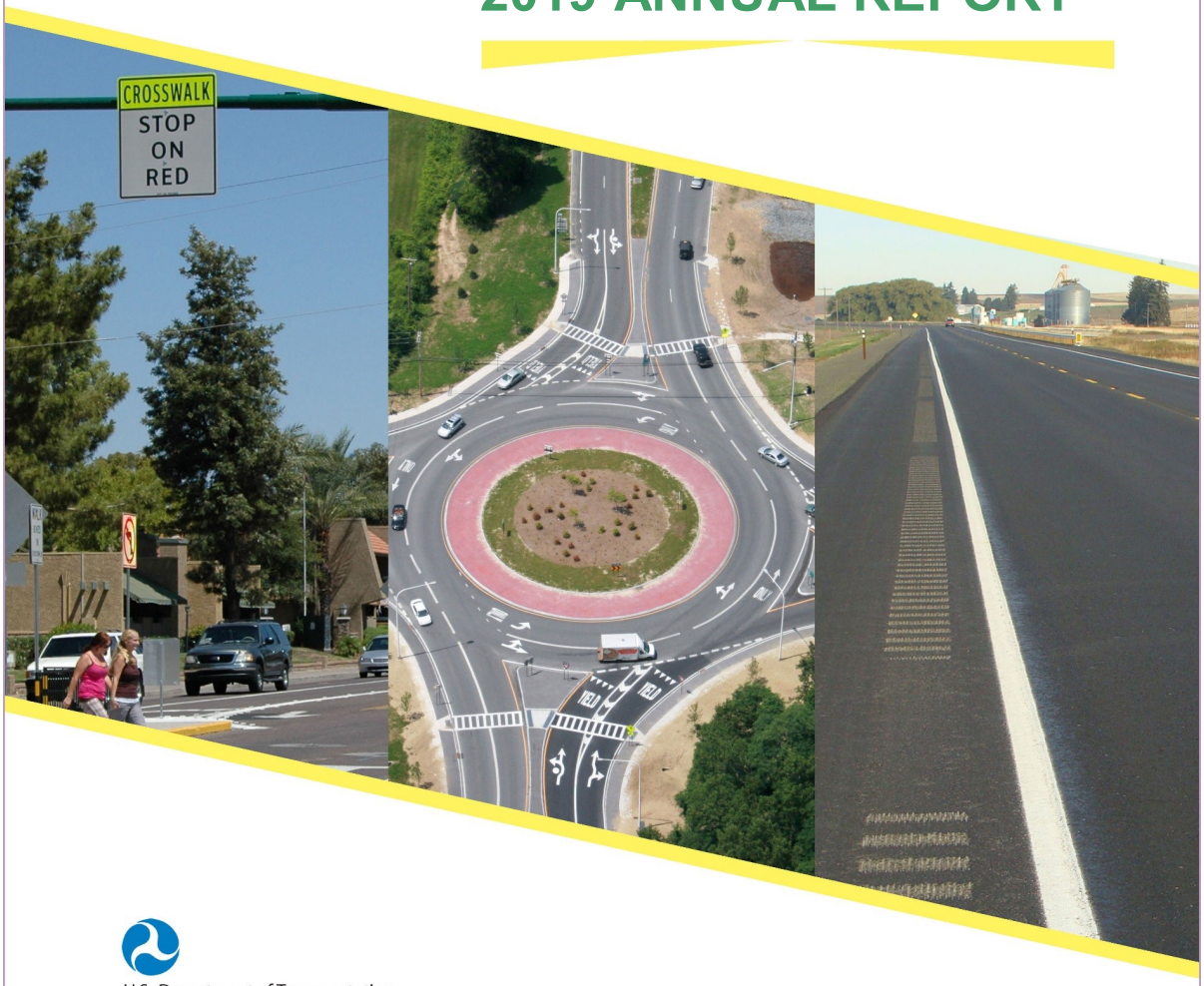
NEVADA

HIGHWAY SAFETY IMPROVEMENT PROGRAM

2019 ANNUAL REPORT



U.S. Department of Transportation
Federal Highway Administration

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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.”

Executive Summary

This annual Highway Safety Improvement Program (HSIP) report for 2019 summarizes the activities of the Nevada Department of Transportation's HSIP as required by Fixing America's Surface Transportation (FAST) Act. The FAST Act continues the HSIP to achieve a significant reduction in traffic fatalities and serious injuries on all public roads, including non-State-owned public roads and roads on tribal lands. The HSIP requires a data-driven, strategic approach to improving highway safety on all public roads that focuses on performance (FAST Act § 1113; 23 U.S.C. 148).

The FAST Act continued to allocate funds for the HSIP program in the Federal Fiscal Years 2016 – 2020. Available program funds for the purpose of this report are considered to be those funds obligated during the 2018 federal fiscal year. The activities of the Nevada Department of Transportation (NDOT) are primarily designed to develop safety improvement projects for the following areas:

· High crash locations (intersections and roadway segments)

· Urban intersection safety improvements

· Urban lane departure crash mitigation

· Rural lane departure crash mitigation

· Rural intersection safety improvements

· Systemic Safety Improvements Pedestrian related safety improvements

· 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 Traffic 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, 2010, and 2016. A copy of the current updated NDOT Safety Procedural Manual is located on the NDOT website.

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 Reporting Guidance dated December 29, 2016 and consists of five sections: program structure, progress in implementing highway safety improvement projects, progress in achieving safety outcomes and performance targets, effectiveness of the improvements and compliance assessment.

Program Structure

Program Administration

Describe the general structure of the HSIP in the State.

See attached HSIP Flow Chart

Where is HSIP staff located within the State DOT?

Planning

How are HSIP funds allocated in a State?

- SHSP Emphasis Area Data

Describe how local and tribal roads are addressed as part of HSIP.

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, Rumble Stripes, and turn pockets with acceleration/deceleration lanes on rural highways. We also use recommendations made during Road Safety Assessment (RSA) completed on local and tribal roads to develop projects. While evaluating rural intersections, we are identifying those locations where fatalities and serious injuries can be reduced by converting to a roundabout.

NDOT Traffic Safety Engineering is developing a low-cost safety improvement project with the Pyramid Lake Paiute Tribe. The Pyramid Lake Paiute Tribe's Wadsworth Project is an infrastructure improvement project designed to improve pedestrian and bicycle safety along a stretch of SR-447 that runs through the heart of Wadsworth, past an elementary school, head start center, tribal childcare center and community center. This route is frequently used by pedestrians and bicyclists traveling to the school and community amenities, while at the same time experiencing substantial through traffic from individuals traveling to Pyramid Lake and the annual Burning Man festival held in the Black Rock Desert. The project will realign existing crosswalks with current road approaches, add a multi-use path for pedestrians and bicyclists, add street lighting for road approaches, improve school zone signage, and improve roadside drainage facilities; improving pedestrian and bicycle safety along a key stretch of Route 447. Completion of the project will substantially improve traffic safety for motorists, pedestrians, and bicyclists traveling along SR-447, reducing injury and fatality crashes and accomplishing key goals established in the Tribe's 2015 Transportation Safety Plan and supported by a 2017 Road Safety Assessment.

Identify which internal partners (e.g., State departments of transportation (DOTs) Bureaus, Divisions) are involved with HSIP planning.

- Design
- Districts/Regions
- Governors Highway Safety Office
- Maintenance
- Operations
- Planning
- Traffic Engineering/Safety

Describe coordination with internal partners.

NDOT Traffic Safety Engineering coordinates with:

1. The NDOT Roadway Design team at many various 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 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. Traffic Safety Engineering coordinates with the Roadway Design Scoping section to initiate and recommend safety improvements into projects that are currently being evaluated.

2. The NDOT Maintenance/Operations division during Road Safety Assessment's, Safety Management Plans 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.

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. Traffic Safety and Traffic Operations have incorporated the Intersection Control Evaluation (ICE) as part of our intersection improvement evaluations and Wrong Way Driver countermeasures. The Traffic Incident Management (TIM) program is also a coordinated effort between Traffic Safety and Traffic Operations. The TIM programs primary goal is to reduce fatalities and serious injuries from secondary crashes. Under Interim Approval memo from FHWA, Wrong Way Driver systems (with RED flashing lights) have been installed at a number of freeway ramps and a study of their effectiveness is planned to be conducted under task order with the University of Nevada, Reno. Also under interim approval, Rapid Rectangular Flashing Beacon (RRFB) pedestrian crossing enhancements have been installed throughout the state in multiple jurisdictions. Coordination for green pavement markings on bike lanes

at conflict or mixing zones is also being considered on some projects under another experimental interim approval.

5. The Governors Highway Safety Office (The Department of Public Safety - Office of Traffic Safety, OTS). Traffic Safety Engineering continues to coordinate with the OTS since the inception of the SHSP. 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 HSIP planning.

- Academia/University
- FHWA
- Governors Highway Safety Office
- Law Enforcement Agency
- Local Government Agency
- Regional Planning Organizations (e.g. MPOs, RPOs, COGs)
- Tribal Agency
- Other-Emergency Medical Services
- Other-UNLV Traffic Safety Research

Describe coordination with external partners.

