NEVADA ADVISORY COMMITTEE ON TRAFFIC SAFETY

June 30, 2022

The Honorable Steve Sisolak Governor of Nevada Capitol Building 101 N. Carson St. Carson City, Nevada 89701 Director Brenda Erdoes Director of the Legislative Counsel Bureau Nevada State Legislature 401 S. Carson St. Carson City, Nevada 89701

Dear Governor Sisolak and Director Erdoes:

As the Chairman of the Nevada Advisory Committee on Traffic Safety (NVACTS), I have the pleasure of presenting the 2022 Annual Report on behalf of the committee. This report has been prepared per NRS 408.581(10) and was approved by the committee on June 9, 2022. The 2022 Annual Report includes statewide safety data, traffic safety policy recommendations, and a summary of the committee's activities in accordance with NRS 408.581(10). While this report is statutorily required, we must remember that each number and each policy recommendation is connected to a person, a family, and a community deeply impacted by the safety, or lack thereof, of our roadways.

In 2021, Nevada experienced its deadliest year in over a decade on our roadways, with 386 fatalities. Unfortunately, 2022 started with the deadliest crash in the history of Nevada, with nine lives lost in North Las Vegas. This year continues to trend in the wrong direction, with 144 lives lost to date. We cannot accept that roadway fatalities are an inevitable part of life in Nevada. To reduce this deadly trend, this committee has prioritized five policy recommendations, enclosed in this report, that we believe will fundamentally improve safety for all:

- Road Safety Cameras (Automated Traffic Enforcement)
- Higher Fines in School Zones
- Primary Seat Belts
- Graduated Driver License Additions
- Roadside Drug Impairment Testing

Working together, we can and must affect the change necessary to save lives on our roadways. Lives depend on it.

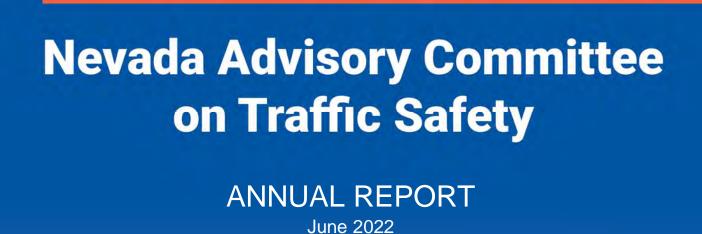
Myself and members of the committee are available to provide any further clarification needed, and we look forward to ongoing discussions around the implementation.

Respectfully,

ANDREW THOMAS BENNETT

Chairman, Nevada Advisory Committee on Traffic Safety







Nevada Advisory Committee on Traffic Safety (NVACTS)

ANNUAL REPORT

June 2022

Committee Members:

Kristina Swallow	Director	Nevada Department of Transportation	
Sondra Rosenberg	Assistant Director, Planning	Nevada Department of Transportation	
Julia Peek	Deputy Administrator	Department of Health and Human Services	
Sean Sever	Deputy Administrator, Research and Project Management Division (NVACTS Vice Chair)	Department of Motor Vehicles	
Amy Davey	Administrator	Nevada Department of Public Safety-Office of Traffic Safety	
(Vacant)		Nevada Department of Public Safety	
Christy McGill	Director of the Office for a Safe and Respectful Learning Environment	Superintendent of Public Instruction/Nevada Department of Education	
Cameron (C.H.) Miller	Assemblyman	Assembly Standing Committee on Growth and Infrastructure	
Scott Hammond	Senator	Senate Standing Committee on Growth and Infrastructure	
David Gordon	Manager of Judicial Education	Administrative Office of the Courts	
Cliff Banuelos	Tribal-State Environmental Liaison	Inter-Tribal Council of Nevada	
Shashi Nambisan	Director, Transportation Research Center	Nevada System of Higher Education/University of Nevada, Las Vegas Transportation Research Center	
Deborah Kuhls	Assistant Dean for Research, Professor of Surgery, Chief, Section of Critical Care	Nevada System of Higher Education/ Kirk Kerkorian School of Medicine at University of Nevada, Las Vegas	
Dan Doenges	Director of Planning	Regional Transportation Commission of Washoe County	
John Penuelas	Senior Director of Engineering	Regional Transportation Commission of Southern Nevada	
Nick Haven	Long Range Planning and Transportation Division Manager	Tahoe Regional Planning Agency	
Kelly Norman	Lead Transportation Planner	Carson Area Metropolitan Planning Organization	
Andrew Bennett	Director (NVACTS Chair)	Nevada Association of Counties/Clark County Office of Traffic Safety	
Joey Paskey	Deputy Director, City Traffic Engineer	Nevada League of Cities/City of Las Vegas	
Jason Walker	Sergeant	Nevada Sheriffs and Chiefs Association/Washoe County Sheriff's Office	

Table of Contents

Purpose of this Document	4
Statewide Safety Data	4
Traffic Fatalities	4
Speeding-Related	6
Impaired Driving	6
Intersections	7
Unrestrained Occupants	7
Younger Drivers	7
Recommendations	8
Traffic Safety Policy Priorities	8
Summary of Activities	9
NVACTS Meetings	9
Task Forces	9
Legislative Task Force Working Group	9
Traffic Safety Task Forces	9
Table of Figures	
Figure 1: Fatal Crashes in Nevada (2012-2021)	5
Figure 2: Nevada Traffic Fatalities (2012-2021)	
Figure 3: Nevada Traffic Fatality Rate per 100 Million VMT (2011-2020)	
Figure 4: Nevada Traffic Fatality Rate per 100 Thousand Population (2011-2020)	
Figure 5: Speeding-Related Fatalities (2016-2020)	
Figure 6: Impaired Driving Fatalities (2016-2020)	
Figure 7: Intersection Fatalities (2016-2020)	
Figure 8: Unrestrained Occupant Fatalities (2016-2020)	7
Figure 9: Younger Driver Fatalities (2016-2020)	
Figure 10: Nevada Traffic Safety Task Forces	10

List of Appendices

Appendix A (pdf pg 12) - NVACTS Bylaws

Appendix B (pdf pg 19) - Nevada Crash Facts

Appendix C (pdf pg 97) - Traffic Safety Policy Priority White Papers

Appendix D (pdf pg 118) - 2021-2025 SHSP and Action Plan

Purpose of this Document

The Nevada Advisory Committee on Traffic Safety (NVACTS) was voted into the Nevada Revised Statutes (NRS) at the 2021 Nevada Legislative Session. As defined by NRS 408.581 and described in the NVACTS Bylaws (**Appendix A**), the function of NVACTS is to:

- · Review, study, and make recommendations regarding:
 - Evidence-based best practices for reducing or preventing fatalities and injuries related to motor vehicle crashes on roadways in Nevada
 - Data on motor vehicle crashes in Nevada resulting in fatalities or serious bodily injuries, including, without limitation, factors that cause such crashes and measures known to prevent
 - o Policies intended to reduce or prevent deaths and injuries related to motor vehicle crashes on roadways in this State
 - o Any other matter submitted by the Chair
- Prepare and submit an annual report to the Governor and to the Director of the Legislative Counsel Bureau for transmittal to the Legislature. Summarize activities of the Advisory Committee that address, without limitation, any issue reviewed or studied, and any recommendations made by the Advisory Committee.

This document satisfies the requirement as the NVACTS Annual Report.

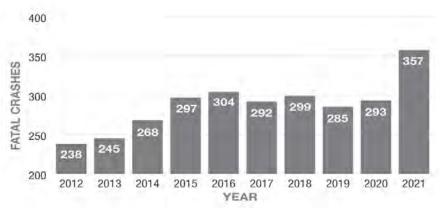
Statewide Safety Data

With a goal of Zero Fatalities since 2011, Nevada has focused on reducing fatalities on state and local roadways for the past decade. There have been some years that showed trends in the right direction. It is clear from the data below that fatalities on our roadways are climbing and the most common factors are speeding and impairment (alcohol and/or drugs). The latest fatality data for Nevada is summarized below. 2021 Nevada Crash Facts, which includes the complete summary of the most recent five years of fatality data (2015-2019), is included in Appendix B.

Traffic Fatalities

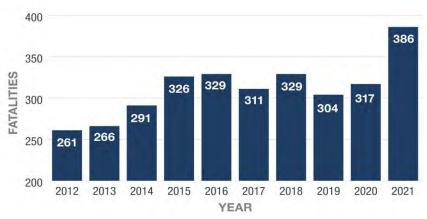
Fatalities and fatal crashes have generally increased over the last 10 years, with 2021 being the worst year in the last decade with 389 fatalities (preliminary). Fatality rates, when compared to vehicle miles traveled (VMT) and population, are also on the rise. The following figures show fatal crashes, fatalities, and fatality rates (per 100M vehicle miles traveled and 100K population for 2011-2020). This section also includes five-year fatality data for speeding-related, impaired driving, unrestrained occupants, younger drivers, and intersection fatalities.

Figure 1: Fatal Crashes in Nevada (2012-2021)



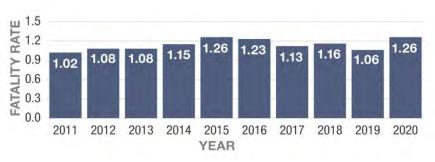
Source: 2012 to 2020 Fatality Analysis Reporting System, National Highway Traffic Safety Administration (NHTSA); 2021 Nevada Monthly Fatality Report

Figure 2: Nevada Traffic Fatalities (2012-2021)



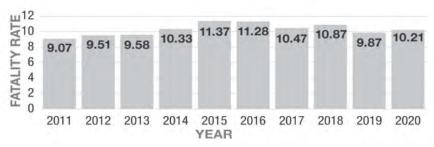
Source: 2012 to 2020 Fatality Analysis Reporting System, NHTSA; 2021 Nevada Monthly Fatality Report

Figure 3: Nevada Traffic Fatality Rate per 100 Million VMT (2011-2020)



Source: Fatality Analysis Reporting System, NHTSA (2021 preliminary data not available)

Figure 4: Nevada Traffic Fatality Rate per 100 Thousand Population (2011-2020)

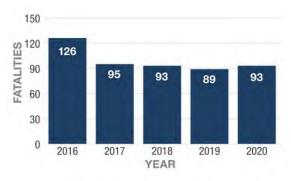


Source: Fatality Analysis Reporting System, NHTSA (preliminary 2021 data not available)

Speeding-Related

From 2016-2020, the total speeding-related fatalities was 496. Since 2016, the number of speeding-related fatalities has generally declined. However, data shows speed is a contributing factor in over 30% of Nevada's total fatalities. Speeding-related fatalities for 2016-2020 are shown in **Figure 5**.

Figure 5: Speeding-Related Fatalities (2016-2020)

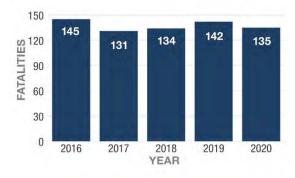


Source: Fatality Analysis Reporting System, NHTSA (2021 data not available)

Impaired Driving

Since 2016, a total of **687 fatalities** resulted from crashes involving an impaired driver. As shown in **Figure 6**, impaired driving fatalities have remained consistent for the last five years.

Figure 6: Impaired Driving Fatalities (2016-2020)



Source: Fatality Analysis Reporting System, NHTSA (2021 data not available)

Intersections

From 2016 to 2020, a total of **511 fatalities** occurred at **intersections** on Nevada roadways during that time frame. The intersection fatalities for the last five years are shown in **Figure 7**.

120
SHAP 100 108 105 105 104
89
0 2016 2017 2018 2019 2020
YEAR

Figure 7: Intersection Fatalities (2016-2020)

Source: Nevada Statewide Crash Data (2021 data not available)

Unrestrained Occupants

Between 2016 and 2020, **356 unrestrained-occupant fatalities** occurred on Nevada roadways. See **Figure 8.**

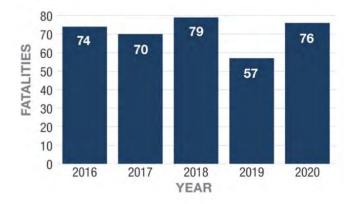


Figure 8: Unrestrained Occupant Fatalities (2016-2020)

Source: Fatality Analysis Reporting System, NHTSA (2021 data not available)

Younger Drivers

During 2016 to 2020, there were a total of **176 fatalities**, resulting from crashes involving a young driver. Fatalities over the last five years reached a high of 42 in 2020. See **Figure 9** below for the fatalities each year.

50 40 FATALITIES 42 39 30 29 29 20 10 0 2016 2017 2018 2019 2020 YEAR

Figure 9: Younger Driver Fatalities (2016-2020)

Source: Fatality Analysis Reporting System, NHTSA (2021 data not available)

Recommendations

Traffic Safety Policy Priorities

The following five policy priorities were approved by NVACTS as the most important policy priorities that would lead to the reduction of fatalities and serious injuries on Nevada's roadways based on a review of the current traffic safety issues. Additional information for the recommended traffic safety policy priorities is included in **Appendix C**.

Road Safety Cameras (RSCs) (Automated Traffic Enforcement)

The existing NRS prohibiting RSCs is from 1999. In 2019, Senate Bill 43 (SB43) was proposed to change NRS to allow agencies to use RSCs, however, there was a strong negative response due to ongoing concerns of personal privacy. The policy priority presented is the same: to eliminate the current NRS that limits local agencies' ability to use RSCs. There is continued work to be done to understand the concerns of those who have opposed this policy in previous sessions. Regional Transportation Commission of Washoe County (RTC Washoe) is considering a bill draft request (BDR) for use of RSCs specifically in school zones. There could be an opportunity to combine these proposals. Another consideration is to install RSCs specifically on school bus mast arms.

Higher Fines in School Zones

While "higher fines in school zones" may be posted in some jurisdictions, there is no specific language in NRS for higher fines in school zones (NRS 484B.363) and this has been dismissed in court due to lack of specific NRS language. This policy priority recommends strengthening NRS to specify higher fines and/or points in school zones, similar to work zones (NRS 484B.130) and pedestrian safety zones (NRS 484B.135).

Primary Seat Belts (PBL)

This policy priority is to create a PBL for Nevada. A PBL allows law enforcement to stop and ticket a driver or passenger for not wearing their seat belt. Currently, it is a secondary offense in Nevada. At this time, 37 states have a PBL in place (only 13 do not, including Nevada). A recent awareness survey showed that there is the perception that there is a PBL in Nevada.

