NEVADA

HIGHWAY SAFETY IMPROVEMENT PROGRAM

2023 ANNUAL REPORT

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Photo source: 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. 407 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 2023 summarizes the activities of the Nevada Department of Transportation's HSIP as required by Infrastructure Investment and Jobs Act (IIJA)(Public Law 117-58, also known as the "Bipartisan Infrastructure Law" (BIL)). The BIL 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 regulated under Part 924 of Title 23, Code of Federal Regulations (23 CFR Part 924).

Available program funds for the purpose of this report are considered to be those funds obligated during the 2023 Federal Fiscal Year. The activities of the Nevada Department of Transportation (NDOT) are primarily designed to develop safety improvement projects for data driven improvements identified by crash data and systemic solutions, which include, but not limited to: high crash locations (intersections and roadway segments), systemic safety improvements, pedestrian related safety improvements, and rural lane departure crash mitigation.

The crash data on all public roadways contained in this report is extracted from the Nevada Citation and Accident Tracking System (NCATS) and Enforcement Mobile 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 Enforcement Mobile 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.

NDOT Traffic Safety Engineering launched a project to support all local agencies using NDOT Local Public Agency (LPA) process that helps locals access HSIP funds for data driven projects. 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. This project is still in its early stages, but it shows great promise.

NDOT Traffic Safety Engineering has worked to improve the data transfer process and Crash Locating System. The crash data will be received directly from the vendor and stored in a new crash database. This new crash database will have an improved schema that will include new data fields and optimize the workflow within the section. Work includes a replacement to the outdated and historically troublesome application that would locate crashes spatially. This new database and locator app will greatly reduce the time it takes to have spatial data located. This will increase the most recently available crash data to be used in analysis.

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 is in support of local road and tribal road safety. The team encourages all local safety planning efforts and is piloting a Local Public Agency process to allow any local with a qualifying safety plan to apply for HSIP funds. Qualifying safety plans may include Local Road Safety Plans (LRSP), Safe Streets and Roads for All (SS4A) Plans, Tribal Transportation Safety Plans and Vision Zero Plans. NDOT is currently funding LRSPs for interested agencies, sharing the best available state level data, and participating as active stakeholders in local and tribal safety planning efforts.

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

- Design
- Districts/Regions
- Local Aid Programs Office/Division
- 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 (SMPs), RSAs, 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 RSAs, SMPs, 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.

Identify which external partners are involved with HSIP planning.

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

Describe coordination with external partners.

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 (CEAs) identified in the SHSP, the CEA Task Force Committees, and the Zero Fatalities Initiative. DPS-OTS houses Nevada's Governor's Highway Safety Office and is NDOT Traffic Safety Engineering’s primary behavioral partner. The teams

collaborate frequently, share the best available 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.

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 on a regular basis 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.

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. The NDOT Traffic Safety Engineering team supplies data and acts as a stakeholder in local safety efforts.

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 SMPs, RSAs, 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 SMPs, RSAs, 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. 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. An addendum to the current SHSP will be incorporated in November 2023, which includes Nevada's Vulnerable Road Safety Assessment. The assessment will provide a detailed analysis of locations throughout the state that are indicative of a crash problem that involves vulnerable road users.

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). NVACTS is working to take traffic safety priority recommendations to the Nevada Legislature in an effort to support the goal of zero fatalities on all state and local roads.

The SHSP team coordinated the 2022 Nevada Traffic Safety Summit. The summit was a two-day event held in person at the Nugget Casino Resort in Sparks, Nevada on October 19th and 20th. The summit was attended by over 300 traffic safety professionals resulting in record attendance for the Nevada Traffic Safety Summit.

The 2022 Summit had session offerings, which included, child passenger safety and motorcycle safety workshops, Strategic Highway Research Program 2 (SHRP 2) Traffic Incident Management (TIM) training, a law enforcement panel discussion, and traffic safety technology presentations. Focused sessions also included presentations on keeping young drivers safe, transportation safety equity, the Safe System Approach, and grant writing. Keynote sessions featured Gina Espinosa-Salcedo of the National Highway Traffic Safety Administration (NHTSA), who presented on active transportation, in addition to Shelly Baldwin of the Washington State Traffic Safety Commission, who presented on the proactive traffic safety culture implementation in Washington State. Mayor Lawson of the City of Sparks also provided a special presentation on improvements in the City of Sparks related to connectivity, access, and safety.

The SHSP team is currently planning the 2023 Nevada Traffic Safety Summit. The Summit will be held September 12 through September 14 at the Palace Station Hotel and Casino in Las Vegas, Nevada. The 2023 Summit is scheduled to be a two and half day, in person event.

Nevada continues to revitalize their RSA program. After completing the virtual process for RSAs, NDOT looks to work with a consultant to update their RSA process, prioritization, and improve the number of projects that are created from the RSAs. This project will start in August of 2023 and go through June of 2024.

NDOT is working with consultants to update the uncontrolled crossings guide to new standards and create data driven justifications for when a pedestrian improvement should be prioritized when it does not meet traditional traffic operations volume warrants. This project is expected to be completed by quarter 1 of 2024.

NDOT has been funding the creation of Local Road Safety Plans (LRSP) to help local jurisdictions reduce their fatal and serious injury crashes. The City of North Las Vegas plan will be wrapping up in August 2023. NDOT currently has 2 other LRSPs that are actively being worked on. One is for the Carson Area Metropolitan Planning Organization (CAMPO) and the other is for Elko County. Both plans are expected to be completed in quarter 2 of 2024.

Safety Management Plans are safety focused corridor studies intended 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. Two SMP locations have been selected in this reporting period. Locations were identified through the NDOT network screening process. The first is in Reno, Nevada on South Virginia Street from SR-431/SR-341 (Veteran’s Parkway/Mt Rose Highway) to East Patriot Boulevard. The second is in Las Vegas, Nevada on SR-592 (East Flamingo Road) from South Paradise Road to South Pecos Road. Both SMPs are on state-systems and are safe systems focused. SMP typically take one year to complete. The SMPs in this reporting period are expected to be completed in late 2023/early 2024.

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. The SMP process additionally uses the Safe System Principles to produce a safety focused corridor study.

The Speed Management Action Plan (SMAP) published June 2022 characterizes Nevada’s speeding-related safety problems and speed management issues; identifies appropriate engineering, enforcement, and educational countermeasures and strategies; and outlines actions that the Nevada Department of Transportation (NDOT) and partner agencies can take to implement these strategies to reduce speeding and speed-related fatal and serious injury crashes. This SMAP will facilitate coordination and cooperation among

various agency stakeholders including planners, designers and managers, enforcement officials, public health practitioners, and policymakers to implement a sustainable speed management program, and to target the most cost-effective and feasible countermeasures where they will have the greatest safety benefits.

The safety goals of the SMAP are as follows:

· Reduce fatal and serious injury crashes in support of the Nevada Strategic Highway Safety Plan (SHSP)

· Incorporate the statewide speed management strategies and action items into the SHSP and track progress in the SHSP Action Tracking Tool

· Provide network screening guidance for agencies to determine areas of concern

· Improve compliance with speed limits and set target speed limits using the Countermeasures to Achieve Target Speed

Speed limit review, engineering, and design strategies, enforcement, and educational measures will be implemented through this SMAP. As mentioned, there are three basic approaches to implementation of strategies and countermeasures: proactive, comprehensive, and systematic:

· A **proactive approach** aims to foster creation of self-enforcing roadway designs appropriate to the land use and user needs (functions of the road) to reduce future speeding and injury risk. The approach aims to develop collaborative and consistent policies, procedures, and safety guidance in speed-limit setting and design for new projects and roadway improvements.