1. NDOT Traffic Safety Engineering (TSE) coordinated with:
    1. Academia/University –the University of Nevada Reno, and the University of Nevada Las Vegas in several research projects, which includes Pedestrian safety, Safety Analyst, Before/After Studies for Complete Streets and Benefit Cost Ratios of roundabouts.
    2. FHWA – while attending webinars, peer- to- peers, and workshops that are hosted by the FHWA. TSE has meet with FHWA staff on a quarterly basis to review and develop HSIP procedures. Together we are working to update and develop the procedures for data analysis, project selection, and network screening.
    3. 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. Because of this long ongoing crash data 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.
    4. Local Government Agency – representatives from local government agencies attended the Safety Summit, contribute to Safety Management Plans and are also members of the Critical Emphasis Area teams.
    5. MPO's – staff from the Southern Nevada RTC, RTC of Washoe County, and CAMPO attended the Safety Summit, contribute to Safety Management Plans and are also members of the Critical Emphasis Area teams.
    6. Tribal Agency – some tribal representative attended the Safety Summit. Also, Traffic Safety Engineering has performed Road Safety Audits (RSAs) for a few tribes located in the state.
    7. Law Enforcement Agency - representatives from local law enforcement agencies attended the Safety Summit, contribute to Safety Management Plans and are also members of the Critical Emphasis Area teams.
    8. UNLV - Traffic Safety Research - researchers at the UNLV School of Medicine maintain 2 databases: (1) All Nevada Road User trauma data for years 2005-2017. This includes all 4

Nevada trauma centers (UMC, Renown, St. Rose, and Sunrise) and (2) A linked crash-trauma database for years 2005-2017 (crash data source = NDOT, trauma data see above).

Describe other aspects of HSIP Administration on which the State would like to elaborate.

Nevada Strategic Highway Safety Plan:

Ongoing administration of the SHSP is being augmented with consultant forces, currently Kimley-Horn, and their performance has been stellar. The Kimley-Horn team are true partners in the SHSP activities and not merely consultant forces. Without this support and Kimley-Horn's partnering approach, the SHSP would not be where it is today. Kudos to Kimley-Horn for building the diverse and robust SHSP teams & partners that we have today.

Recurring activities for the SHSP include regular meetings of the Nevada Executive Committee on Traffic Safety (NECTS) (now meeting quarterly) and quarterly meetings for the seven SHSP Critical Emphasis Area (CEA) Task Forces: (Intersection Safety , Impaired Driving Prevention, Occupant Protection, Pedestrian Safety, Lane Departure Prevention, Motorcycle Safety and Young Driver Safety). The Traffic Records Coordinating Committee (TRCC) has been integrated into the SHSP.

Planning is underway for the 2019 Nevada Traffic Safety Summit which will be in Reno this year. The focus or theme for the 2019 Nevada Traffic Safety Summit is MYZERO. The Zero Fatalities goal is owned by every person, and requires all of us to succeed. The theme for the Summit requires each attendee to personalize the Zero Fatalities message and fully understand why zero is important to them. Rather than thinking of Zero as a concept, philosophy or ideal we challenge each participant to speak from the heart, to describe why they show up every day to do what they do to achieve Zero Fatalities on our roadways.

Road Safety Assessments (RSA)

The RSA program is continuing in Nevada and has been a typical approach by the designer and/or planner to use an RSA as a safety tool on their new projects. There were twelve (12) RSA performed from September 1, 2018 to September 30, 2019 . The RSA were primarily performed on 3R preservation projects, capacity projects, corridor studies, high crash locations, post construction projects, and Tribal planning projects. The RSA database is a compilation of all the RSA suggestions in one central file that can be sorted out according to the required data field for use as a design/planning reference by NDOT transportation professionals. The RSA database will identify suggestions that were incorporated in the project or implemented by NDOT District Maintenance crews and/or by other using agencies; and identify those suggestions that were not implemented. The RSA program statewide will continue in FFY 19-20. The updating of the RSA database will include those RSA that were performed in 2015 and 2016.

Systemic improvements:

A rural highway curve project was incorporated in the FY2019 HSIP program this year as systemic improvements. We also are utilizing 6" edge line striping on rural state route highway as a countermeasure for lane departure crashes as well as making it a standard.

Safety Management Plans: a safety focused corridor study

To reduce the number of crashes on Nevada Roadways, the NDOT Traffic Safety Engineering Division identified corridors on arterial roads statewide to implement safety improvements. To identify corridors for improvement on Principal Arterials, routes were identified that have highest rates of societal cost of crashes

per mile per AADT. For Minor Arterials, routes were identified that rank highest societal cost of crashes per mile and normalized by AADT and compared against similar functional class.

Three SMP's were started at the following locations:

- Sahara Ave (Rainbow to I-15) in Las Vegas, Nevada
- Jones Blvd (Carey to Rancho) & Cheyenne Ave (Torrey Pines to Decatur) in Las Vegas, Nevada

- N. McCarran Blvd (I-80 to Socrates/Evans) in Reno, Nevada

These SMP's will evaluate the needs of all modes of transportation and make recommendations for future projects. The purpose of a Safety Management Plan was to conduct a safety focused corridor study aimed at all road users and to include collaboration with stakeholders and the public. A SMP includes the development of short and long-range transportation safety improvement projects that incorporate relevant studies, access management principles, public and stakeholder input, crash and capacity analyses, benefit/cost analysis, and other impacts to all road users. A Stakeholder Working Group (SWG) was created to help with the development of the SMP and to ensure that the plan was consistent with the needs of the many different stakeholders along the project corridor. The SMP process is consistent with the Nevada Strategic Highway Safety Plan's goals of reducing the number of fatalities and serious injuries on Nevada's roadways.

Traffic Safety Engineering Design Services (TSEDs):

The TSEDs were used to design safety improvements identified in RSAs and SMPs. The following list of projects were design in 2019 utilizing TSEDs:

- Intersection improvements, reconstructing SLIP Lanes, and pedestrian safety improvements
  - McCarran Blvd (E Greg St to Prater Way), Reno
- Intersection improvements
  - Eastern and Washington, Las Vegas
- Corridor improvements to include intersection, pedestrian, and ADA updates-Phase II
  - Eastern Ave/Civic Center Dr (Cheyenne to US-95), Las Vegas
- Construct roundabout
  - McCarran Blvd and Baring Blvd, Sparks
- Wrong Way Driver Signs (part of paving project)
  - I-580 Carson City Freeway (0.66 miles south of the CC/WA county line, MP CC 3.14 to CC 8.95), Carson City
- Install safety improvements to include signing, striping, guardrail, concrete barrier rail, asphalt paving and high friction surface treatment
  - SR-431(MP WA 0.00 to WA 3.00 and WA 13.00 to 16.00), Washoe County
- Install Retro-Reflective Borders on Traffic Signal Backplates
  - Various locations in Washoe County
- Pedestrian and ADA improvements
  - SR-147 (Lake Mead) @ Bassler St and @ Brand St, North Las Vegas

Program Methodology

Does the State have an HSIP manual or similar that clearly describes HSIP planning, implementation and evaluation processes?

Yes
FileName:
Highway Safety Improvement Program Manual final-updated-8.7.17.docx

Select the programs that are administered under the HSIP.

- HRRR
- Intersection
- Pedestrian Safety
- Rural State Highways
- Segments
- Other-Safety Management Plans

Program: HRRR

Date of Program Methodology:10/22/2012

What is the justification for this program?

- Addresses SHSP priority or emphasis area
- FHWA focused approach to safety

What is the funding approach for this program?

Funding set-aside

What data types were used in the program methodology?

Crashes	Exposure	Roadway
All crashes	Volume	Functional classification

What project identification methodology was used for this program?

- Crash frequency
- Crash rate

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

Yes

Are local road projects identified using the same methodology as state roads?

Yes

How are projects under this program advanced for implementation?

- Other-Priority Ranking

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).

Rank of Priority Consideration

Available funding:2
Other-Combining with other projects:3
Other-Systemic Improvmeents:1

Program: Intersection

Date of Program Methodology:3/9/1997

What is the justification for this program?

- Addresses SHSP priority or emphasis area
- FHWA focused approach to safety

What is the funding approach for this program?

Competes with all projects

What data types were used in the program methodology?

Crashes	Exposure	Roadway
All crashes	Volume	Functional classification

What project identification methodology was used for this program?

- Crash rate
- Other-Societal Cost normalized by AADT

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

Yes

Are local road projects identified using the same methodology as state roads?

Yes

How are projects under this program advanced for implementation?

- Other-Priority Ranking

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

Available funding:30
Other-combining with other projects with our traffic safety partners:20
Other-Societal costs per volume:50
Total Relative Weight:100

Program: Pedestrian Safety

Date of Program Methodology:3/15/2015

What is the justification for this program?

- Addresses SHSP priority or emphasis area
- FHWA focused approach to safety

What is the funding approach for this program?

Funding set-aside

What data types were used in the program methodology?

Crashes	Exposure	Roadway
All crashes	Other-Land Use Generators	Functional classification

What project identification methodology was used for this program?

- Crash frequency
- Other-Land Use Generator Matrix (see attached)

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

Yes

Are local road projects identified using the same methodology as state roads?

Yes

How are projects under this program advanced for implementation?

- Other-Priority Ranking

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

Available funding:30
Other-Combining with other projects being done by our traffic safety partners:20
Other-weight from land use generator matrix:50
Total Relative Weight:100

Program: Rural State Highways

Date of Program Methodology:10/22/2012

What is the justification for this program?

- Addresses SHSP priority or emphasis area
- FHWA focused approach to safety

What is the funding approach for this program?

Funding set-aside

What data types were used in the program methodology?

Crashes	Exposure	Roadway
All crashes	Volume	Functional classification

What project identification methodology was used for this program?

- Crash frequency
- Crash rate

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

Yes

Are local road projects identified using the same methodology as state roads?

Yes

How are projects under this program advanced for implementation?