Graduated Driver License (GDL) Additions

Changes to the GDL include extending the GDL through 20 years of age, or for all new drivers; installing a three-stage intermediate GDL for 6-12 months; and requiring additional training after a permit is earned. It was discussed that the current requirement for 50 hours of training is not closely tracked. Defensive driving courses (NRS 483.727) approved by the Department of Motor Vehicles (DMV) may provide a more structured curriculum for driver training than logging hours with parents. A statewide driver education program could be established in the future.

Roadside Drug Impairment Testing

Roadside drug impairment testing requires an oral fluid sample as the standard for roadside screening. An oral fluid test screens for opioids and other types of drugs, not a specific drug, but allows for screening for substances beyond alcohol. The test results in more initial information that would lead to more informed decisions for arrest, adjudication, and treatment.

Summary of Activities

The following subsections summarize the Fiscal Year (FY) 2022 activities under NVACTS.

NVACTS Meetings

NVACTS meets quarterly on the first Thursday of the month. Meetings are held in person in Las Vegas and Carson City, with video conference/virtual option for members and the public. The first NVACTS meeting was held on Tuesday, August 17, 2021. A special meeting of the NVACTS was held on April 14, 2022 to view a presentation and take action on Traffic Safety Policy Priorities from the Legislative Priority Task Force Working Group. Information for NVACTS, including meeting minutes and upcoming meetings, can be found here: Nevada Advisory Committee on Traffic Safety - Zero Fatalities (zerofatalitiesnv.com).

Task Forces

Legislative Task Force Working Group

NVACTS established the Legislative Priority Task Force Working Group to research and develop Traffic Safety Policy Priorities for 2022/2023. Sean Sever of the Nevada Department of Motor Vehicles (DMV) served as Chair. Legislative Task Force Working Group Members include:

- Sean Sever, DMV
- Amy Davey, Department of Public Safety-Office of Traffic Safety (DPS-OTS)
- Joey Paskey, City of Las Vegas
- Deborah Kuhls, University of Nevada, Las Vegas (UNLV) Kerkorian School of Medicine
- Dani Hafeman, OTS
- Christy McGill, Department of Education
- Laura Gryder Culver, UNLV Kerkorian School of Medicine
- Kevin Honea, Nevada State Police
- Kristina Swallow, NDOT
- Lacey Tisler, NDOT
- Erin Breen, UNLV Transportation Research Center
- Andrew Bennett, Clark County Office of Traffic Safety
- Shannon Bryant, Traffic Safety Resource Prosecutor
- Nick Nordyke, DPS-OTS
- Mike Colety, Kimley-Horn
- Lindsay Saner, Kimley-Horn

Traffic Safety Task Forces

Nevada's Strategic Highway Safety Plan (SHSP) includes five task forces that meet quarterly. Task forces are organized as shown in Figure 3: Safer Roads, Vulnerable Road Users, Safer Drivers and Passengers, Impaired Driving, and the Traffic Records Coordinating Committee. Meeting agendas, meeting minutes, and resources can be found here: STRATEGIC HIGHWAY SAFETY PLAN - Zero Fatalities (zerofatalitiesnv.com). The 2021-2025 Nevada SHSP is included as Appendix D.

Nevada Department of **Public Safety Zero** Fatalities Traffic Records Task Forces **Coordinating Committee** Key Areas Impaired Driving Prevention Vulnerable Road Users Safer Roads Impaired Driving Safe Speed Pedestrians Young Drivers **50%** Motorcyclists Older Drivers Departures Occupant Protection **Bicyclists** Intersections Micromobility Work Zones Distracted Driving

Figure 10: Nevada Traffic Safety Task Forces

APPENDIX A

NVACTS Bylaws

NEVADA ADVISORY COMMITTEE ON TRAFFIC SAFETY (NVACTS) BYLAWS

ARTICLE 1 – NAME

1.1 This organization shall be called the Nevada Advisory Committee on Traffic Safety (NVACTS) hereinafter referred to as the NVACTS.

ARTICLE 2- AUTHORITY

- 2.1 The authority for establishing NVACTS is found in the State of Nevada Revised Statutes (NRS) Chapter 408, which creates the Advisory Committee on Traffic Safety within the Department of Transportation.
- 2.2 The Advisory Committee shall review, study and make recommendations regarding:
 - 2.2.1 Evidence-based best practices for reducing or preventing deaths and injuries related to motor vehicle crashes on roadways in this State;
 - 2.2.2 Data on motor vehicle crashes resulting in death or serious bodily injury in this State, including, without limitation, factors that cause such crashes and measures known to prevent such crashes;
 - 2.2.3 Policies intended to reduce or prevent deaths and injuries related to motor vehicle crashes on roadways in this State; and
 - 2.2.4 Any other matter submitted by the Chair.
- 2.3 NVACTS shall prepare and submit to the Governor and to the Director of the Legislative Counsel Bureau for transmittal to the Legislature an annual report concerning the activities of the Advisory Committee that addresses, without limitation, any issue reviewed or studied, and any recommendations made by the Advisory Committee.

ARTICLE 3 - PURPOSE AND FUNCTION

- 3.1 The NVACTS shall review, study and make recommendations regarding:
 - 3.1.1 Evidence-based best practices for reducing or preventing deaths and injuries related to motor vehicle crashes on roadways in this State;
 - 3.1.2 Data on motor vehicle crashes resulting in death or serious bodily injury in this State, including, without limitation, factors that cause such crashes and measures known to prevent such crashes;
 - 3.1.3 Policies intended to reduce or prevent deaths and injuries related to motor vehicle crashes on roadways in this State; and
 - 3.1.4 Any other matter submitted by the Chair.

- 3.1.5 NVACTS will provide guidance to state, county, all local agencies, and tribal communities that incorporate a commitment to traffic safety in their mission and/or organization.
- 3.1.6 NVACTS will review and approve a strategic plan that will impact the present and predicted statistics on vehicle-related deaths and injuries, focusing on key emphasis areas and containing strategies designed to improve major problem areas or to advance effective practices by means that are both cost-effective and acceptable to the majority of Nevada's citizens.
- 3.1.7 NVACTS will establish and publish statewide highway safety goals and objectives.
- 3.1.8 NVACTS will create the mechanisms to foster multidisciplinary efforts to resolve statewide traffic safety problems and issues through communication and cooperative agreements.
- 3.1.9 NVACTS will serve as the Traffic Records Executive Committee (TREC) for the State of Nevada and oversee the activities of the Traffic Records Coordinating Committee (TRCC). Each NVACTS member agency is eligible to have one responsible representative designated by their agency on the TRCC.

ARTICLE 4 – MEMBERSHIP

- 4.1 The members of the Advisory Committee shall elect from their voting membership a Chair and a Vice Chair. The Chair shall preside at the meetings of the NVACTS. If the Chair is unable to attend, then the Vice Chair shall assume the duties of the Chair.
- 4.2 The term of office of the Chair and the Vice Chair is 2 years. If a vacancy occurs in the office of Chair or Vice Chair, the members of the Advisory Committee shall elect a Chair or Vice Chair, as applicable, from among its voting members to serve for the remainder of the unexpired term.
- 4.3 NVACTS shall consist of:

Director (or designee), Department of Transportation (NDOT)

Representative (appointed by NDOT Director) of NDOT

Director (or designee), Department of Health and Human Services (DHHS)

Director (or designee), Department of Motor Vehicles (DMV)

Director (or designee), Department of Public Safety (DPS)

Representative (appointed by DPS Director) of DPS

Superintendent (or designee), Department of Education (DED)

Member, Nevada State Assembly Standing Committee on Growth and Infrastructure (appointed by Speaker of the Assembly)

Member, Nevada State Senate Standing Committee on Growth and Infrastructure (appointed by Majority Leader of the Senate)

Representative (appointed by the Chief Justice of the Supreme Court of Nevada), Administrative Office of the Courts (AOC)

Representative (appointed by Inter-Tribal Council of Nevada (ITCN)), Tribal Governments

Representative (appointed by NDOT Director), Nevada System of Higher Education

Representative (appointed by NDOT Director), Nevada System of Higher Education

Representative, Regional Transportation Commission of Southern Nevada (RTCSNV)

Representative, Regional Transportation Commission of Washoe County (RTC)

Representative, Carson Area Metropolitan Planning Organization (CAMPO)

Representative, Tahoe Regional Planning Agency (TRPA)

Representative, Nevada Association of Counties (NACO)

Representative, Nevada League of Cities

Representative, Nevada Sheriffs' and Chiefs' Association (NSCA)

The Director of the Department of Transportation may appoint as nonvoting members of NVACTS such other persons as the Director deems appropriate.

- 4.3.1 The term of office of each member appointed to the Advisory Committee is 2 years. Such members may be reappointed for additional terms of 2 years in the same manner as the original appointments. Any vacancy occurring in the appointed voting membership of the Advisory Committee must be filled in the same manner as the original appointment not later than 30 days after the vacancy occurs.
- 4.3.2 Member organizations may designate a proxy to serve on the committee when the member identified in 4.3 is unable to attend. This notice shall be in writing and directed to the Chair.

ARTICLE 5 - VOTING

5.1 A majority of the voting members of the Advisory Committee constitutes a quorum for the transaction of business. If a quorum is present, the affirmative vote of a majority of the voting members of the Advisory Committee present is sufficient for any official action taken by the Advisory Committee.

ARTICLE 6 - COMPENSATION

6.1 Each member of the Advisory Committee serves without compensation and is not entitled to receive a per diem allowance or travel expenses.

ARTICLE 7 – MEETINGS

- 7.1 The Advisory Committee shall meet at least once each calendar quarter and may meet at such further times as deemed necessary by the Chair.
- 7.2 NVACTS members may submit agenda items no later than 12 working days before a scheduled meeting, to the Nevada Department of Transportation Traffic Safety Engineering Division. These agenda items will be approved by the Chair and will be distributed to the NVACTS members seven days prior to the scheduled NVACTS meeting date.
- 7.3 Meetings will comply with the Nevada Open Meeting Law (NRS 241).
- 7.4 The deliberations at NVACTS meetings shall be in accord with Robert's Rules of Order-Newly Revised.

ARTICLE 8 - TASK FORCE WORKING GROUPS

- 8.1 The Advisory Committee may establish such working groups, task forces and similar entities from within or outside its membership as necessary to address specific issues or otherwise to assist in its work.
- 8.2 Each Task Force Working Group will be required to analyze the issue assigned, determine cause and develop solutions and strategies for addressing the contributing factors of the subject matter assigned.
 - 8.2.1 A member of NVACTS shall chair each Task Force Working Group.
 - 8.2.2 The size and composition of a Task Force Working Group will be determined by the appointed chair.
 - 8.2.3 Task Force membership should not be limited to members of the NVACTS, and when possible, they will be composed of a diverse selection of representatives

- from state, federal, county, local, and tribal agencies in an effort to ensure all aspects of the topic are identified and addressed.
- 8.2.4 Task Force Working Groups should meet as frequently as needed.
- 8.2.5 Meetings/discussions may be conducted by video teleconference, conference call and/or e-mail.
- 8.2.6 The Task Force Working Group members shall receive no compensation other than that received from their own agency/organization. The Task Force Working Group shall not reach a decision by a vote or consensus. No motions or resolutions are to be presented. No decisions for or recommendations to the board are to be made. The Task Force Working Groups shall not speak to or be recognized by the board as a single voice on any issue.
- 8.2.7 Task Force Working Groups will be considered working groups and therefore not subject to the provisions of Nevada Open Meeting laws, rules, and regulations.
- Note: If a Task Force Working Group engages in deliberation or decision making, is assigned by NVACTS to formulate policy or carry out planning functions, is delegated the task of making decisions for or recommendations to NVACTS, or is recognized by NVACTS as speaking with one voice, it shall be subject to the Nevada Open Meeting Law.
- 8.3 Task Force Working Groups will report to the NVACTS as directed.

ARTICLE 9 - TECHNICAL SUPPORT STAFF

- 9.1 The Department of Transportation shall provide administrative support to NVACTS. The Staff shall:
 - 9.1.1 Coordinate the activities of NVACTS to include making all logistical arrangements required for meetings.
 - 9.1.2 Provide a note taker and staff person to comply with the Nevada Open Meeting Law.
 - 9.1.3 Provide research assistance and statistical data to the NVACTS.
 - 9.1.4 Prepare and publish plans and documents at the direction of NVACTS.
 - 9.1.5 Establish and maintain a website for NVACTS designed to further the sharing of crash data, organizational safety planning, research, and other relevant information pertinent to the Committee.

ARTICLE 10 - ADOPTION and AMENDMENTS

- 10.1 These bylaws shall be initially adopted by a majority vote of the members present at the second meeting.
- 10.2 These bylaws may be amended at any regular meeting of NVACTS by a majority vote of the voting members present.

Approved by action of the Committee at the meeting on Tuesday, February 1, 2022

APPENDIX B

Nevada Crash Facts











Nevada Traffic Safety Crash Facts











Table of Contents

List of Acronyms	i
Introduction	1
Overall Crash Data	2
Speeding-Related Crashes	1
Lane Departure Crashes	
Intersection Crashes	
Pedestrian Crashes	
Motorcycle Crashes	22
Unhelmeted Motorcyclists	
Bicycle Crashes	28
Unrestrained-Occupant Crashes	31
Child Passenger Crashes	34
Older Driver Crashes	36
Young Driver Crashes	39
Distracted Driving Crashes	42
Impaired Driving Crashes	45
Appendix A – Crash Maps	49
Appendix B – Emphasis Area Data Query Table	70

Statutory Notice 23 U.S.C. § 409: US Code -

Section 409: Discovery and admission as evidence of certain reports and surveys

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.



List of Acronyms

BAC	Blood Alcohol Content	
CEA	Critical Emphasis Area	
DPS	Department of Public Safety	
FARS	Fatality Analysis Reporting System	
FHWA	Federal Highway Administration	
HSIP	Highway Safety Improvement Program	
HSP	Highway Safety Plan	
NDOT	Nevada Department of Transportation	
NECTS	Nevada Executive Committee on Traffic Safet	
NHTSA	National Highway Traffic Safety Administratio	
OTS	Office of Traffic Safety	
SOE	Sequence of Events	
SHSP	Strategic Highway Safety Plan	
STSI	State Traffic Safety Information	
VMT	Vehicle Miles Traveled	



Introduction

The Nevada Traffic Safety Crash Facts documents the analysis of Fatality Analysis Reporting System (FARS) data from the National Highway Traffic Safety Administration (NHTSA) (https://www.nhtsa.gov/content/nhtsa-ftp/251). The primary purpose of the Nevada Traffic Safety Crash Facts is to provide the appropriate data to effectively guide strategies and actions for the Strategic Highway Safety Plan (SHSP), the Highway Safety Plan (HSP) for the Nevada Office of Traffic Safety (OTS), the Highway Safety Improvement Program (HSIP) for the Nevada Department of Transportation (NDOT), and other traffic safety efforts within the state.

