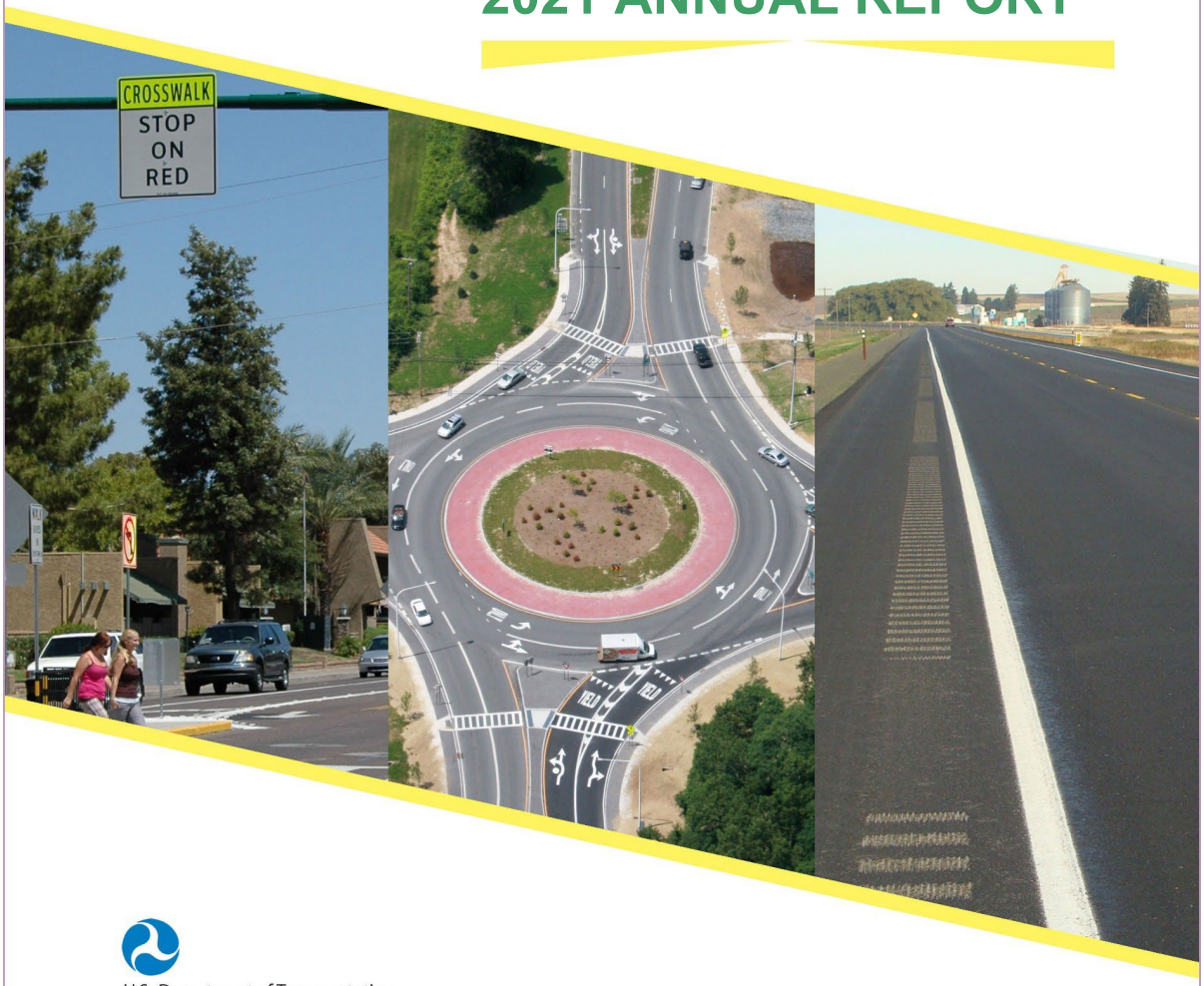
NEVADA

HIGHWAY SAFETY IMPROVEMENT PROGRAM

2021 ANNUAL REPORT



U.S. Department of Transportation
Federal Highway Administration

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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. 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

The Nevada Highway Safety Improvement Program (HSIP) report for 2021 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).

Available program funds for the purpose of this report are considered to be those funds obligated during the 2021 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)

· Pedestrian related safety improvements

· Urban intersection safety improvements

· Urban lane departure crash mitigation

· Rural intersection safety improvements

· Rural lane departure crash mitigation

· Systemic safety Improvements

· Tribal low-cost safety improvements

The Nevada team is excited for the new Investing in a New Vision for the Environment and Surface Transportation Act, or the INVEST in America Act and is prepared to respond to new and innovative ideas to expand the Nevada HSIP program.

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 NDOT 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 geolocation software and is linearly referenced to the statewide street centerline data. The geolocation software tools automate the cleanup of location attributes and assign a spatial location to the crash data through a series of database procedures.

The NDOT Traffic Safety Engineering team has experienced significant turnover in the last few years. New leadership and team members have been reviewing innovative ideas and challenging old processes. The team is excited to use internal and external best practices to strengthen traffic safety in Nevada.

NDOT Traffic Safety Engineering is gearing up to launch a project that will support all local agencies using NDOT Local Public Agency (LPA) process. NDOT is including FHWA and local stakeholders in the development of the NDOT LPA process. This will be included in the NDOT HSIP Manual and reported on in the 2022 HSIP Report. NDOT Traffic Safety Engineering hopes that this will lead to a true partnership with the local agencies. Local agencies can support this process by working with NDOT and the FHWA to develop a Local Road Safety Plan tailored to the needs in each community.

The HSIP program is administered by the NDOT Traffic Safety Engineering division. 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 HSIP Manual. A copy of the current updated NDOT HSIP Manual and other information can be found on the NDOT website at https://www.dot.nv.gov.

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.

The HSIP program is managed by the NDOT Traffic Safety Engineering Team. The team is located in the Planning Division of NDOT.

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.

NDOT Traffic Safety Engineering uses recommendations made during Road Safety Audits (RSA) completed on local and tribal roads to develop projects. The RSA process was impacted by the Covid-19 Pandemic. NDOT is piloting its first internal, virtual RSA project and will report on the outcomes in the 2022 HSIP report. Details of the virtual RSA process can be found later in this report.

NDOT Traffic Safety Engineering is coordinating with Nye County and FHWA to complete Nevada's first Local Road Safety Plan (LRSP). The plan will determine Emphasis Areas and identify potential Safety Projects for the county. NDOT Traffic Safety Engineering is working on a Request for Proposal (RFP) to bring on a consultant team to help all interested locals develop a LRSP to support Local Road Safety. This agreement is expected to be in place in early 2022.

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 the NDOT Planning on a regular basis. Traffic Safety Engineering provides safety improvement guidance and review to the Planning team as projects develop. Traffic Safety Engineering recommends safety improvements for projects in the early stage of development and has supported the One Nevada Transportation Plan for prioritizing projects statewide. The One Nevada Transportation Plan can be found at https://www.dot.nv.gov/projects-programs/road-projects/onenvplan .

NDOT Traffic Safety Engineering is frequently interacting with the NDOT Engineering Division. The Roadway Design and Project Management team are developing plans and specifications to make recommendations from recent Safety Management Plans (SMP's), RSA's and local planning documents a reality. Engineering teams participate at all levels, ranging from preliminary field design surveys, pre-design, intermediate design, final design and construction support.

NDOT Traffic Safety Engineering coordinates with Roadway Design to share the latest safety strategies and provide guidance for safety improvement ideas. This includes the utilization of Strategic Highway Safety Plan (SHSP) strategies, Highway Safety Manual (HSM) tools and other federal guidelines. Traffic Safety Engineering coordinates with the Roadway Design Scoping Section to initiate and recommend safety improvements on projects during the Scoping Phase.

NDOT Traffic Safety Engineering works with the NDOT District offices to understand locations of concerns. Once the concerns are identified, Traffic Safety Engineering can support the district construction and maintenance teams as they build and maintain safe NDOT infrastructure. NDOT District Operations and Maintenance teams participate in RSA's, SMP's and miscellaneous field inspections.

NDOT Traffic Safety Engineering collaborates with NDOT Traffic Operations when developing and implementing safety projects. Collaboration includes signal design, lighting design, operational analysis of roadway segments and intersections, and the development and discussion of safety strategies, methodologies and guidelines. Traffic Safety Engineering and Traffic Operations have partnered on the Traffic Incident Management (TIM) program and several interim approval projects with the FHWA. The TIM program has a primary goal of reducing fatalities and serious injuries from secondary crashes. Current interim approval projects include Wrong Way Driver systems with red flashing lights and Rapid Rectangular Flashing Beacon (RRFB) pedestrian crossing enhancements.