- Other-Priority Ranking

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).

Rank of Priority Consideration

Available funding:2
Other-Combining with other projects being done by our traffic safety partners:3
Other-Systemic Improvements:1

Program: Segments

Date of Program Methodology:9/15/2015

What is the justification for this program?

- Addresses SHSP priority or emphasis area
- FHWA focused approach to safety

What is the funding approach for this program?

Competes with all projects

What data types were used in the program methodology?

Crashes	Exposure	Roadway
All crashes	Volume	Functional classification

What project identification methodology was used for this program?

- Crash rate
- Other-Societal cost per volume

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

Yes

Are local road projects identified using the same methodology as state roads?

Yes

How are projects under this program advanced for implementation?

- Other-Priority Ranking

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

Available funding:30
Other-Combining with other projects being done by our traffic safety partners:20
Other-Societal cost per volume:50
Total Relative Weight:100

Program: Other-Safety Management Plans

Date of Program Methodology:6/15/2016

What is the justification for this program?

- Addresses SHSP priority or emphasis area
- FHWA focused approach to safety

What is the funding approach for this program?

Competes with all projects

What data types were used in the program methodology?

Crashes	Exposure	Roadway
All crashes	Volume	Functional classification

What project identification methodology was used for this program?

- Crash rate
- Other-Societal Costs normalized by ADT

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

Yes

Are local road projects identified using the same methodology as state roads?

Yes

How are projects under this program advanced for implementation?

- Other-Priority Ranking

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

Available funding:30
Other-combining with other projects with our traffic safety partners:20
Other-Sociatal Cost per ADT:50
Total Relative Weight:100

What percentage of HSIP funds address systemic improvements?

46

HSIP funds are used to address which of the following systemic improvements?

- High friction surface treatment
- Rumble Strips
- Wrong way driving treatments

What process is used to identify potential countermeasures?

- Crash data analysis
- Data-driven safety analysis tools (HSM, CMF Clearinghouse, SafetyAnalyst, usRAP)
- Engineering Study
- Road Safety Assessment
- SHSP/Local road safety plan
- Other-Safety Management Plans

Does the State HSIP consider connected vehicles and ITS technologies?

No

Does the State use the Highway Safety Manual to support HSIP efforts?

Yes

Please describe how the State uses the HSM to support HSIP efforts.

The Highway Safety Manual's process for Network Screening and Project Prioritization is used to help determine the priority of HSIP projects as well as the predictive methodologies. We also use the Highway Safety Manual process for calculating the Safety Effectiveness of our projects.

Describe other aspects of the HSIP methodology on which the State would like to elaborate.

Nevada was identified as a Focus State for Intersections by FHWA in July 2015. Because of this designation, TSE has continued to incorporate into our program systemic and spot treatments at intersections such as Retroreflective Back Plates, Flashing Yellow Arrows, pedestrian crossing islands and medians and that will provide better corridor access management. NDOT is also currently utilizing the Intersection Control Evaluation (ICE) methodology to evaluate intersection safety mitigation, as well as promoting roundabouts wherever possible.

Nevada was also identified as a High Risk Rural Roads state, and is incorporating systemic proven countermeasures such as rumble strips, wider edge line striping, curve improvements (including HFST) into our HSIP program. TSE is currently working to update rumble strip design and standards. These new designs are less impactful on the roadway and include a bicycle friendly rumble strip.

Three Safety Management Plans (SMP) were completed, and low-cost safety improvements that were recommended within the studies are being design for McCarran Blvd in Sparks, Nevada. This includes intersection redesign to improve sight distance, pedestrian improvements as well as a roundabout design at McCarran & Baring. Recommendations from the Eastern Ave SMP are also being designed at the intersection of Eastern and Washington in the City of Las Vegas. Three new SMP studies were also started at North McCarran Blvd in Reno; Sahara in Las Vegas; and Jones and Cheyenne in Las Vegas, Nevada.

Traffic Safety Engineering and Traffic Operations is continuing to expand the Traffic Incident Management (TIM) program throughout the state. The primary goal of the of the TIM program is to reduce fatalities and serious injuries from secondary crashes by providing coordination and education to all partners, including enforcement and emergency services.

Project Implementation

Funds Programmed

Reporting period for HSIP funding.

Federal Fiscal Year

Enter the programmed and obligated funding for each applicable funding category.

FUNDING CATEGORY	PROGRAMMED	OBLIGATED	% OBLIGATED/PROGRAMMED
HSIP (23 U.S.C. 148)	$10,107,294	$7,845,510	77.62%
HRRR Special Rule (23 U.S.C. 148(g)(1))	$1,487,814	$1,487,814	100%
Penalty Funds (23 U.S.C. 154)	$0	$0	0%
Penalty Funds (23 U.S.C. 164)	$0	$0	0%
RHCP (for HSIP purposes) (23 U.S.C. 130(e)(2))	$1,598,654	$537,300	33.61%
Other Federal-aid Funds (i.e. STBG, NHPP)	$0	$0	0%
State and Local Funds	$1,062,488	$1,062,488	100%
Totals	$14,256,250	$10,933,112	76.69%

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

14%

How much funding is obligated to local or tribal safety projects?

14%

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

36%

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

47%

How much funding was transferred in to the HSIP from other core program areas during the reporting period under 23 U.S.C. 126?

$0

How much funding was transferred out of the HSIP to other core program areas during the reporting period under 23 U.S.C. 126?

$10,000,000

$10,000000 was transferred into NHPP

Discuss impediments to obligating HSIP funds and plans to overcome this challenge in the future.

Utility companies reviews and new service agreements timelines have doubled due to their workloads in Nevada. This has resulted in projects not being completed in time to obligated. We are changing our processes to start earlier communication and coordination with the utility companies.

Describe any other aspects of the State's progress in implementing HSIP projects on which the State would like to elaborate.

The collaboration of state, local, and regional agencies while developing the Safety Management Plans has created better HSIP projects for all.

General Listing of Projects

List the projects obligated using HSIP funds for the reporting period.

PROJECT NAME	IMPROVEMENT CATEGORY	SUBCATEGORY	OUTPUTS	OUTPUT TYPE	HSIP PROJECT COST($)	TOTAL PROJECT COST($)	FUNDING CATEGORY	LAND USE/AREA TYPE	FUNCTIONAL CLASSIFICATION	AADT	SPEED	OWNERSHIP	METHOD FOR SITE SELECTION	SHSP EMPHASIS AREA	SHSP STRATEGY
Eastern Ave at Washington - Phase 2	Intersection geometry	Intersection geometrics - miscellaneous/other/unspecified	1	Locations	$134971	$1639652	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Other	14,950	40	City or Municipal Highway Agency	Spot	Intersections	
Wrong Way Driver Signs on Carson City Freeway	Advanced technology and ITS	Advanced technology and ITS - other			$2385874	$16375810	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Interstate	0		State Highway Agency	Systemic	Impaired Drivers	
SR 431 Install safety improvements to nclude signing, striping, quardrail, concrete barrier rail, asphalt paving and high friction surface treatment	Roadway	Pavement surface - high friction surface			$1487814	$1763039	HRRR Special Rule (23 U.S.C. 148(g)(1))			0	45	State Highway Agency	Systemic	Lane Departure	
SR-147 Lake Mead at Bassler and Brand Streets Pedestrian and ADA Improvements	Pedestrians and bicyclists	Pedestrian beacons	2	Locations		$660000	State and Local Funds	Urban	Principal Arterial-Other	43,500	35	State Highway Agency	Spot	Pedestrians	
Pedestrian Safety Improvements at Cheyenne at Mary Dee	Pedestrians and bicyclists	Pedestrian beacons	1	Locations		$250000	State and Local Funds	Urban	Minor Arterial	0		City or Municipal Highway Agency	Spot	Pedestrians	
Traffic Incident Management	Advanced technology and ITS	Congestion detection / traffic monitoring system			$1236235	$1301300	HSIP (23 U.S.C. 148)	N/A	N/A	0			Systemic	Lane Departure	
Data improvement/upgrading	Non-infrastructure	Data/traffic records			$1673163	$1761224	HSIP (23 U.S.C. 148)	N/A	N/A	0				Data	
NCATS	Non-infrastructure	Data/traffic records			$1425000	$1500000	HSIP (23 U.S.C. 148)			0				Data	
SR 431 Install safety improvements to nclude signing, striping, quardrail, concrete barrier rail, asphalt paving and high friction surface treatment	Roadway	Pavement surface - high friction surface			$37073	$1763039	HSIP (23 U.S.C. 148)			0		State Highway Agency		Lane Departure	