FARS data is updated continuously and published on the FARS website each fall. For the purpose of historical understanding, 10 years worth of data is reported. However, all trends and analyses were conducted on the most recent five years of data (2015 – 2019).

Nevada's five year fatality data is available on an on-line platform and is updated with the latest data available from FARS (2015-2019). The Nevada Fatal Crash Data Dashboard is located <u>here.</u>

Following a data-driven approach enables implementers to inform change in policy, infrastructure, and education for the 6 "Es" of Nevada's SHSP (Equity, Engineering, Education, Enforcement, Emergency Response and Everyone). This report provides information related to the following five key questions:

- What fatalities have occurred?
- Where did these fatalities occur?
- Who was responsible/who was affected?
- When did these fatalities occur?
- Why did these fatalities occur?

The intent is for traffic safety implementers to use this data to gain a better understanding of the factors that contribute to crashes. Once the applicable crash causes are understood, implementers and policymakers are better positioned to support the appropriate proven countermeasures and innovative approaches that target the largest factors in causing crashes.

Critical emphasis areas (CEAs) are topics of concern that experience high frequency of crashes and, as such, are the focus of efforts to reduce crash occurrences. A total of nine CEAs have been identified within the Nevada SHSP, which are organized under four Key Areas: Safer Roads, Vulnerable Road Users, Safe Drivers and Passengers and Impaired Driving Prevention.



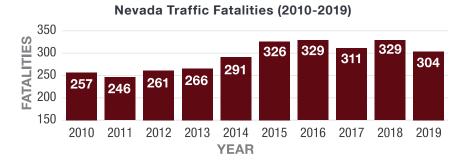
Overall Crash Data

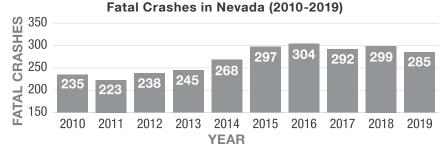
This section analyzes the overall crash data for Nevada between 2015 and 2019. Official FARS data from a File Transfer Protocol (FTP) site maintained by NHTSA was used to determine the numbers of fatalities and fatal crashes (https://www.nhtsa.gov/content/nhtsa-ftp/251). This data is used to determine where to focus efforts and resources and to evaluate effectiveness of existing traffic safety measures in Nevada.

What?

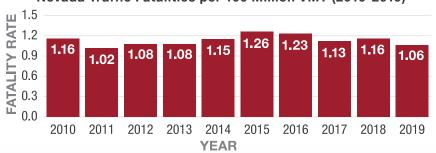
Fatalities and fatal crashes have generally increased over the past 10 years. Nevada's fatalities have increased from 257 in 2010 to 304 in 2019 and, likewise, fatal crashes have increased from 235 in 2010 to 285 in 2019.

As shown in the graphs, fatalities per vehicle miles traveled (VMT) have slightly decreased in Nevada since 2010. Fatalities per population have generally increased since 2010.

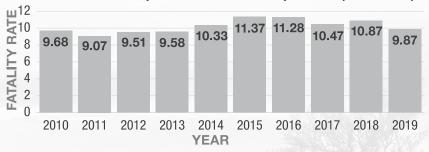




Nevada Traffic Fatalities per 100 Million VMT (2010-2019)*



Nevada Fatalities per 100 Thousand Population (2010-2019)



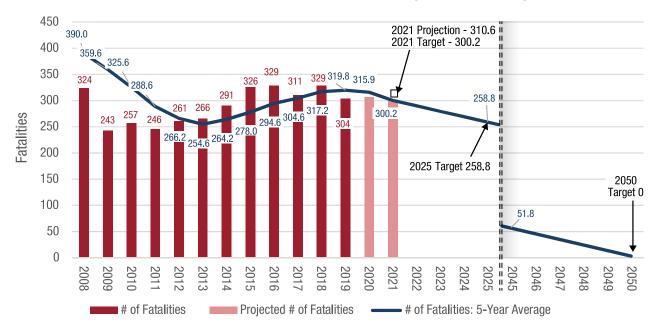
*This chart has been modified to match the NHTSA STSI summary



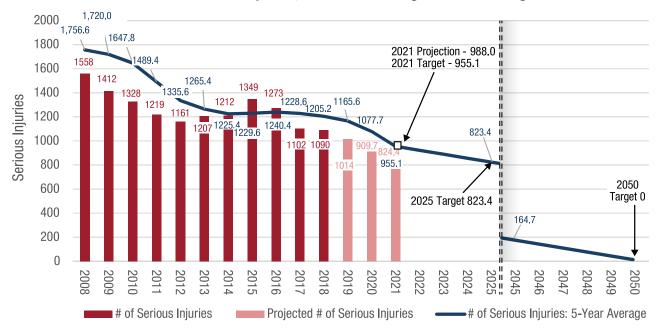
What? (continued)

Zero Fatalities has been Nevada's official traffic safety goal since 2010, when it was adopted by the Nevada Executive Committee on Traffic Safety (NECTS). Nevada has a Zero Fatalities goal to reach zero traffic fatalities and serious injuries by 2050. As shown in the charts below and on the following pages, Nevada is currently on track to meet the goal for serious injuries but not for fatalities.

Nevada Traffic Fatalities, Five-Year Average and 2025 Target

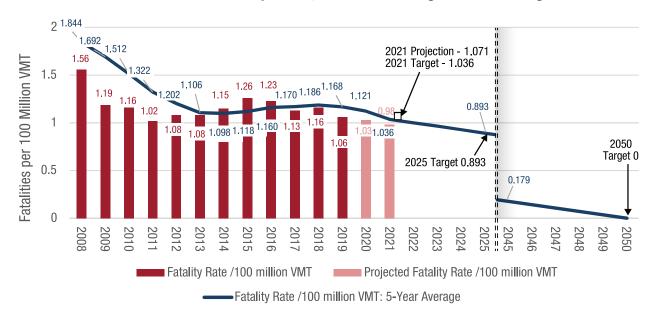


Nevada Serious Injuries, Five-Year Average and 2025 Target

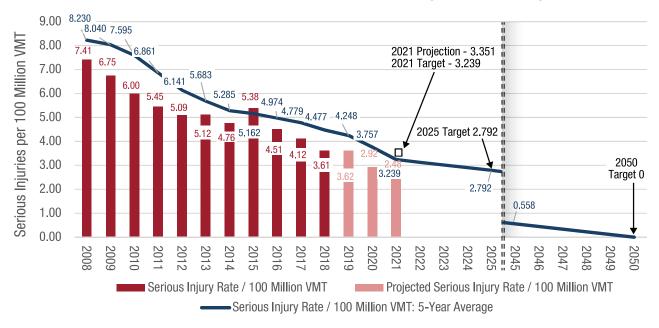




Nevada Traffic Fatality Rates, Five-Year Average and 2025 Target

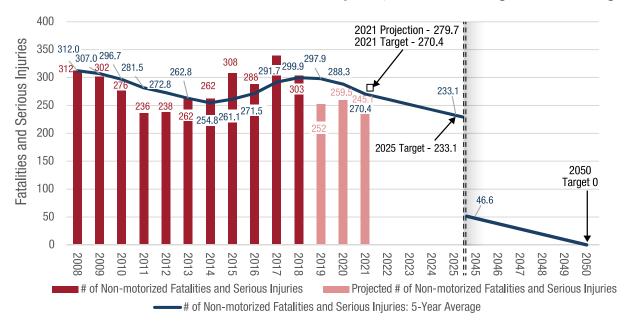


Nevada Serious Injury Rates, Five-Year Average and 2025 Target



NEVADA Traffic Safety Crash Facts

Nevada Non-Motorized Fatalities and Serious Injuries, Five-Year Average and 2025 Target



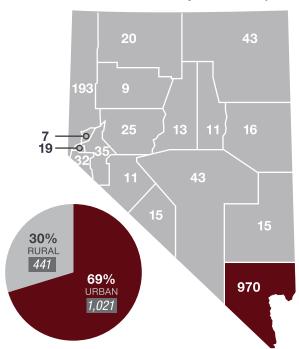


Where?

Rural and urban crash locations are defined in FARS as the classification of the segment of trafficway on which a crash occurred, based on Federal Highway Administration (FHWA)-approved adjusted census boundaries of small rural and urbanized areas.

Between 2015 and 2019, Clark County reported the largest number of fatal crashes and fatalities. Sixty-nine percent of all Nevada fatal crashes occurred on urban roadways.

Fatal Crashes in Nevada by Location (2015-2019)*



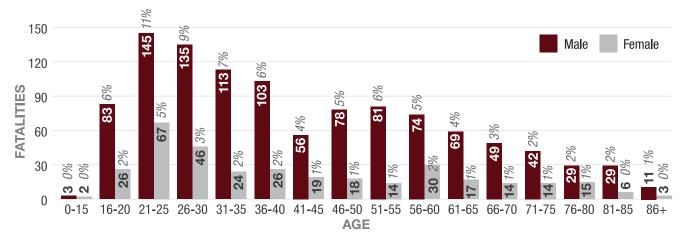
by County (2015-2019)*

County	Fatal Crash	Percent of all Fatal Crashes
Carson City	19	1%
Churchill	25	2%
Clark	970	66%
Douglas	32	2%
Elko	43	3%
Esmeralda	15	1%
Eureka	11	1%
Humboldt	20	1%
Lander	13	1%
Lincoln	15	1%
Lyon	35	2%
Mineral	11	1%
Nye	43	3%
Pershing	9	1%
Storey	7	0%
Washoe	193	13%
White Pine	16	1%
TOTAL	1,477	

Who?

From 2015 to 2019, males ages 21 to 25 years old comprised the largest number of at-fault drivers in fatal crashes in Nevada.

Age/Gender Breakdown of At-Fault Drivers in All Fatal Crashes in Nevada (2015-2019)*



*Does not include values that are unknown or missing



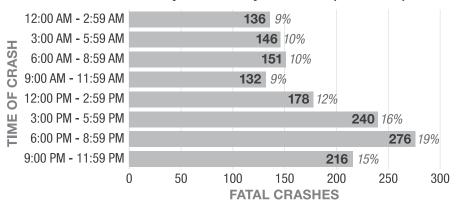
NEVADA Traffic Safety Crash Facts

When?

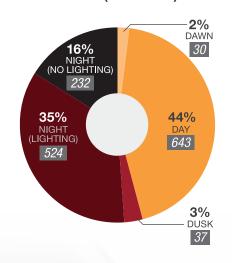
Between the hours of 6:00 PM and 8:59 PM, 276 fatal crashes occurred, totaling 19% of all fatal crashes. Nearly 35% took place at night in areas with street lighting.

From 2015 to 2019, 34% of all fatal crashes and fatalities occurred on the weekends. Ten percent occurred during the month of September.

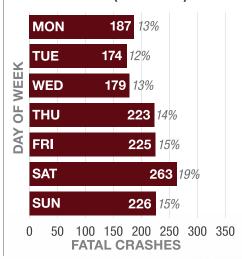
Fatal Crashes by Time of Day in Nevada (2015-2019)



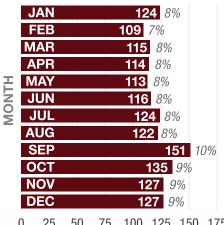
Lighting at Time of Fatal Crash in Nevada (2015-2019)*



Fatal Crashes by Day of Week in Nevada (2015-2019)



Fatal Crashes by Month of Year in Nevada (2015-2019)

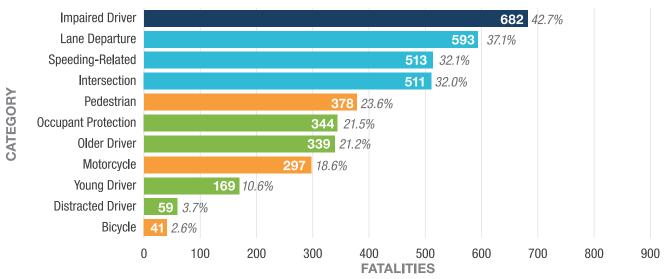


0 25 50 75 100 125 150 175 **FATAL CRASHES**

Why?

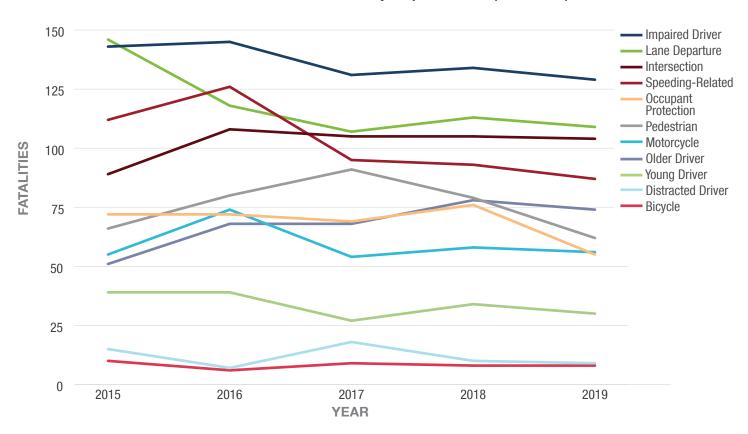
Between 2015 and 2019, **impaired driving fatalities**, which involves a driver with a blood alcohol content (BAC) of 0.08% or greater and/or tested positive for drugs in their system, comprised the largest percent of fatalities at nearly 43% of all Nevada's traffic fatalities.

Nevada Traffic Fatalities by Emphasis Area (2015-2019)*



*A crash may be categorized in more than one emphasis area, e.g., an impaired motorcyclist at an intersection. Therefore, the values exceed the total number of fatalities and the sum of the percentages is more than 100%.

