2015 (FY14 and FY15) in an effort to save lives by promoting the six

fundamental driving safety tips updated in the state's SHSP. The campaign is the result of a joint effort, leveraging and coordinating NDOT and Office of Traffic Safety (OTS) resources to assist in reaching the state's goal by providing powerful, cohesive and instantly-recognizable traffic safety campaigns.

The NDOT Safety Engineering team has continued coordinated efforts with the Office of Traffic Safety (OTS). This partnership has been ongoing since the inception of the Strategic Highway Safety Plan (SHSP) wherein NDOT has funded behavioral components of OTS programs for several years now with funding from the Highway Safety Improvement Program.

For (FY14 and FY15), NDOT again collaborated with OTS to support both the paid media/outreach and the data-driven high visibility enforcement (HVE) components of the OTS traffic safety and public education programs. These efforts focused on seat belt safety, impaired driving prevention, distracted driving prevention, pedestrian safety, motorcycle safety, and teen drivers. Paid media is a large part of the OTS marketing strategy and is used in conjunction with safety initiatives synced with the state's Joining Forces enforcement timing and the National enforcement and media calendars. Media campaigns unify public messaging and education by reinforcing the Zero Fatalities brand as a part of all programs.

Specifically, the 2014 high visibility enforcement and media campaign focusing on distracted driving, *It Can Wait for 28*, was highly successful. Twenty three of the state's law enforcement agencies came together and collaborated during two separate events in FY14. In total, officers issued 13,343 citations. From those citations, 31 were DUI arrests; 3,388 for speeding; 2,672 for cell phone use; 266 for red light running and making contact (stops) with 10,101 drivers.

In 2015, the Zero Teen Fatalities Program also achieved unprecedented growth with over 2200 millennials registering for in the program and spreading messages through social media about the consequences of unsafe driving behaviors. NDOT and OTS supported the program as it guided teens through three major competitions resulting in the distribution of more than \$20,000 in prizes and awards donated by community partners and business supporting the Zero Fatalities doctrine.

Road Safety Assessments (RSA's)

The RSA program is very active in Nevada and has been incorporated as a standard for all new projects. There were 12 RSAs performed from July 2014 to July 2015. The RSA program primarily focused for NDOT on 3R preservation projects, corridor studies, and Safety Management Plans; and projects/corridor studies for the City of Las Vegas, and the Washoe County and Southern Nevada Regional Transportation Commissions. The RSA program was also extended to the Nevada Indian Reservations and Colonies. RSAs were conducted for Duckwater Sho-Pai Tribes, Te-Moak Tribe of Western Shoshone (Battle Mountain Band Council, Elko band Council, South Fork Band council, and Wells Band Council), and Washoe Tribe of Nevada and California (Carson Colony Community Council, Dresslerville Community Council, Stewart Community Council, and Woodfords Community Council).

Furthermore, RSA program included the use of Human Factors Guidelines (NCHRP 600) and the road safety performance evaluation by Highway Safety Manual. In July 2015, the FHWA Resource Center through the Nevada Local Technical Assistance Program (LTAP) held a two day class on Roadway RSAs in Reno and Las Vegas, Nevada with 29 and 22 participants respectively.

Systemic improvements:

Shoulder widening & slope flattening on rural two lane highways, median cable barrier rail installations, centerline rumble stripes, flashing yellow arrow installations.

Safety Management Plans: a safety focused corridor study

Three SMP locations were chosen along corridors with high crash locations. These SMP's will evaluate the needs of all modes of transportation and make recommendations for future projects.

- Craig Rd in North Las Vegas (Decatur to 5th)
- Eastern Ave/Civic Center in Las Vegas (Cope to US 95)
- Second St and Arlington Ave in Reno (Keystone to I580 and Court to 6th)

Safety Engineering Design Services (SEDs):

The SEDs may be used to design safety improvements identified in RSAs and SMPs.

Other miscellaneous projects & activities:

NDOT Traffic Safety Engineering is participating in the funding of two wildlife animal crossings at Pequop Summit over Interstate 80. We have also updated NDOT rumble stripe standards to include quiet rumbles and bike rumbles. A guideline for evaluating uncontrolled crosswalks was developed along with a system for prioritizing pedestrian safety improvements at various locations throughout the state.

As a result of the four Road Safety Assessments (RSA's) conducted on Tribal lands, NDOT Traffic Safety Engineering is currently preparing the first "Low Cost Safety Improvements" project with the Te-Moak Tribe of western Nevada. We plan to continue this effort with the other Tribes that have completed RSA's.

Highway Safety Manual Implementation:

The NDOT Safety Engineering section has been continuing their strategic deployment of the HSM. During fiscal year 2015, the following is a summary of the main accomplishments:

 Participated in the NCHRP Project 17-50 Lead States Initiative for Implementing the HSM as a Support State and continue with that effort. Established an agreement with the University of Nevada Reno Center for Advanced Transportation Education and Research to support HSM Implementation in Nevada. Tasks include Predictive Method Safety Performance Function (SPF) calibration and independent SPF development, HSM before and after procedures and HSM application case studies. (ongoing from 2013).

Program Methodology Select the programs that are adm	inistered 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		Right Angle Crash
Left Turn Crash	Shoulder Improvement	Segments
Other:		
Program:	Intersection	
Date of Program Methodology:	3/9/1997	
What data types were used in the	e program methodology?	
Crashes	Exposure	Roadway

	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 metho	dology was used for this program?	
Crash frequency		
Expected crash frequency with E	EB adjustment	
Equivalent property damage on	y (EPDO Crash frequency)	
EPDO crash frequency with EB a	djustment	
Relative severity index		
⊠Crash rate		
Critical rate		
Level of service of safety (LOSS)		
Excess expected crash frequence	y using SPFs	
Excess expected crash frequence	y with the EB adjustment	
Excess expected crash frequence	y using method of moments	
Probability of specific crash type	25	
Excess proportions of specific cr	ash types	
Other		
Are local roads (non-state owned	and operated) included or addresse	ed in this program?
⊠Yes		

2015

□No	
	sing the same methodology as state roads?
	sing the same methodology as state roads:
⊠Yes	
No	
How are highway safety improvement p	projects advanced for implementation?
Competitive application process	
selection committee	
Other	
☑Other-Priority Ranking	
rankings. If weights are entered, the sur both processes the same rank and skip t	in project prioritization. Enter either the weights or numerical m must equal 100. If ranks are entered, indicate ties by giving 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
	2
☐Incremental B/C	
Ranking based on net benefit	
Other	
⊠combining with other projects with our traffic safety partners	

2015

Program:	Rural State Highways	
Date of Program Methodology:	10/22/2012	
What data types were used in th	e program methodology?	
Crashes	Exposure	Roadway
	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 meth	odology was used for this program?	
Expected crash frequency with	EB adjustment	
Equivalent property damage o	nly (EPDO Crash frequency)	
EPDO crash frequency with EB	adjustment	
Relative severity index		
⊠Crash rate		
Critical rate		
Level of service of safety (LOSS	5)	
⊠Excess expected crash frequen	cy using SPFs	
Excess expected crash frequen	cy with the EB adjustment	
Excess expected crash frequen	cy using method of moments	

Probability of specific crash types	
Excess proportions of specific crash	n 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	d using the same methodology as state roads?
⊠Yes	
□No	
How are highway safety improvemen	at projects advanced for implementation?
Competitive application process	
selection committee	
Other	
⊠Other-Priority Ranking	
the relative importance of each proce rankings. If weights are entered, the	e projects for implementation. For the methods selected, indicate ess in project prioritization. Enter either the weights or numerical sum must equal 100. If ranks are entered, indicate ties by giving ip the next highest rank (as an example: 1, 2, 2, 4).
Relative Weight in Scoring	
Rank of Priority Consideration	
	1
	2

2015

☐ Incremental B/C ☐ Ranking based on net ber ☐ Other ☐ Combining with other probeing done by our traffic safe partners	ojects 3	
Program:	Crash Data	
Date of Program Methodology:	3/9/1997	
What data types were used in the Crashes	e program methodology? 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-Crash Data	Other
What project identification meth Crash frequency Expected crash frequency with	odology was used for this program? EB adjustment	
Equivalent property damage of	nly (EPDO Crash frequency)	

2015

Nevada

EPDO crash frequency with EB adjustment

Relative severity index
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?
Are local roads (non-state owned and operated) included or addressed in this program? ☐ Yes
⊠Yes
⊠Yes □No