PROJECT NAME	IMPROVEMENT CATEGORY	SUBCATEGORY	OUTPUTS	OUTPUT TYPE	HSIP PROJECT COST($)	TOTAL PROJECT COST($)	FUNDING CATEGORY	LAND USE/AREA TYPE	FUNCTIONAL CLASSIFICATION	AADT	SPEED	OWNERSHIP	METHOD FOR SITE SELECTION	SHSP EMPHASIS AREA	SHSP STRATEGY
CLRS on multiple locations Statewide	Roadway	Rumble strips - center		Miles	$390009	$1950000	HSIP (23 U.S.C. 148)	Rural	Local Road or Street	0		State Highway Agency	Systemic	Lane Departure	
Corridor Improvements to include Intersection, Pedestrian and ADA updates on Second Street and Arlin	Pedestrians and bicyclists	Pedestrian beacons		Locations	$332369	$2125000	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Other	6,000	35	City or Municipal Highway Agency	Systemic	Pedestrians	
Corridor Improvements to include Intersection, Pedestrian and ADA updates on Eastern Ave	Access management	Access management - other		Locations	$-118607	$3900000	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Other	25,000	35	City or Municipal Highway Agency	Systemic	Intersections	
Pedestrian Safety Improvements on Stewart St, Carson City	Pedestrians and bicyclists	Pedestrian beacons		Crosswalks	$-108708	$860000	HSIP (23 U.S.C. 148)	Urban	Minor Arterial	9,200	35	City or Municipal Highway Agency	Land Use Generator Matrix	Pedestrians	
SR 667, Kietzke Lane, Pedestrian and ADA Improvements (SMP) Package 2	Pedestrians and bicyclists	Miscellaneous pedestrians and bicyclists	1.1	Miles	$291881	$2960000	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Other	150,000	45	State Highway Agency	Safety Management Plan and Crash/Crash frequency analysis	Intersections	
Nevada Strategic Highway Safety Plan	Non-infrastructure	Transportation safety planning			$166250	$175000	HSIP (23 U.S.C. 148)	N/A	N/A	0		State Highway Agency	Administration of Nevada Strategic Highway Safety Plan	Administration of Nevada Strategic Highway Safety Plan	

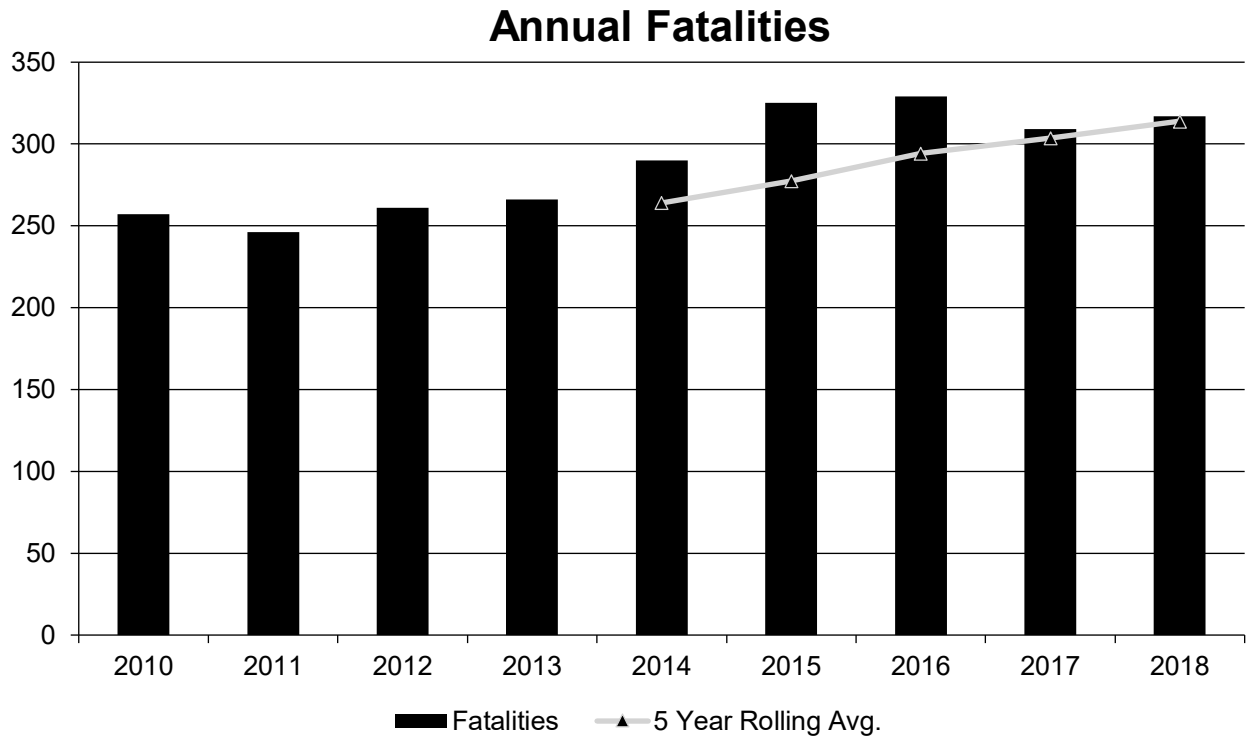
Intersection Improvements, reconstructing SLIP lanes, and Pedestrian Safety improvement McCarran Blvd (Greg to Prater) - this project also included Pedestrian Improvements
SR 431 safety improvements project included $37073 in Preliminary Engineering.
Wrong Way Driver Signs on Carson City Freeway work was including in a contract with pavement preservation work.
CLRS on multiple locations Statewide is the final contract payment balancing.
Corridor Improvements to include Intersection, Pedestrian and ADA updates on Second Street and Arlington is the final contract payment balancing.
Pedestrian Safety Improvements on Stewart St, Carson City is the final contract payment balancing.
SR 667, Kietzke Lane, Pedestrian and ADA Improvements (SMP) Package 2 is the final contract payment balancing.