· The overarching objectives of the **comprehensive approach** are to seek community support for the program, coordinate various stakeholders and engage the community in setting and enforcing appropriate limits, and to complement and enhance the effectiveness of design and engineering measures with locally tailored communications and educational measures.

· A **systematic approach** is used to identify and coordinate treatment of existing speeding and speed-related safety problems with cost-effective countermeasures (engineering and enforcement-related measures), and to integrate this approach with other safety plans and safety focus areas.

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. A full update is to be completed in FFY 2024.

Select the programs that are administered under the HSIP.

- Horizontal Curve
- HRRR
- Intersection
- Local Safety
- Pedestrian Safety
- Roadway Departure

- Segments
- Wrong Way Driving
- Other-Safety Management Plans

Programs not specifically identified under HSIP may be handled by other internal partners.

Program: Horizontal Curve

Date of Program Methodology:2/19/2021

What is the justification for this program?

- Addresses SHSP priority or emphasis area

What is the funding approach for this program?

Competes with all projects

What data types were used in the program methodology?

Crashes	Exposure	Roadway
• Fatal and serious injury crashes only		

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-Department Prioritization

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).

Program: HRRR

Date of Program Methodology:2/19/2021

What is the justification for this program?

- Addresses SHSP priority or emphasis area

What is the funding approach for this program?

Competes with all projects

What data types were used in the program methodology?

Crashes	Exposure	Roadway

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?

No

Describe the methodology used to identify local road projects as part of this program.

Local Project Identification

How are projects under this program advanced for implementation?

- Other-Department Prioritization

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).

Program: Intersection

Date of Program Methodology:2/19/2021

What is the justification for this program?

- Addresses SHSP priority or emphasis area

What is the funding approach for this program?

Competes with all projects

What data types were used in the program methodology?

Crashes	Exposure	Roadway
• Fatal and serious injury crashes only		

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?

No

Describe the methodology used to identify local road projects as part of this program.

Local Project Identification

How are projects under this program advanced for implementation?

- Other-Department Prioritization

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).

Program: Local Safety

Date of Program Methodology:2/19/2021

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?

Other-In development

What data types were used in the program methodology?

Crashes	Exposure	Roadway
• Fatal and serious injury crashes only • Other-Local Input	• Other-Varies with Local Input	

What project identification methodology was used for this program?

- Other-Varies with Local Input

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?

No

Describe the methodology used to identify local road projects as part of this program.

Varies with Local Input

How are projects under this program advanced for implementation?

- Other-Process in Development

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

Program: Pedestrian Safety

Date of Program Methodology:2/19/2021

What is the justification for this program?

- Addresses SHSP priority or emphasis area

What is the funding approach for this program?

Competes with all projects

What data types were used in the program methodology?

Crashes	Exposure	Roadway

- Fatal and serious injury crashes only

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?

No

Describe the methodology used to identify local road projects as part of this program.

Local Project Identification

How are projects under this program advanced for implementation?

- Other-Department Prioritization

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).

Program: Roadway Departure

Date of Program Methodology:2/19/2021

What is the justification for this program?

- Addresses SHSP priority or emphasis area

What is the funding approach for this program?

Competes with all projects

What data types were used in the program methodology?

Crashes	Exposure	Roadway
• Fatal and serious injury crashes only		

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?

No

Describe the methodology used to identify local road projects as part of this program.

Local Project Identification

How are projects under this program advanced for implementation?

- Other-Department Prioritization

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).

Program: Segments

Date of Program Methodology:2/19/2021

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
• Fatal and serious injury crashes only		

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?

No

Describe the methodology used to identify local road projects as part of this program.

Local Project Identification

How are projects under this program advanced for implementation?

- Other-Department Prioritization

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).

Program: Wrong Way Driving

Date of Program Methodology:2/19/2021

What is the justification for this program?

- Addresses SHSP priority or emphasis area

What is the funding approach for this program?

Competes with all projects

What data types were used in the program methodology?

Crashes	Exposure	Roadway
• Fatal and serious injury crashes only		

What project identification methodology was used for this program?

- Other-Wrong way driver study

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?

No

Describe the methodology used to identify local road projects as part of this program.

Local Project Identification

How are projects under this program advanced for implementation?

- Competitive application process

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).

Program: Other-Safety Management Plans

Date of Program Methodology:2/19/2021

What is the justification for this program?

- FHWA focused approach to safety
- Other-High Crash Network

What is the funding approach for this program?

Competes with all projects

What data types were used in the program methodology?

Crashes	Exposure	Roadway
• Fatal and serious injury crashes only		

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?

- Other-Department Prioritization

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).

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 projects. The improvements include signage, rumble strips, safety edge, guard rail upgrades, pavement/shoulder widening, 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
- Stakeholder input
- Other-Safety Management Plans

Does the State HSIP consider connected vehicles and ITS technologies?

Yes

Describe how the State HSIP considers connected vehicles and ITS technologies.

The Nevada Department of Transportation (NDOT) is continuously evaluating connected vehicle technologies and has participated in pilot projects focusing on V2I and connected snow plows for winter operations and safety. We are currently transitioning from a DSRC/Cellular hybrid test corridor to a broader cellular based installation on applicable maintenance vehicles that is compatible with our upcoming AVL platform. As part of this AVL installation, NDOT will also be installing forward facing cameras and sharing live video to our 511 website during active plowing. Due to the absence of USDOT/OEM standards for connected vehicles, most of our current efforts for the public domain are focused on expanding our underlying enterprise grade communications backbone along Nevada's roadways. As identified in our Smart Mobility Plan, this will provide a robust and redundant system capable is supporting a wide variety of connected technologies as they become available and are proven safe and effective. NDOT is also in the process of completing a statewide ITS and ATM Master Plan. Needs and solutions are being evaluated based on safety improvements and operational deficiencies. Through both of the aforementioned plans, we will evaluate new technology solutions (including C-V2X deployments) as well as expanding current solutions such as Wrong Way Driver (WWD) systems, Variable Speed Limit (VSL) corridors, smart work zone devices, wind and weather warning systems, and Advanced Traveler Information System (ATIS) devices.

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 is working on a Passing and Climbing Lane study and continues its efforts to incorporate systemic proven countermeasures such as rumble strips, curve improvements, 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)	$11,619,904	$9,054,013	77.92%
HRRR Special Rule (23 U.S.C. 148(g)(1))	$0	$0	0%
VRU Safety Special Rule (23 U.S.C. 148(g)(3))	$4,197,679	$4,197,679	100%
Penalty Funds (23 U.S.C. 154)	$0	$0	0%
Penalty Funds (23 U.S.C. 164)	$7,199,731	$7,199,731	100%
RHCP (for HSIP purposes) (23 U.S.C. 130(e)(2))	$1,306,850	$489,155	37.43%
Other Federal-aid Funds (i.e. STBG, NHPP)	$0	$0	0%
State and Local Funds	$0	$0	0%
Totals	$24,324,164	$20,940,578	86.09%

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%

Local road safety projects are currently ongoing that were obligated in FFY 2022 with the intent to moving towards more local projects in FFY 2024.

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

32%

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

32%

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?

$11,644,143

$30,565 was transferred from the Highway Safety Improvement Program Fast (ZS30), FFY 2020, to the Surface Transportation Block GRTS-FLEX (Z240).

$11,613,578 was transferred from the Highway Safety Improvement Program IIJA (YS30), FFY 2023, to the National Highway Perf IIJA (Y001).