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 ber	nefit	
Other		
we use the crash data to prioritze projects for implementation		
Program:	Pedestrian Safety	
Date of Program Methodology:	3/15/2015	
What data types were used in th	e program methodology?	
Crashes	Exposure	Roadway
⊠All crashes	Traffic	Median width
Fatal crashes only	⊠Volume	Horizontal curvature
Fatal and serious injury crashes only	Population	
Other	Lane miles	Roadside features
	Other	Other

2015

What project identification methodology was used for this program?
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 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-Priority Ranking		
the relative importance of each p rankings. If weights are entered, t both processes the same rank and	rocess in pro the sum must	for implementation. For the methods selected, indicate ject prioritization. Enter either the weights or numerical tequal 100. If ranks are entered, indicate ties by giving at highest rank (as an example: 1, 2, 2, 4).
Relative Weight in Scoring		
Rank of Priority Consideration		
⊠Ranking based on B/C	1	
	2	
☐Incremental B/C		
Ranking based on net ben	efit	
Other		
Combining with other probeing done by our traffic safe partners		
Program:	Segments	
Date of Program Methodology:	9/15/2015	
What data types were used in the	e program me	ethodology?
Crashes	Exposure	Roadway
	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 metho	odology was used for this program?	
Expected crash frequency with	EB adjustment	
⊠Equivalent property damage on	ly (EPDO Crash frequency)	
EPDO crash frequency with EB a	adjustment	
Relative severity index		
⊠Crash rate		
Critical rate		
Level of service of safety (LOSS)		
⊠Excess expected crash frequence	y using SPFs	
Excess expected crash frequenc	y with the EB adjustment	
Excess expected crash frequenc	y using method of moments	
Probability of specific crash type	es	
Excess proportions of specific co	rash types	
Other		
Are local roads (non-state owned	and operated) included or addresse	ed in this program?
⊠Yes		
□No		

2015

If yes, are local road projects identified u	using the same methodology as state roads?
⊠Yes	
□No	
How are highway safety improvement	projects advanced for implementation?
Competitive application process	
selection committee	
Other-Priority Ranking	
the relative importance of each process rankings. If weights are entered, the sur	projects for implementation. For the methods selected, indicate in project prioritization. Enter either the weights or numerical m must equal 100. If ranks are entered, indicate ties by giving 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
	2
☐Incremental B/C	
Ranking based on net benefit	
Other	
Combining with other projects being done by our traffic safety partners	3

What proportion of highway safety improvement	program funds address systemic improvements?
80	
Highway safety improvement program funds are improvements?	used to address which of the following systemic
□ Cable Median Barriers	⊠Rumble Strips
Traffic Control Device Rehabilitation	
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-Safety Management Plans
What process is used to identify potential counter	rmeasures?
Engineering Study	
Road Safety Assessment	
Other: Other-Crash Data Evaluation	
◯ Other: Other-Safety Management Plans	

Identify any program methodology practices used to implement the HSIP that have changed since th 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.

Nevada Strategic Highway Safety Plan:

During FFY 15, five key activities were conducted for the implementation of the Nevada Strategic Highway Safety Plan (SHSP). These included:

- adding the Motorcycle Critical Emphasis Area (CEA) as the sixth CEA;
- hosting a FHWA Peer to Peer exchange on SHSP Best Practices;
- hosting the Nevada Traffic Safety Summit in Reno, Nevada in March 2015;
- participating in the Nevada Tribal Transportation Safety Summit in May 2015;
- initiating the "It Can Wait for 28 Challenge" focused on breaking the distracted-driving habit.

Brief descriptions of these five key activities are provided below. Recurring activities for the SHSP included semi-annual meetings of the Nevada Executive Committee on Traffic Safety (NECTS), quarterly meetings for the SHSP Technical Working Group, and meetings for the six SHSP CEAs Teams that met either quarterly or every other month. The Data Team and Strategic Communications Alliance (SCA) are focusing on coordinating and disseminating materials among SHSP partners.

Adding the Motorcycle Critical Emphasis Areas (CEA) as the sixth CEA:

The Nevada SHSP members and NECTS agreed that the number and percentage of fatalities and serious injuries involving motorcyclists in Nevada has grown significantly over the last few years to a point where a CEA focused on motorcycles was necessary. An addendum to the 2011 to 2015 Nevada SHSP finalized in the fall of 2014 documents that a sixth CEA has been added to focus on Motorcycles. The Motorcycle CEA kicked off at the end of October 2014 and met every other month starting in January 2015. The CEA team meetings were typically attended by 10 to 15 people representing the 4 Es of engineering as well as motorcycle advocates, vendors and safety training instructors. The team has developed the following four proposed strategies:

- 1. Increase targeted enforcement and public education programs (specifically speeding and impaired riding and yielding to motorcycles).
- 2. Increase the percentage of motorcyclists that are licensed and trained.
- 3. Improve motorcycle-friendly roadway design, traffic control, construction, and maintenance policies and practices.
- 4. Increase crash survivability through increasing the use of appropriate protective gear and improved emergency response.

Hosting a FHWA Peer to Peer Exchange on SHSP Best Practices:

NDOT hosted a peer exchange March 4 and 5, 2015, in Carson City, Nevada, with support from the FHWA Office of Safety. Representatives from FHWA, NDOT, the Arizona Department of Transportation (ADOT), the Utah Department of Transportation (UDOT), the California Department of Transportation (Caltrans), the Idaho Transportation Department (ITD), the Maryland Department of Transportation (MDOT), the Nevada Department of Public Safety's Office of Traffic Safety (DPS/OTS) and Nevada Highway Patrol (DPS/NHP) attended the event.

This event focused on providing NDOT with noteworthy practices from other States to incorporate into their 2016-2020 SHSP update, as well as to provide Nevada an opportunity to share their SHSP successes and challenges. This peer exchange centered on presentations, question and answer sessions, and facilitated discussions. Peers discussed a variety of SHSP-related topics, including

- emphasis area strategy selection;
- addressing performance measures;
- local and regional SHSP implementation;
- Tribal outreach;
- communication and collaboration; and
- Safety culture and SHSP integration.

Hosting the Nevada Traffic Safety Summit in Reno in March 2015:

The Nevada Safety Summit was held on March 24-25, 2015 at the Peppermill Resort in Reno, Nevada. The purpose of the Summit was to gather safety partners together to develop strategies and action steps to use as the foundation for the 2016-2020 Nevada Strategic Highway Safety Plan (SHSP) Update. Approximately 240 attendees participated in the two-day Summit, representing all 4 "E's" of transportation safety: Engineering, Enforcement, Education, and Emergency Services. Attendees were divided into breakout sessions for each Critical Emphasis Area (CEA):

- Impaired Driving;
- Intersections;
- Lane Departures;
- Motorcycles;
- Occupant Protection; and
- Pedestrians.

There were two breakout sessions for each CEA. The first breakout, Session 1 included a review of statewide crash data and the top issues related to traffic safety, and small group discussion on data needs. Electronic polling devices were used so that each individual attending the summit was able to contribute in the ranking of critical issues. The Session 2 breakout focused on small group discussions identifying the top strategies and related action steps.

Results from the breakout sessions are being used as a base in the development of the 2016-2020 SHSP Update. The strategies listed are in the basic format from national resources that were used at the Summit, however the specific wording will be customized for Nevada in coordination with each CEA team. Presentations, handouts, and results of the Nevada Safety Summit are available at www.safetysummitnv.com.

Participating in the Nevada Tribal Transportation Safety Summit in May 2015

There are 27 federally recognized tribal communities in Nevada. Nevada has been reaching out to tribal communities within Nevada regarding transportation safety. Nevada has provided Road Safety Assessments and Low Cost Safety Improvement Projects to tribes that have expressed interest. The 2015 Nevada Tribal Transportation Safety held in May 2015 was hosted by the National Indian Justice Center and was a great opportunity to meet with additional tribal members and to present at the conference on the successful projects within Nevada that NDOT has completed with tribal communities. The summit was attended by approximately 35 people and 15 different tribes or agencies. The summit included presentations and discussion on the following topics:

- Developing Tribal Transportation Safety Programs;
- Gathering and Analyzing Data;

- Transportation Safety Planning;
- Building Safety Measures Into Transportation;
- Conducting Tribal Road Safety Assessments; and
- Safety Circuit Rider.

Initiating an "It Can Wait for 28 Challenge" Focused on Breaking the Distracted-Driving Habit:

There are more than 3,500 distraction-related crashes in Nevada every year and the "It Can Wait for 28 Challenge" was developed to drastically reduce that number. The challenge is designed to divert violators of Nevada's "hands free" law into an educational program and ultimately gain voluntary compliance. Motorists cited for a distracted-driving violation are notified of the program by the officer and must register within 24 hours of receiving their citation. Violators that complete the 28 day challenge will have their distracted-driving citation dismissed and be eligible to win prizes. The primary purpose of the "It Can Wait for 28 Challenge" is to bring increased awareness to the problem of distracted driving and to help the public learn to break dangerous distracted driving habits. The name of the program reflects on the commonly held perception that it takes 28 days to overcome a bad habit. The initial pilot deployment of the program in 2015 was very successful.