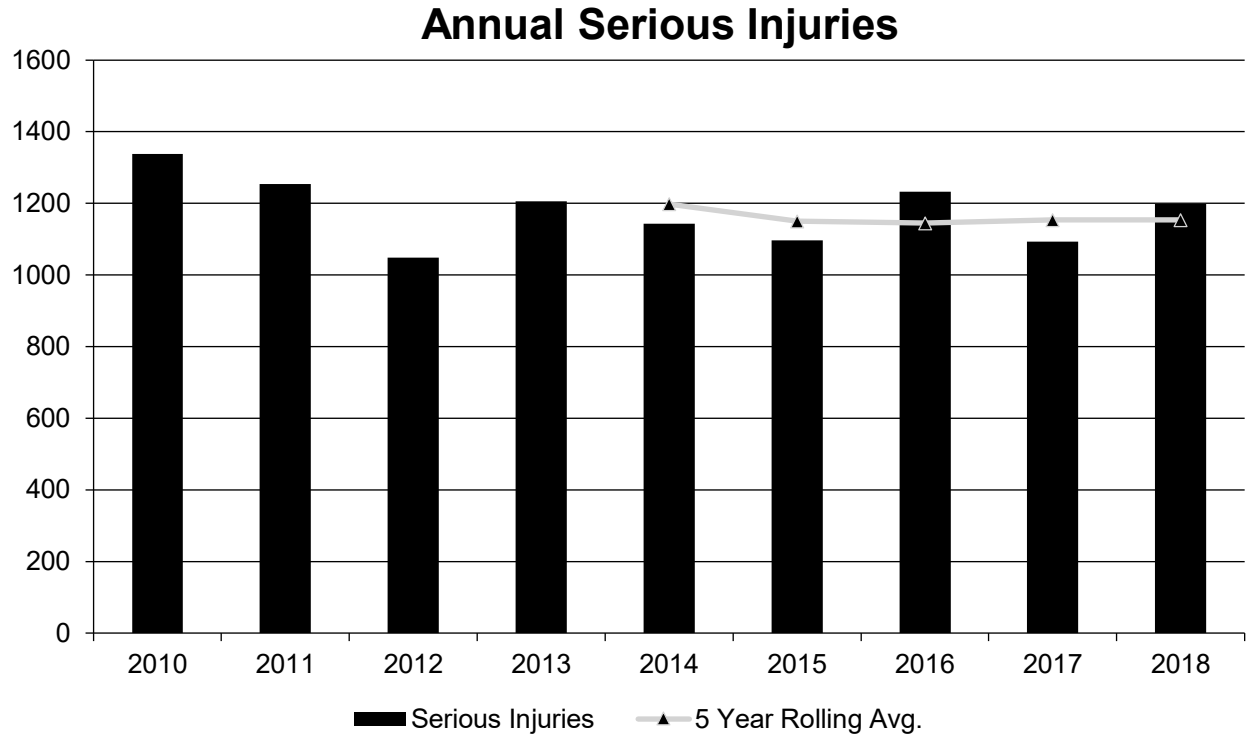
Safety Performance

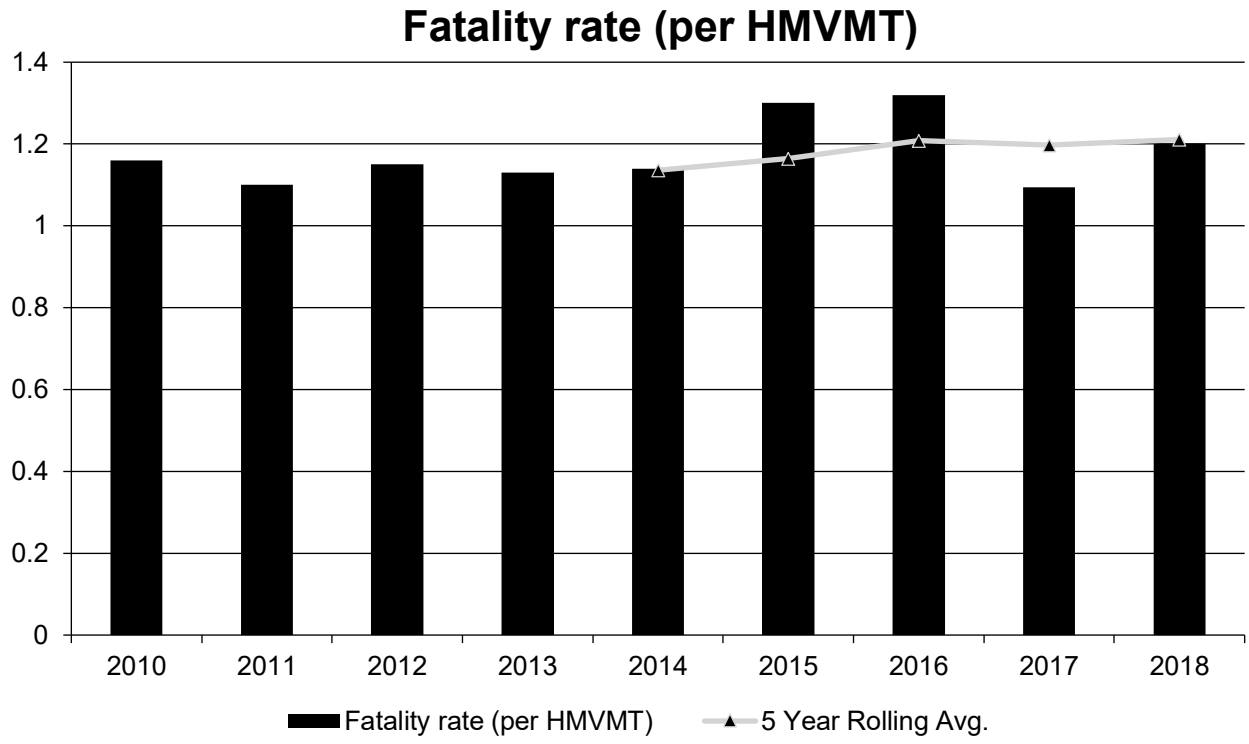
General Highway Safety Trends

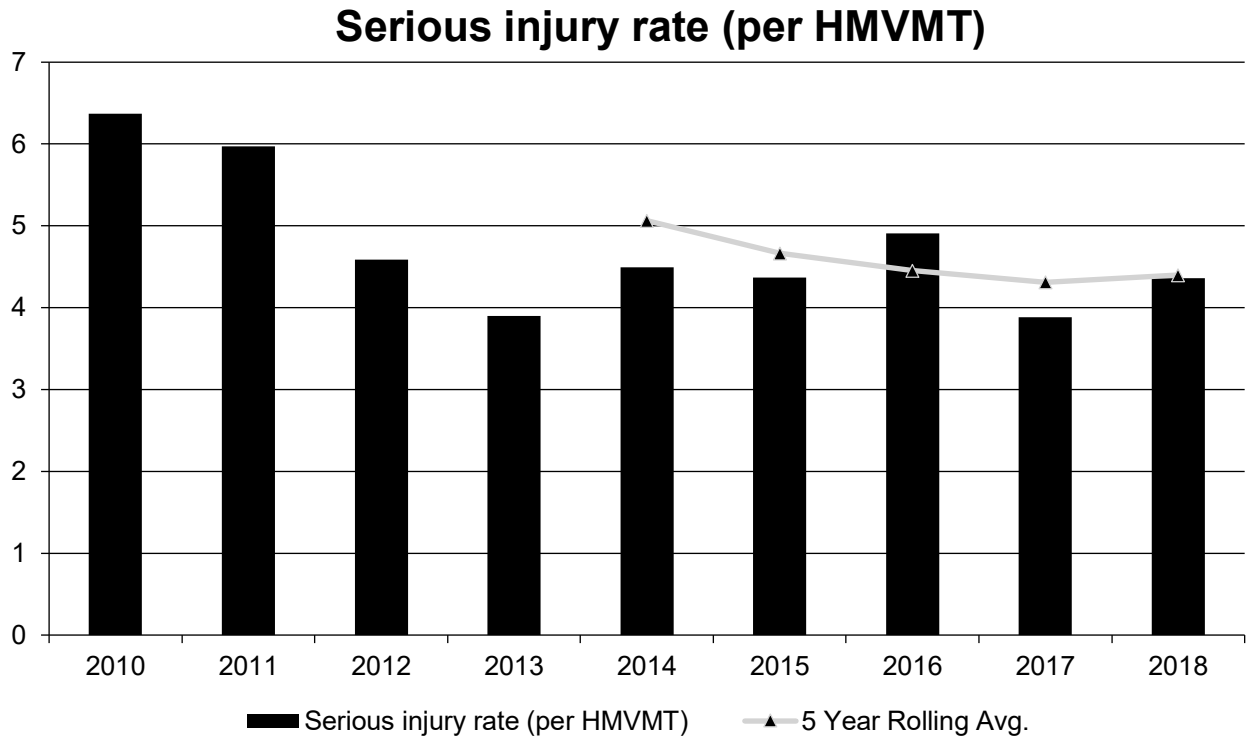
Present data showing the general highway safety trends in the State for the past five years.

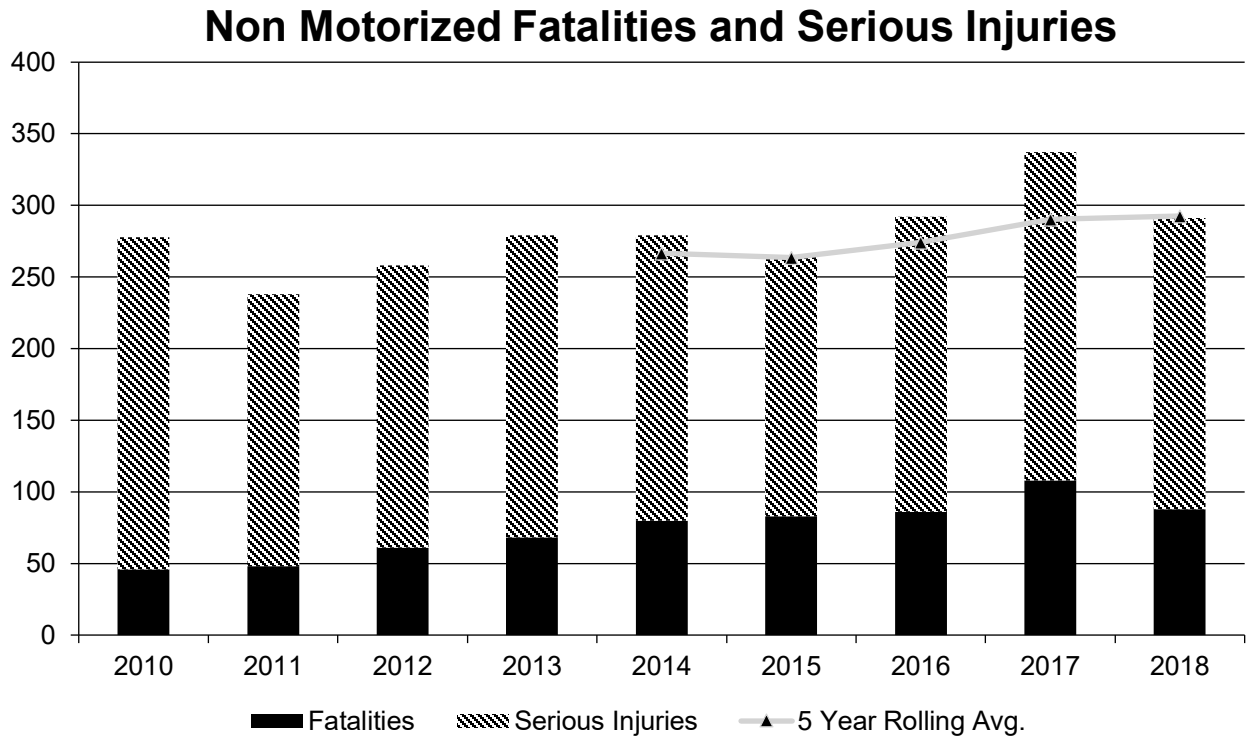
PERFORMANCE MEASURES	2010	2011	2012	2013	2014	2015	2016	2017	2018
Fatalities	257	246	261	266	290	325	329	309	317
Serious Injuries	1,339	1,254	1,048	1,205	1,144	1,097	1,232	1,094	1,199
Fatality rate (per HMVMT)	1.160	1.100	1.150	1.130	1.140	1.300	1.320	1.095	1.200
Serious injury rate (per HMVMT)	6.370	5.970	4.590	3.900	4.490	4.370	4.910	3.880	4.360
Number non-motorized fatalities	46	48	61	68	80	83	86	108	88
Number of non-motorized serious injuries	232	190	197	211	199	181	206	229	203


Annual Fatalities
350
300
250
200
150
100
50
0
2010
2011
2012
2013
2014
2015
2016
2017
2018
Fatalities
5 Year Rolling Avg.


Annual Serious Injuries
1600
1400
1200
1000
800
600
400
200
0
2010
2011
2012
2013
2014
2015
2016
2017
2018
Serious Injuries
5 Year Rolling Avg.


Fatality rate (per HMVMT)
1.4
1.2
1
0.8
0.6
0.4
0.2
0
2010
2011
2012
2013
2014
2015
2016
2017
2018
Fatality rate (per HMVMT)
5 Year Rolling Avg.


Serious injury rate (per HMVMT)
7
6
5
4
3
2
1
0
2010
2011
2012
2013
2014
2015
2016
2017
2018
Serious injury rate (per HMVMT)
5 Year Rolling Avg.



Describe fatality data source.

FARS

To the maximum extent possible, present this data by functional classification and ownership.