Nevada Traffic Total Fatalities by Emphasis Area (2015-2019)



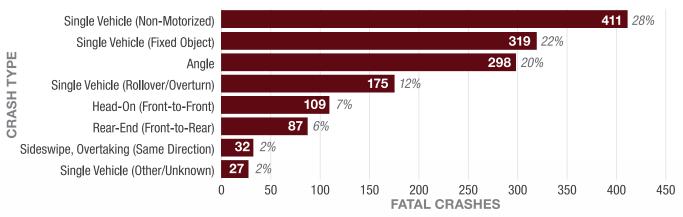


NEVADA Traffic Safety Crash Facts

Why? (continued)

Fatalities most frequently involved a non-motorized form of transportation, which is defined as **any form of transportation that includes pedestrian, bicycle, wheelchair, skateboard, etc.**

Nevada Traffic Fatalities by Crash Type (2015-2019)*



*Does not include values that are unknown or missing or data categories with low representation





Speeding-Related Crashes

32.1% of Nevada's total fatalities.

A speeding-related crash is defined as a crash in which the responding officer deemed the crash to be related to the vehicle speeding. The FARS data uses the attribute "speeding-related (SPEEDREL)" in the vehicle file to indicate if a fatal crash was speeding-related. For this analysis, five attribute codes were used: "yes," "yes, racing," "yes, exceeded speed limit," "yes, too fast for conditions," and "yes, specifics unknown." If a crash reported any of the attribute codes, the crash was deemed a fatal speeding-related crash.

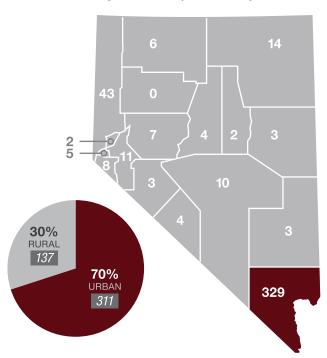
What?

From 2015 to 2019, there was a slight decline in the number of fatal speeding crashes. A total of **512 fatalities** and **453 fatal speeding-related crashes** occurred on Nevada roadways during this time frame.

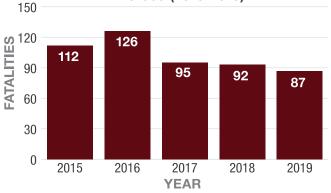
Where?

Between 2015 and 2019, 70% of fatal speeding crashes occurred on urban roadways. Clark County reported the highest number of fatal speeding-related crashes in Nevada.

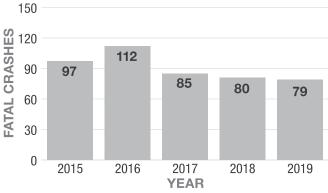
Fatal Speeding-Related Crashes in Nevada by Location (2015-2019)*



Speeding-Related Traffic Fatalities in Nevada (2015-2019)



Fatal Speeding-Related Crashes in Nevada (2015-2019)



*Does not include values that are unknown or missing

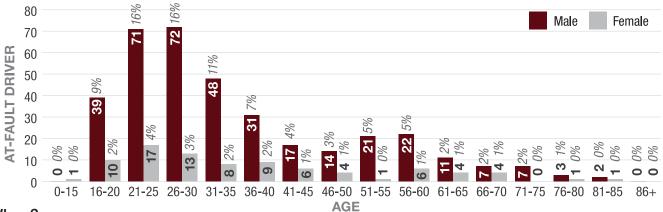




Who?

From 2015-2019, Male drivers ages 26 to 30 years old comprise the greatest number of at-fault drivers in fatal speeding-related crashes in Nevada.

Age/Gender Breakdown of At-Fault Drivers in Fatal Speeding-Related Crashes in Nevada (2015-2019)*

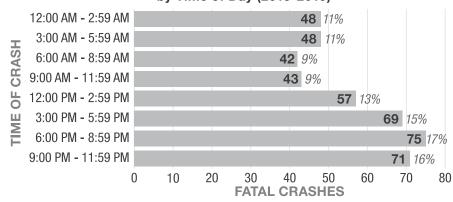


When?

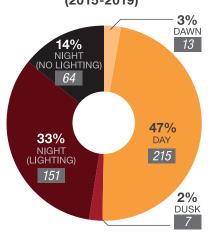
The hours of 6:00 PM and 11:59 PM had the greatest number of fatal speeding-related crashes. Nearly half of all fatal speeding-related crashes took place at night in areas with and without street lighting.

More than 50% of fatal speedingrelated crashes occurred from Friday to Sunday. Fatal crashes occurred most frequently during the months of March and September, totaling 19% of all fatal speeding-related crashes.

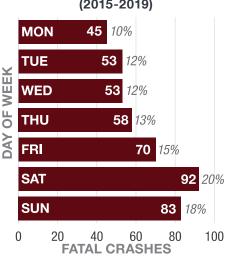
Fatal Speeding-Related Crashes in Nevada by Time of Day (2015-2019)



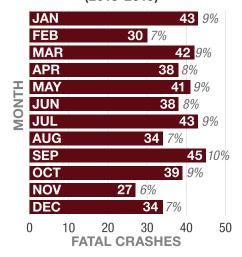
Lighting at Time of Fatal Speeding-Related Crash in Nevada (2015-2019)*



Fatal Speeding-Related Crashes in Nevada by Day of Week (2015-2019)



Fatal Speeding-Related Crashes in Nevada by Month of Year (2015-2019)



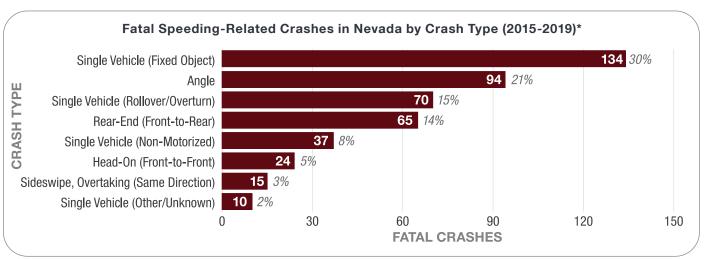
^{*}Does not include values that are unknown or missing





Why?

From 2015 to 2019, fatal speeding-related crashes most frequently involved a single motor vehicle hitting a fixed object or an angle collision with another vehicle.



^{*}Does not include values that are unknown or missing or data categories with low representation





Lane Departure Crashes

37.1% of Nevada's total fatalities.

Lane departure crashes involve a motor vehicle in transit that leaves its designated lane. The FARS data uses the attribute "sequence of events (SOE)" in the crash event (CEVENT) dataset to identify if and how the vehicle left its lane. Thirty-three attribute codes were used: rollover/overturn, immersion or partial immersion, building, impact attenuator/crash cushion, bridge pier or support, bridge rail, guardrail face, concrete or other traffic barrier, utility pole/light support, post/pole/other support, culvert, curb, ditch, embankment, fence, wall, fire hydrant, shrubbery, tree (standing only), other fixed object, traffic signal support, snow bank, bridge overhead structure, guardrail end, mail box, cable barrier, traffic sign support, ran off road—right, ran off road—left, cross median, and cross centerline. If any of the listed attribute codes were assigned, the crash was deemed a lane departure crash.

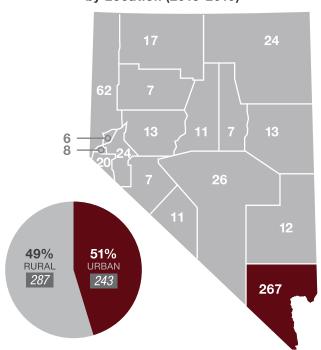
What?

During 2015 to 2019, there were a total of **593 fatalities** and **535 fatal lane departure crashes** that occurred on Nevada roadways.

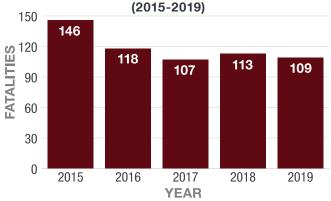
Where?

Between 2015 and 2019, nearly two-thirds of fatal lane departure crashes occurred in Clark County. More than half of such fatalities occurred on urban roadways.

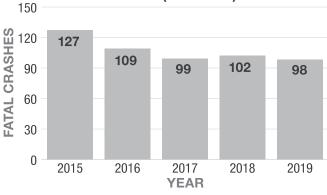
Fatal Lane Departure Crashes in Nevada by Location (2015-2019)*



Lane Departure Traffic Fatalities in Nevada



Fatal Lane Departure Crashes in Nevada (2015-2019)



*Does not include values that are unknown or missing

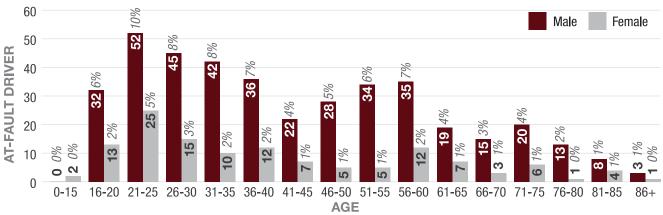




Who?

From 2015 and 2019 males ages 21 to 25 were the largest reported age group of at-fault drivers involved in fatal lane departure crashes in Nevada.

Age/Gender Breakdown of At-Fault Driver in Fatal Lane Departure Crashes in Nevada (2015-2019)*

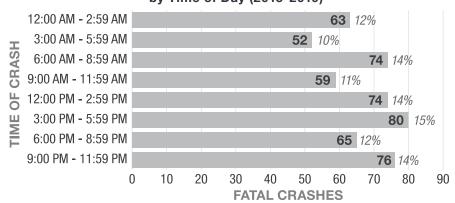


When?

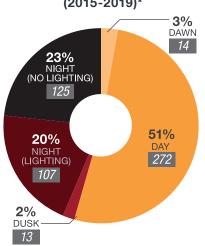
The hours of 3:00 PM and 5:59 PM had the greatest number of fatal lane departure crashes. More than 50% of fatal lane departure crashes occurred during daylight.

From 2015 to 2019, 37% of fatal lane departure crashes occurred on the weekends. Most fatal crashes took place in the month of July.

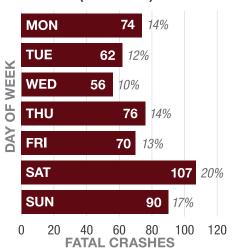
Fatal Lane Departure Crashes in Nevada by Time of Day (2015-2019)



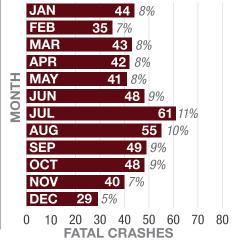
Lighting at Time of Fatal Lane Departure Crash in Nevada (2015-2019)*



Fatal Lane Departure Crashes in Nevada by Day of Week (2015-2019)



Fatal Lane Departure Crashes in Nevada by Month of Year (2015-2019)

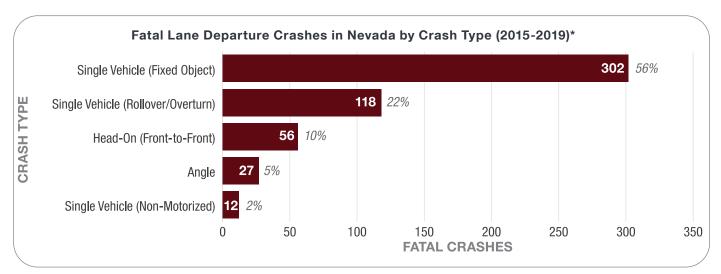


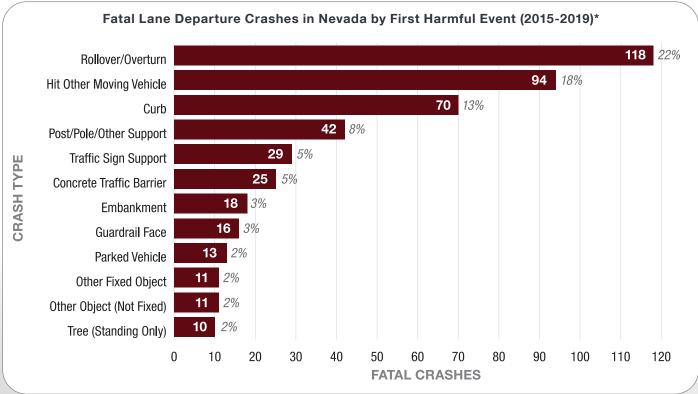
*Does not include values that are unknown or missing





From 2015 to 2019, fatal lane departure crashes most frequently involved a single vehicle hitting a fixed object (56%).





*Does not include values that are unknown or missing or data categories with low representation



Intersection Crashes

32.0% of Nevada's total fatalities.

Intersection crash data includes all crashes where the reporting officer designates the crash location to be at an intersection. FARS data uses the attribute "relation to junction-specific location (RELJCT2)" to identify the crash location with respect to the presence in or proximity to roadway junctions or interchanges. For this analysis, the two attribute codes used were "intersection" and "intersection-related." If a fatal crash was assigned either of the two attribute codes, the crash was deemed an intersection crash.

What?

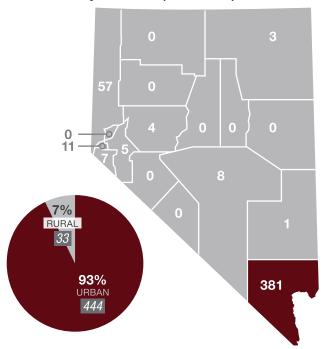
From 2015 to 2019, the number of intersection fatalities and fatal crashes generally increased. A total of **511 fatalities** and **477 fatal intersection crashes** occurred on Nevada roadways during that time frame.

Where?

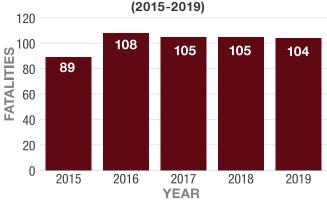
Between 2015 and 2019, 93% of fatal intersection crashes occurred on urban roadways.

Clark County reported the highest number of fatal intersection crashes in Nevada during that time frame.

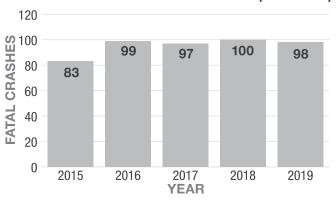
Fatal Intersection Crashes in Nevada by Location (2015-2019)*



Intersection Traffic Fatalities in Nevada



Fatal Intersection Crashes in Nevada (2015-2019)

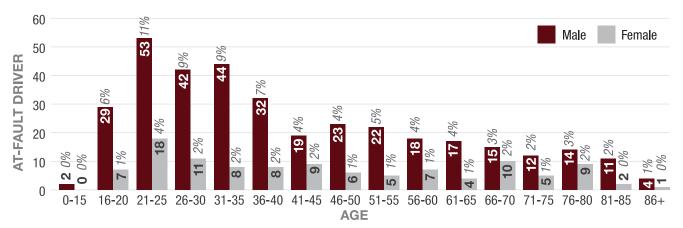






Between 2015 and 2019, males ages 21 to 25 were the largest reported age group of at-fault drivers in fatal intersection crashes in Nevada.