Zero Fatalities Traffic Safety Campaign:

NDOT and OTS have greatly strengthened their efforts in coordinating the Zero Fatalities program this year and worked together to appoint a new Media & Marketing Liaison, who acts as the single point of contact for all media and campaign agencies. This role has helped to increase communication between NDOT and OTS, to decrease duplication and optimize the traffic safety education efforts across the state.

Elements

This year, the Zero Fatalities traffic safety campaigns focused on the following areas

- Pedestrian safety
- Motorcycle safety
- Distracted driving
- Impaired driving
- Occupant protection
- Intersection safety
- Bicycle safety
- Drowsy driving
- Aggressive driving
- Teen driving

The brand promoted these messages across the following channels:

- TV / Video (traditional broadcast, cinema and online outlets such as Hulu and YouTube)
- Radio (traditional broadcast and online outlets such as Pandora)
- Outdoor (billboards, posters, gas pump ads and transit signage)
- Digital (online banners, homepage takeover ads)
- Social (Facebook, Twitter and Instagram)
- Sports sponsorships (signage at UNLV and UNR sports events and Las Vegas 51s and Reno Aces baseball games)
- Outreach (community and safety events)
- Public relations (media interviews and press releases)

Updates & Results

Zero Fatalities greatly increased its online presence this year, running more online videos, radio, banners and promoted posts than ever before. The website (zerofatalitiesnv.com) was also updated this year to include responsive capabilities – meaning that mobile and tablet users now experience the same optimized site functionality as they do on desktop. However, the most significant increase the brand has seen this year is in social media. This platform has proved to be extremely resourceful in traffic safety education; not only can we create more awareness of our key traffic issues, we can also engage directly with the community and hold a two-way conversation. With this priority to increase engagement and listening to our social community, the Zero Fatalities Facebook page achieved nearly 16,700 page likes by the end of August 2015, a 67% increase from the same time last year.

With the addition of Motorcycle Safety to the critical emphasis areas, there has also been an increase in Zero Fatalities Motorcycle Safety awareness communication in conjunction with the Nevada Rider Motorcycle Safety Program. From October 2014 – August 2015, the Zero Fatalities campaigns have garnered over 20 million impressions encouraging Nevada riders to ride sober, wear a helmet and protective gear, slow down and get trained and licensed.

NDOT and OTS have continued to coordinate with local community organizations to further expand the Zero Fatalities grassroots messaging and outreach efforts. At Las Vegas's First Friday Event alone, Zero Fatalities coordinated with the Clark County School District Police Department, Las Vegas Metropolitan Police Department, Community Ambulance, and Regional Transportation Commission (RTC) of southern Nevada to reach more than 10,000 people with bike and pedestrian safety messages.

Other partner agencies, such as the Department of Motor Vehicles (DMV), Nevada Highway Patrol (NHP), Commercial Enforcement Section, Washoe RTC, the City of Reno and many others have continued to support the Zero Fatalities program through media efforts and community outreach efforts.

Zero Fatalities also initiated a program called Certified Zero, a sub-program of Zero Fatalities that trains and certifies key stakeholders, businesses and government agencies on the Zero Fatalities program and traffic safety goals. This year, Zero Fatalities has presented the Certified Zero presentation 5 times and has certified 140 people.

Overall, from August 2014 – August 2015, Zero Fatalities-branded campaigns delivered more than 282 million impressions. The most recent Zero Fatalities public opinion survey (September 2014) shows that 60% of Nevadans have heard of the program (up from 50% in 2013) and 77% of those polled said the Zero Fatalities campaigns had influenced them to focus on the road and to stop driving distracted.

Coordination with the Nevada DPS - OTS:

DPS-OTS and the Nevada's Zero Fatalities Program have continued their combined public outreach campaign optimizing their resources and persisted in engaging motorists in an effort to save lives by promoting the now, six fundamental driving safety tips updated in the state's SHSP. The campaign is the result of a joint effort, leveraging and coordinating NDOT and OTS resources to assist in reaching the state's goal by providing powerful, cohesive and instantly-recognizable traffic safety campaigns.

The NDOT Safety Engineering team has continued the coordinated efforts with OTS. This partnership has been ongoing since the inception of the SHSP wherein NDOT has funded behavioral components of OTS programs for several years now with funding from the HSIP.

For FFY 15, NDOT again collaborated with OTS to support both the paid media/outreach and the data-driven high visibility enforcement (HVE) components of the OTS traffic safety and public education programs. These efforts focused on seat belt safety, impaired driving prevention, distracted driving prevention, pedestrian safety, motorcycle safety, and teen drivers. Paid media is a large part of the OTS campaign strategy and is used in conjunction with safety initiatives synced with the state's Joining Forces enforcement timing and the National enforcement and media calendars. Media campaigns unify public messaging and education by reinforcing the Zero Fatalities brand as a part of all programs.

Specifically, the high visibility enforcement and media campaign focusing on distracted driving, "It Can Wait for 28", was highly successful. Twenty three of the state's law enforcement agencies came together and collaborated during two separate events. In total, officers issued 13,343 citations. From those citations, 31 were DUI arrests; 3,388 for speeding; 2,672 for cell phone use; 266 for red light running and making contact (stops) with 10,101 drivers.

In FY15, the Zero teen Fatalities Program also achieved unprecedented growth with over 2200 millennials registering for in the program and spreading messages through social media about the consequences of unsafe driving behaviors. NDOT and OTS supported the program as it guided teens through three major competitions resulting in the distribution of more than \$20,000 in prizes and awards donated by community partners and business supporting the Zero Fatalities doctrine.

Road Safety Assessments (RSA's)

The RSA program is very active in Nevada and has been incorporated as a standard for all new projects. There were 12 RSAs performed from July 2014 to July 2015. The RSA program primarily focused for NDOT on 3R preservation projects, corridor studies, and Safety Management Plan; and projects/corridor studies for the City of Las Vegas, and Washoe and Southern Nevada Regional Transportation Commission. The RSA is continuing and extended the program to the Nevada Indian Reservations and Colonies. For FFY 15, RSAs were conducted for Yerington Piute Tribe, Washoe Tribe of Nevada and California (Carson Colony Community Council, Dresslerville Community Council, Stewart Community Council, and Woodfords Community Council).

Furthermore, RSA program included in the procedure the use of Human Factors Guidelines (NCHRP 600) and the road safety performance evaluation by Highway Safety Manual. In July 2015, the FHWA Resource Center through the Nevada Local Technical Assistance Program (LTAP) held a two day class on Roadway RSA in Reno and Las Vegas, Nevada with 29 and 22 participants respectively.

Systemic improvements:

Shoulder widening & slope flattening with passing lanes on rural two lane highways, median cable barrier rail installations, centerline rumble stripes, flashing yellow arrow installations.

<u>Safety Management Plans: a safety focused corridor study</u>

Three SMP locations were chosen along corridors with high crash locations. These SMP's will evaluate the needs of all modes of transportation and make recommendations for future projects.

- Craig Rd in North Las Vegas (Decatur to 5th)
- Eastern Ave/Civic Center in Las Vegas (Cope to US 95)
- Second St and Arlington Ave in Reno (Keystone to I580 and Court to 6th)

<u>Safety Engineering Design Services (SEDs):</u>

The SEDs may be used to design safety improvements identified in RSAs and SMPs.

Other miscellaneous projects & activities:

Traffic Safety Engineering has participated in funding two wildlife animal crossing at Pequop Summit over Interstate 80. We have also updating NDOT rumble stripe standards to include quiet rumbles and bike rumbles. A guideline for evaluating uncontrolled crosswalks was developed along with a system for prioritizing pedestrian safety improvements at various locations throughout the state.

As a result of the four Road Safety Assessments (RSA's) conducted on Tribal lands and Traffic Safety Engineering is currently preparing the first "Low Cost Safety Improvements" project with the Te-Moak Tribe of western Nevada. We plan to continue this effort with the other Tribes that have completed RSA's.