Year 2018

Functional Classification	Number of Fatalities (5-yr avg)	Number of Serious Injuries (5-yr avg)	Fatality Rate (per HMVMT) (5-yr avg)	Serious Injury Rate (per HMVMT) (5-yr avg)
Rural Principal Arterial (RPA) - Interstate	21	41	0.94	1.83
Rural Principal Arterial (RPA) - Other Freeways and Expressways	0	0	0	0
Rural Principal Arterial (RPA) - Other	33	59	2.09	3.8
Rural Minor Arterial	9	21	2.17	5.26
Rural Minor Collector	3	3	2.15	2.15
Rural Major Collector	10	25	2.69	6.71
Rural Local Road or Street	6	10	1.18	1.96

Functional Classification	**Number of Fatalities (5-yr avg)**	**Number of Serious Injuries (5-yr avg)**	**Fatality Rate (per HMVMT) (5-yr avg)**	**Serious Injury Rate (per HMVMT) (5-yr avg)**
Urban Principal Arterial (UPA) - Interstate	22	74	0.51	1.7
Urban Principal Arterial (UPA) - Other Freeways and Expressways	11	33	0.64	1.89
Urban Principal Arterial (UPA) - Other	60	239	1.86	7.42
Urban Minor Arterial	86	366	1.7	7.27
Urban Minor Collector	30	128	1.38	5.96
Urban Major Collector	0	0	0	0
Urban Local Road or Street	25	113	0.5	2.29

Year 2015

Roadways	Number of Fatalities (5-yr avg)	Number of Serious Injuries (5-yr avg)	Fatality Rate (per HMVMT) (5-yr avg)	Serious Injury Rate (per HMVMT) (5-yr avg)
State Highway Agency				
County Highway Agency				
Town or Township Highway Agency				
City or Municipal Highway Agency				
State Park, Forest, or Reservation Agency				
Local Park, Forest or Reservation Agency				
Other State Agency				
Other Local Agency				
Private (Other than Railroad)				
Railroad				
State Toll Authority				
Local Toll Authority				
Other Public Instrumentality (e.g. Airport, School, University)				
Indian Tribe Nation				

Safety Performance Targets

Safety Performance Targets

Calendar Year 2020 Targets *

Number of Fatalities:330.6

Describe the basis for established target, including how it supports SHSP goals.

The target of 330.6 fatalities for 2020 was set to meet Nevada's SHSP Zero Fatalities Interim Goal of reducing the 2004 to 2008 5-year moving average for each performance measure in half by 2030.

The current trend was projected through 2020 to be 344.1 and then a reduction from the 2020 projection was calculated for a linear reduction to meet the 2030 Interim Goal.

Number of Serious Injuries:1088.6

Describe the basis for established target, including how it supports SHSP goals.

The target of 1088.6 serious injuries for 2020 was set to meet Nevada's SHSP Zero Fatalities Interim Goal of reducing the 2004 to 2008 5-year moving average for each performance measure in half by 2030. The current trend was projected through 2020 to be 1197.5 and then a reduction from the 2020 projection was calculated for a linear reduction to meet the 2030 Interim Goal.

Fatality Rate:1.214

Describe the basis for established target, including how it supports SHSP goals.

The target of 1.214 fatality rate for 2020 was set to meet Nevada's SHSP Zero Fatalities Interim Goal of reducing the 2004 to 2008 5-year moving average for each performance measure in half by 2030. The current trend was projected through 2020 to be 1.244 and then a reduction from the 2020 projection was calculated for a linear reduction to meet the 2030 Interim Goal.

Serious Injury Rate:4.060

Describe the basis for established target, including how it supports SHSP goals.

The target of 4.060 serious injury rate fatalities for 2020 was set to meet Nevada's SHSP Zero Fatalities Interim Goal of reducing the 2004 to 2008 5-year moving average for each performance measure in half by 2030. The current trend was projected through 2020 to be 4.060 and then a reduction from the 2020 projection was calculated for a linear reduction to meet the 2030 Interim Goal.

Total Number of Non-Motorized Fatalities and Serious Injuries:294.7

Describe the basis for established target, including how it supports SHSP goals.

The target of 294.7 fatalities and serious injuries based on a 5 year moving average for 2020 was set to meet Nevada's SHSP Zero Fatalities Interim Goal of reducing the 2004 to 2008 5-year moving average for each performance measure in half by 2030. The current trend was projected through 2020 to be 308.8 and then a reduction from the 2020 projection was calculated for a linear reduction to meet the 2030 Interim Goal.

Describe efforts to coordinate with other stakeholders (e.g. MPOs, SHSO) to establish safety performance targets.

There are ongoing efforts with the Locals to establish safety performance measures. This includes standing monthly coordination meetings with discussions on the available data, trends in the data, problems with the data and other relative matters at the time. Our office works closely with each of the Local entities to provide them whatever data they request. This includes but not limited to: raw crash data, located crash maps, summarized crash analysis, heat maps and crashes by jurisdictional boundaries. The SHSO (DPS/OTS) and

NDOT Traffic Safety Engineering office work extremely close to set and use the first three measures; number of fatal crashes, fatal rate and number of serious injuries. Also, NDOT's Safety Targets have been adopted by Tahoe Regional Planning Agency (TRPA) and the Regional Transportation Commission of Southern Nevada (RTCSN).

Does the State want to report additional optional targets?

No

Describe progress toward meeting the State's 2018 Safety Performance Targets (based on data available at the time of reporting). For each target, include a discussion of any reasons for differences in the actual outcomes and targets.

Performance Measure 1, 3, and 5 (Number of Fatalities, Number of Fatalities per 100M VMT, and Non-Motorized Fatalities and Serious Injuries) the 5-year moving average was less than the projected 2020 target values. Performance Measure 2 and 4 (Number of Serious Injuries and Number of Serious Injuries per 100M Vehicles) the 5-year moving average was greater than the projected 2020 target values.

It is difficult to determine the reason for the increase in fatalities and serious injuries and why the strategies are not working. There has been a shift in the types of crashes with increase in motorcycle, young driver, and occupant protection fatalities, and a decrease in other types of crashes such as lane departures. Certain mitigation strategies that have been implemented to address those crashes appear to be effective, while others like the primary seatbelt law was not approved by the legislature and therefore cannot be implemented as identified in the SHSP.

Approximately half of traffic fatalities do not occur on NDOT maintained roadways. The Department cannot achieve the goal without the cooperation and assistance of our partners in the areas of law enforcement, education, emergency medical response and all the Local Public agencies. The DOT is constantly improving the working relations with the Local entities to help achieve this goal.

The Department will continue to spend funds to improve the safety of the entire State transportation system. NDOT will also continue working with partners to take advantage of opportunities to reduce the severity and frequency of motor vehicle crashes statewide. Every life saved, and every serious injury avoided lessens or eliminates the cost to the families who would have been affected, as well as reduce the need for response by law enforcement, emergency medical services, and trauma centers.

Applicability of Special Rules

Does the HRRR special rule apply to the State for this reporting period?

Yes

Provide the number of older driver and pedestrian fatalities and serious injuries 65 years of age and older for the past seven years.

PERFORMANCE MEASURES	2012	2013	2014	2015	2016	2017	2018
Number of Older Driver and Pedestrian Fatalities	32	35	27	32	44	43	62
Number of Older Driver and Pedestrian Serious Injuries	64	91	89	66	96	88	101

Evaluation

Program Effectiveness

How does the State measure effectiveness of the HSIP?

- Change in fatalities and serious injuries

Based on the measures of effectiveness selected previously, describe the results of the State's program level evaluations.

During this reporting period, the frequency of fatalities and serious injuries have increased slightly. Responses to traffic crash requests and analysis were prepared for various local, state and federal agencies, consulting firms, news media and private citizens. The studies supported efforts in the development of safety procedures, crash reduction countermeasures, selective law enforcement, urban and rural planning, and public information campaigns. Coordination between the Roadway Design Division and the Safety Engineering Division is continuing with Roadway Design requesting crash data on most of the projects early in the design phase of the project. The Safety Engineering Division continues to use a standard report to more effectively address the traffic safety concerns that should be incorporated in the design of projects.

The HSIP program evaluates all of the crashes in the state and identifies high crash locations HCL as defined:

- Rural – (Population under 5000) intersections 10 or more crashes in a three-year period
- Small Urban – (Population above 5000 and under 50,000) intersections 20 or more crashes in a three-year period
- Urban – (Population above 50,000) intersections 30 or more crashes in a three-year period.

Once the locations have been identified they are then prioritized by a safety index and any of the projects that are greater than one are candidates for safety projects. We have been focusing on intersections for the last 10 plus years and are now in the process of making changes to the program to focus more on crash types and mitigations for crash types that we can implement a systemic / statewide approach.

What other indicators of success does the State use to demonstrate effectiveness and success of the Highway Safety Improvement Program?