NDOT Traffic Safety Engineering partners with the Nevada Department of Public Safety Office of Traffic Safety (DPS-OTS) on the development of the SHSP, the Critical Emphasis Areas (CEA's) identified in the SHSP, the CEA Task Force Committees and the Zero Fatalities Initiative. DPS-OTS is NDOT Traffic Safety Engineering's primary behavioral partner.

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

Describe coordination with external partners.

NDOT Traffic Safety Engineering coordinates with the University of Nevada Reno (UNR) and the University of Las Vegas (UNLV) for research projects. Current projects include Traffic Data Collection and an Urban Street Lighting study. The UNLV School of Medicine maintains two (2) crash trauma databases.

NDOT Traffic Safety Engineering team partners with the FHWA. Team members share knowledge with the FHWA by attending webinars, peer-to-peers, and workshops. Traffic Safety Engineering and Traffic Operations leadership meets with the FHWA at least once a month to discuss the HSIP, interim approval programs and upcoming plans. The NDOT HSIP team works with the FHWA representative to ensure that any updates in HSIP procedures or best practices are shared and documented.

The Department of Public Safety – Office of Traffic Safety (DPS-OTS) serves as Nevada's Governors Highway Safety Office. The NDOT Traffic Safety Engineering and DPS-OTS work together as defined in the SHSP. The teams share crash data and work together to ensure that safety messages reach road users in the State of Nevada. DPS-OTS and NDOT Traffic Safety share goals that are used to develop SHSP and HSIP Performance Measures.

Representatives from Local Government Agencies partner with the HSIP team by attending the annual Safety Summit hosted by NDOT, contribute and partner with SMP's and participate as team members in the SHSP Task Forces.

NDOT Traffic Safety works with and seeks input from a variety of regional planning organizations, including, but not limited to the Southern Nevada Regional Transportation Commission (RTC), RTC of Washoe County, Carson Area Metropolitan Planning Organization (CAMPO), and Tahoe Regional Planning Authority (TRPA). These organizations are encouraged to attend the Safety Summit, contribute to SMP's, RSA's and serve as members of SHSP Task Forces.

Representatives from Law Enforcement Agencies and Emergency Medical Services support and participate in the Nevada Safety Summit, contribute to SMP's, RSA's and serve as members of the SHSP Task Forces and TIM Collation.

Tribal Agency projects are generated by the RSA process or through tribal planning priorities. Projects are developed and executed with tribal input.

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

Nevada published the 2021-2025 SHSP in early 2021. This team is reviewing stakeholders' input and defining the strengths, opportunities, and areas for improvement in SHSP implementation. The SHSP defines the ongoing commitments of the Nevada Safety Team. The SHSP establishes statewide goals and strategies focusing on the 6 "Es" of traffic safety: Equity, Engineering, Education, Enforcement, Emergency Medical Services/Emergency Response/Incident Management and Everyone.

The 81st session of the Nevada Legislature created the Nevada Advisory Committee on Traffic Safety (NVACTS) with the approval of Assembly Bill No. 54 (AB54). NVACTS is the executive committee the oversees the Nevada SHSP and the Traffic Records Coordination Committee (TRCC). This bill builds on the group formally known as the Nevada Executive Committee on Traffic Safety (NECTS).

The SHSP team coordinated the 2020 Nevada Traffic Safety Summit. The summit was a one-day, virtual event held on December 2nd, 2020. The virtual event drew 182 virtual attendees with varying backgrounds. The 2020 Summit started with welcome session followed by four presentations: COVID-19: Exposing Road Safety

Challenges; Priorities for Traffic Safety in Nevada Community Leaders Panel Discussion, The Why, What and Who of the Safe System Approach; and Traffic Safety Communication - How One Conversation Can Save a Life. All sessions were well received and the attendees appreciated the shortened digital platform.

The SHSP team is currently planning the 2021 Nevada Traffic Safety Summit. The Summit will be held October 19th through 21st at the Palace Station in Las Vegas, Nevada. The 2021 Summit is scheduled to be a three day, in person event. The planning team is keeping a close eye on Centers for Disease Control and Prevention (CDC) and Nevada specific guidelines with the intent to make this a safe and educational event.

Nevada is revitalizing it RSA program. The Covid-19 Pandemic forced changes and the department responded. At the time of writing, NDOT Traffic Safety Engineering is hosting its first virtual RSA. This virtual process includes a field review and data collection by the NDOT Traffic Safety Engineering including field observations, videos of both daytime and nighttime driving views of the RSA corridor, and pictures of the major intersections. This data, coupled with crash data analysis and maps exhibiting crash severity, crash types, and driver factors for the RSA's were have been created and shared with to the multidisciplinary and multi-agency RSA Stakeholder Team to review prior to the virtual RSA meeting. Two virtual meetings are held to allow the stakeholders time to review and to submit comments. The RSA Stakeholders are encouraged to drive and observe the corridor, either virtually or in person. All comments are to be collected in a comment matrix and reviewed and approved by the RSA Stakeholder Team as the NDOT Traffic Safety Engineering team developed the RSA report documents and final report. This process aligns with Technical Report No. FHWA-SA-21-025 "Preparing for a virtual Road Safety Audit (RSA)" published in December 2020.

NDOT Traffic Safety Engineering is updating the RSA database so that the RSA recommendations can be found in one central file. The database will be used as a design and planning resource for internal and external projects. The RSA database will include all current and historic RSA information and is expected to be fully populated by winter of 2022-2023.

NDOT Traffic Safety Engineering works with other NDOT teams to perform engineering studies in support of the SHSP. Current studies include "A Data-Drive Approach to Implementing Wrong-way Driving Countermeasures" where NDOT has installed red Rapid Rectangular Flashing Beacon's (RRFB's) on several off-ramps. This study is conducted under an interim agreement with the FHWA (4(09)-56 (E) - Red Rectangular Rapid Flashing Beacons on Exit Ramps – Nevada DOT). As part of this interim agreement, NDOT manages a multiplidicanary team led by NDOT Traffic Safety Engineering and NDOT Traffic Operations to study the effectiveness of these systems, and to submit semi-annual progress reports and a final evaluation report at the end of the experiment. The study will evaluate wrong-way driver systems that are MUTCD compliant and compare the data collected.

In support of the Lane Departure SHSP Task Force, NDOT Traffic Safety Engineering has initialed a program that identifies locations statewide on rural roads where 2 or more chip seal applications have been installed over centerline rumble strips making them less effective. Locations are identified and centerline rumble strips are reinstalled through NDOT Districts.Stakeholders include, but are not limited to the NDOT Districts, the NDOT Freight team and law enforcement partners.

NDOT Traffic Safety Engineering is working with a consultant team to develop a data driven approach to identify and prioritize locations for passing lanes. The prioritization is scheduled to be complete in Fall of 2022. Once this is developed, Traffic Safety Engineering will work with the NDOT team to design, bid and build these projects.

Safety Management Plans are safety focused corridor studies intend to reduce the number of crashes on Nevada Roadways. The NDOT Traffic Safety Engineering team identifies corridors on arterial roads statewide to implement safety improvements. Three SMP's occurred in this reporting period. Locations were identified through the NDOT network screening process. The first is in Reno, Nevada on NV-647 (West 4th Street) between McCarran on the West and North Virginia Street on the East. The second is in Las Vegas, Nevada on

off-system East Bonanza Road between Las Vegas Boulevard North and North Nellis Boulevard. The third is in North Las Vegas, Nevada on off-system East Care Avenue from Interstate 15 to North Sloan Lane. SMP's typically take one year to complete. The SMP's in this reporting period were impacted by the Covid-19 Pandemic and extended. They are expected to be completed in September 2021.

SMP's evaluate the needs of all modes of transportation and make recommendations for future projects. The purpose of a SMP is 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 Technical Advisory Committee (TAC) is 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 SHSP goal of reducing the number of fatalities and serious injuries on Nevada's roadways.

Program Methodology

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

Yes
NDOT Traffic Safety Engineering will systematically review this manual and update as appropriate. The manual is scheduled to be updated late 2021 to include a newly established LPA process for HSIP funding and new crash data processes.

Select the programs that are administered under the HSIP.

- HRRR
- Intersection
- Local Safety
- Pedestrian Safety
- Rural State Highways
- Segments
- Wrong Way Driving
- 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 Improvements: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
- All crashes

Exposure
- Volume

Roadway
- 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: Local Safety

Date of Program Methodology:11/4/2019

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 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?