Highway Safety Manual Implementation:

NDOT has been continuing their strategic deployment of the Highway Safety Manual (HSM). During fiscal year 2015, the following are the main accomplishments:

- Participated in the FHWA Pooled Fund Study on HSM Implementation and will be attending the HSM Peer Exchange in September 2015.
- Used the University of Nevada Reno Center for Advanced Transportation Education and Research to support HSM Implementation in Nevada. Tasks include Horizontal Curve Analysis, Safety Analyst Database Research, Urban High Crash Corridor Criteria, Wildlife Highway Crossing Monitoring, and a Safety Performance Function Data Work Plan as well as coordinated with UNR on their Strategic Highway Research Program (SHRP) 2 Pedestrian Safety Research.
- Hosted numerous HSM Implementation meetings with individual implementers from NDOT Scoping Division, NDOT Roadway Design and NDOT Safety Engineering to review design alternatives there are working on and assisting with application of the HSM.
- Prepared website materials for applying the Highway Safety Manual in Nevada.
- Scheduling HSM Practitioners and IHSDM training for Fall 2015.

Involvement in FHWA Pooled Fund Studies on HSM Implementation and Low Cost Safety Countermeasures:

Nevada participated in two FHWA-sponsored Pooled Fund Studies (PFS) during fiscal year 2015. One PFS focused on HSM implementation and the other on low cost safety countermeasures. The purpose of these PFSs is to have coordination among multiple states on best practices and lessons learned on

applying effective engineering safety countermeasures. NDOT is attending a Peer Exchange on HSM Implementation as part of the HSM PFS in September 2015 that covers the following topics:

- National Efforts;
- Data: Innovative Approaches for Obtaining and Managing Data for the HSM;
- HSM Case Studies: Programming Planning and Network Screening;
- Policy, Guidance, Training: Building Blocks of Institutionalization;
- Increasing HSM Implementation—Communicating to the Various Users; and
- Calibration and SPF Development.

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)	20139693	95 %	23767629	95 %		
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	1006984.65	5 %	1188381.45	5 %		

Totals	21146677.65	100%	24956010.45	100%

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

\$0.00

How much funding is obligated to local safety projects?

\$0.00

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

\$5,146,150.00

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

\$5,146,150.00

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

\$2,755,427.00

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

\$0.00

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

There were no local projects obligated in FY 2015. The projects were programmed in FY15 but funded in FY14.

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

Nevada Department of Transportation, Traffic Safety Engineering will continue to implement the HSIP as described in MAP-21 or until a new transportation bill is approved.

General Listing of Projects

List each highway safety improvement project obligated during the reporting period.

Project	Improvement Category	Output	HSIP Cost	Total Cost	Funding Categor	Functional Classificatio	AAD T	Spee d	Roadway Ownershi	Relationship to SHSP	
					у	n			р	Emphasis Area	Strategy
US 95 Shoulder Widening and Slope flattening	Shoulder treatments Widen shoulder - paved or other	44.2 Miles	585047 9	6158399	HSIP (Section 148)	Rural Principal Arterial - Other	2300	70	State Highway Agency	Lane Departure	Lessen Crash severity in the event of a lane departure
US 95 Shoulder Widening and Slope flattening	Shoulder treatments Widen shoulder - paved or other	29 Miles	997100 5	1137579 6	HSIP (Section 148)	Rural Principal Arterial - Other	850	70	State Highway Agency	Lane Departure	Lessen Crash severity in the event of a lane departure
SR 160, Pahrump Valley Rd (Modify Cable Barrier Rail and median crossovers)	Roadside Barrier - cable	10 Number s	800000	876937	HSIP (Section 148)	Rural Principal Arterial - Other	7800	70	State Highway Agency	Emergenc y Response	Increase time for emergenc y responder s

Pequop Animal Crossing	Animal- related	6.5 Miles	200000	1365846 1	HSIP (Section 148)	Rural Principal Arterial - Interstate	5400	75	State Highway Agency	Wildlife Crossing	reduce the conflict with wildlife on interstate
Safety Managemen t Plan	Non- infrastructure Transportatio n safety planning	0	364610 0	3838000	HSIP (Section 148)		0	0		all Critical Emphases Areas	Reduce fatalities and serious injuries on high crash location roadway segments
OTS - Behavioral	Non- infrastructure Educational efforts	0	150005	1579000	HSIP (Section 148)		0	0		Education	Reduce fatalities and serious injuries through education

Progress in Achieving Safety Performance Targets

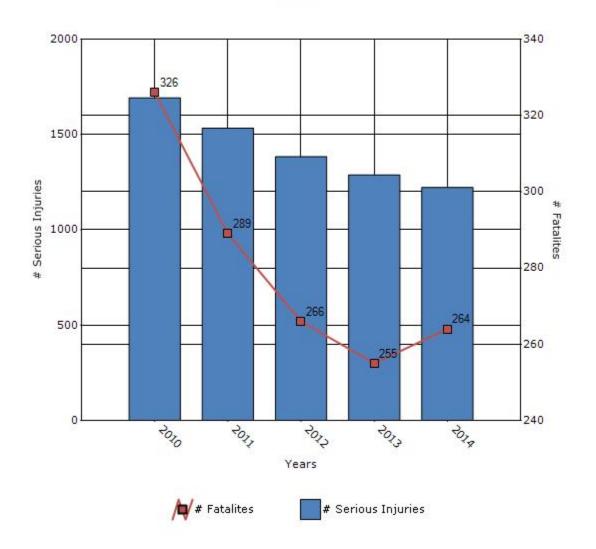
Overview of General Safety Trends

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

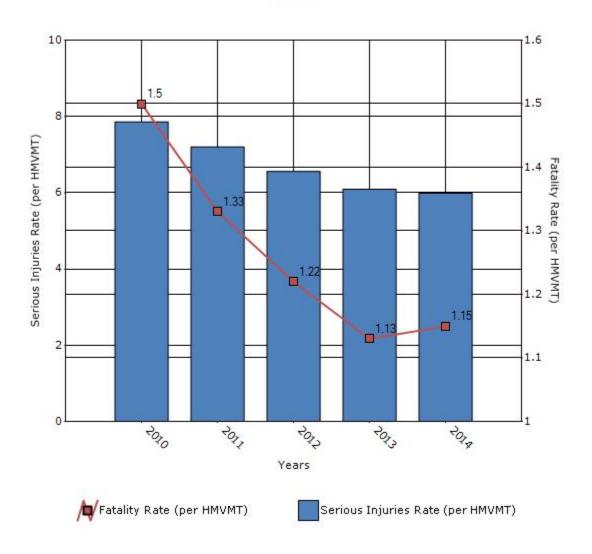
Performance Measures*	2010	2011	2012	2013	2014
Number of fatalities	326	289	266	255	264
Number of serious injuries	1692	1534	1384	1288	1223
Fatality rate (per HMVMT)	1.5	1.33	1.22	1.13	1.15
Serious injury rate (per HMVMT)	7.86	7.2	6.56	6.09	5.99

^{*}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



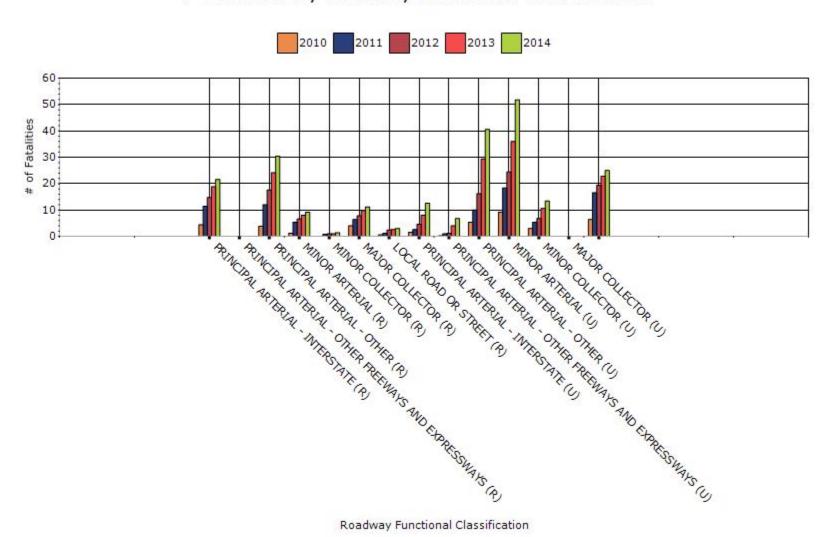
To the maximum extent possible, present performance measure* data by functional classification and ownership.