Age/Gender Breakdown of At-Fault Drivers in Fatal Intersection Crashes in Nevada (2015-2019)*

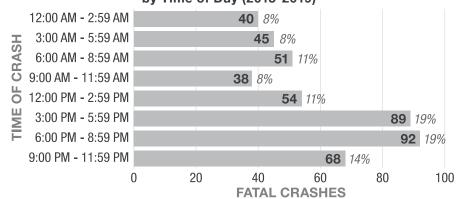


When?

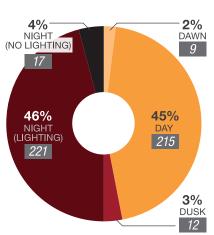
The hours of 3:00 PM to 8:59 PM had the greatest number of fatal intersection crashes. Half of all fatal intersection crashes took place at night.

Thirty-one percent of fatal intersection crashes occurred on the weekends. Fatal intersection crashes occurred most frequently in the months of September and December, with a combined total of 18% of crashes.

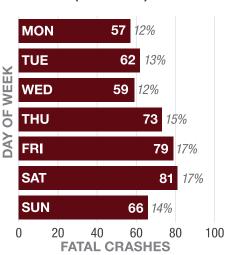
Fatal Intersection Crashes in Nevada by Time of Day (2015-2019)



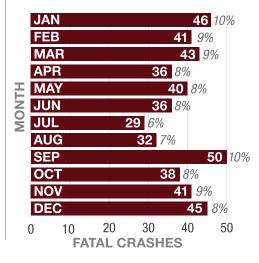
Lighting at Time of Fatal Intersection Crash in Nevada (2015-2019)*



Fatal Intersection Crashes in Nevada by Day of Week (2015-2019)



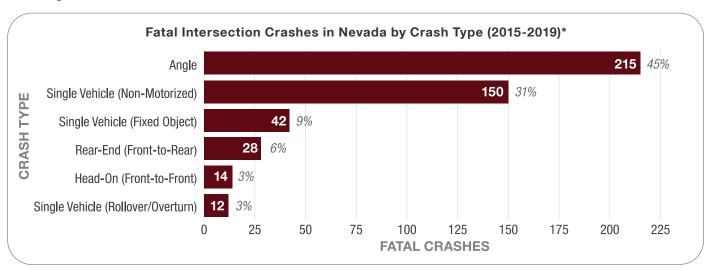
Fatal Intersection Crashes in Nevada by Month of Year (2015-2019)



^{*}Does not include values that are unknown or missing



From 2015 to 2019, fatal intersection crashes most frequently involved a motor vehicle hitting another motor vehicle in an angle crash.



*Does not include values that are unknown or missing or data categories with low representation





Pedestrian Crashes

23.6% of Nevada's total fatalities.

A pedestrian fatal crash is a motor vehicle crash in which a pedestrian dies. Pedestrian crash fatalities are the total number of pedestrians killed in crashes. The FARS data uses the attribute "person type (PER_TYP)" in the person data set to determine if the person was a pedestrian, and "injury severity (INJ_SEV)" to determine the level of the person's injuries. For this analysis, the two attribute codes used were "pedestrian" for the person type, and "fatal injury (K)" for injury severity. If a crash reported both attributes, the crash was deemed a fatal pedestrian crash.

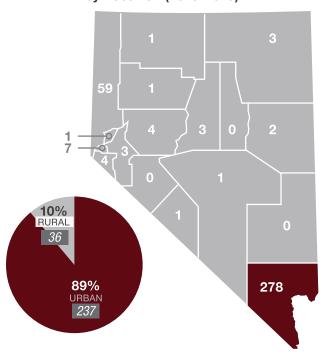
What?

During 2015 to 2019, the number of pedestrian fatalities and fatal crashes generally increased. A total of **378 fatalities** and **368 fatal pedestrian crashes** occurred on Nevada roadways.

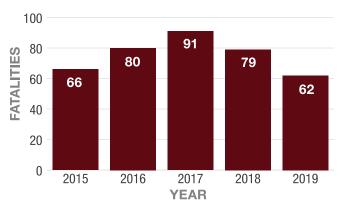
Where?

Between 2015 and 2019, 89% of fatal pedestrian crashes occurred on urban roadways. Clark County reported the highest number of fatal pedestrian crashes in Nevada.

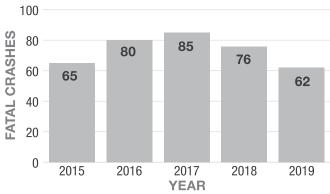
Fatal Pedestrian Crashes in Nevada by Location (2015-2019)*



Pedestrian Traffic Fatalities in Nevada (2015-2019)



Fatal Pedestrian Crashes in Nevada (2015-2019)

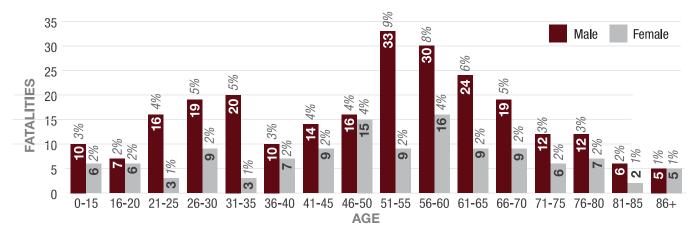






From 2015 to 2019, males ages 51 to 60 years old comprised the greatest number of pedestrian fatalities in Nevada.

Age/Gender Breakdown of Pedestrian Fatalities in Nevada (2015-2019)

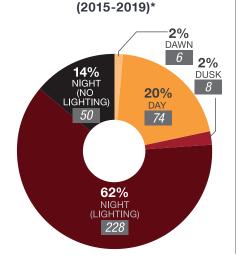


When?

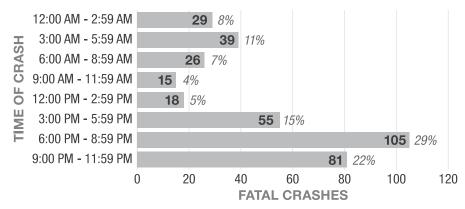
The hours of 6:00 PM to 11:59 PM had the greatest number of fatal pedestrian crashes. From 2015 to 2019, 62% of fatal pedestrian crashes took place at night in areas with street lighting.

From 2015-2019, 59% of fatal pedestrian crashes occurred from Thursday to Saturday. More pedestrian fatal crashes occurred in November than any other month during this time frame.

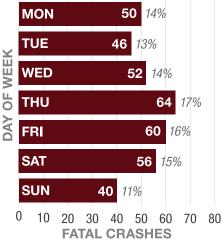
Lighting at Time of Fatal Pedestrian Crashes in Nevada



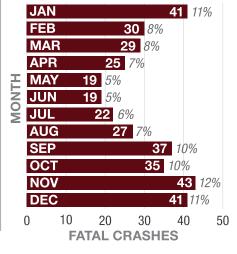
Fatal Pedestrian Crashes in Nevada by Time of Day (2015-2019)



Fatal Pedestrian Crashes in Nevada by Day of Week (2015-2019)



Fatal Pedestrian Crashes in Nevada by Month of Year (2015-2019)



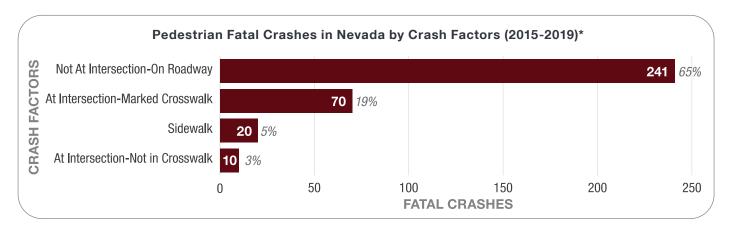
^{*}Does not include values that are unknown or missing



Ż

Why?

Sixty-five percent of fatal pedestrian crashes took place on the roadway, not at a designated intersection.



^{*}Does not include values that are unknown or missing or data categories with low representation





Motorcycle Crashes

19.8% of Nevada's total fatalities.

Fatal motorcycle crashes are crashes involving a motorcyclist where one or more people on a motorcycle were killed in the crash. The FARS data uses the attribute "body type (BODY_TYP)" in the vehicle data set to identify if a motorcycle was involved and the attribute "deaths (DEATHS)" in the vehicle data set to determine if one or more people on a motorcycle died. Ten attribute codes were used: two-wheel motorcycle, moped or motorized bicycle, three-wheel motorcycle (two rear wheels), off-road motorcycle, motor scooter, unenclosed three-wheel motorcycle/unenclosed autocycle (one rear wheel), enclosed three-wheel motorcycle/enclosed autocycle (one rear wheel), unknown three-wheel motorcycle type, other motored cycle type, and unknown motored cycle type. If a fatal crash had any of the listed attribute codes assigned and one or more people on a motorcycle died in the crash, the crash was deemed a fatal motorcycle crash.

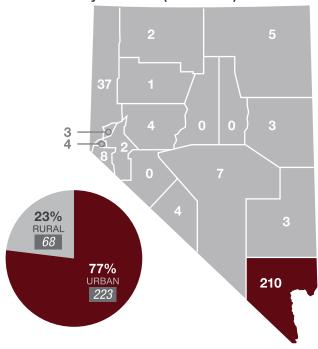
What?

Between 2015 to 2019, there were 297 fatalities and 293 fatal motorcycle crashes on Nevada roadways.

Where?

Between 2015 and 2019, 77% of fatal motorcycle crashes occurred on urban roadways. Clark County reported the highest number of fatal motorcycle crashes in Nevada.

Fatal Motorcycle Crashes in Nevada by Location (2015-2019)*





2017

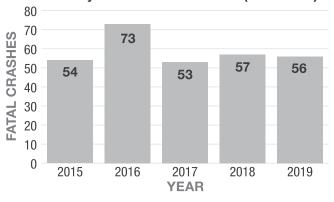
YEAR

2018

2019

2016

2015

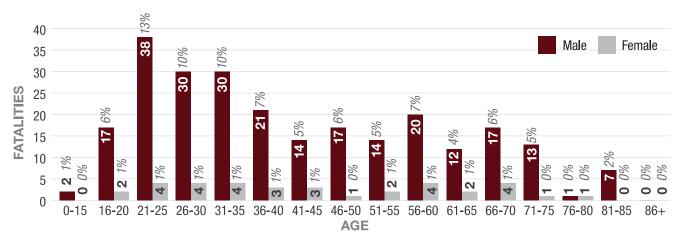






Between 2015 and 2019, males ages 21 to 25 years old were the largest reported age group for motorcycle driver and passenger fatalities.

Age/Gender Breakdown of Motorcycle Driver and Passenger Fatalities in Nevada (2015-2019)*

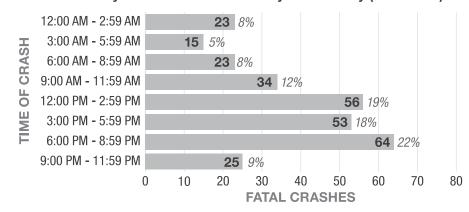


When?

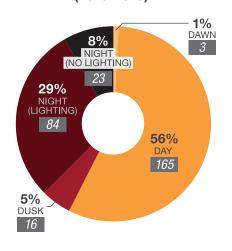
Most fatal motorcycle crashes occurred between the hours of 12:00 PM and 8:59 PM, while 56% of crashes occurred during daytime.

From 2015-2019, 38% of fatal motorcycle crashes occurred on Saturdays and Sundays. Fatal motorcycle crashes took place most frequently in September during this time frame.

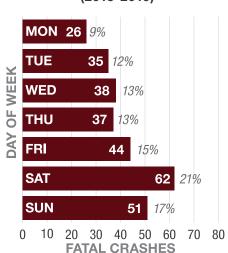
Fatal Motorcycle Crashes in Nevada by Time of Day (2015-2019)



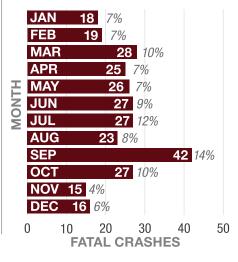
Lighting at Time of Motorcycle Fatal Crash in Nevada (2015-2019)*



Fatal Motorcycle Crashes in Nevada by Day of Week (2015-2019)



Fatal Motorcycle Crashes in Nevada by Month of Year (2015-2019)

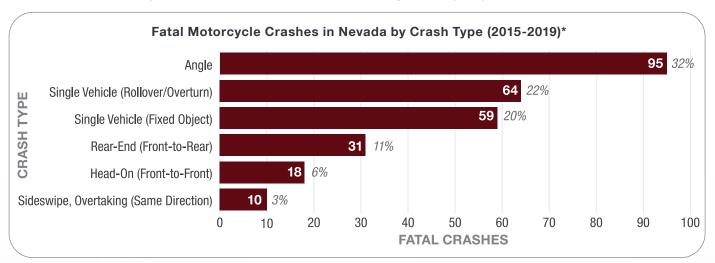


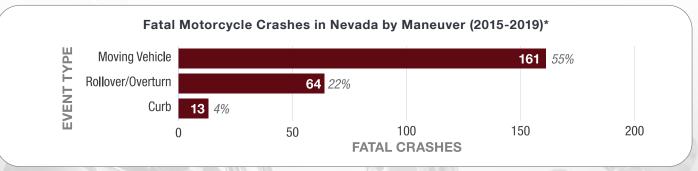
^{*}Does not include values that are unknown or missing





From 2015 to 2019, 32% of all fatal motorcycle crashes were angle crashes. The maneuver that most frequently resulted in fatal motorcycle crashes was a collision with a moving vehicle (55%).