Both transfers amount to $11,644,143 transferred out of the HSIP towards other core program areas.

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

The NDOT team is working through changes in our programs and how we prioritize projects and following the data driven process in the One Nevada Plan. Leadership is working on prioritizing projects and potentially expedite project based on the Vulnerable Road User Safety Assessment and other screening metrics. Funds for local safety projects were implemented in FFY 2022 with the plans to implement additional projects in FFY 2024.

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

Nevada has developed a process for funding local road projects for local and tribal agencies. NDOT is working with select agencies to test the process and expects to open the process to all agencies with data driven safety needs once testing is complete.

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
HSIP Support Services	Miscellaneous	Transportation safety planning	0	Planning Studies	$4834987	$5000000	HSIP (23 U.S.C. 148)	N/A	N/A	0	0	State Highway Agency	Systemic	All Emphasis Areas	All Emphasis Areas
Statewide Traffic Incident Management (TIM) Program FFY 23-27	Miscellaneous	Transportation safety planning	0	Statewide Program	$4000000	$4000000	Penalty Funds (23 U.S.C. 164)	N/A	N/A	0	0	State Highway Agency	Systemic	All Emphasis Areas	All Emphasis Areas
Continued Implementation of the Strategic Highway Safety Plan (SHSP) SFY 24-27	Miscellaneous	SHSP Development	0	Statewide Safety Plan	$2450000	$2500000	HSIP (23 U.S.C. 148)	N/A	N/A	0	0	State Highway Agency	Systemic	All Emphasis Areas	All Emphasis Areas
Michelin DDI	Pedestrians and bicyclists	Pedestrians and bicyclists – other	0	Data Study	$166664	$175436	HSIP (23 U.S.C. 148)	N/A	N/A	0	0	State Highway Agency	Systemic	Pedestrians	Vulnerable Road Users
US 93 Passing Lanes Flatten Slopes	Roadway	Roadway widening - add lane(s) along segment	42.67	Miles	$29514	$31069	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Other	2,500	65	State Highway Agency	Systemic	Roadway Departure	Lane Departure
SR 589 From SR 595 To I15N NB Ramps Access Management, Pedestrian Upgrades, And Signal Improvements	Access management	Access management - other	4	Miles	$1535510	$1616570	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Other	45,166	45	State Highway Agency	Spot	Pedestrians	Intersection and Pedestrian
SR169 Clark County N Moapa Valley Blvd Shoulder Widening and An Addition Of The Truck Climbing Lane	Shoulder treatments	Widen shoulder – paved or other (includes add shoulder)	3.47	Miles	$-1029852	$4117316	HSIP (23 U.S.C. 148)	Rural	Major Collector	4,450	55	State Highway Agency	Spot	Roadway Departure	Lane Departure
I 15 Clark County MP Cl 29.38 US 95 Kyle Canyon RD MP CL 9363 to	Advanced technology and ITS	Wrong-way Driving Detection System	63.12	Miles	$448070	$471652	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Interstate	112,980	65	State Highway Agency	Systemic	Intersections	Intersection

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
MP Cl 96.13 Install Wrong Way Driver System															
I 580 Fairview Dr US 50, College Pkwy, Arrowhead, North Carson St MP CC 3.15 To CC 7.96	Advanced technology and ITS	Wrong-way Driving Detection System	63.12	Miles	$162700	$471652	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Interstate	112,980	65	State Highway Agency	Systemic	Intersections	Intersection
US 50 Austin W of Austin to Churchill/Lander County Line to 0.52 Miles East of SR305 Near Austin Town Limits MP 0.00 To LA 23.30 Pavement Rehab	Roadway	Pavement surface - other	23.30	Miles	$1000000	$17278432	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Other	700	70	State Highway Agency	Spot	All Emphasis Areas	All Emphasis Areas
Second St, Reno, From Keystone Ave. To I 580 And Arlington Ave. From Court St To Sixth St. Ped And ADA Improvements Throughout Corridors	Pedestrians and bicyclists	ADA curb ramps	2.89	Miles	$500000	$3119722	HSIP (23 U.S.C. 148)	Urban	Multiple/Varies	14,707	30	City or Municipal Highway Agency	Systemic	Pedestrians	All Emphasis Areas
Clark County, Eastern Avenue/Civic Center Drive (Cheyenne To US 95) Intersection Improvements At Eastern And Washington	Miscellaneous	Miscellaneous - other	1	Intersections	$500000	$1787438	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Other	46,400	35	City or Municipal Highway Agency	Systemic	Intersections	Intersection
Towing and Recovery Incentive Program FFY 23-24	Roadside	Roadside - other	0	Statewide Service	$743430	$782558	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0	0	State Highway Agency	Systemic	All Emphasis Areas	All Emphasis Areas

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 Clark County MP 57.43 to MP 68.10	Roadway	Roadway widening - add lane(s) along segment	10.67	Miles	$-449368	$2602301	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Other	2,500	65	State Highway Agency	Systemic	Roadway Departure	Lane Departure
Silver Lake Crossing #834-498D	Railroad grade crossings	Railroad grade crossings - other	0	Crossing	$490550	$2138776	RHCP (for HSIP purposes) (23 U.S.C. 130(e)(2))	Urban	Minor Arterial	0	0	State Highway Agency	Systemic	Intersections	All Emphasis Areas
Multiple Railroad Crossing Along Hawthorne Army Depot	Railroad grade crossings	Crossing warning signs and pavement marking improvements	0	Intersections	$-1395	$20450	RHCP (for HSIP purposes) (23 U.S.C. 130(e)(2))	Rural	Multiple/Varies	0	0	State Highway Agency	Systemic	Intersections	All Emphasis Areas
US 50 MP CH 11.30 to MP CH 106.88	Pedestrians and bicyclists	ADA curb ramps	0	Miles	$250000	$9120810	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Other	13,100	65	State Highway Agency	Systemic	All Emphasis Areas	All Emphasis Areas
US 95 MP MI 49.82 to MP CH 58.97	Roadway	Roadway - other	0	Miles	$600000	$18300761	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Other	2,100	65	State Highway Agency	Systemic	All Emphasis Areas	All Emphasis Areas
SR 667 and Boulder Hwy Design Services	Miscellaneous		2	Locations	$500000	$1889496	HSIP (23 U.S.C. 148)	Urban	Multiple/Varies	0	0	State Highway Agency	Systemic	All Emphasis Areas	All Emphasis Areas
Statewide TIM FFY 2019-2021	Miscellaneous	Transportation safety planning	0	Statewide Program	$1000000	$2353932	HSIP (23 U.S.C. 148)	N/A	N/A	0	0	State Highway Agency	Systemic	All Emphasis Areas	All Emphasis Areas
OTS VRU Community Engagement	Pedestrians and bicyclists		0	Statewide Program	$2209768	$2209768	VRU Safety Special Rule (23 U.S.C. 148(g)(3))	N/A	N/A	0	0	State Highway Agency	Systemic	Vulnerable Road Users	All Emphasis Areas
US 95 NYE County MP NY 28.817 to MP NY 56.234	Roadway	Roadway widening - add lane(s) along segment	27.417	Miles	$1000000	$26135250	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Other	3,800	65	State Highway Agency	Systemic	Roadway Departure	Lane Departure

HSIP Support Services, Continued Implementation of SHSP, uses three funding sources (HSIP and SEC 164 Penalties and VRU Special Rule Funds)

Silver Lake Crossing #834-498D project fund change (-9,450.00 from ZS40 and 500,000 from YS40).