Year - 2014

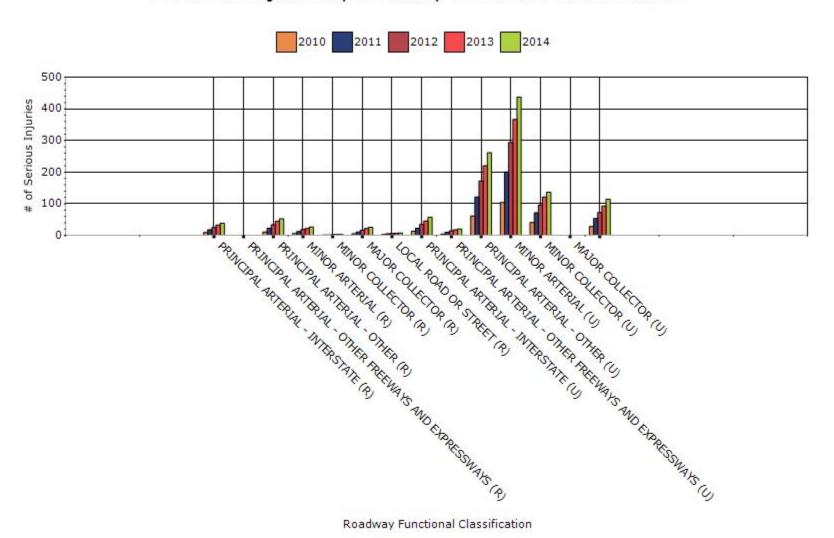
Function Classification	Number of fatalities	Number of serious injuries	Fatality rate (per HMVMT)	Serious injury rate (per HMVMT)
RURAL PRINCIPAL ARTERIAL - INTERSTATE	21.6	38.2	1.11	1.95
RURAL PRINCIPAL ARTERIAL - OTHER FREEWAYS AND EXPRESSWAYS	0	0	0	0
RURAL PRINCIPAL ARTERIAL - OTHER	30.4	52.6	2.01	3.48
RURAL MINOR ARTERIAL	9.2	26.4	2.1	5.99
RURAL MINOR COLLECTOR	1.4	2.4	0.49	1.32
RURAL MAJOR COLLECTOR	11.2	25.6	2.65	6.23
RURAL LOCAL ROAD OR STREET	3	7.6	0.53	1.5
URBAN PRINCIPAL	12.6	57	0.35	1.61

ARTERIAL - INTERSTATE				
URBAN PRINCIPAL ARTERIAL - OTHER FREEWAYS AND EXPRESSWAYS	6.8	20	0.43	1.2
URBAN PRINCIPAL ARTERIAL - OTHER	40.6	261.4	1.43	9.23
URBAN MINOR ARTERIAL	51.8	437	1.18	9.96
URBAN MINOR COLLECTOR	13.4	136.2	0.75	7.82
URBAN MAJOR COLLECTOR	0	0	0	0
URBAN LOCAL ROAD OR STREET	25	114	0.95	4.08

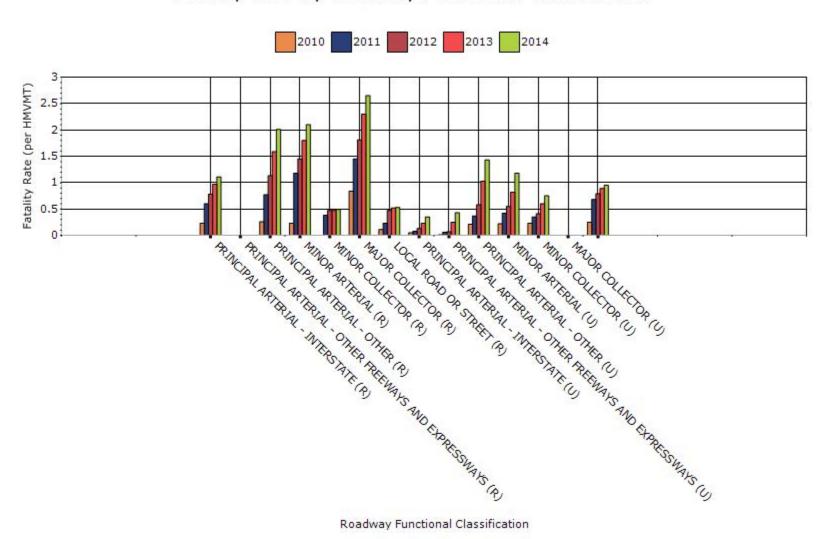
Fatalities by Roadway Functional Classification



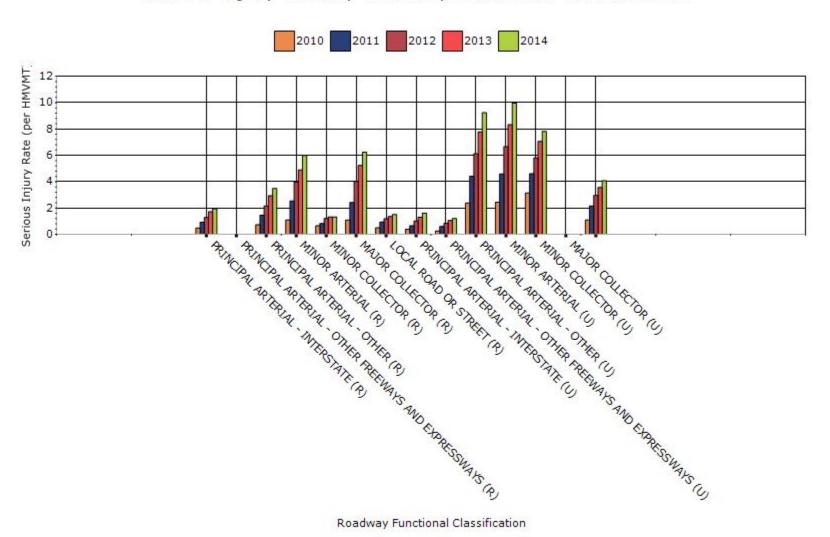
Serious Injuries by Roadway Functional Classification



Fatality Rate by Roadway Functional Classification



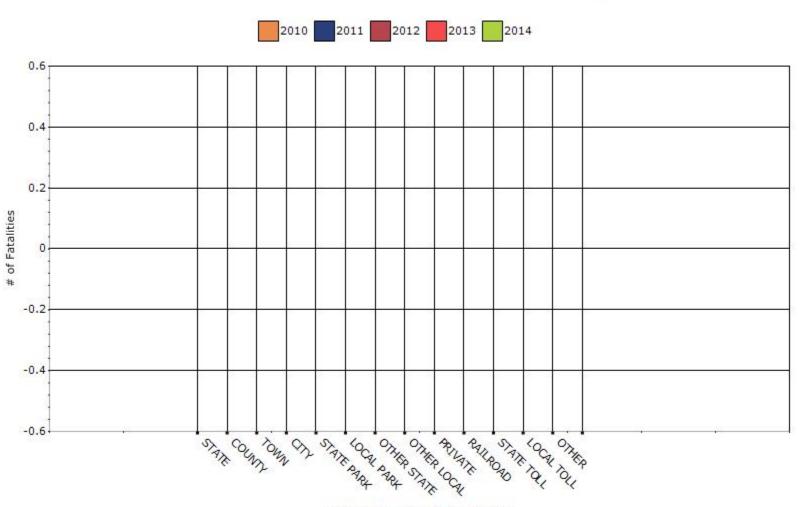
Serious Injury Rate by Roadway Functional Classification



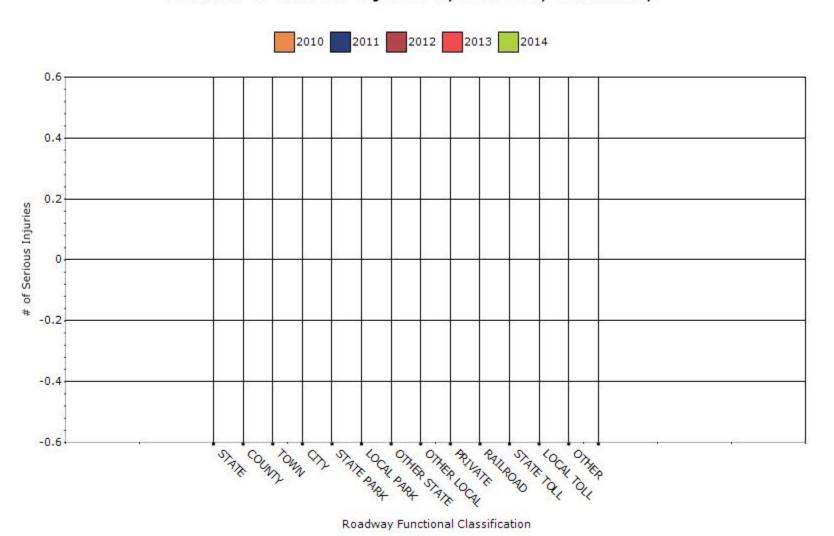
Year - 2010

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

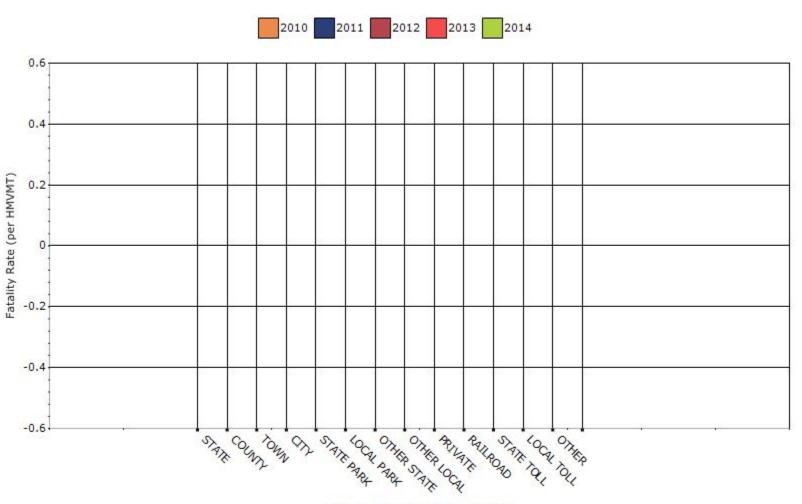
Number of Fatalities by Roadway Ownership