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

Ranking based on B/C:50
Available funding:50

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
- All crashes

Exposure
- Volume

Roadway
- 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
- All crashes

Exposure
- Volume

Roadway
- 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: Wrong Way Driving

Date of Program Methodology:3/11/2020

What is the justification for this program?

- 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 frequency
- Crash rate

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

No

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

How are projects under this program advanced for implementation?

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

Rank of Priority Consideration

Available funding:50
Other-Combined with other projects:50

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

- All crashes

Exposure

- Volume

Roadway

- 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?

0

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

Nevada includes systemic improvements in all state-funded projects. The improvements include signage, rumble strips, safety edge, guard rail upgrades and 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. Project safety effectiveness is calculated by Highway Safety Manual processes.

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

Nevada did not trigger the HRRR Special Rule for the reporting period but continues its efforts on rural road safety. Nevada kicked off a Passing and Climbing Lane study and continues its efforts to incorporate systemic proven countermeasures such as rumble strips, curve improvements (including High Friction Surface Treatment), shoulder widening, slope flattening, and passing lanes into our HSIP program.

NDOT Traffic Safety Engineering and Traffic Operations is continuing to expand the 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)	$16,590,611	$16,590,611	100%
HRRR Special Rule (23 U.S.C. 148(g)(1))	$0	$0	0%
Penalty Funds (23 U.S.C. 154)	$0	$0	0%
Penalty Funds (23 U.S.C. 164)	$7,120,336	$0	0%
RHCP (for HSIP purposes) (23 U.S.C. 130(e)(2))	$4,903,118	$3,165,220	64.56%
Other Federal-aid Funds (i.e. STBG, NHPP)	$0	$0	0%
State and Local Funds	$0	$0	0%
Totals	$28,614,065	$19,755,831	69.04%

Nevada will focus on the obligation of Penalty Funds (23 U.S.C. 146) in Federal Fiscal Year 2022.

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

0%

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

0%

NDOT does not set a funding limit for local or tribal safety project. Current projects are designed and constructed by the NDOT team. NDOT is developing a LPA process for all locals to submit for HSIP funds.

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

53%

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?

$5,163,890
Funds transferred to National Highway Performance Program (NHPP).

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

The NDOT Traffic Safety Engineering team is still working though changes inspired by the Covid-19 Pandemic and staff turnover. Leadership is working with the data analysis and engineering teams to finalized processes to be reported in the 2022 HSIP report. The team has made a commitment to Nevada's FHWA representative to systematically review and update the HSIP Manual, HSIP processes and projects throughout the State of Nevada. The 2022 HSIP report is expected to highlight new and reinvigorated processes including, but not limited to, RSAs and a new Local Public Agency program allowing locals to access HSIP funding through NDOT.

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

Nevada is developing a process to support and fund local and regional projects in a sustainable manner. In the last reporting period, FHWA approved a pilot project using the NDOT LPA program. Nevada is expanding on the LPA concept and studying the best practices of peer states to develop a sustainable LPA program. State HSIP projects will be identified and pursued using processes established in the HSIP Manual.

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
US 93, MP EL 101.9 TO MP EL 107.11 SHOULDER WIDENING, SLOPE FLATTENING, TURN LANES AND BOX EXTENSIONS	Roadway	Roadway widening - travel lanes	6.02	Miles	$3680978	$3874714	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Other	2,900	70	State Highway Agency	Systemic	Roadway Departure	Lane Departure
US 95, MP NY 72.036 TO NY103.552 SHOULDER WIDENING, SLOPE FLATTENING, TURN LANES AND BOX EXTENSIONS	Roadway	Roadway widening - travel lanes	31.156	Miles	$9025000	$9500000	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Other	2,750	70	State Highway Agency	Systemic	Roadway Departure	Lane Departure
STATEWIDE - INSTALL AC POWER AND SOLAR AT ACTIVE ADVANCE WARNING SIGNALS AT RAILROAD CROSSINGS	Railroad grade crossings	Crossing warning signs and pavement marking improvements	4	Locations	$2007016	$2230019	RHCP (for HSIP purposes) (23 U.S.C. 130(e)(2))	Multiple/Varies	Multiple/Varies	0	0	State Highway Agency	Spot	Railroad	Intersections
TWO SIGNALS IN DISTRICT II - SIGNAL SYSTEM MODIFICATION INCLUDING FLASHING ARROWS AND PEDESTRIAN COUNTDOWN TIMERS	Intersection traffic control	Systemic improvements – signal-controlled	2	Intersections	$-21375	$-22500	HSIP (23 U.S.C. 148)	Urban	Multiple/Varies	0	0	Other Local Agency	Spot	Intersections	Intersections
CONTINUED IMPLEMENTATION OF SHSP TO ADDRESS THE SEVEN CRITICAL EMPHASIS AREAS	Miscellaneous	SHSP Development	0	Planning Study	$358483	$377351	HSIP (23 U.S.C. 148)	N/A	N/A	0	0	State Highway Agency	Planning	All Key Emphasis Areas	All Key Emphasis Areas
STATEWIDE CRASH/CITATION REPORTING, SOFTWARE, HOSTING, AND MAINTENANCE (FY 2021-2024)	Miscellaneous	Data collection	0	Data	$3800000	$4000000	HSIP (23 U.S.C. 148)	N/A	N/A	0	0	State Highway Agency	Systemic	Data	All Key Emphasis Areas
STATEWIDE DEVELOPMENT OF A SYSTEMIC STATEWIDE PASSING AND CLIMBING LANE PRIORITIZATION PROCESS AND RISK ASSESSMENT INDEX	Miscellaneous	Transportation safety planning	0	Planning Study	$264030	$277926	HSIP (23 U.S.C. 148)	N/A	N/A	0	0	Planning Study	Planning	Roadway Departure	Lane Depature

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
RAIL INVENTORY MANAGEMENT SYSTEM INVENTORY DATABASE AND FIELD APPLICATION	Miscellaneous	Data collection	0	Data Collection	$50992	$56658	HSIP (23 U.S.C. 148)	N/A	N/A	0	0	State Highway Agency	Systemic	Data	Intersections
AT-GRADE RAILWAY-HIGHWAY CROSSINGS ENGINEERING DESIGN SEVICES	Railroad grade crossings	Crossing approach improvements	0	Design	$90000	$100000	HSIP (23 U.S.C. 148)	N/A	N/A	0	0	State Highway Agency	Systemic	Data	Intersections
STATEWIDE - IMPROVE CRASH DATA COLLECTION AND ANALYSIS	Miscellaneous	Data collection	0	Data	$-88935.73	$-93614.67	HSIP (23 U.S.C. 148)	N/A	N/A	0	0	State Highway Agency	Systemic	Data	All Key Emphasis Areas
LOW COST PEDESTRIAN AND ROAD SAFETY IMPROVEMENTS ON TE-MOAK AND DUCKWATER TRIBAL LANDS	Pedestrians and bicyclists	Pedestrians and bicyclists – other	0	Various Low Cost Safety Improvements from RSA	$-17912.45	$-18855.37	HSIP (23 U.S.C. 148)	Rural	Local Road or Street	0	0	Other Local Agency	Spot	Pedestrians	Pedestrians
STEWART ST, CARSON CITY SAFETY IMPROVEMENTS TO INCLUDE RAPID FLASHING BEACONS, REFUGE ISLAND, AND LIGHTING	Pedestrians and bicyclists	Rapid Rectangular Flashing Beacons (RRFB)	0	Locations	$-119417.52	$-125702.49	HSIP (23 U.S.C. 148)	Urban	N/A	0	0	State Highway Agency	Spot	Pedestrians	Pedestrians
US 95 MINERAL COUNTY, LYON COUNTY, AND CHURCHILL COUNTY - MISC AREAS OF FULL DEPTH RECONSTRUCT/OVERLAY	Roadway	Pavement surface - other	13.57	Miles	$-24	$-25	HSIP (23 U.S.C. 148)	Rural	Multiple/Varies	0	0	State Highway Agency	Systemic	Roadway Departure	Roadway Depature
SHSP - DPS/NHP SUPPORT FOR EQUIPMENT FY 2014-2017	Miscellaneous	Equipment	0	Equipment	$-241849.74	$-254578.67	HSIP (23 U.S.C. 148)	N/A	N/A	0	0	State Highway Agency	Systemic	All Emphasis Areas	All Key Emphasis Areas
STATEWIDE - ROAD SAFETY AUDIT FY 2016-2018	Miscellaneous	Road safety audits	0	Planning Study	$-56503.38	$-59477.43	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0	0	State Highway Agency	Systemic	All Emphasis Areas	All Key Emphasis Areas
SR 147, SR 159, SR322 - FINAL DESIGN FOR TRAFFIC SAFETY ENGINEERING DESIGN SERVICES	Miscellaneous	Miscellaneous - other	0	Design	$-703496.32	$-740522.45	HSIP (23 U.S.C. 148)	Urban	Multiple/Varies	0	0	State Highway Agency	Spot	All Emphasis Areas	All Key Emphasis Areas
MULTIPLE LOCATIONS IN DISTRICT - SR322, US 93, AND SR 361	Roadway	Rumble strips – center	82.8	Miles	$-186238.61	$-196041.3	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0	0	State Highway Agency	Systemic	Roadway Departure	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
SHSP DPS/NHP SUPPORT FOR EQUIPMENT FY 2018 -2019	Miscellaneous	Equipment	0	Equipment	$-213105.34	$-224321.83	HSIP (23 U.S.C. 148)	N/A	N/A	0	0	State Highway Agency	Systemic	All Emphasis Areas	All Key Emphasis Areas
Development of Local Road Safety Plans (LRSPs), Statewide	Miscellaneous	Local road safety plans	0	Planing Study	$1110978.43	$2000000	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0	0	State Highway Agency	Systemic	All Emphasis Areas	All Key Emphasis Areas
Rail Inventory Management System - Continued Access To and Maintenance	Railroad grade crossings	Railroad grade crossings - other	0	Data	$117212	$130236	RHCP (for HSIP purposes) (23 U.S.C. 130(e)(2))	Multiple/Varies	Multiple/Varies	0	0	State Highway Agency	Systemic	Data	Intersection
Statewide Railway-Highway Crossings Section 130 Program	Railroad grade crossings	Railroad grade crossings - other	0	Planning	$900000	$1000000	RHCP (for HSIP purposes) (23 U.S.C. 130(e)(2))	Multiple/Varies	Multiple/Varies	0	0	State Highway Agency	Systemic	Railroad	Intersections