*Does not include values that are unknown or missing or data categories with low representation





Helmet UseUnhelmeted Motorcyclists



Fatal unhelmeted motorcycle crashes are crashes involving a motorcyclist where one or more people on a motorcycle were killed in the crash and were not wearing a helmet or misused a helmet. The FARS data uses the attribute "body type (BODY_TYP)" in the person data set to identify if a motorcycle was involved and the attribute "injury severity (INJ_SEV)" in the person data set to determine if one or more people on a motorcycle died. To determine if no helmet was used, the attribute codes "helmet use (HELM_USE for 2019)" and "restraint use (REST_USE for 2015-2018)" in the person data set were used. To determine if a helmet was misused, the attribute codes "helmet misuse (HELM_MIS for 2019)" and "restraint misuse (REST_MIS for 2015-2018)" in the person data set were used. If a fatal crash had any of the listed attribute codes assigned and one or more people on a motorcycle died in the crash, the crash was deemed a fatal unhelmeted motorcycle crash.

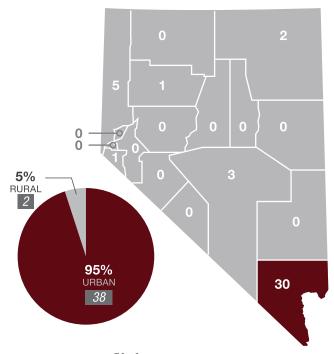
What?

Between 2015 and 2019, a total of **42 fatalities** and **42 unhelmeted motorcyclist fatal crashes** occurred in the state of Nevada.

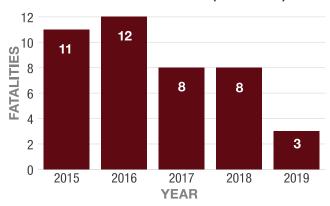
Where?

Between 2015 and 2019, 95% of fatal unhelmeted motorcyclist crashes occurred on urban roadways. Clark County reported the highest number of fatal unhelmeted motorcyclist crashes in Nevada.

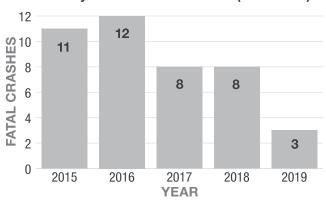
Fatal Unhelmeted Motorcyclist Crashes in Nevada by Location (2015-2019)*



Unhelmeted Motorcyclist Traffic Fatalities in Nevada (2015-2019)



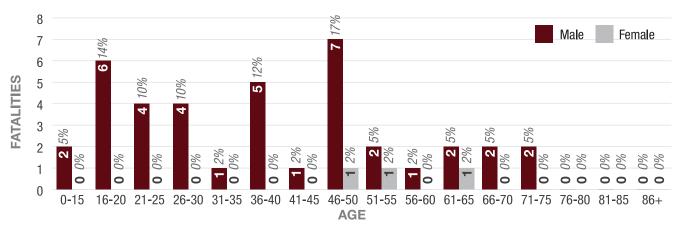
Fatal Motorycle Crashes in Nevada (2015-2019)





From 2015-2019, males ages 46 to 50 were the highest reported age group for unhelmeted motorcyclist fatalities. Only three female fatalities, compared with 39 male fatalities, were reported between 2015 and 2019.

Age/Gender Breakdown of Unhelmeted Motorcyclist Fatalities in Nevada (2015-2019)

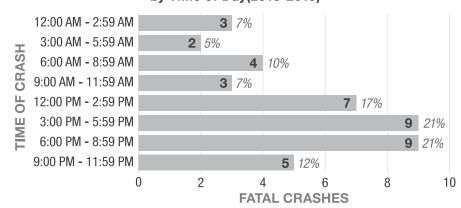


When?

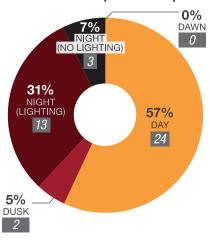
Fatal unhelmeted motorcyclist crashes occurred most frequently from 3:00 PM to 8:59 PM. Fifty-seven percent of fatal unhelmeted motorcyclist crashes occurred during daylight.

Between 2015 and 2019, Thursday and Saturday reported the most fatal unhelmeted motorcyclist crashes with a combined total of 42%. April reported the greatest number crashes.

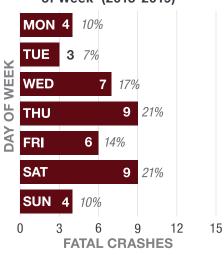
Fatal Unhelmeted Motorcyclist Crashes in Nevada by Time of Day(2015-2019)



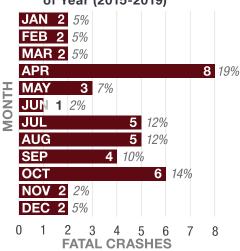
Lighting at Time of Fatal Unhelmeted Motorcyclist Crash in Nevada (2015-2019)



Fatal Unhelmeted Motorcyclist Crashes in Nevada by Day of Week (2015-2019)



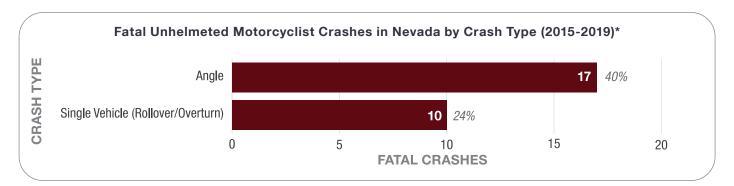
Fatal Unhelmeted Motorcyclist Crashes in Nevada by Month of Year (2015-2019)

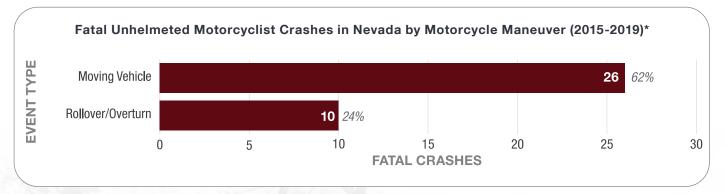






From 2015 to 2019, fatal unhelmeted motorcyclist crashes involving a motorcycle being struck by another motor vehicle in an angle crash was the highest reported crash type. The second highest reported crash type was a single vehicle (rollover/overturn).





*Does not include values that are unknown or missing or data categories with low representation





Bicycle Crashes

2.6% of Nevada's total fatalities.

A fatal bicycle crash is a motor vehicle crash in which a bicyclist is killed. Bicycle crash fatalities are the total number of bicyclists who died in a crash. The FARS data uses the attribute "person type (PER_TYP)" in the person data file to determine if the person was a cyclist, and "injury severity (INJ_SEV)" to determine the level of the person's injuries. For this analysis, three attribute codes were used: "bicyclist" and "other cyclist" for person type and "fatal injury (K)" for injury severity. If a crash reported either "bicyclist" or "other cyclist" and a "fatal injury (K)," the crash was deemed a fatal bicycle crash.

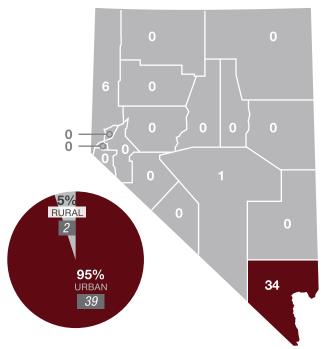
What?

Between 2015 and 2019, there were 41 fatalities and 41 fatal bicycle crashes on Nevada roadways.

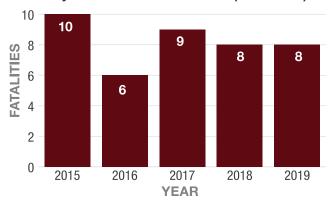
Where?

Between 2015 and 2019, 95% of fatal bicycle crashes occurred on urban roadways. Clark County reported the highest number of fatal bicycle crashes in Nevada.

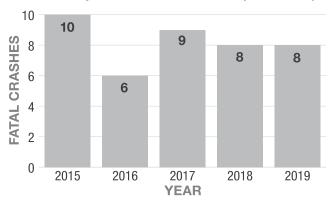
Fatal Bicycle Crashes in Nevada by Location (2015-2019)*



Bicyclist Fatalities in Nevada (2015-2019)



Fatal Bicycle Crashes in Nevada (2015-2019)

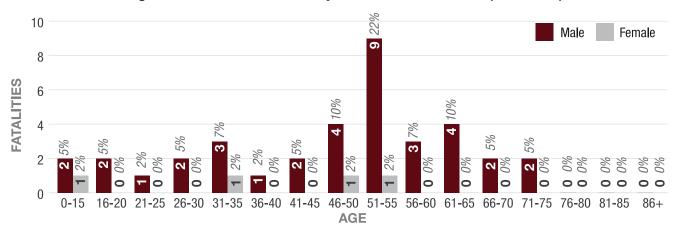






From 2015 and 2019, males ages 51 to 55 comprised the largest number of bicycle fatalities in Nevada.

Age/Gender Breakdown of Bicycle Fatalities in Nevada (2015-2019)

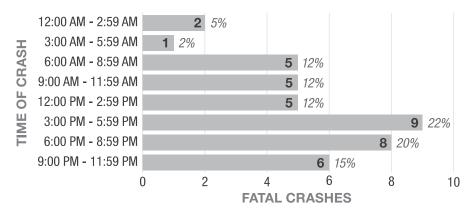


When?

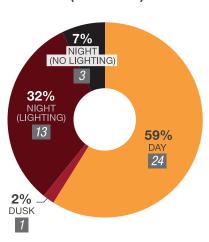
From 2015 to 2019, 42% of fatal bicycle crashes took place between the hours of 3:00 PM and 8:59 PM. Fifty-nine percent of fatal bicycle crashes occurred during daylight hours.

Forty-nine percent of fatal bicycle crashes occurred on Friday, Saturday, and Sunday. October was the highest reported month for fatal bicycle crashes, totaling 15% of all crashes.

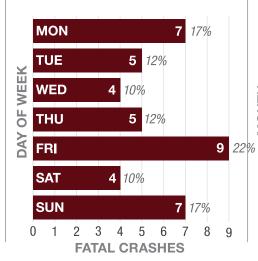
Fatal Bicycle Crashes in Nevada by Time of Day (2015-2019)



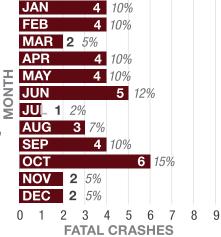
Lighting at Time of Fatal Bicycle Crash in Nevada (2015-2019)



Fatal Bicycle Crashes in Nevada by Day of Week (2015-2019)



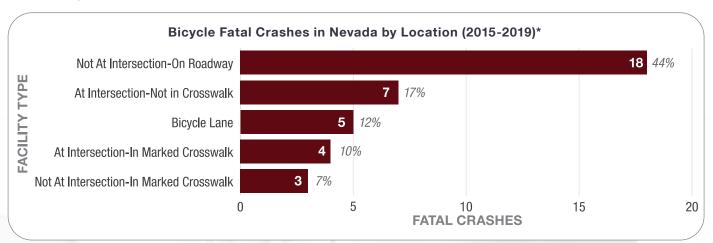
Fatal Bicycle Crashes in Nevada by Month of Year (2015-2019)







From 2015 to 2019, the facility type that resulted in the most fatal bicycle crashes was "not at an intersection on the roadway."



*Does not include values that are unknown or missing or data categories with low representation





Unrestrained-Occupant Crashes

21.5% of Nevada's total fatalities.

A fatal unrestrained-occupant crash involves a person travelling in a passenger vehicle that did not use a restraining device, such as a seatbelt, that died in the crash. Passenger vehicles are constituted as passenger cars, light trucks, pickups, and vans. The FARS data uses the attribute "restraint system/helmet use (REST_USE)" in the person data set to determine if a person was using a seatbelt, and the attribute "injury severity (INJ_SEV)" to determine the level of the persons injuries. For this analysis, the two attribute codes used were "none used/not applicable" for restraint use and "fatal injury (K)" for injury severity. If a crash reported both attributes, the crash was deemed a fatal unrestrained-occupant crash.

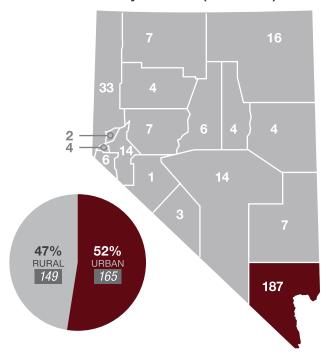
What?

Between 2015 and 2019, **344 fatalities** and **319 fatal unrestrained-occupant crashes** occurred on Nevada roadways.

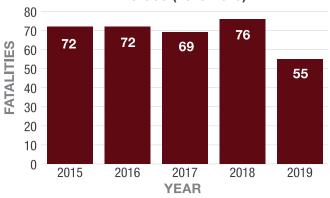
Where?

Between 2015 and 2019, 187 of fatal unrestrainedoccupant crashes occurred in Clark County. More than half of fatal unrestrained-occupant crashes occurred on urban roadways.

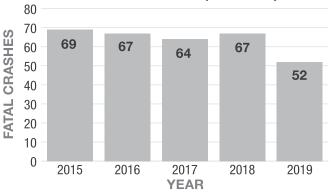
Fatal Unrestrained-Occupant Crashes in Nevada by Location (2015-2019)*







Fatal Unrestrained-Occupant Crashes in Nevada (2015-2019)

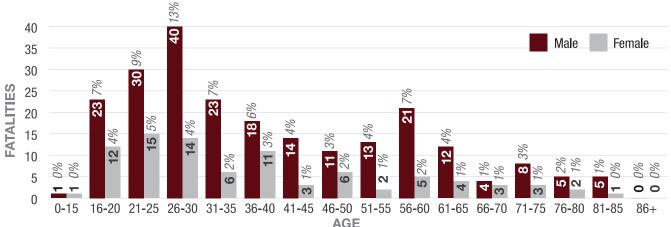






From 2015 to 2019, males ages 16 to 30 years old comprised the greatest number of unrestrained-occupant fatalities in Nevada.

Age/Gender Breakdown of Unrestrained-Occupant Fatalities in Nevada (2015-2019)

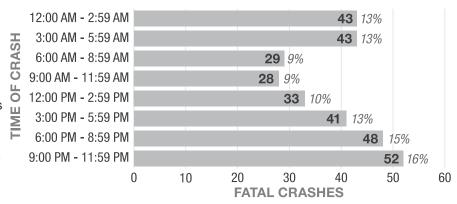


When?

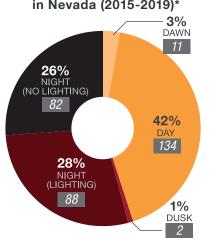
The greatest percentage of fatal unrestrained-occupant crashes occurred between the hours of 9:00 PM and 11:59 PM. More than half of fatal unrestrained-occupant crashes occurred at night in areas with and without street lighting.