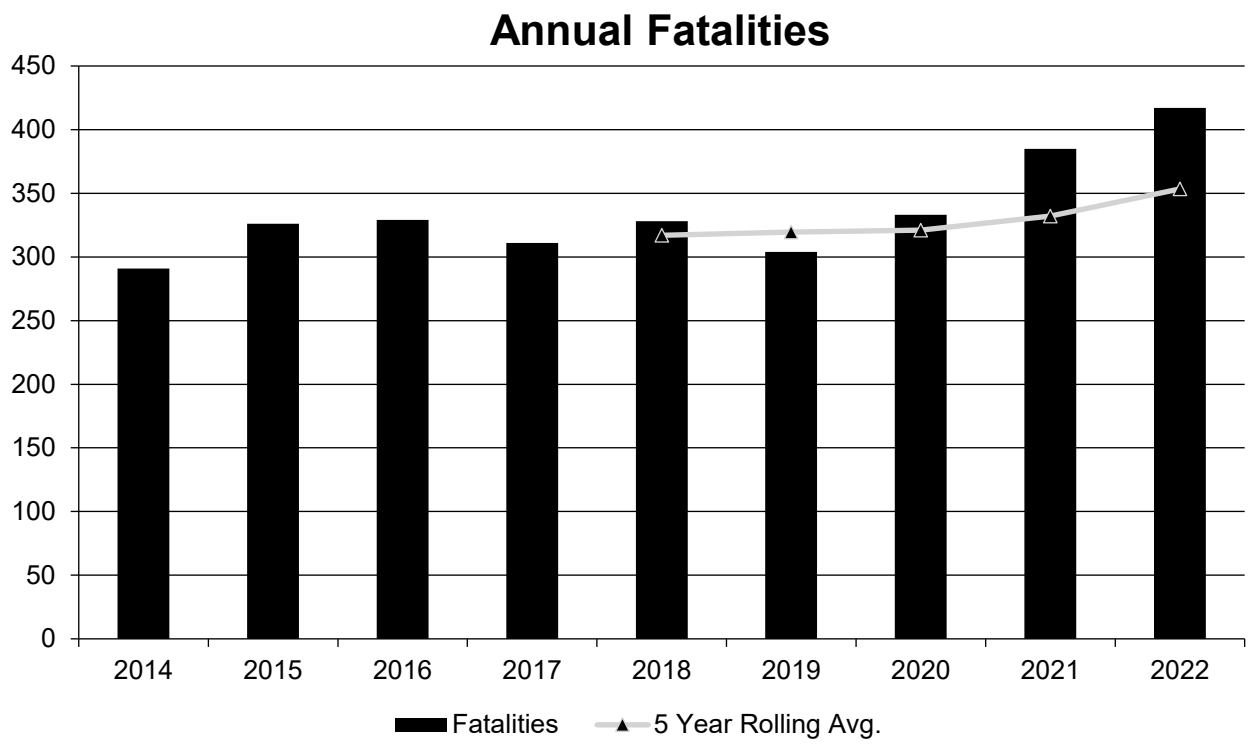
Negative values represent project close-outs