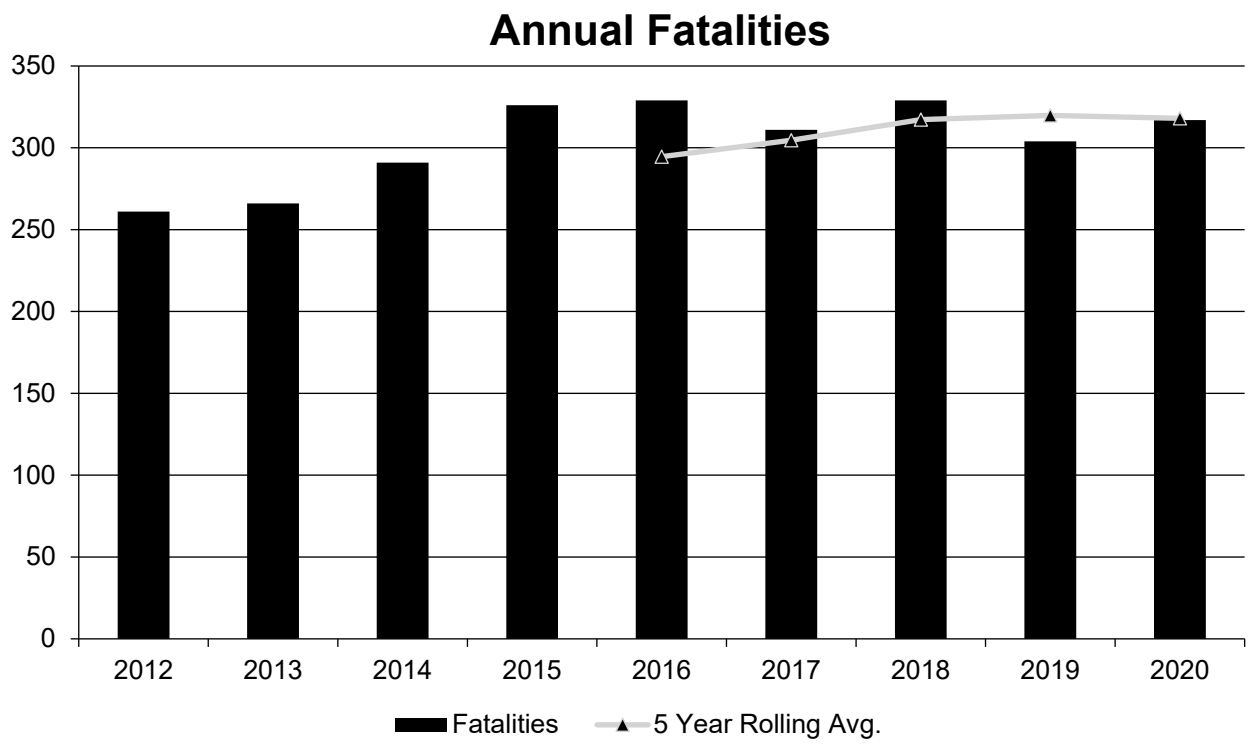
Negative values reflect NDOT fiscal closeout of older projects. These projects are included to reflect all Obligated and Programmed HSIP funds in the reporting period.