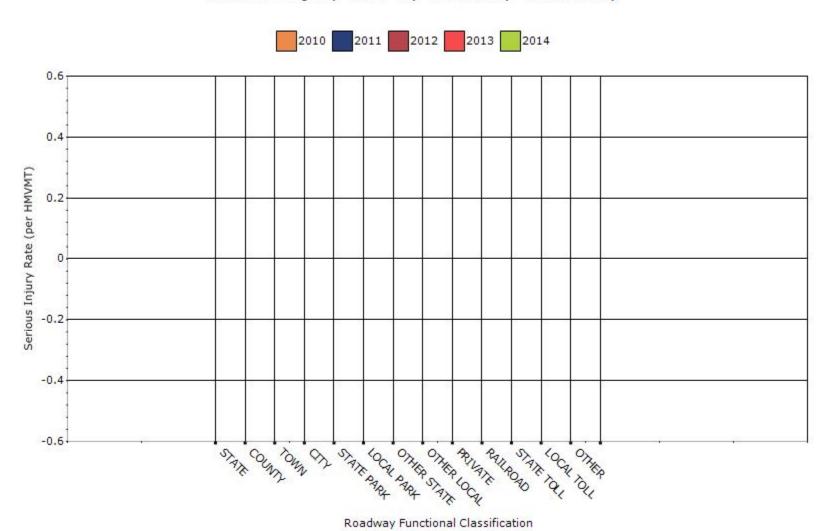
Number of Serious Injuries by Roadway Ownership



Fatality Rate by Roadway Ownership



Serious Injury Rate by Roadway Ownership



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

Nevada is showing positive trends in three of their five Critical Emphasis Area's: Occupant Protection, Lane Departures, and Intersections. The Fact Sheets on the Strategic Highway Safety Plan outlines these trends and states the critical strategies identified to continue these trends towards zero. http://www.zerofatalitiesnv.com/safety-plan-what-is-the-shsp/safety-plan-fact-sheets/

Application of Special Rules

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

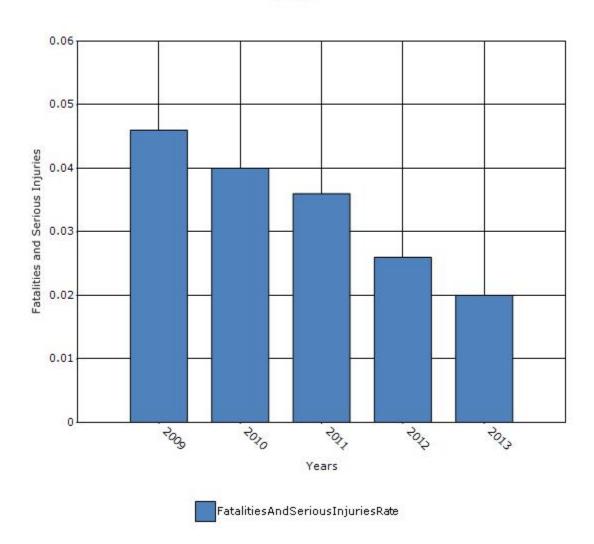
Older Driver Performance Measures	2009	2010	2011	2012	2013
Fatality rate (per capita)	0.01	0.008	0.008	0.008	0.006
Serious injury rate (per capita)	0.036	0.03	0.028	0.022	0.016
Fatality and serious injury rate (per capita)	0.046	0.04	0.036	0.026	0.02

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

Each year's fatalities and serious injuries were divided by the number of people 65 Years of age and older figures for each of the respective years, from Nevada Estimates from 2000 to 2012 and Projections from 2013 to 2032 released October 2013.

Those are the values we entered in the spreadsheet above. Then the system calculated the 5-yr rolling averages automatically.

Rate of Fatalities and Serious injuries for the Last Five Years



Does the older driver special rule apply to your state?

No

2015 Nevaa

Assessment of the Effectiveness of the Improvements (Program Evaluation)

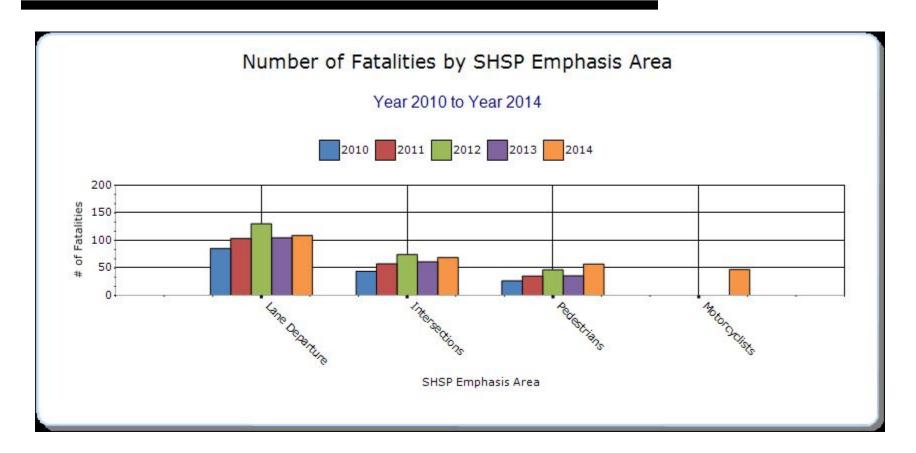
What indicators of success can you use to demonstrate effectiveness and success in the Highway Safety Improvement Program?
□ None
Benefit/cost
Policy change
Other: Other-Decrease in the Fatal and Serious injury crashes over the last several years.
What significant programmatic changes have occurred since 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.
None

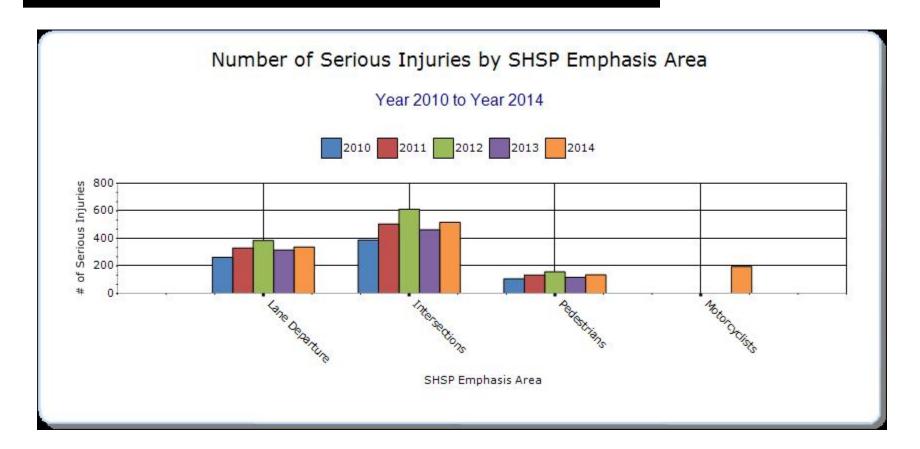
SHSP Emphasis Areas

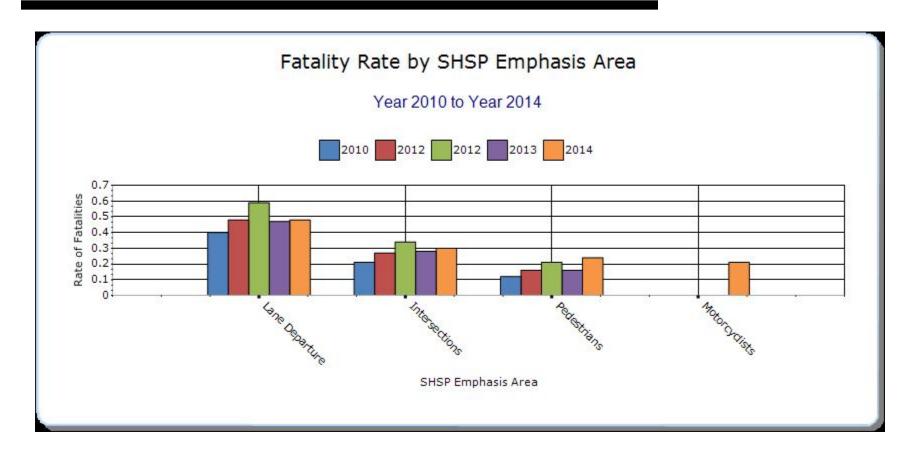
For each SHSP emphasis area that relates to the HSIP, present trends in emphasis area performance measures.