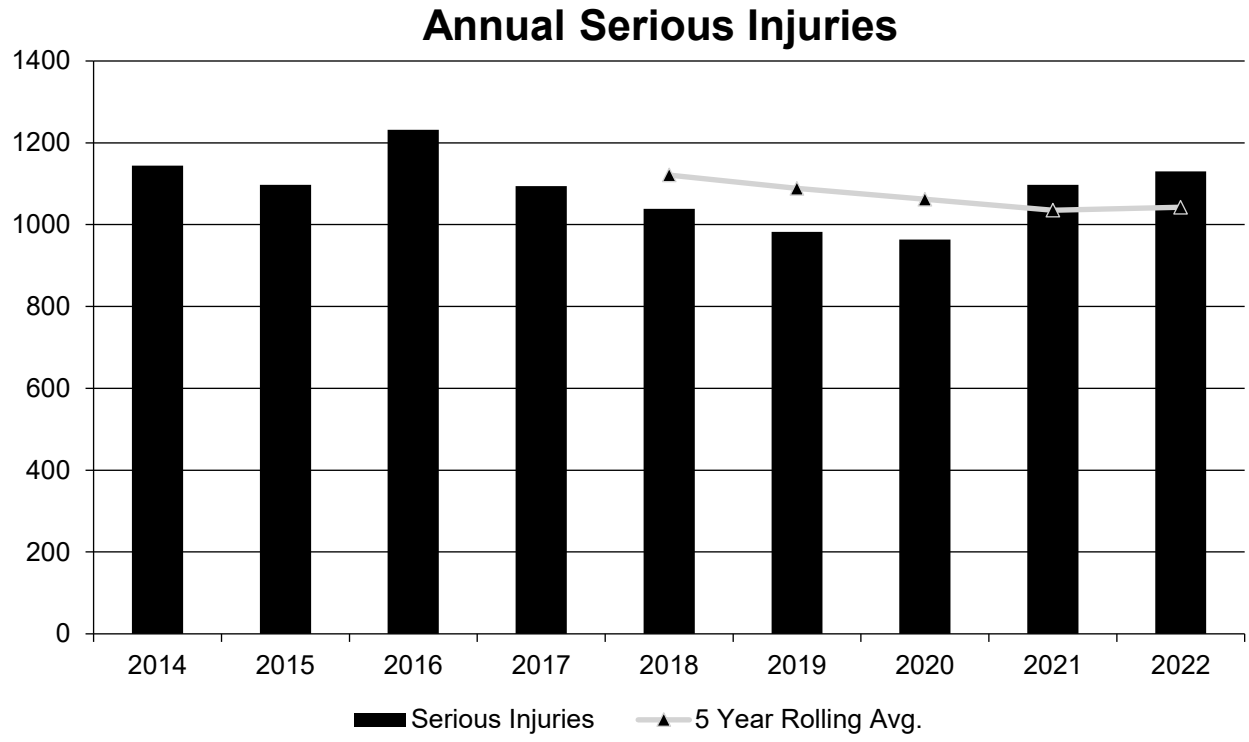
Safety Performance

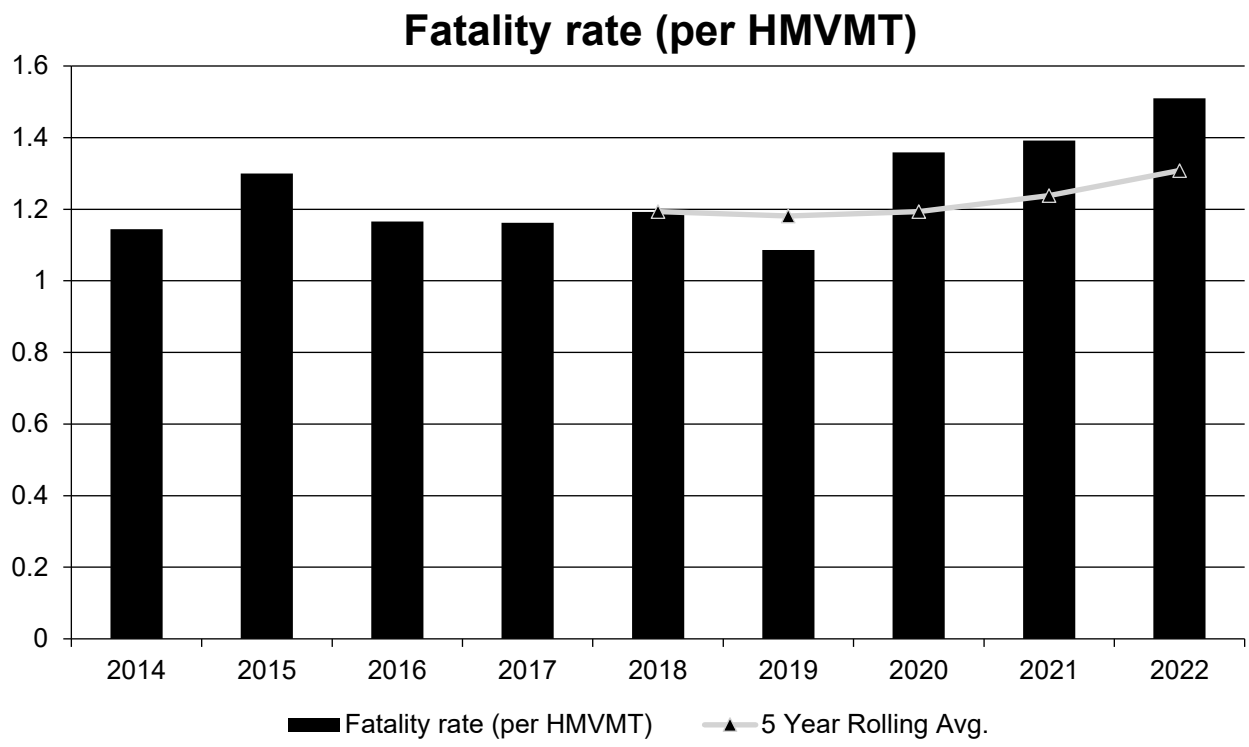
General Highway Safety Trends

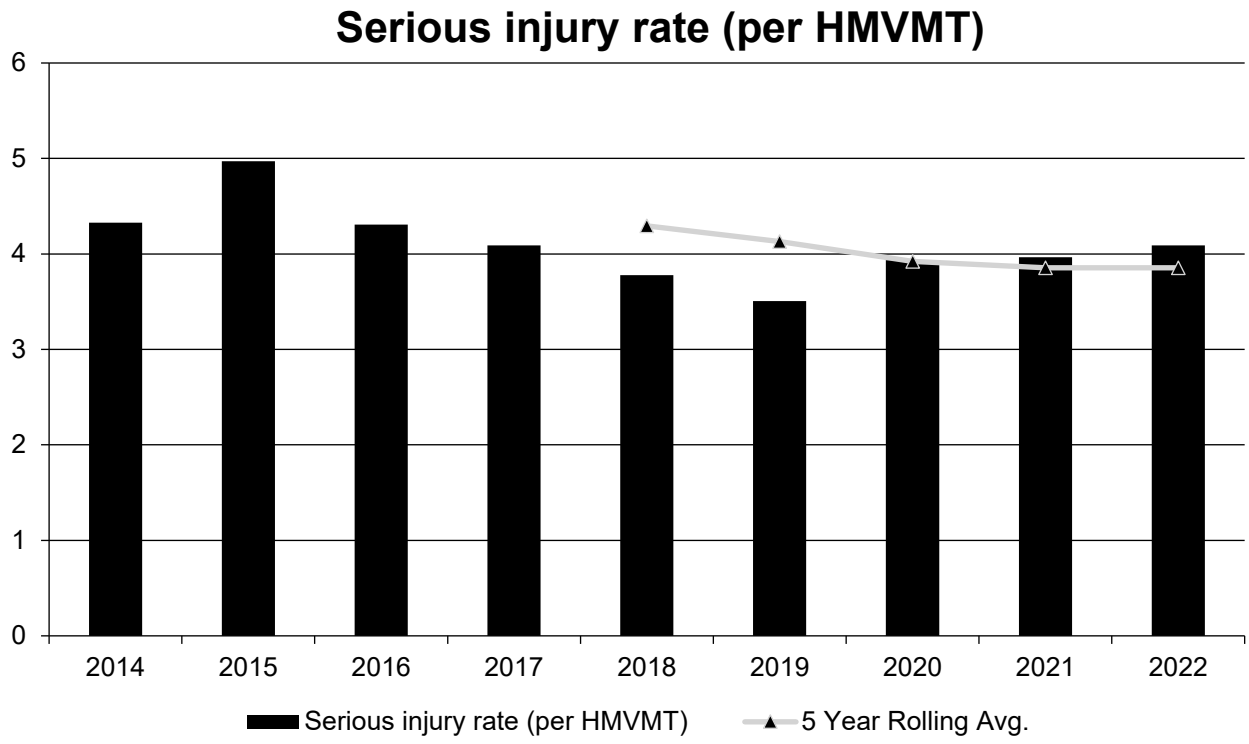
Present data showing the general highway safety trends in the State for the past five years.

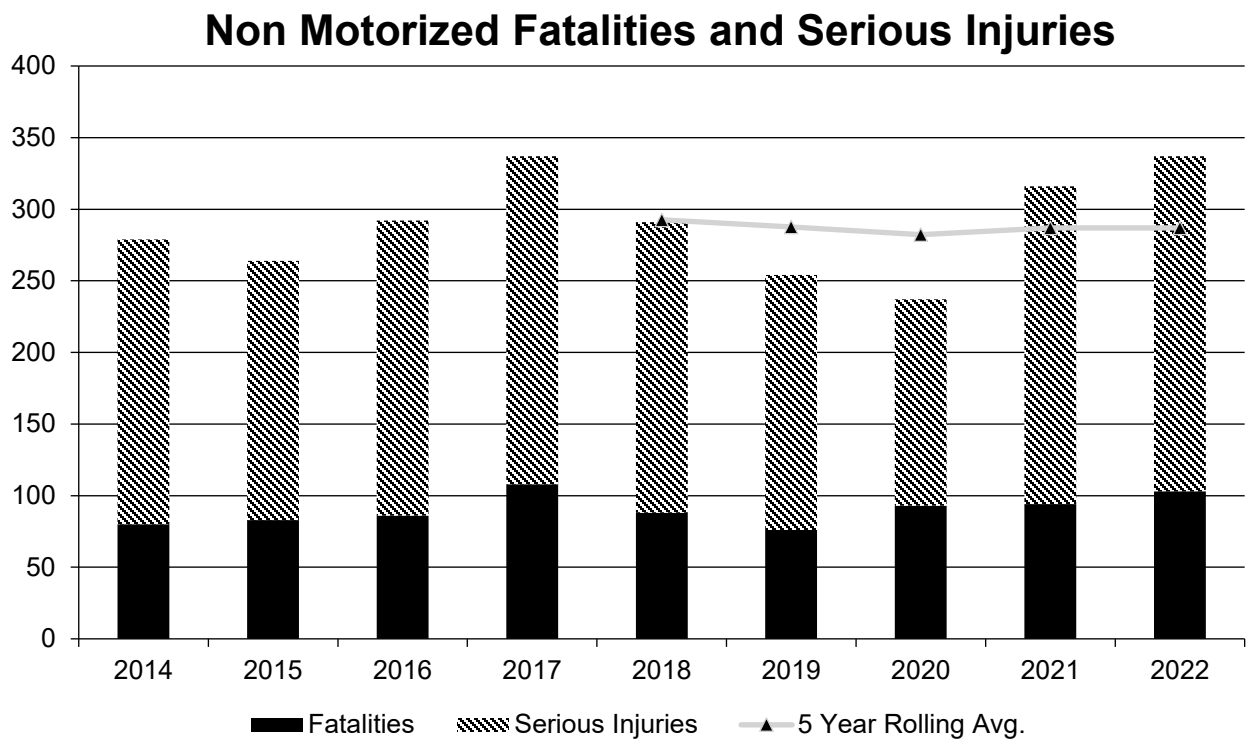
PERFORMANCE MEASURES	2014	2015	2016	2017	2018	2019	2020	2021	2022
Fatalities	291	326	329	311	328	304	333	385	417
Serious Injuries	1,144	1,097	1,232	1,094	1,039	982	964	1,097	1,130
Fatality rate (per HMVMT)	1.144	1.300	1.166	1.162	1.192	1.086	1.359	1.392	1.510
Serious injury rate (per HMVMT)	4.328	4.972	4.306	4.088	3.777	3.508	3.934	3.966	4.091
Number non-motorized fatalities	80	83	86	108	88	76	93	94	103
Number of non-motorized serious injuries	199	181	206	229	203	178	144	222	234


Annual Fatalities
450
400
350
300
250
200
150
100
50
0
2014
2015
2016
2017
2018
2019
2020
2021
2022
Fatalities
5 Year Rolling Avg.