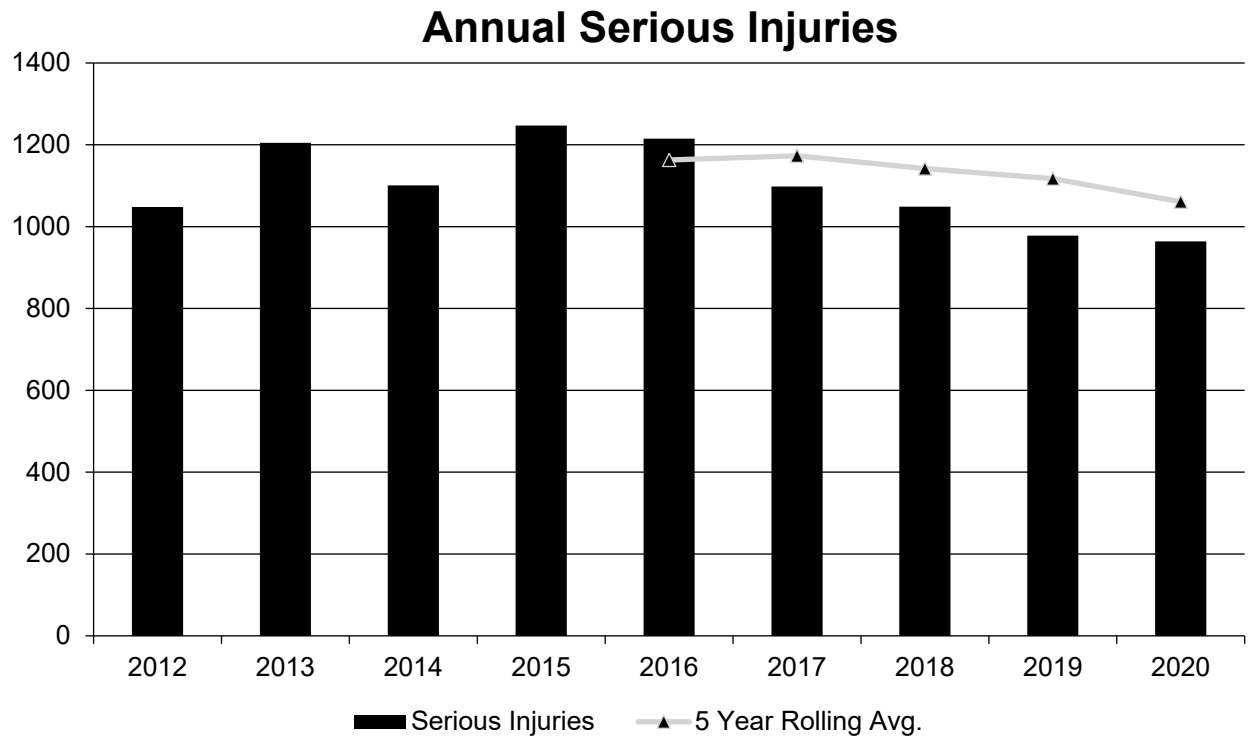
Safety Performance

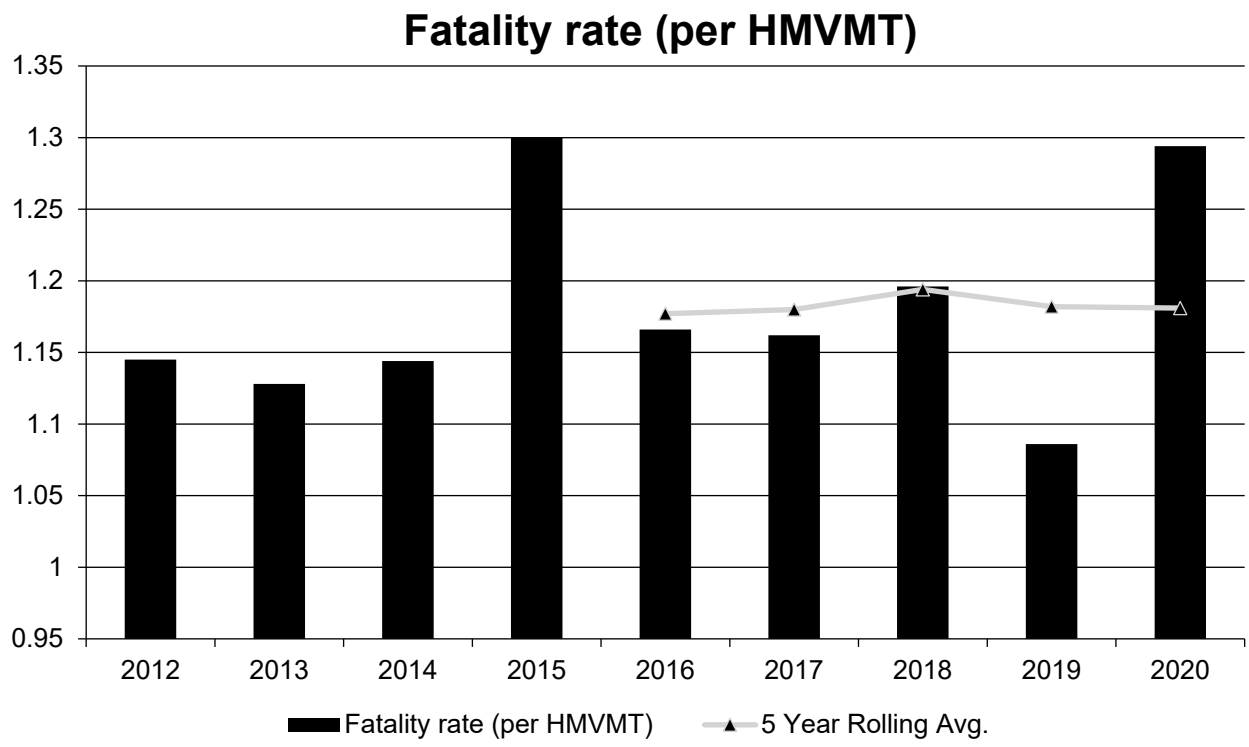
General Highway Safety Trends

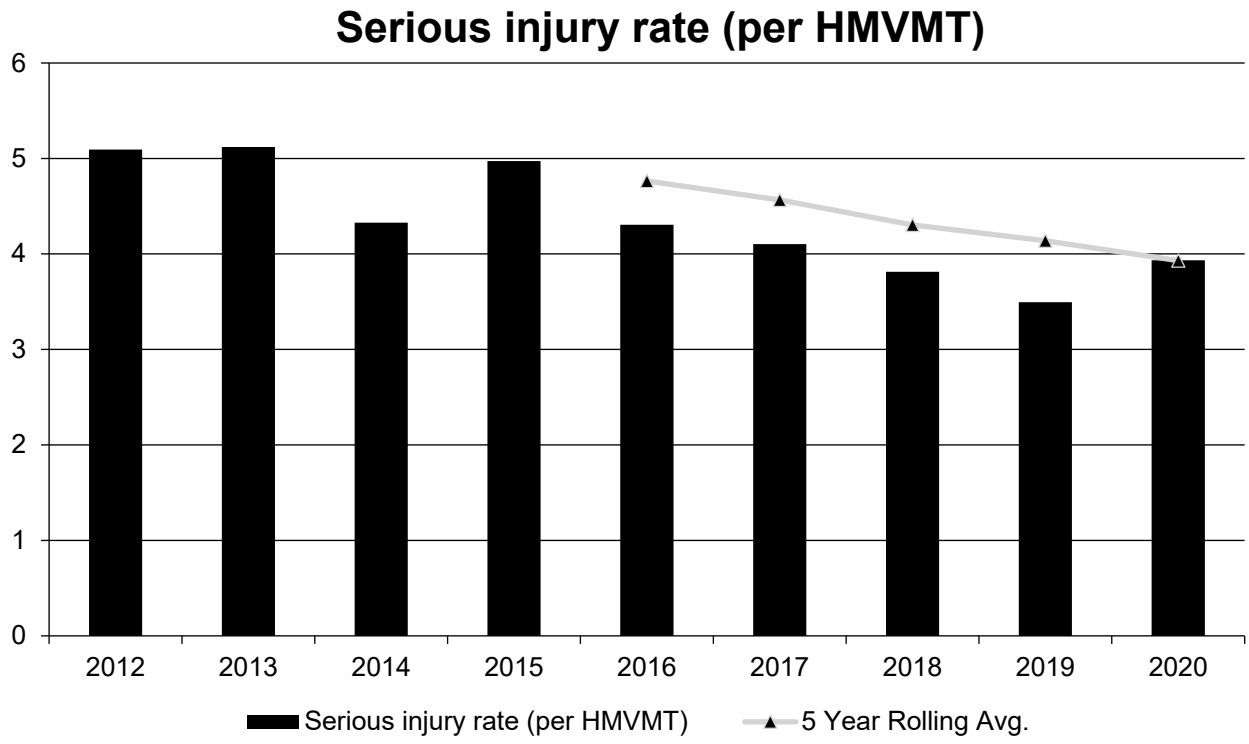
Present data showing the general highway safety trends in the State for the past five years.

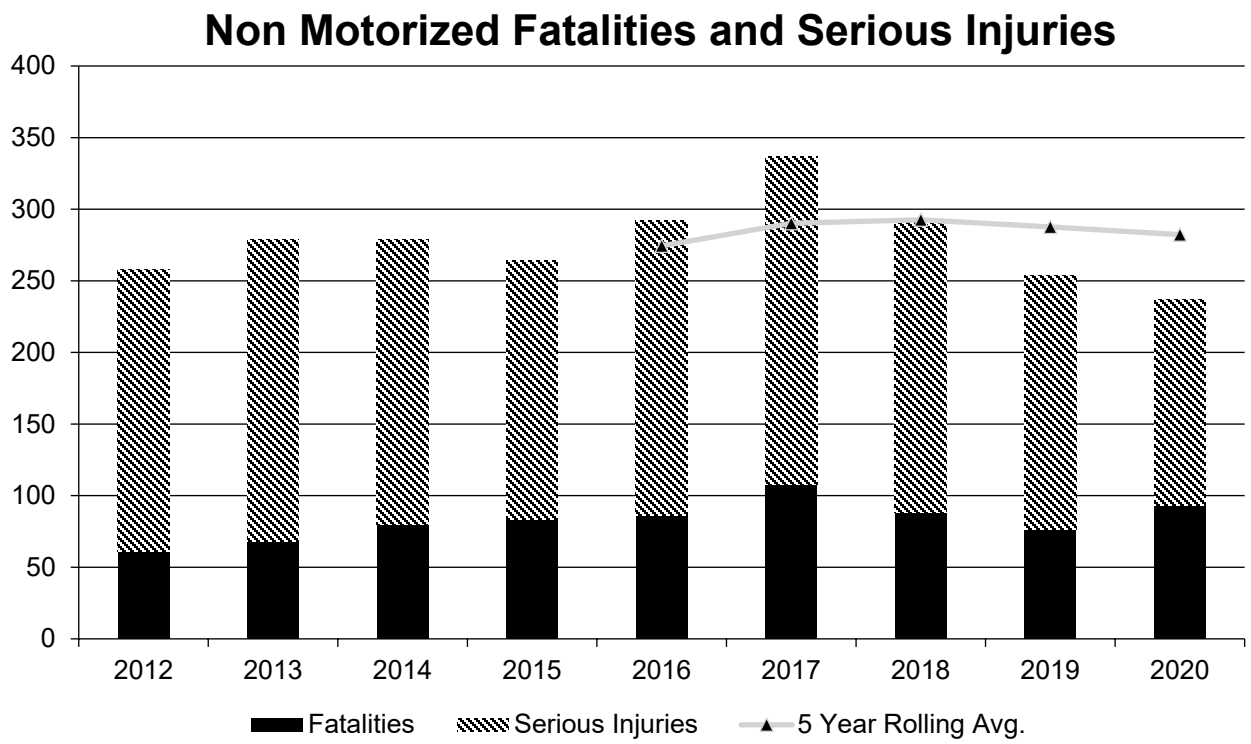
PERFORMANCE MEASURES	2012	2013	2014	2015	2016	2017	2018	2019	2020
Fatalities	261	266	291	326	329	311	329	304	317
Serious Injuries	1,048	1,205	1,101	1,247	1,215	1,098	1,049	978	964
Fatality rate (per HMVMT)	1.145	1.128	1.144	1.300	1.166	1.162	1.196	1.086	1.294
Serious injury rate (per HMVMT)	5.093	5.120	4.328	4.972	4.306	4.103	3.813	3.494	3.934
Number non-motorized fatalities	61	68	80	83	86	108	88	76	93
Number of non-motorized serious injuries	197	211	199	181	206	229	203	178	144


Annual Fatalities
350
300
250
200
150
100
50
0
2012
2013
2014
2015
2016
2017
2018
2019
2020
Fatalities
5 Year Rolling Avg.