- # miles improved by HSIP
- # RSAs completed
- HSIP Obligations
- More systemic programs

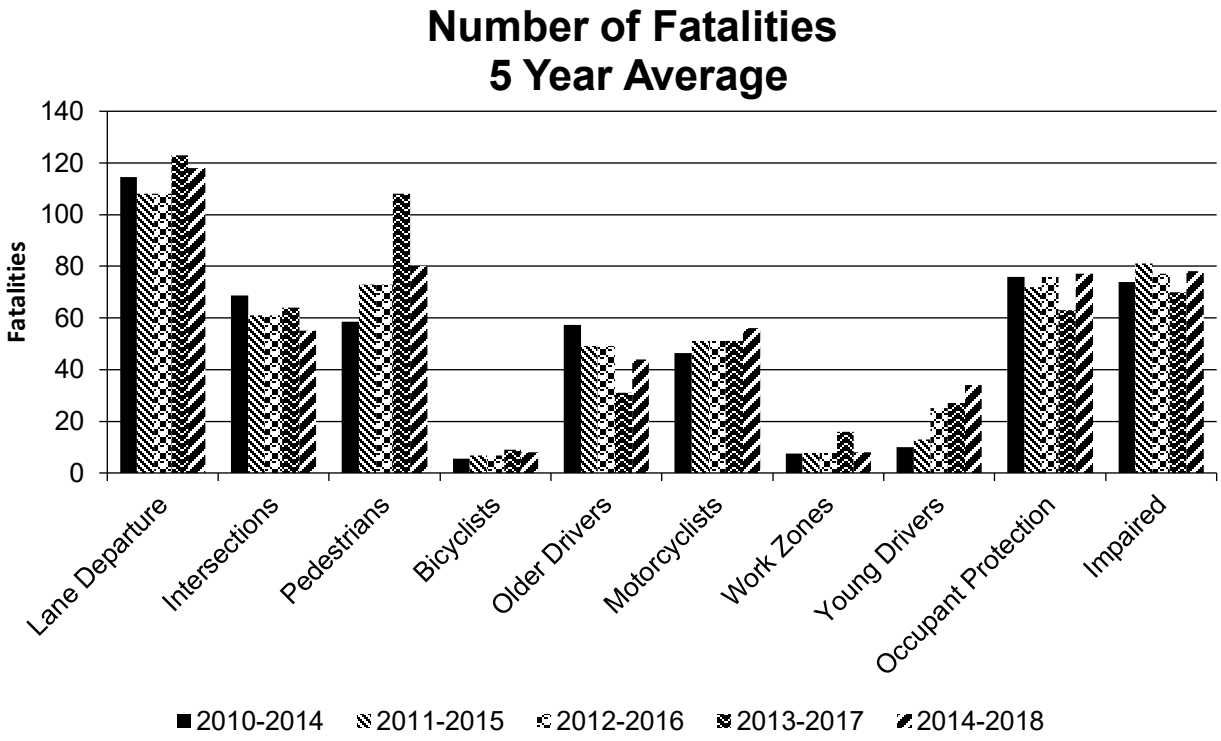
Effectiveness of Groupings or Similar Types of Improvements

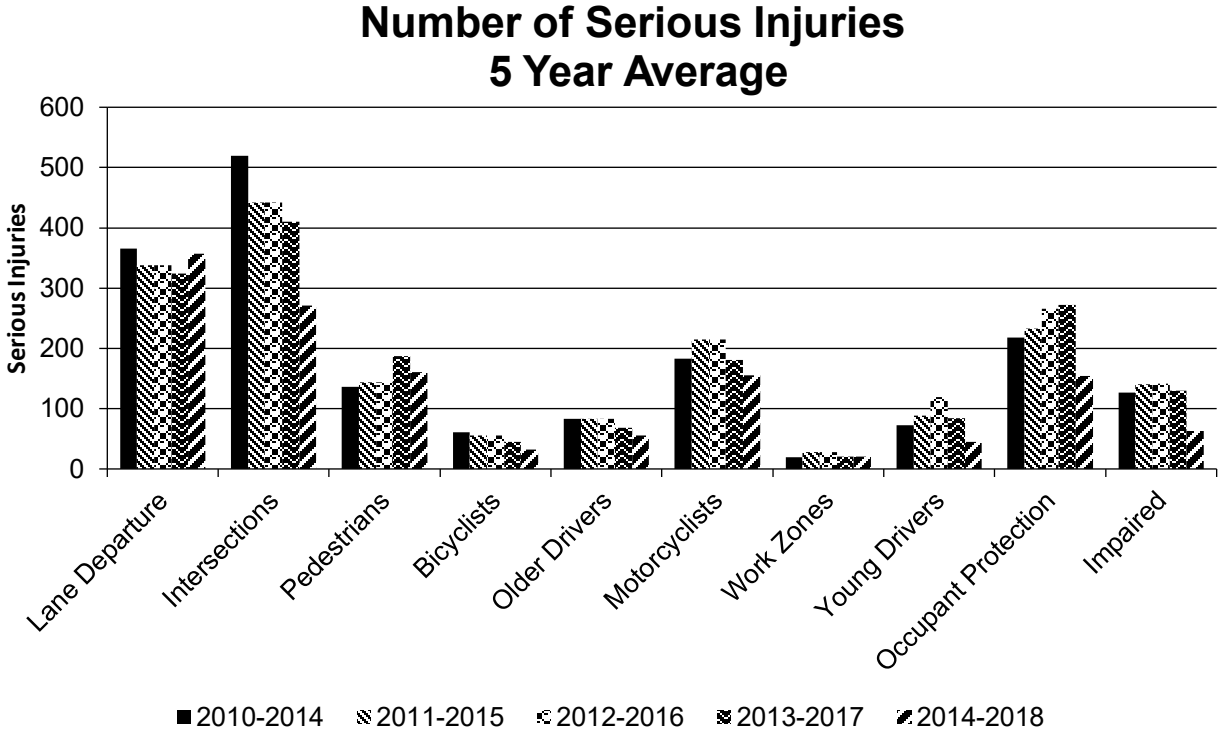
Present and describe trends in SHSP emphasis area performance measures.