Annual Serious Injuries
1400
1200
1000
800
600
400
200
0
2014
2015
2016
2017
2018
2019
2020
2021
2022
Serious Injuries
5 Year Rolling Avg.


Fatality rate (per HMVMT)
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
2014
2015
2016
2017
2018
2019
2020
2021
2022
Fatality rate (per HMVMT)
5 Year Rolling Avg.


Serious injury rate (per HMVMT)
6
5
4
3
2
1
0
2014
2015
2016
2017
2018
2019
2020
2021
2022
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 2021

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	34.4	0.89	1.43
Rural Principal Arterial (RPA) - Other Freeways and Expressways				
Rural Principal Arterial (RPA) - Other	45.6	86.6	2.61	4.88
Rural Minor Arterial	9.8	14.6	2.28	3.36
Rural Minor Collector	2.6	4.6	1.83	3.08
Rural Major Collector	6.08	16	1.76	4.14

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	4	13	0.85	2.8
Urban Principal Arterial (UPA) - Interstate	26	66	0.58	1.46
Urban Principal Arterial (UPA) - Other Freeways and Expressways	7.2	19.8	0.4	1.1
Urban Principal Arterial (UPA) - Other	58.2	172	1.77	5.22
Urban Minor Arterial	91.8	268.6	1.87	5.45
Urban Minor Collector	25.4	84	1.26	4.14
Urban Major Collector	0.8	1.2	1.75	2.63
Urban Local Road or Street	27.4	92.4	0.57	1.92

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				

Safety Performance Targets

Safety Performance Targets

Calendar Year 2024 Targets *

Number of Fatalities:387.2

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 2022 was reduced on a straight-line basis to be 0 in 2050.

Number of Serious Injuries:1049.3

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 2022 was reduced on a straight-line basis to be 0 in 2050.

Fatality Rate:1.435

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 2022 was reduced on a straight-line basis to be 0 in 2050.

Serious Injury Rate:3.979

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 2022 was reduced on a straight-line basis to be 0 in 2050.

Total Number of Non-Motorized Fatalities and Serious Injuries:312.9

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 2022 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 2022 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	309.9	353.4
Number of Serious Injuries	964.0	1042.4

Fatality Rate	1.171	1.308
Serious Injury Rate	3.702	3.855
Non-Motorized Fatalities and Serious Injuries	245.9	287.0

Nevada did not meet the targets for Number of Fatalities, Number of Serious Injuries, Fatality Rate, and Non-Motorized Fatalities and Serious Injuries. Fatal and serious injuries have been increasing in Nevada and across the nation. Nevada is now seeing the upward trend in these crashes in the 5-year average. NDOT is looking into every avenue to reduce fatal and serious injuries on the road network to decrease the serious injury rate. Nevada is focusing on intersection related and vulnerable road user involved crashes and is collaborating with all stakeholders in Nevada in a joint effort to reduce this alarming trend.

Applicability of Special Rules

Does the VRU Safety Special Rule apply to the State for this reporting period?

Yes

Nevada has completed the Vulnerable Road User (VRU) Safety Assessment and is working with all partners and stakeholders in the state to implement project, programs, and strategies to reduce and eliminate VRU crashes on the road network.

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	2016	2017	2018	2019	2020	2021	2022
Number of Older Driver and Pedestrian Fatalities	55	53	62	63	50	77	50
Number of Older Driver and Pedestrian Serious Injuries	130	129	115	124	140	101	56

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.

NDOT Traffic Safety Engineering focuses on developing projects that will reduce the numbers of fatalities and serious injuries. This involves using HSIP funds as outlined in the strategies and action items under the current emphasis areas outlined in the Nevada SHSP. Due to the increased rate of serious injuries on the road network, NDOT is looking into every resource available to decrease the upward trend.

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

- HSIP Obligations
- Increased awareness of safety and data-driven process
- Increased focus on local road safety
- More systemic programs
- Policy change

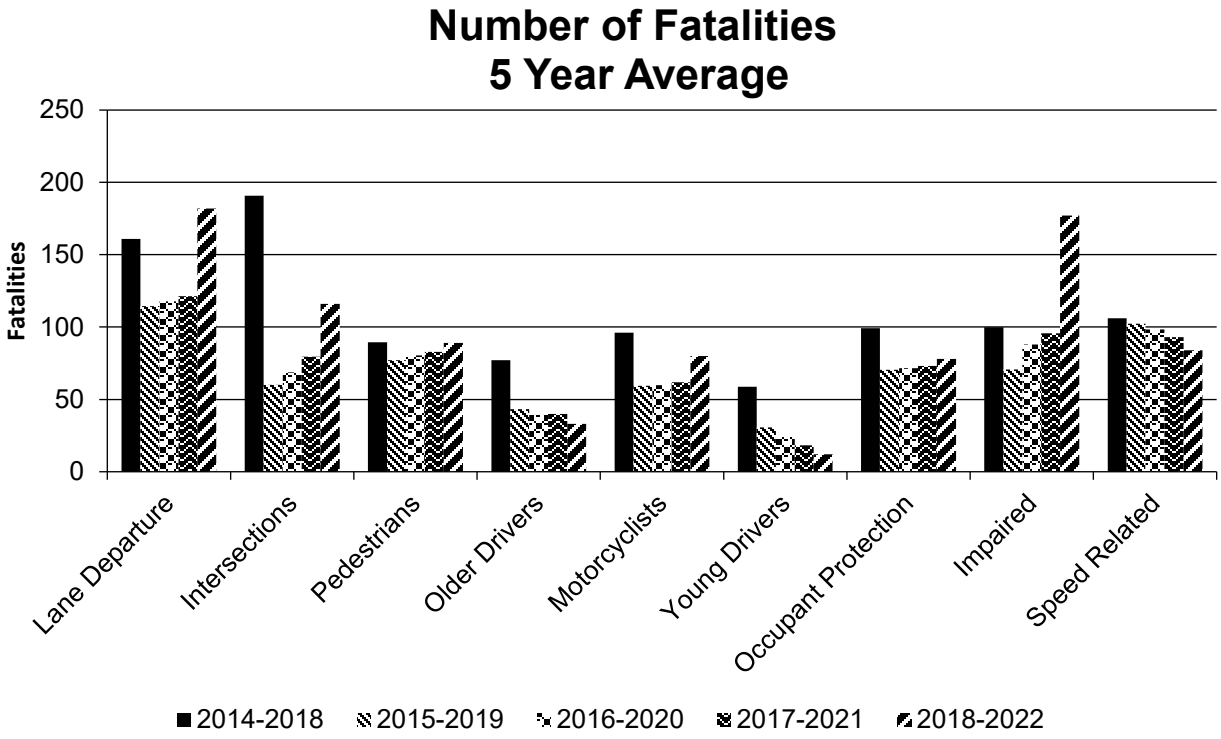
Effectiveness of Groupings or Similar Types of Improvements