Annual Serious Injuries
1400
1200
1000
800
600
400
200
0
2012
2013
2014
2015
2016
2017
2018
2019
2020
Serious Injuries
5 Year Rolling Avg.


Fatality rate (per HMVMT)
1.35
1.3
1.25
1.2
1.15
1.1
1.05
1
0.95
2012
2013
2014
2015
2016
2017
2018
2019
2020
Fatality rate (per HMVMT)
5 Year Rolling Avg.


Serious injury rate (per HMVMT)
6
5
4
3
2
1
0
2012
2013
2014
2015
2016
2017
2018
2019
2020
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 2019

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	22	36.6	0.97	1.61
Rural Principal Arterial (RPA) - Other Freeways and Expressways	0	0	0	0
Rural Principal Arterial (RPA) - Other	34.4	56	2.4	2.12
Rural Minor Arterial	9.8	18.6	2.4	4.63
Rural Minor Collector	2.6	2.6	1.85	1.87
Rural Major Collector	9	22	2.49	6.03

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 Local Road or Street	5.4	10.6	1.05	2.12
Urban Principal Arterial (UPA) - Interstate	23.2	70.2	0.52	1.56
Urban Principal Arterial (UPA) - Other Freeways and Expressways	8.6	31.4	0.48	1.76
Urban Principal Arterial (UPA) - Other	61	214.6	6.5	1.85
Urban Minor Arterial	90.2	342.2	1.76	6.65
Urban Minor Collector	28	121.8	1.29	5.62
Urban Major Collector	1.6	1.8	3.46	3.91
Urban Local Road or Street	23.2	103.4	0.48	2.19

Year 2020

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	0	0	0	0
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				

Due to an incomplete spatially located record of 2020 K and A-type injuries, K and A-type injuries injuries will not be reported per function class in the 2021 HSIP report.

Safety Performance Targets

Safety Performance Targets

Calendar Year 2022 Targets *

Number of Fatalities:309.9

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

The target was set based on Nevada's SHSP Goal of Zero Fatalities in 2050. The number of fatalities in 2020 was reduced on a straight-line basis to be 0 in 2050.

Number of Serious Injuries:964.0

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

The target was set based on Nevada's SHSP Goal of Zero Fatalities in 2050. The number of serious injuries in 2020 was reduced on a straight-line basis to be 0 in 2050.

Fatality Rate:1.171

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

The target was set based on Nevada's SHSP Goal of Zero Fatalities in 2050. The fatality rate in 2020 was reduced on a straight-line basis to be 0 in 2050.

Serious Injury Rate:3.702

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

The target was set based on Nevada's SHSP Goal of Zero Fatalities in 2050. The serious injury rate in 2020 was reduced on a straight-line basis to be 0 in 2050.

Total Number of Non-Motorized Fatalities and Serious Injuries:245.9

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

The target was set based on Nevada's SHSP Goal of Zero Fatalities in 2050. The number of non -motorized fatalities and serious injuries in 2020 was reduced on a straight-line basis to be 0 in 2050.

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

Nevada is sharing its methodology with all stakeholders and will support all efforts to align with the SHSP Goal of Zero Fatalities in 2050 by reducing on a straight-line basis to be 0 in 2050.

Does the State want to report additional optional targets?

No

Describe progress toward meeting the State's 2020 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 MEASURES	TARGETS	ACTUALS
Number of Fatalities	330.6	318.0
Number of Serious Injuries	1088.6	1060.8
Fatality Rate	1.214	1.181
Serious Injury Rate	4.060	3.930

Non-Motorized Fatalities and Serious Injuries	294.7	282.2

All 2020 outcomes were below the 2020 safety performance targets.

Applicability of Special Rules

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

No

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	2014	2015	2016	2017	2018	2019	2020
Number of Older Driver and Pedestrian Fatalities	37	46	55	53	62	63	50
Number of Older Driver and Pedestrian Serious Injuries	100	110	130	129	115	124	140

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 decreased.

NDOT Traffic Safety Engineering focuses on developing projects that will reduce the numbers of fatalities and serious injuries using HSIP funds as outlined in the strategies and action items under the current emphasis areas outlines in the Nevada SHSP.

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
- Increased awareness of safety and data-driven process
- More systemic programs
- Policy change

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

NDOT Traffic Safety Engineering is developing a new system for project delivery on local roadways. The team is working with the peer states, local stakeholders and the FHWA to incorporate the HSIP into the established NDOT Local Public Agency program. This change will be highlighted in the 2022 HSIP report.

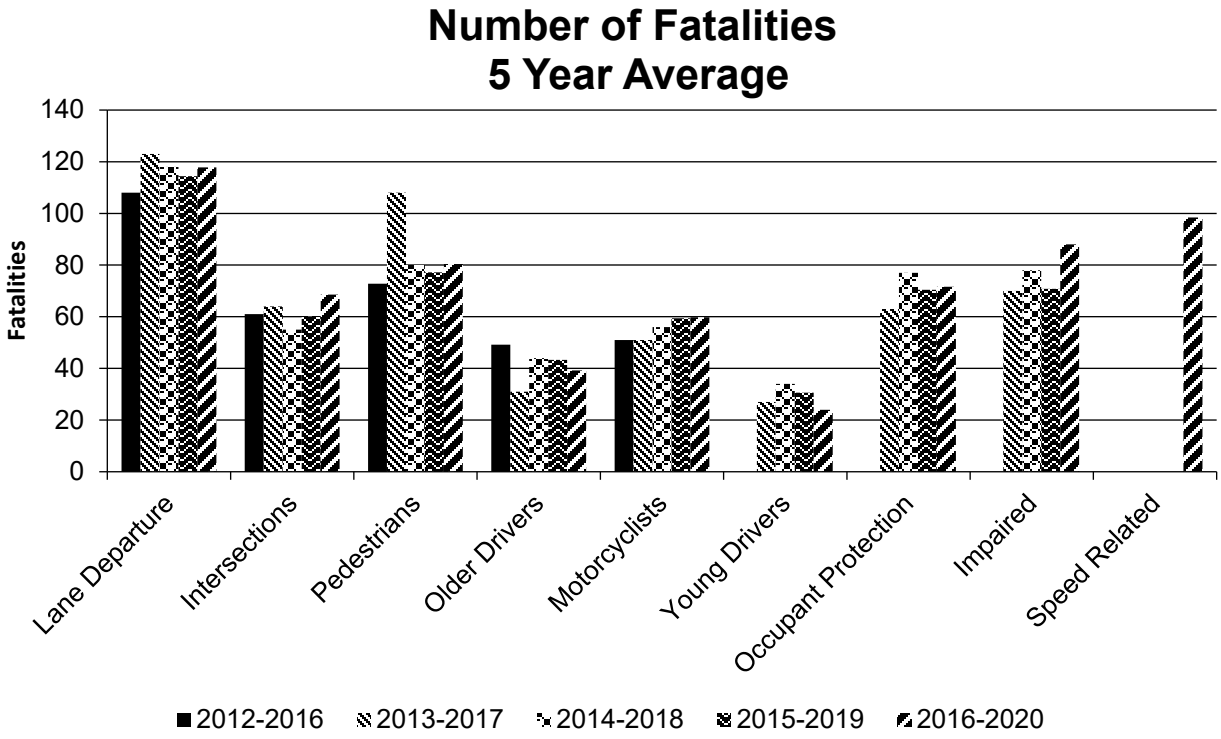
Effectiveness of Groupings or Similar Types of Improvements