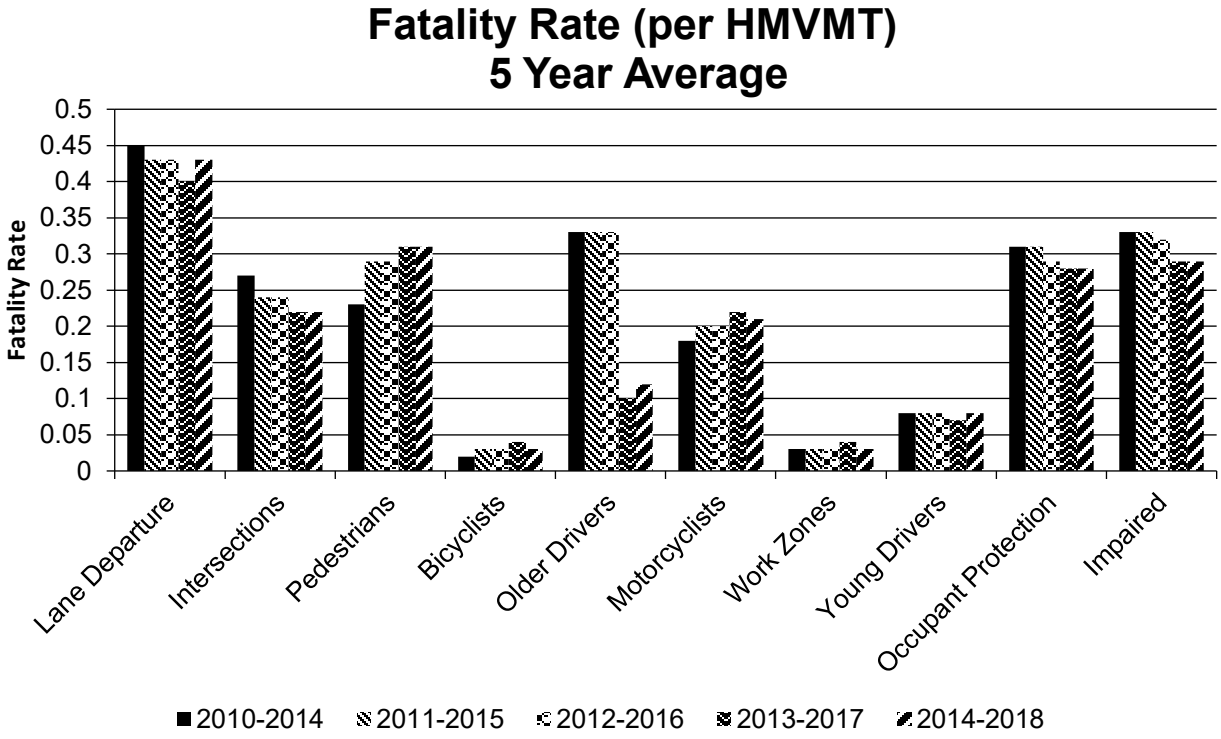
Year 2018

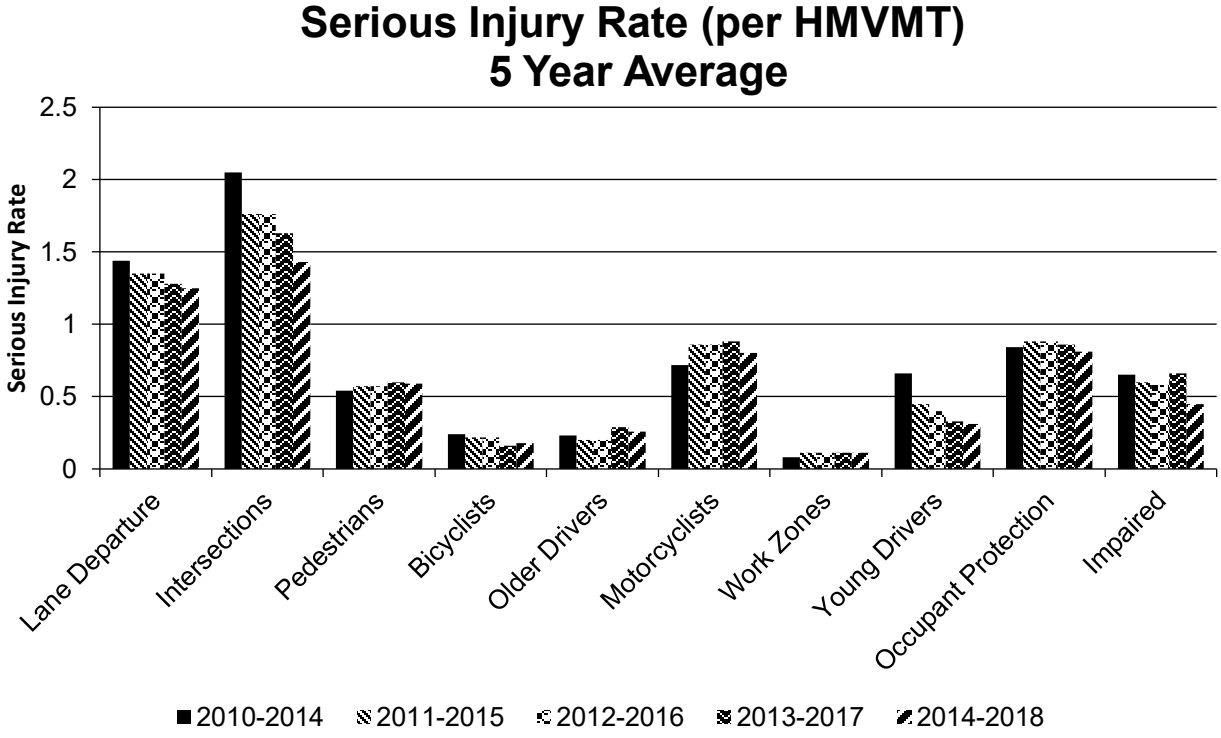
2019 Nevada Highway Safety Improvement Program

SHSP Emphasis Area	Targeted Crash Type	Number of Fatalities (5-yr avg)	Number of Serious Injuries (5-yr avg)	Fatality Rate (per HMVMT) (5-yr avg)	Serious Injury Rate (per HMVMT) (5-yr avg)
Lane Departure		118	357	0.43	1.25
Intersections		55	271	0.22	1.43
Pedestrians		80	161	0.31	0.59
Bicyclists		8	32	0.03	0.18
Older Drivers		44	56	0.12	0.26
Motorcyclists		56	155	0.21	0.8
Work Zones		8	21	0.03	0.11
Young Drivers		34	45	0.08	0.31
Occupant Protection		77	154	0.28	0.81
Impaired		78	63	0.29	0.45


Number of Fatalities
5 Year Average
Fatalities
140
120
100
80
60
40
20
0
Lane Departure
Intersections
Pedestrians
Bicyclists
Older Drivers
Motorcyclists
Work Zones
Young Drivers
Occupant Protection
Impaired
2010-2014
2011-2015
2012-2016
2013-2017
2014-2018


Number of Serious Injuries
5 Year Average
Serious Injuries
600
500
400
300
200
100
0
Lane Departure
Intersections
Pedestrians
Bicyclists
Older Drivers
Motorcyclists
Work Zones
Young Drivers
Occupant Protection
Impaired
2010-2014
2011-2015
2012-2016
2013-2017
2014-2018





Has the State completed any countermeasure effectiveness evaluations during the reporting period?

No

Project Effectiveness

Provide the following information for previously implemented projects that the State evaluated this reporting period.

LOCATION	FUNCTIONAL CLASS	IMPROVEMENT CATEGORY	IMPROVEMENT TYPE	PDO BEFORE	PDO AFTER	FATALITY BEFORE	FATALITY AFTER	SERIOUS INJURY BEFORE	SERIOUS INJURY AFTER	ALL OTHER INJURY BEFORE	ALL OTHER INJURY AFTER	TOTAL BEFORE	TOTAL AFTER	EVALUATION RESULTS (BENEFIT/COST RATIO)
SR 147 CL 9.67 to CL14.23. Phase I	Rural Major Collector	Shoulder treatments	Widen shoulder - paved or other	7.00	3.00			2.00		2.00		11.00	3.00	
Multiple Intersections in District 1 (City of North Las Vegas). Signal System. Package 2	Urban Principal Arterial (UPA) - Other	Intersection traffic control	Modify traffic signal - add flashing yellow arrow	221.00	238.00	2.00	2.00	22.00	18.00	231.00	261.00	476.00	519.00	
SR 160 MP CL 22.00 to CL 43.16	Rural Principal Arterial (RPA) - Other	Roadway	Roadway - other	71.00	47.00	2.00		6.00	5.00	36.00	30.00	115.00	82.00	

The Before/After analysis is based on 3 years instead of 5 years of data.

The evaluation results were not included in this table because we are currently reviewing and updating our benefit/cost methodology under a Task Order with the University of Nevada, Reno.

Compliance Assessment

What date was the State's current SHSP approved by the Governor or designated State representative?

10/11/2016

What are the years being covered by the current SHSP?

From: 2016 To: 2020

When does the State anticipate completing it's next SHSP update?

2020

Provide the current status (percent complete) of MIRE fundamental data elements collection efforts using the table below.

ROAD TYPE	MIRE NAME (MIRE NO.)	NON LOCAL PAVED ROADS - SEGMENT		NON LOCAL PAVED ROADS - INTERSECTION		NON LOCAL PAVED ROADS - RAMPS		LOCAL PAVED ROADS		UNPAVED ROADS	
		NON-STATE	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE	
ROADWAY SEGMENT	Segment Identifier (12)	100	100					100	100	100	100
	Route Number (8)	100	100								
	Route/Street Name (9)	100	100								
	Federal Aid/Route Type (21)	100	100								
	Rural/Urban Designation (20)	100	100					100	100		
	Surface Type (23)	100	100								
	Begin Point Segment Descriptor (10)	100	100					100	100	100	100
	End Point Segment Descriptor (11)	100	100					100	100	100	100
	Segment Length (13)	100	100								
	Direction of Inventory (18)	100	75								
	Functional Class (19)	100	100					100	100	100	100
	Median Type (54)	20	20								
	Access Control (22)	45	45								

ROAD TYPE	MIRE NAME (MIRE NO.)	NON LOCAL PAVED ROADS - SEGMENT		NON LOCAL PAVED ROADS - INTERSECTION		NON LOCAL PAVED ROADS - RAMPS		LOCAL PAVED ROADS		UNPAVED ROADS	
		NON-STATE	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE	
	One/Two Way Operations (91)	100	100								
	Number of Through Lanes (31)	100	100								
	Average Annual Daily Traffic (79)	100	100								
	AADT Year (80)	100	100								
	Type of Governmental Ownership (4)	100	100					100	100	100	100
INTERSECTION	Unique Junction Identifier (120)			100	100						
	Location Identifier for Road 1 Crossing Point (122)			100	100						
	Location Identifier for Road 2 Crossing Point (123)			100	100						
	Intersection/Junction Geometry (126)										
	Intersection/Junction Traffic Control (131)			30	30						
	AADT for Each Intersecting Road (79)			100	100						
	AADT Year (80)			100	100						
	Unique Approach Identifier (139)										
INTERCHANGE/RAMP	Unique Interchange Identifier (178)										
	Location Identifier for Roadway at Beginning of Ramp Terminal (197)										
	Location Identifier for Roadway at Ending Ramp Terminal (201)										
	Ramp Length (187)					100	100				

ROAD TYPE	MIRE NAME (MIRE NO.)	NON LOCAL PAVED ROADS - SEGMENT		NON LOCAL PAVED ROADS - INTERSECTION		NON LOCAL PAVED ROADS - RAMPS		LOCAL PAVED ROADS		UNPAVED ROADS	
		NON-STATE	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE	
	Roadway Type at Beginning of Ramp Terminal (195)										
	Roadway Type at End Ramp Terminal (199)										
	Interchange Type (182)										
	Ramp AADT (191)					100	100				
	Year of Ramp AADT (192)					100	100				
	Functional Class (19)					100	100				
	Type of Governmental Ownership (4)					100	100				
Totals (Average Percent Complete):		**92.50**	**91.11**	**66.25**	**66.25**	**45.45**	**45.45**	**66.67**	**66.67**	**100.00**	**100.00**

*Based on Functional Classification

Describe actions the State will take moving forward to meet the requirement to have complete access to the MIRE fundamental data elements on all public roads by September 30, 2026.

The State of Nevada will take the following steps to meet the MIRE requirements by September 30, 2026:
Hire a consultant to assist with the planning, implementation and evaluation of the Highway Safety Improvement Program (HSIP) as it relates to MIRE data element requirements. The planning phase will include: Identifying processes for collecting and maintaining a record of crash, roadway, traffic and vehicle data on all public roads including railway-highway grade crossings inventory data that includes but is not limited to the characteristics of both highway and train traffic. Expanding the agency's roadway inventory and traffic elements important to safety management to include all segments of our local roads. Identifying which HPMS data elements can be used in conjunction with the elements that comprise the MIRE data. Prioritizing the collection of data elements on Federal-aid roads and then expanding to non-Federal-aid roads The implementation phase will identify data collection costs, funding sources, safety tools, collection methodologies, time schedules and other resources. The evaluation phase shall include HSIP quality control measures to ensure the accuracy of the State's safety data and established performance measures.

Did the State conduct an HSIP program assessment during the reporting period?

No

When does the State plan to complete its next HSIP program assessment.

2020

Optional Attachments

Program Structure:

HSIP Flow Chart3 .pdf
Highway Safety Improvement Program Manual final-updated-8.7.17.docx
Project Implementation:

Safety Performance:

Evaluation:

Compliance Assessment:

Glossary

5 year rolling average: means the average of five individuals, 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.

Systematic: refers to an approach where an agency deploys countermeasures at all locations across a system.

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.