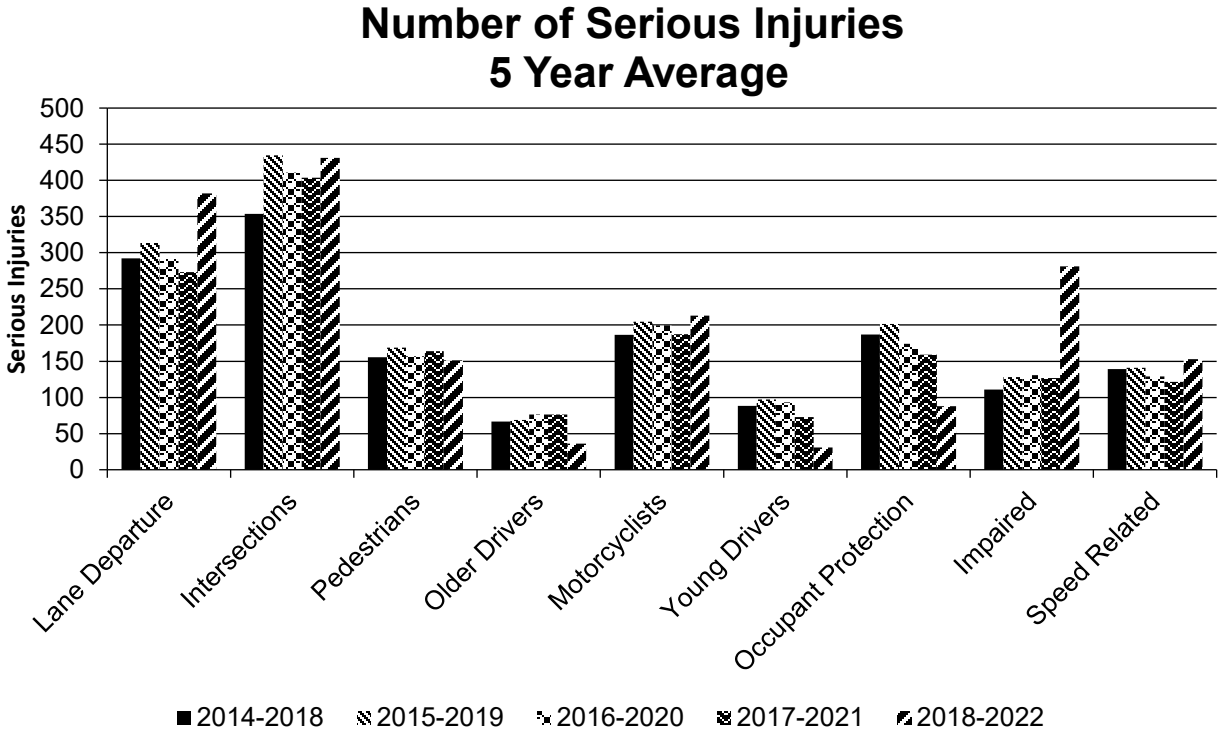
Present and describe trends in SHSP emphasis area performance measures.