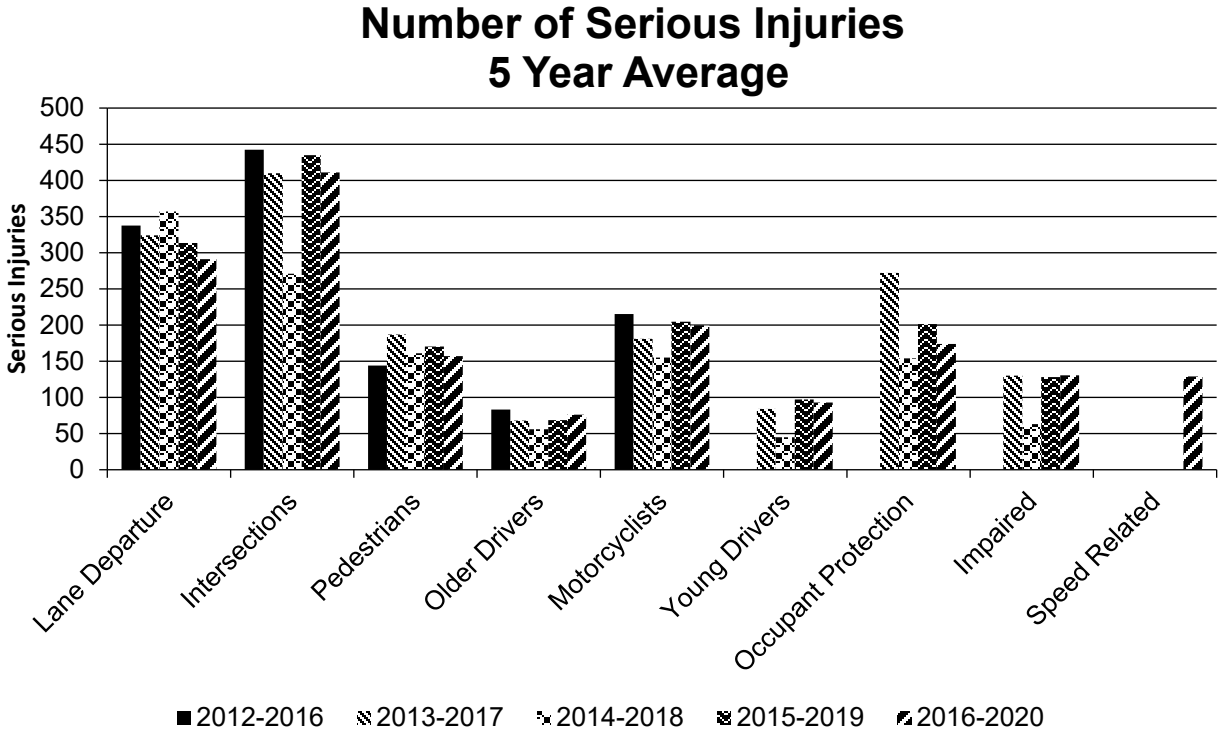
Present and describe trends in SHSP emphasis area performance measures.

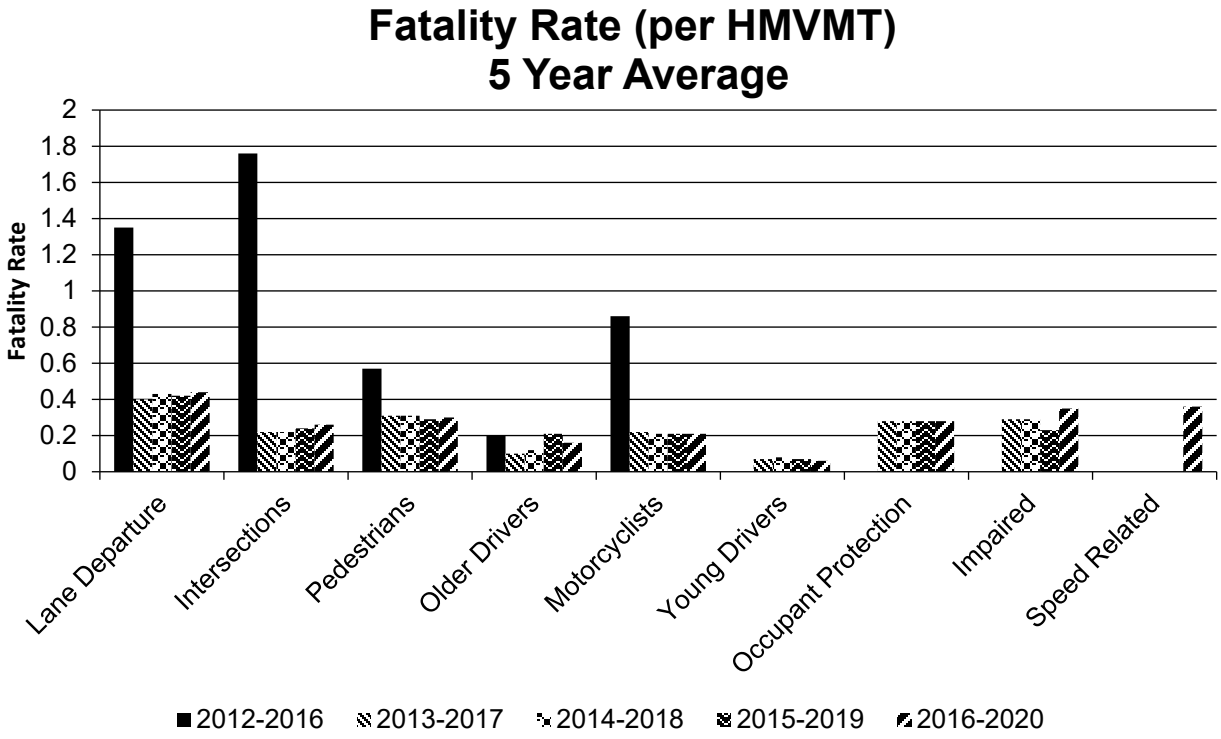
Year 2020

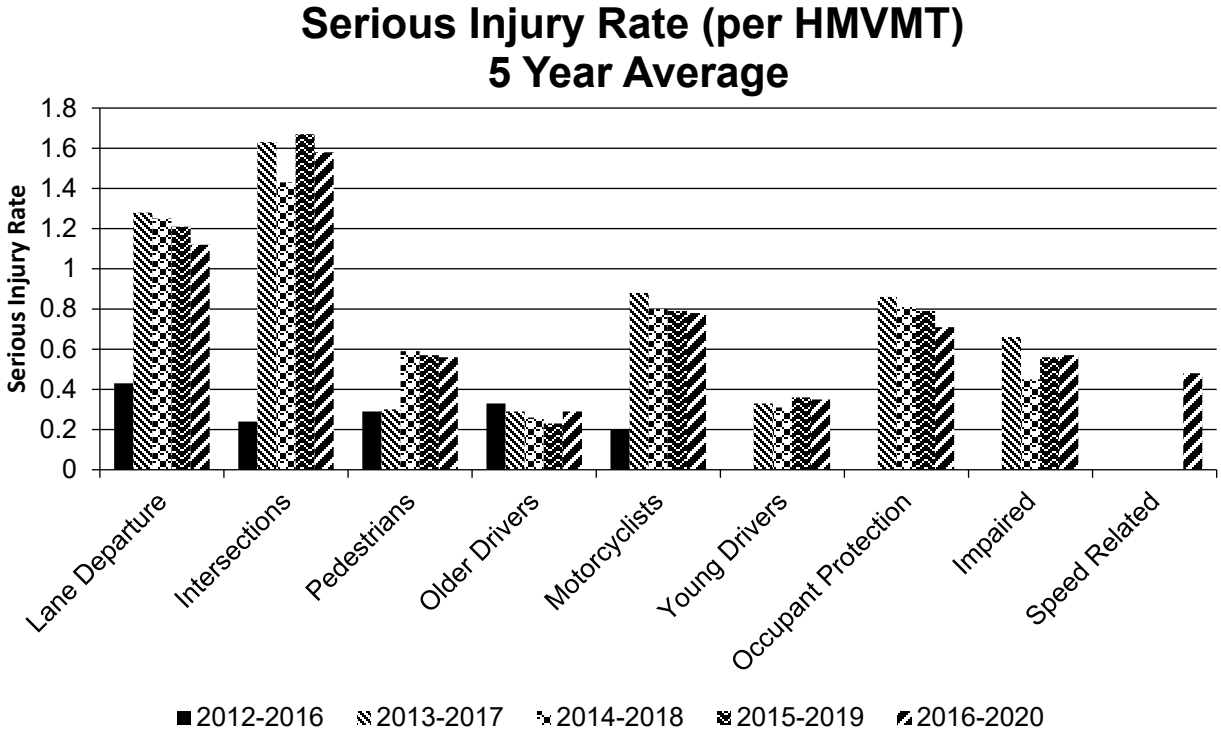
SHSP Emphasis Area	Targeted Crash Type	Number of Fatalities (5-yr avg)	Number of Serious Injuries (5-yr avg)	Fatality Rate (per HMVMT) (5-yr avg)	Serious Injury Rate (per HMVMT) (5-yr avg)
Lane Departure	Run-off-road	117.8	291.2	0.44	1.12
Intersections	Intersections	68.6	411	0.26	1.58
Pedestrians	Vehicle/pedestrian	80.4	157	0.3	0.56