Most fatal unrestrained-occupant crashes occurred on Saturdays and Sundays, totaling 39% of all crashes. July reported the greatest number of fatal unrestrained-occupant crashes, totaling 13%.

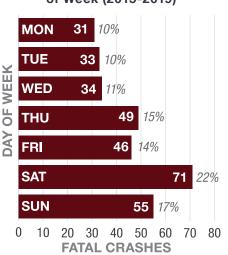
Fatal Unrestrained-Occupant Crashes in Nevada by Time of Day (2015-2019)



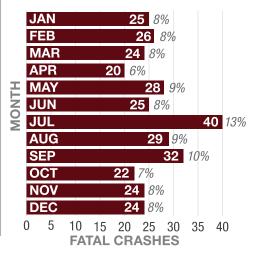




Fatal Unrestrained-Occupant Crashes in Nevada by Day of Week (2015-2019)



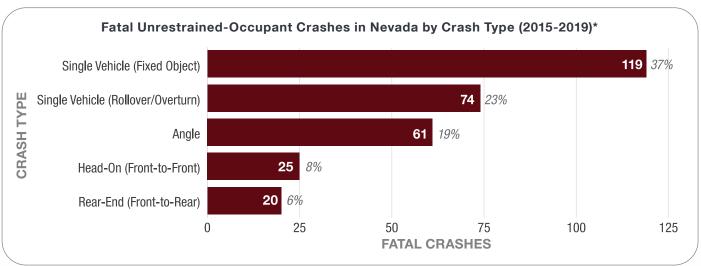
Fatal Unrestrained-Occupant Crashes in Nevada by Month of Year (2015-2019)







From 2015 to 2019, fatal unrestrained-occupant crashes most frequently involved a motor vehicle rolling over in which the vehicle hit a fixed object (37%).



^{*}Does not include values that are unknown or missing or data categories with low representation





Child Passenger Crashes

0.2% of Nevada's total fatalities.

A child passenger crash involves a child between the ages of zero and thirteen that dies in a crash. The FARS data uses the person data file attributes "age (AGE)," "person type (PER_TYP)," and "injury severity (INJ_SEV)." The following attribute codes were used: values equal to and between zero and thirteen to identify age, "passenger of a motor vehicle in transport," and "fatal injury (K)." If a crash reported all the individual attribute codes, the crash was deemed a fatal child passenger crash. Fatal child passenger crashes make up too small of a percentage of all fatalities and fatal crashes in Nevada to perform a full analysis.

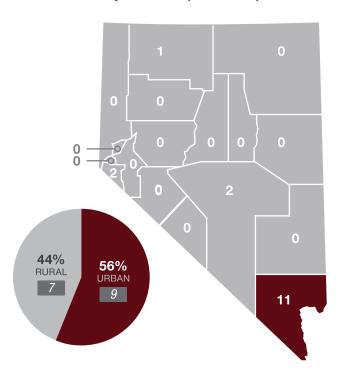
What?

During 2015 to 2019, there were a total of 16 fatalities and 16 child passenger fatal crashes.

Where?

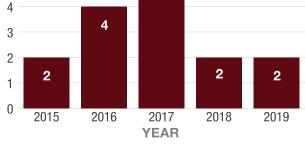
The majority of fatal child passenger crashes occurred in Clark County and on urban roadways.

Fatal Child Passenger Crashes in Nevada by Location (2015-2019)*



Nevada (2015-2019) 6 5 4 4 2

Child Passenger Fatalities in



Nevada (2015-2019) 6 5 4 4 2 2 2 2 2 2

Fatal Child Passenger Crashes in

*Does not include values that are unknown or missing

2017 **YEAR** 2018

2019

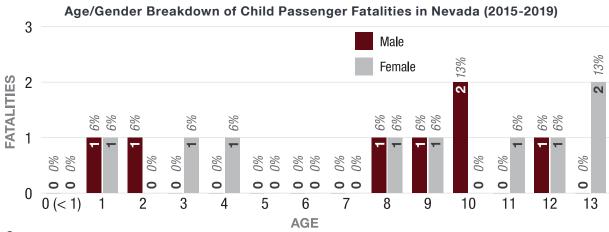
2016

2015





From 2015 to 2019, seven male children and nine female children accounted for the total 16 child passenger fatalities.

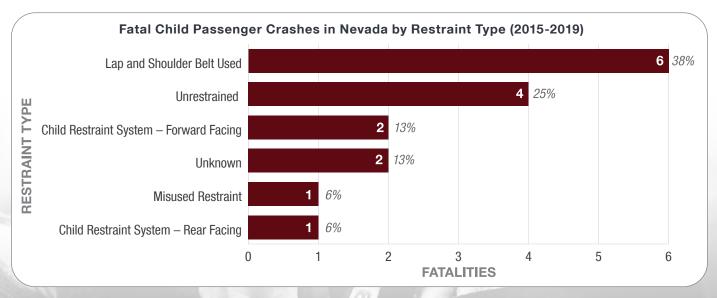


When?

Six fatal child passenger crashes took place between the hours of 3:00 PM and 8:59 PM. Sixty-nine percent of all fatal child passenger crashes occurred during daylight. The month of November had the highest number of fatal child passenger crashes with a total of three.

Why?

Between 2015 and 2019, lap and shoulder belt use as well as unrestrained child passengers were the most reported restraint types for children involved in fatal child passenger crashes.





Older Driver Crashes

21.2% of Nevada's total fatalities.

An older driver crash is a crash in which at least one driver is age 65 or older, regardless of fault. The FARS data uses the attribute "person type (PER_TYP)" in the person data file to determine if the person was the driver and "age (AGE)" in the person data file to determine the age of the driver. For this analysis, the two attribute codes that were used were "driver of a motor vehicle in transport" to indicate the person was the driver and age values of 65 and over to designate the specified age range. If a crash reported both attributes, the crash was deemed a fatal older driver crash.

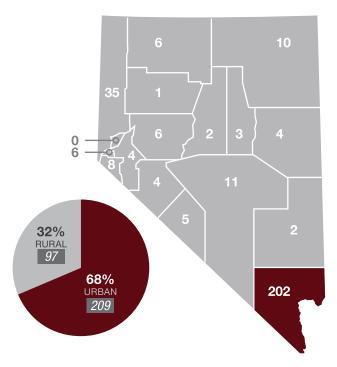
What?

From 2015 to 2019, the number of older driver crashes and crash fatalities in Nevada generally increased. There were a total of **339 fatalities** and **309 fatal older driver crashes** during this time frame.

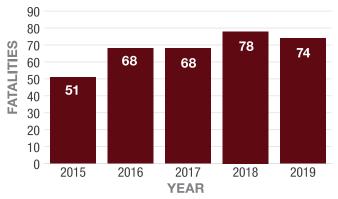
Where?

Between 2015 and 2019, 68% of older driver fatal crashes occurred on urban roadways. Clark County reported the highest number of fatal older driver crashes.

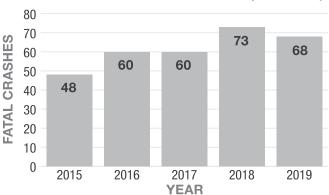
Fatal Older Driver Crashes in Nevada by Location (2015-2019)*



Older Driver Crash Fatalities in Nevada (2015-2019)



Fatal Older Driver Crashes in Nevada (2015-2019)

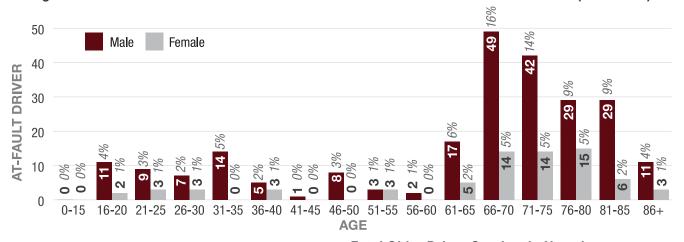






Between 2015 and 2019, males age 66 to 70 years old were the highest reported age group of at-fault drivers in fatal older driver crashes.

Age/Gender Breakdown of At-Fault Drivers in Fatal Older Driver Crashes in Nevada (2015-2019)



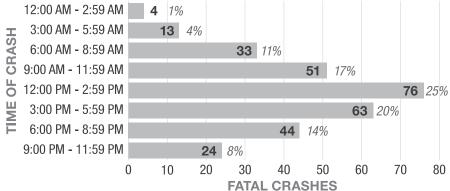
When?

From 2015 to 2019, the most reported time frame for fatal older driver crashes was 12:00 PM to 2:59 PM. Sixty-seven percent of fatal older driver crashes took place during daylight.

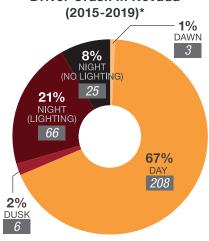
Fatal older driver crashes occurred most frequently on Wednesdays. The most commonly reported months for fatal older driver crashes were March. June, and September, with a combined total of 30%.

12:00 PM - 2:59 PM ш 3:00 PM - 5:59 PM 6:00 PM - 8:59 PM

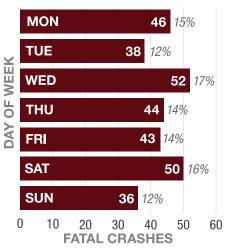




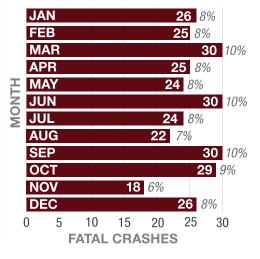
Lighting at Time of Fatal Older **Driver Crash in Nevada** (2015-2019)* 1%



Fatal Older Driver Crashes in Nevada by Day of Week (2015-2019)



Fatal Older Driver Crashes in Nevada by Month of Year (2015-2019)

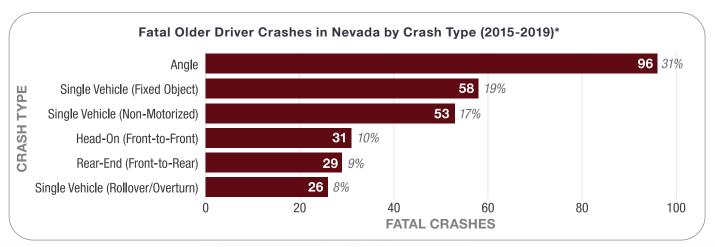


^{*}Does not include values that are unknown or missing





From 2015 to 2019, fatal older driver crashes most frequently involved a motor vehicle hitting another motor vehicle in an angle crash.



^{*}Does not include values that are unknown or missing or data categories with low representation





Young Driver Crashes

10.6% of Nevada's total fatalities.

A young driver crash is a crash in which at least one driver is between the ages of 15 and 20, regardless of fault. The FARS data uses the attribute "person type (PER_TYP)" in the person data file to determine if the person was the driver and "age (AGE)" in the person data file to determine the age of the driver. For this analysis, the two attribute codes that were used were "driver of a motor vehicle in transport" to indicate the person was the driver and age values of 15 to 20 to designate the specified age range. If a crash reported both attributes, the crash was deemed a fatal young driver crash.

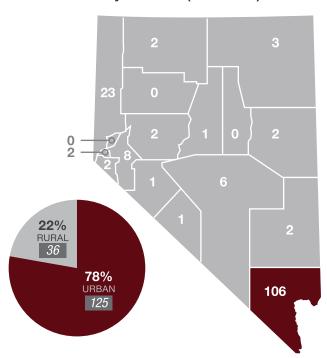
What?

During 2015 to 2019, the number of young driver crashes and crash fatalities in Nevada generally decreased. There were a total of **169 fatalities** and **161 fatal young driver crashes** during this time frame.

Where?

Between 2015 and 2019, 78% of young driver fatal crashes occurred on urban roadways. Clark County reported the highest number of fatal young driver crashes.

Fatal Young Driver Crashes in Nevada by Location (2015-2019)*



in Nevada (2015-2019) 50 40 39 30 27 10

Young Driver Crash Fatalities

Fatal Young Driver Crashes in Nevada (2015-2019)

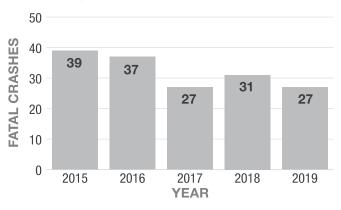
2017

YEAR

2018

2019

2016



*Does not include values that are unknown or missing



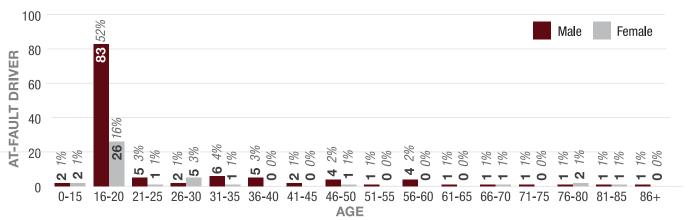
0

2015



Between 2015 and 2019, young males 16 to 20 years old were the highest reported age group of at-fault drivers in fatal young driver crashes.

Age/Gender Breakdown of At-Fault Driver in Fatal Young Driver Crashes in Nevada (2015-2019)

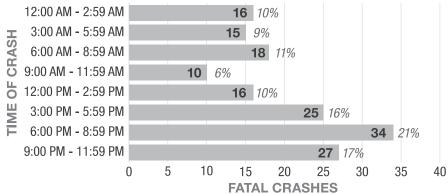


When?

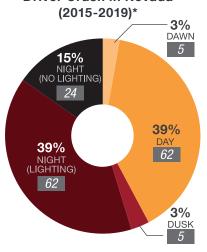
From 2015 to 2019, most reported time frame for fatal young driver crashes was 6:00 PM to 8:59 PM, totaling 21%. More than half of fatal young driver crashes took place at night in areas with and without street lighting.

Saturday was the most reported day of the week for fatal young driver crashes. The most reported months of the year for fatal young driver crashes were May and October, with a combined total of 22%.