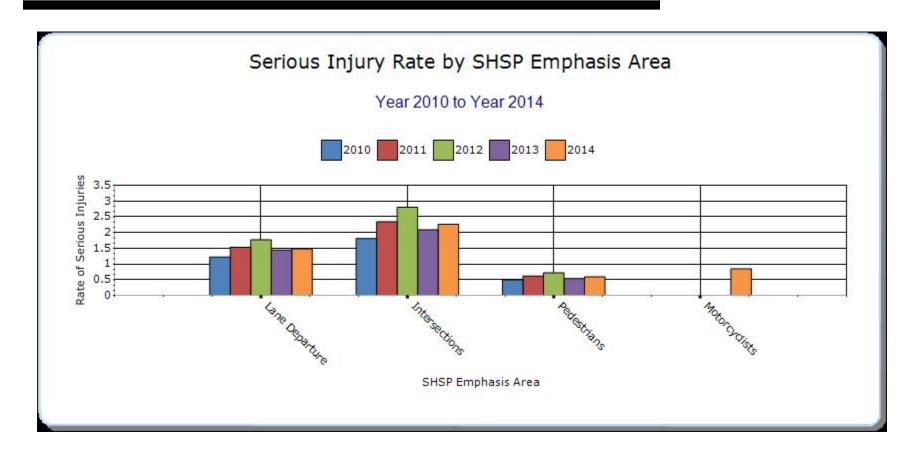
Year - 2014

HSIP-related SHSP Emphasis Areas	Target Crash Type	Number of fatalities	Number of serious injuries	•		Other- 1	Other- 2	Other-
Lane Departure	All	109	338	0.48	1.48	0	0	0
Intersections	All	69	517	0.3	2.26	0	0	0
Pedestrians	All	57	135	0.24	0.59	0	0	0
Motorcyclists	All	47	196	0.21	0.85	0	0	0
Impaired Driving	All	75	147	0.33	0.64	0	0	0
Seat Belts	All 62		174	0.27	0.76	0	0	0







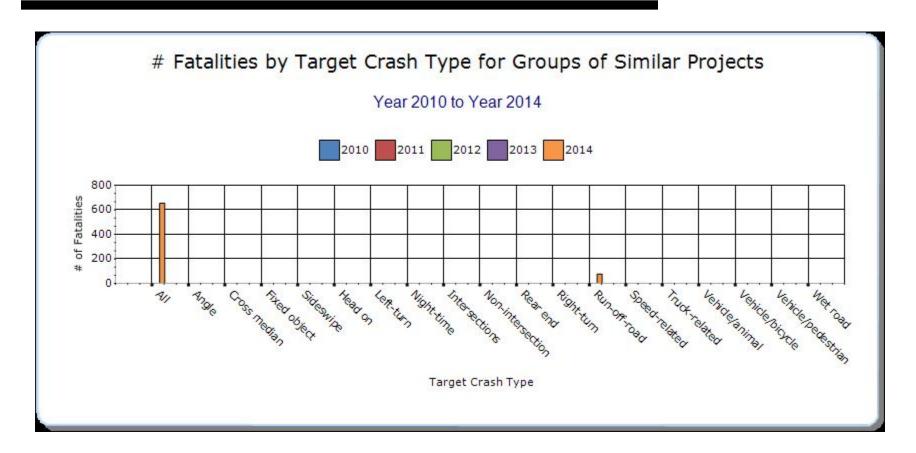


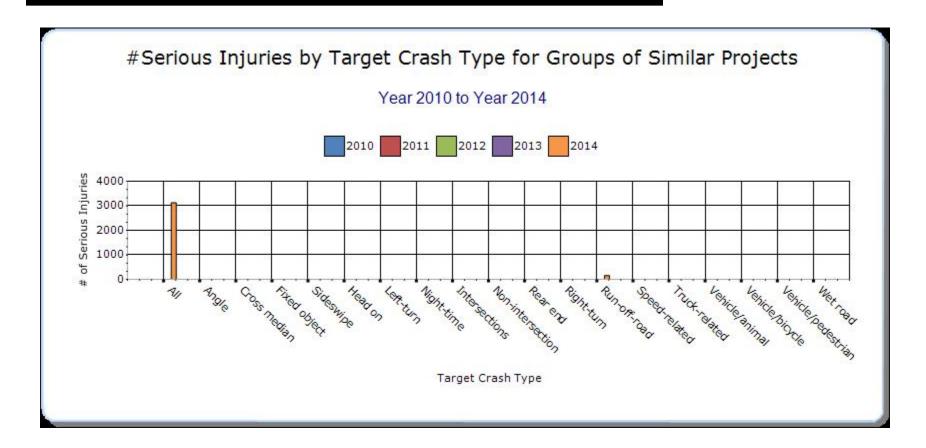
Groups of similar project types

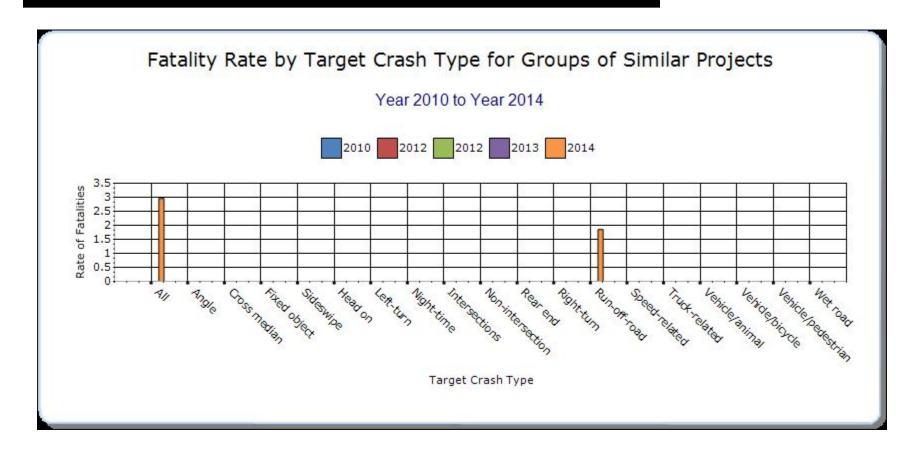
Present the overall effectiveness of groups of similar types of projects.

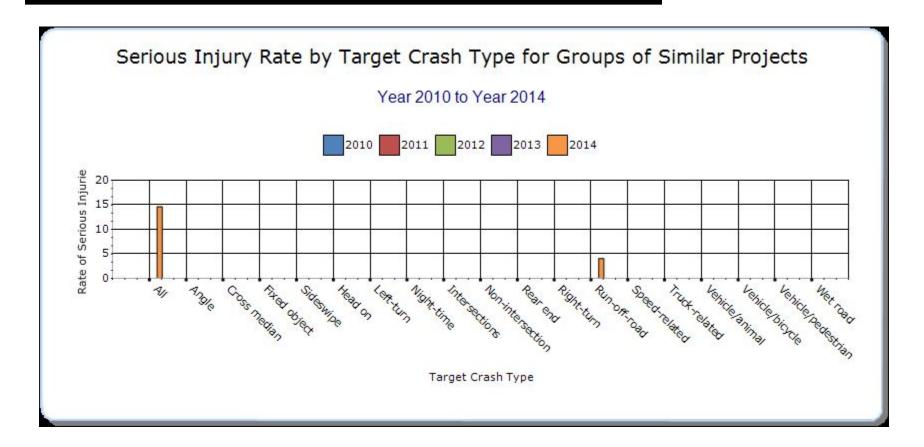
Year - 2014

HSIP Sub- program Types	Target Crash Type	Number of fatalities	Number of serious injuries	Fatality rate (per HMVMT)	Serious injury rate (per HMVMT)	Other-	Other- 2	Other-
Rural State Highways	Run-off- road	77	153	1.85	4.07	0	0	0
Segments	All	264	1234	1.21	5.87	0	0	0
Pedestrian Safety	All	57	136	0.24	0.59	0	0	0
Crash Data	All	264	1234	1.21	5.87	0	0	0
Intersection	All	69	520	0.3	2.28	0	0	0