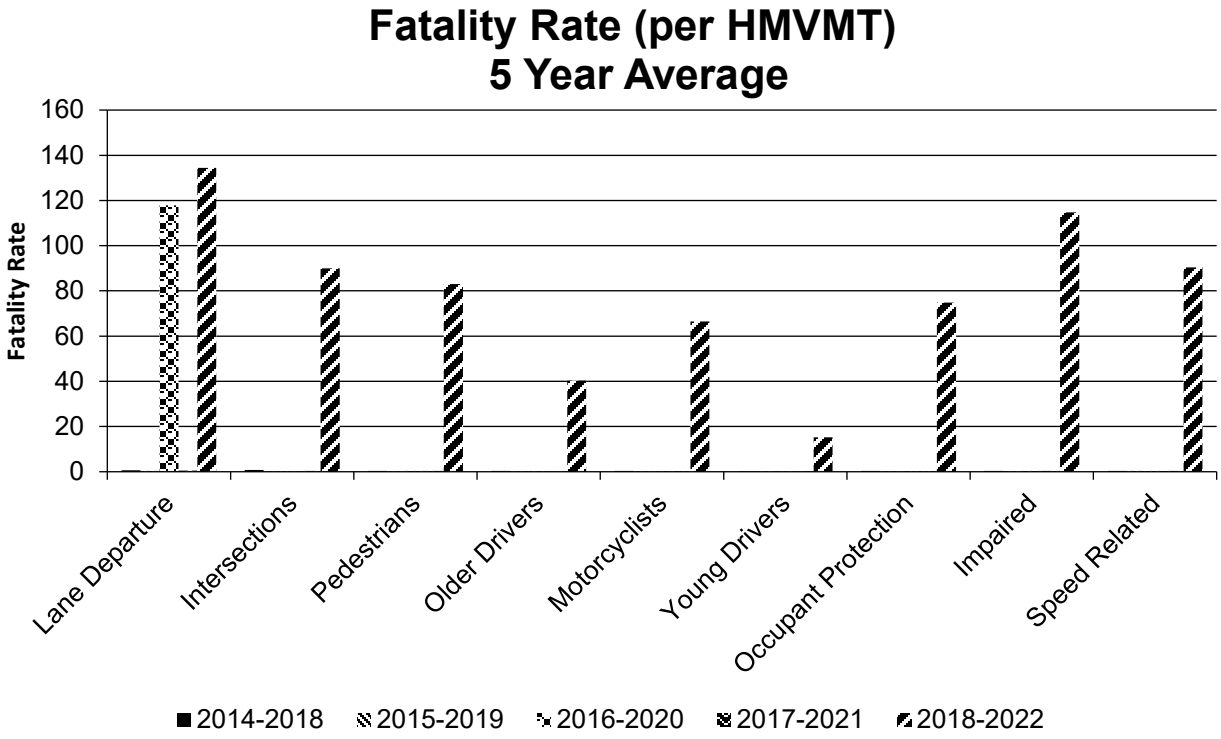
Year 2022

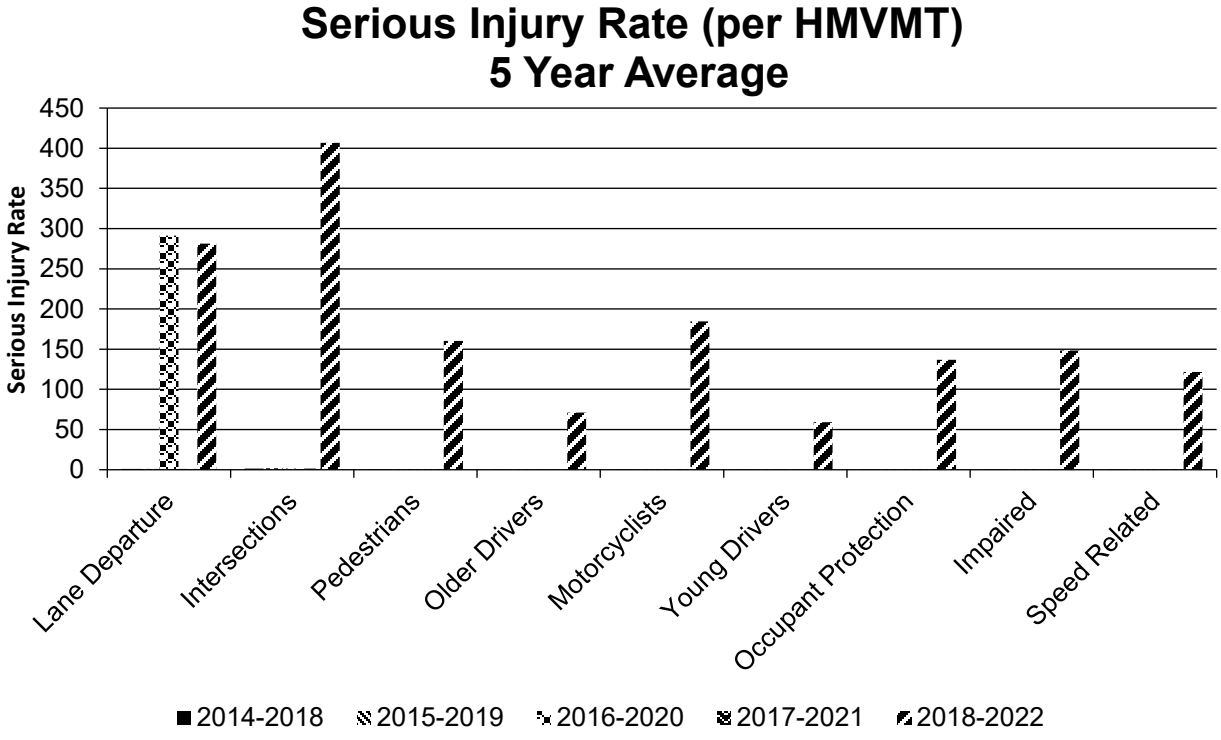
SHSP Emphasis Area	Targeted Crash Type	Number of Fatalities (5-yr avg)	Number of Serious Injuries (5-yr avg)	Fatality Rate (per HMVMT) (5-yr avg)	Serious Injury Rate (per HMVMT) (5-yr avg)
Lane Departure		182	382	134.38	281.37
Intersections		116	431	89.93	406.78
Pedestrians		89	151	82.98	160.17
Older Drivers		33	36	40.31	71.06
Motorcyclists		80	213	66.47	184.57
Young Drivers		12	31	15.22	59.11
Occupant Protection		78	88	74.85	136.83
Impaired		177	281	114.78	148.16

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)
Speed Related		84	153	90.34	121.78


Number of Fatalities
5 Year Average
Fatalities
250
200
150
100
50
0
Lane Departure
Intersections
Pedestrians
Older Drivers
Motorcyclists
Young Drivers
Occupant Protection
Impaired
Speed Related
2014-2018
2015-2019
2016-2020
2017-2021
2018-2022


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
2014-2018
2015-2019
2016-2020
2017-2021
2018-2022


Fatality Rate (per HMVMT)
5 Year Average
Fatality Rate
160
140
120
100
80
60
40
20
0
Lane Departure
Intersections
Pedestrians
Older Drivers
Motorcyclists
Young Drivers
Occupant Protection
Impaired
Speed Related
2014-2018
2015-2019
2016-2020
2017-2021
2018-2022


Serious Injury Rate (per HMVMT)
5 Year Average
Serious Injury Rate
450
400
350
300
250
200
150
100
50
0
Lane Departure
Intersections
Pedestrians
Older Drivers
Motorcyclists
Young Drivers
Occupant Protection
Impaired
Speed Related
2014-2018
2015-2019
2016-2020
2017-2021
2018-2022

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)
Second St, Reno Keystone to I580 and Arlington Ave from Court St to Sixth St	Multiple/Varies	Pedestrians and bicyclists	ADA curb ramps	129.00	103.00			8.00	3.00	95.00	87.00	232.00	193.00	2.611
Eastern Ave and Civic Center Dr Las Vegas From US 95 to Cope Ave	Multiple/Varies	Pedestrians and bicyclists	ADA curb ramps	289.00	253.00	1.00	4.00	14.00	6.00	279.00	252.00	583.00	515.00	-6.790
US 93 Clark County, MP CL 57.43 to MP CL 68.10	Rural Principal Arterial (RPA) - Other	Roadway	Roadway widening - add lane(s) along segment	8.00	2.00		1.00		2.00	6.00	3.00	14.00	8.00	-4.803
Stewart St, Carson City, 9th St to S Carson St	Urban Minor Arterial	Pedestrians and bicyclists	Rapid Rectangular Flashing Beacons (RRFB)	15.00	5.00			1.00	1.00	4.00	3.00	20.00	9.00	0.466
SR 372 at Pahrump Valley Blvd	Multiple/Varies	Intersection traffic control	Modify control – Modern Roundabout	17.00	19.00					12.00	1.00	29.00	20.00	0.591
Multiple Locations in District 1	Multiple/Varies	Roadway	Pavement surface - other	55.00	44.00		5.00		1.00	28.00	16.00	83.00	66.00	-106.071
SR 431 MP WA 0 to MP WA 3, WA 13 to WA 16	Rural Minor Arterial	Roadway	Pavement surface - other	58.00	35.00		3.00	4.00	2.00	21.00	15.00	83.00	55.00	-23.967
Multiple Locations in District 3	Multiple/Varies	Roadway	Rumble strips – center	200.00	88.00	5.00	6.00	3.00	6.00	30.00	23.00	238.00	123.00	-12.702
Multiple Locations District II	Multiple/Varies	Roadway	Rumble strips – center	74.00	71.00	5.00	5.00	7.00	6.00	48.00	20.00	134.00	102.00	10.415

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)
I 580 Carson City, MP CC 3.14 to CC 8.95	Urban Principal Arterial (UPA) - Interstate	Advanced technology and ITS	Wrong-way Driving Detection System	113.00	55.00	2.00	3.00	3.00		44.00	19.00	162.00	77.00	-0.257
SR 667 from Mill St to Galetti Way	Urban Principal Arterial (UPA) - Other	Pedestrians and bicyclists	ADA curb ramps	31.00	27.00	1.00	3.00	1.00	1.00	20.00	28.00	53.00	59.00	-6.395
Eastern Ave and Washington Ave	Multiple/Varies	Intersection traffic control	Pavement markings	27.00	21.00					23.00	19.00	50.00	40.00	0.447

The benefit (B) is calculated using Nevada's best available societal costs per crash type multiplied by the reduction in crash type. The cost (C) is total project costs. The blank areas in the spreadsheet are zeros, this question defaults and leaves them blank when you enter zero.

These previous implemented projects were from 2018 and 2019. Due to the data not being available last year for some of the projects, both 2018 and 2019 projects are being reported this year.

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
	Median Type (54) [55]	80	80								

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
	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	15		
	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]			20	20						
	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 Beginning of Ramp Terminal (197) [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	
		STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE
	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]					100	100				
	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):		**98.89**	**98.89**	**81.25**	**81.25**	**90.91**	**90.91**	**71.67**	**90.56**	**100.00**	**100.00**

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

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. Nevada participated in the MIRE Peer Exchange in Washington D.C. Aug 9th and 10th, 2023 to gain valuable insight on best practices of collecting and analyzing MIRE data. Lastly, evaluation shall include Highway Safety Improvement Program quality control, ensuring the accuracy of safety data. Nevada held a Roadway Data Improvement Program (RDIP) workshop on May 3, 2022 and May 4, 2022. Nevada is waiting on the assessment to proceed with a strategic plan to collect the MIRE data elements.

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.