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)
Older Drivers	All	39.24	76.24	0.16	0.29
Motorcyclists	All	59.8	199.4	0.21	0.78
Young Drivers	All	24	93	0.06	0.35
Occupant Protection	All	71.6	174	0.28	0.71
Impaired	All	88	130.6	0.35	0.57
Speed Related	Speed-related	98.4	129	0.36	0.48


Number of Fatalities
5 Year Average
Fatalities
140
120
100
80
60
40
20
0
Lane Departure
Intersections
Pedestrians
Older Drivers
Motorcyclists
Young Drivers
Occupant Protection
Impaired
Speed Related
2012-2016
2013-2017
2014-2018
2015-2019
2016-2020


Number of Serious Injuries
5 Year Average
Serious Injuries
500
450
400
350
300
250
200
150
100
50
0
Lane Departure
Intersections
Pedestrians
Older Drivers
Motorcyclists
Young Drivers
Occupant Protection
Impaired
Speed Related
2012-2016
2013-2017
2014-2018
2015-2019
2016-2020





Previous 5 year averages can not be entered, and is a glitch in the reporting website.

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)
US 95 South of Tonopah MP ES 0.00 to ES 44.196	Rural Principal Arterial (RPA) - Other	Roadway	Roadway widening - add lane(s) along segment	89.00	46.00	4.00	1.00	11.00	6.00	25.00	9.00	129.00	62.00	4.5
US 6 MP ES 18.815 to MP ES 43.982	Rural Minor Arterial	Roadway	Install / remove / modify passing zone	10.00	14.00	1.00	4.00		1.00	8.00	8.00	19.00	27.00	-7.4
Summerlin Pkwy from Buffalo Drive to CC 215	Urban Principal Arterial (UPA) - Other Freeways and Expressways	Roadside	Barrier – cable	152.00	196.00	4.00	4.00	2.00	2.00	61.00	102.00	219.00	304.00	-3.0
Multiple Intersections in District 1 - City of Las Vegas	Urban Local Road or Street	Intersection traffic control	Modify traffic signal – add flashing yellow arrow	71.00	88.00	1.00	1.00	4.00	5.00	114.00	140.00	190.00	234.00	-6.0
SR 431, Mt. Rose Hwy, MP WA 0.268 to MP WA 0.651	Urban Minor Arterial	Roadway	Roadway - other	2.00	4.00						1.00	2.00	5.00	-0.1
US 93 MP EL 11.79 to MP EL 54.46	Rural Minor Arterial	Roadway	Roadway widening - add lane(s) along segment	43.00	41.00	1.00	1.00	3.00	1.00	19.00	12.00	66.00	55.00	3.7
SR 372 at Blagg Rd	Urban Minor Arterial	Intersection traffic control	Modify control – Modern Roundabout	13.00	18.00			1.00		14.00	2.00	28.00	20.00	0.6
SR 372 at Pahrump Valley Blvd	Urban Minor Arterial	Intersection traffic control	Modify control – Modern Roundabout	17.00	19.00			1.00		14.00	4.00	32.00	23.00	0.6
SR 159 Charleston Blvd at Lamb Blvd	Urban Minor Arterial	Intersection traffic control	Intersection traffic control - other	56.00	60.00		1.00	1.00		56.00	61.00	113.00	122.00	-64.0
SR 147 MP CL 9.67 to MP CL 14.23	Urban Minor Arterial	Roadway	Roadway - other	6.00	3.00			1.00			1.00	7.00	4.00	0.2

The benefit (B) is calculated using Nevada's best available societal costs per crash type multiplied by the reduction in crash type. This cost (C) is total project costs.

Compliance Assessment

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

01/26/2021

What are the years being covered by the current SHSP?

From: 2021 To: 2025

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

2025

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

*Based on Functional Classification (MIRE 1.0 Element Number) [MIRE 2.0 Element Number]

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	
		STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE
ROADWAY SEGMENT	Segment Identifier (12) [12]	100	100					100	100	100	100
	Route Number (8) [8]	100	100								
	Route/Street Name (9) [9]	100	100								
	Federal Aid/Route Type (21) [21]	100	100								
	Rural/Urban Designation (20) [20]	100	100					100	100		
	Surface Type (23) [24]	100	100					15	100		
	Begin Point Segment Descriptor (10) [10]	100	100					100	100	100	100
	End Point Segment Descriptor (11) [11]	100	100					100	100	100	100
	Segment Length (13) [13]	100	100								
	Direction of Inventory (18) [18]	100	100								
	Functional Class (19) [19]	100	100					100	100	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	
		STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE
	Median Type (54) [55]	100	100								
	Access Control (22) [23]	100	100								
	One/Two Way Operations (91) [93]	100	100								
	Number of Through Lanes (31) [32]	100	100					15	100		
	Average Annual Daily Traffic (79) [81]	100	100					15	100		
	AADT Year (80) [82]	100	100								
	Type of Governmental Ownership (4) [4]	100	100					100	100	100	100
INTERSECTION	Unique Junction Identifier (120) [110]			100	100						
	Location Identifier for Road 1 Crossing Point (122) [112]			100	100						
	Location Identifier for Road 2 Crossing Point (123) [113]			100	100						
	Intersection/Junction Geometry (126) [116]										
	Intersection/Junction Traffic Control (131) [131]			30	30						
	AADT for Each Intersecting Road (79) [81]			100	100						
	AADT Year (80) [82]			100	100						
	Unique Approach Identifier (139) [129]			100	100						
INTERCHANGE/RAMP	Unique Interchange Identifier (178) [168]					100	100				
	Location Identifier for Roadway at					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	
		STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE
	Beginning of Ramp Terminal (197) [187]										
	Location Identifier for Roadway at Ending Ramp Terminal (201) [191]					100	100				
	Ramp Length (187) [177]					100	100				
	Roadway Type at Beginning of Ramp Terminal (195) [185]										
	Roadway Type at End Ramp Terminal (199) [189]										
	Interchange Type (182) [172]					100	100				
	Ramp AADT (191) [181]					100	100				
	Year of Ramp AADT (192) [182]					100	100				
	Functional Class (19) [19]					100	100				
	Type of Governmental Ownership (4) [4]					100	100				
Totals (Average Percent Complete):		**100.00**	**100.00**	**78.75**	**78.75**	**81.82**	**81.82**	**71.67**	**100.00**	**100.00**	**100.00**

*Based on Functional Classification (MIRE 1.0 Element Number) [MIRE 2.0 Element Number]
Correct. After several meetings including: the Model Inventory of Road Elements (MIRE) Fundamental Data Elements (FDE) Outreach, as well as, the MIRE FDE Peer Exchange, the Nevada Department of Transportation has gotten several critical questions answer in regards to using sample data. Thus, many collections moved to 100 percent.

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.

Nevada continues to identify proactive actions to meet the MIRE Fundamental Data Elements (FDEs) deadline of September 30, 2026. Completed actions (to date) include: mapping subsequent overlap between HPMS and MIRE data elements, as well as, participation in Federal Highway Administration FDEs mapping report, the investigation of database management system to create a MIRE repository, and the collection and identification of safety gaps not addressed by MIRE, State, or Federal guidance. Data extraction from the Road Video Lidar system is underway, and once completed, data will be utilized in safety tools and/or other tools. Lastly, evaluation shall include Highway Safety Improvement Program quality control, ensuring the accuracy of safety data.

Optional Attachments

Program Structure:

HSIP Procedure Manual July 2020.pdf
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.