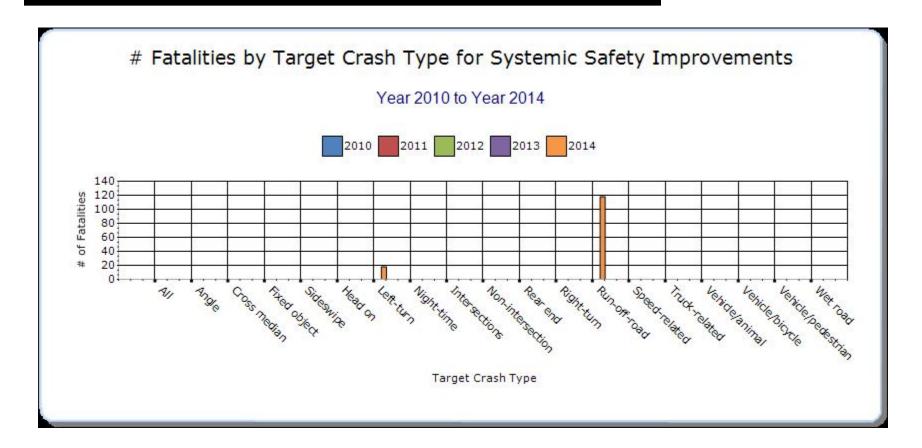


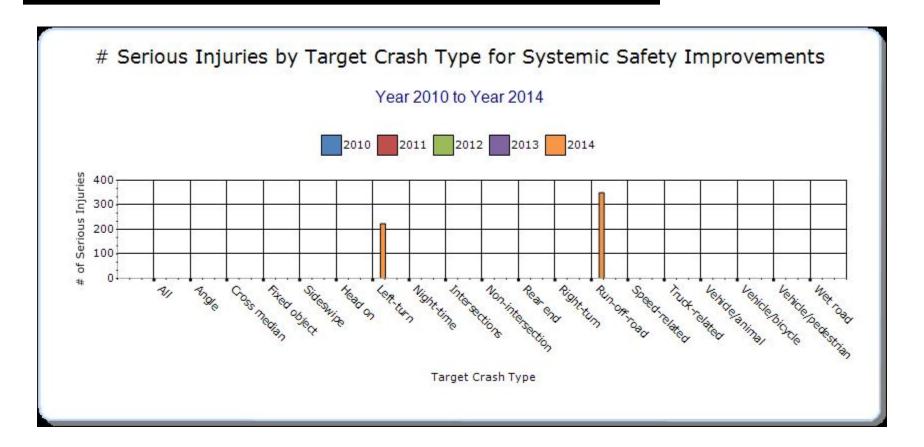
Systemic Treatments

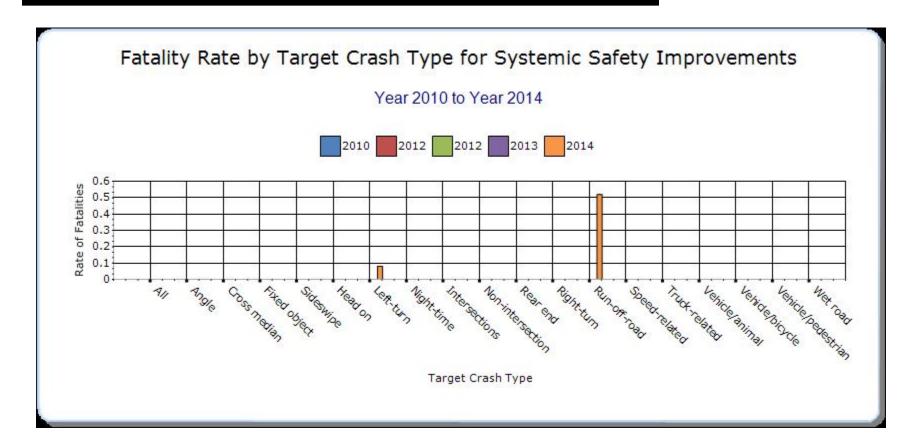
Present the overall effectiveness of systemic treatments.

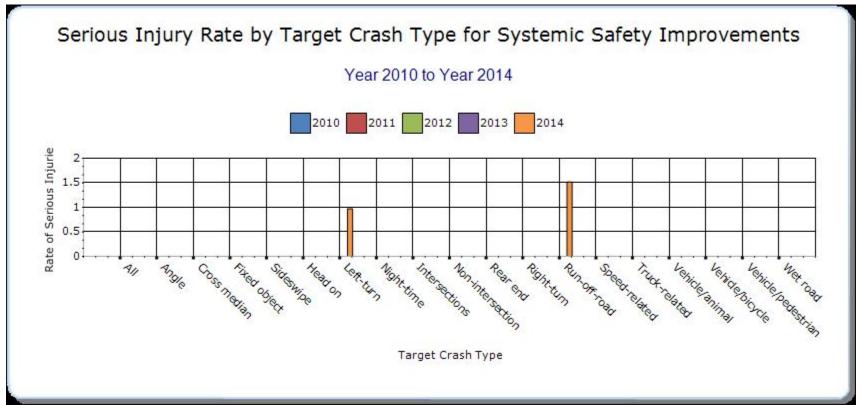
Year - 2014

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
Pavement/Shoulder Widening	Run-off- road	118	349	0.52	1.52	0	0	0
Add/Upgrade/Modify/Remove Traffic Signal	Left-turn	18	223	0.08	0.97	0	0	0









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

As we continue to implement systemic projects, we will report on the effectivness when the required amount of crash data is available.

Project Evaluation

Provide project evaluation data for completed projects (optional).

Slope Principal Flattening Arterial - and Other Install Cable Barrier Rail, CL 21.5 - NY	Location	Functional Class	Improvement Category	_			Bef-All Injuries						Aft- PDO	Total	Evaluation Results (Benefit/ Cost Ratio)
Slope Principal Flattening Arterial - and Other Install Cable Barrier Rail, CL 21.5 - NY	Spring Creek Pkwy and Licht Pkwy, Elko	Arterial	geometry	geometry -	1	0	9	13	23	0	0	1	7	8	3.09
1.5	Slope Flattening and Install Cable Barrier Rail, CL	Principal Arterial -	Roadside	Barrier - cable	5	11	47	103	166	2	9	47	75	133	41.23

Optional Attachments

Sections Files Attached

Glossary

5 year rolling average means the average of five individual, consecutive annual points of data (e.g. annual fatality rate).

Emphasis area means a highway safety priority in a State's SHSP, identified through a data-driven, collaborative process.

Highway safety improvement project means strategies, activities and projects on a public road that are consistent with a State strategic highway safety plan and corrects or improves a hazardous road location or feature or addresses a highway safety problem.

HMVMT means hundred million vehicle miles traveled.

Non-infrastructure projects are projects that do not result in construction. Examples of non-infrastructure projects include road safety audits, transportation safety planning activities, improvements in the collection and analysis of data, education and outreach, and enforcement activities.

Older driver special rule applies if traffic fatalities and serious injuries per capita for drivers and pedestrians over the age of 65 in a State increases during the most recent 2-year period for which data are available, as defined in the Older Driver and Pedestrian Special Rule Interim Guidance dated February 13, 2013.

Performance measure means indicators that enable decision-makers and other stakeholders to monitor changes in system condition and performance against established visions, goals, and objectives.

Programmed funds mean those funds that have been programmed in the Statewide Transportation Improvement Program (STIP) to be expended on highway safety improvement projects.

Roadway Functional Classification means the process by which streets and highways are grouped into classes, or systems, according to the character of service they are intended to provide.

Strategic Highway Safety Plan (SHSP) means a comprehensive, multi-disciplinary plan, based on safety data developed by a State Department of Transportation in accordance with 23 U.S.C. 148.

Systemic safety improvement means an improvement that is widely implemented based on high risk roadway features that are correlated with specific severe crash types.

Transfer means, in accordance with provisions of 23 U.S.C. 126, a State may transfer from an apportionment under section 104(b) not to exceed 50 percent of the amount apportioned for the fiscal year to any other apportionment of the State under that section.