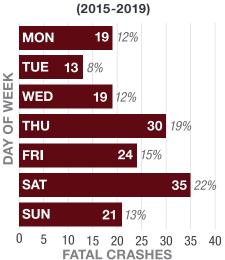
Fatal Young Driver Crashes in Nevada by Time of Day (2015-2019)



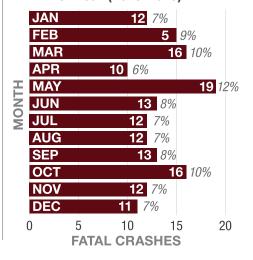




Fatal Young Driver Crashes in Nevada by Day of Week (2015-2019)



Fatal Young Driver Crashes in Nevada by Month of Year (2015-2019)

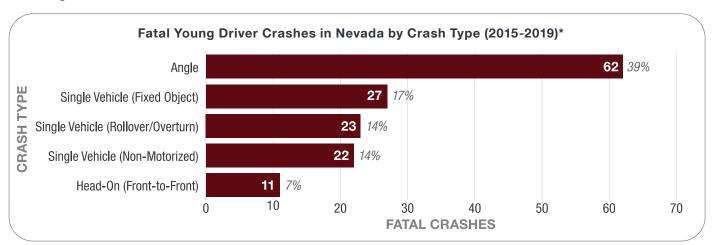


^{*}Does not include values that are unknown or missing





From 2015 to 2019, fatal young driver crashes most frequently involved a motor vehicle hitting another motor vehicle in an angle crash.



^{*}Does not include values that are unknown or missing or data categories with low representation





Distracted Driving Crashes

3.7% of Nevada's total fatalities.

A distracted driving crash is a crash in which the driver of a motor vehicle involved in a fatal crash was distracted, and this contributed to the crash. The FARS data uses the attribute "driver distracted by (MDRDSTRD)" in the distracted (DISTRACT) data file to indicate what distracted the driver. For this analysis, all attribute codes for the attribute "driver distracted by" were used with the exception of "not distracted," "no driver present/unknown if driver present," "not reported," and "unknown if distracted." The other 19 attribute codes cover a range of situations and activities such as: "while talking or listening to cellular phone," "eating or drinking," "careless/inattentive," etc. If a crash reported any of the 24 attribute codes, the crash was deemed a distracted driving crash. It is likely the number of recorded distracted driving crashes is much less than the actual number of distracted driving crashes due to the difficulty of a police officer being able to confirm a driver was distracted when they arrive at the crash scene.

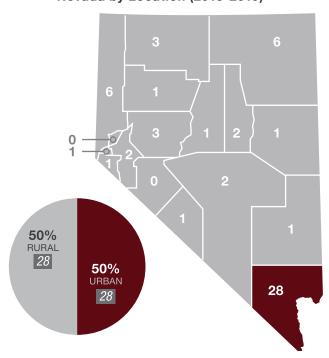
What?

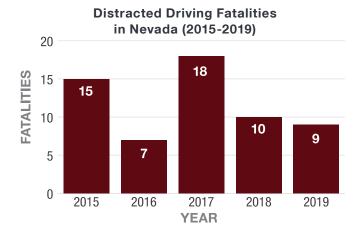
Between 2015 and 2019, a total of 59 fatalities and 58 fatal distracted driving crashes occurred in Nevada.

Where?

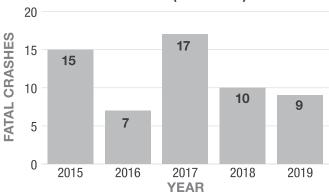
Between 2015 and 2019, 50% of fatal distracted driving crashes occurred on urban roadways. Clark County reported the greatest number of fatal distracted driving crashes in Nevada.

Fatal Distracted Driving Crashes in Nevada by Location (2015-2019)*





Fatal Distracted Driving Crashes in Nevada (2015-2019)

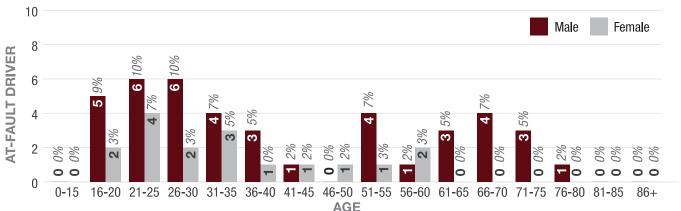






From 2015 to 2019, males ages 21 to 25 and 26 to 30 were the largest reported age groups of at-fault drivers in fatal distracted driving crashes in Nevada.

Age/Gender Breakdown of At-Fault Drivers in Fatal Distracted Driving Crashes in Nevada (2015-2019)

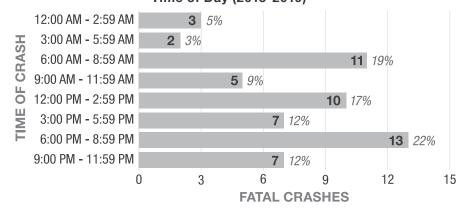


When?

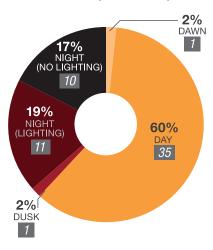
The most commonly reported time frame for fatal distracted driving crashes was 6:00 PM to 8:59 PM, totaling 22% of all fatal distracted driving crashes. However, 60% of fatal distracted driving crashes occurred during the day.

Between 2015 and 2019, the most reported day of the week for fatal distracted driving crashes was Saturday. November was the highest reported month of the year for fatal distracted driving crashes.

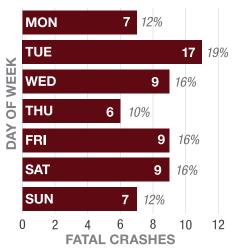
Fatal Distracted Driving Crashesin Nevada by Time of Day (2015-2019)



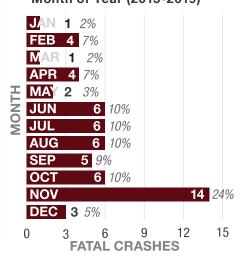
Lighting at Time of Fatal Distracted Driving Crash in Nevada (2015-2019)



Fatal Distracted Driving Crashes in Nevada by Day of Week (2015-2019)

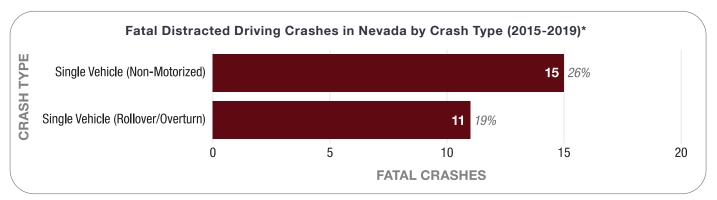


Fatal Distracted Driving Crashes in Nevada by Month of Year (2015-2019)





From 2015 to 2019, a moving vehicle colliding with a non-motorized form of transportation, such as a bicycle or pedestrian, was reported more often than all other crash types in distracted driving crashes.



^{*}The values in the chart differ from the total due to eliminating data categories with low representation





Impaired Driving Crashes

42.7% of Nevada's total fatalities.

0

2015

Impaired driving crashes are fatal crashes involving a driver with a BAC of 0.08% or greater and/or tested positive for drugs in their system. The FARS data uses the attribute "person type (PER_TYP)" in the person data set to determine if the person was the driver, the attribute "alcohol test result (ALC_RES)" in the person data set to report the BAC test result, and the attribute "drug test result (DRUGRES)" in the person data set to report the type of drug(s) present in a person's system at the time of the crash. For this analysis, the following attribute codes were used for drug involvement: "narcotic," "depressant," "stimulant," "hallucinogen," "cannabinoid," "phencyclidine," "anabolic steroid," and "inhalant." If the driver in a fatal crash had either a BAC greater than or equal to 0.08% and/or had any of the listed drug attribute codes, the crash was deemed a fatal impaired driving crash.

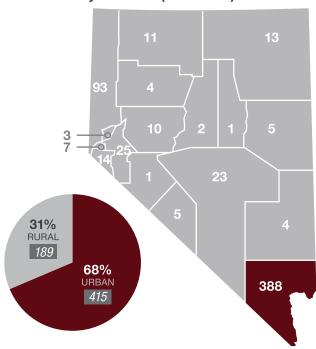
What?

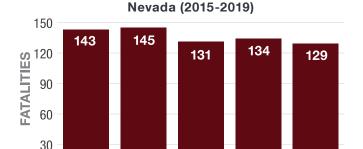
Between 2015 to 2019, the number of impaired driving fatalities and fatal crashes generally decreased. A total of **682 fatalities** and **609 fatal impaired driving crashes** occurred on Nevada roadways during that time.

Where?

From 2015 to 2019, 68% of fatal impaired driving crashes occurred on urban roadways. Clark County reported the highest number of fatal impaired driving crashes in Nevada.

Fatal Impaired Driving Crashes in Nevada by Location (2015-2019)*





Impaired Driving Fatalities in



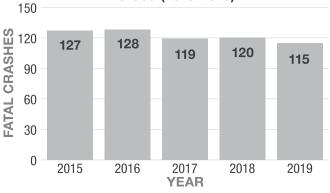
2017

YEAR

2018

2019

2016

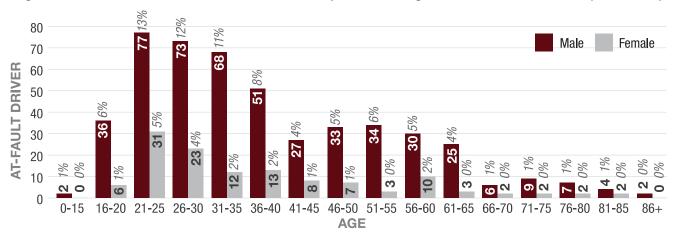






From 2015 to 2019, males ages 21 to 25 comprised the greatest number of at-fault drivers in fatal impaired driving crashes in Nevada.

Age/Gender Breakdown of At-Fault Drivers in Impaired Driving Fatal Crashes in Nevada (2015-2019)*



Fatalities Involving a Driver or Motorcyclist with BAC of 0.08 or Above

The following table includes the 2015-2019 number of fatalities involving a driver or motorcyclist with a BAC of 0.08% or above and the five-year moving average.

Crash Data and Trends	2015	2016	2017	2018	2019
Fatalities	99	102	88	87	68
Five-Year Moving Average	85.6	92.0	92.6	93.8	88.8

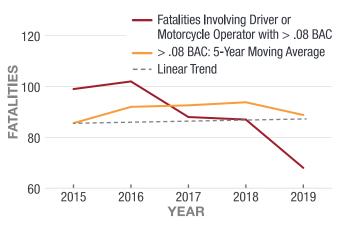
Fatalities Involving a Substance-Involved Operator

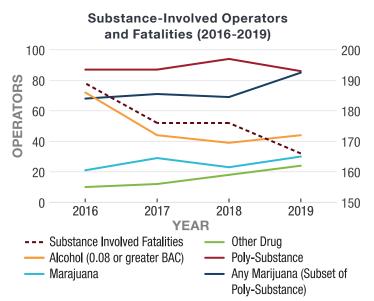
The following table includes the 2016-2019 number of fatalities involving a driver with substance present. The data has been manually tallied based on fatal cases only, no live driver data.

		Fatalities by Substance Type					
Crash Data	Total Substance- Involved Fatalities	Alcohol (0.08 or greater BAC)	Marijuana	Other Drug	Poly- Substance	Any Marijuana (Subset of Poly-Substance)	
2016	189	72	21	10	87	68	
2017	176	44	29	12	87	71	
2018	176	39	23	18	94	69	
2019	166	44	30	24	86	85	



Nevada Traffic Fatalities Involving Driver or Motorcycle Operator with > .08 BAC (2015-2019)



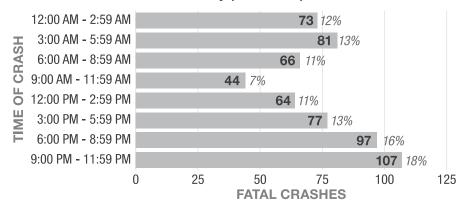


When?

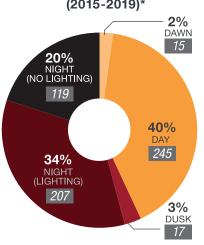
Nearly half of fatal impaired driving crashes took place between 3:00 PM and 11:59 PM, while 54% of the fatal crashes took place at night.

From 2015 to 2019, 40% of fatal impaired driving crashes occurred on Saturdays and Sundays. The most reported month of the year for fatal impaired driving crashes was September.

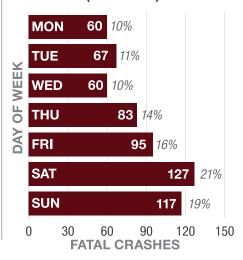
Fatal Impaired Driving Crashes in Nevada by Time of Day (2015-2019)



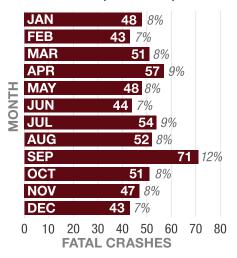
Lighting at Time of Impaired Driving Fatal Crash in Nevada (2015-2019)*



Fatal Impaired Driving Crashes in Nevada by Day of Week (2015-2019)



Fatal Impaired Driving Crashes in Nevada by Month of Year (2015-2019)

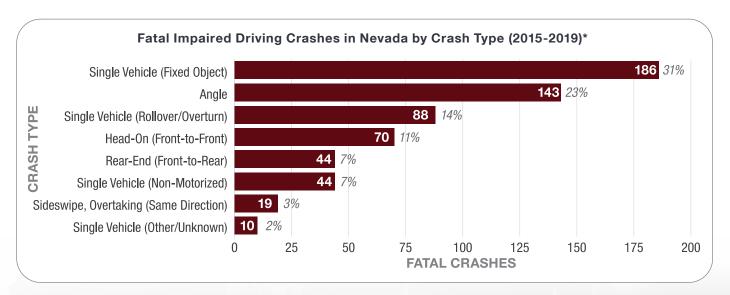


^{*}Does not include values that are unknown or missing





From 2015 to 2019, 31% of fatal impaired driving crashes involved a motor vehicle hitting a fixed object.



*Does not include values that are unknown or missing or data categories with low representation

Appendix A - Crash Maps

Appendix Table of Contents

• •	
Carson City County Fatal Crashes from 2015 - 2019	50
Churchill County Fatal Crashes from 2015 - 2019	51
Clark County Fatal Crashes from 2015 - 2019	52
Las Vegas Valley Fatal Crashes from 2015 - 2019	53
Las Vegas Downtown Fatal Crashes from 2015 - 2019	54
Douglas County Fatal Crashes from 2015 - 2019	55
Elko County Fatal Crashes from 2015 - 2019	56
Esmeralda County Fatal Crashes from 2015 - 2019	57
Eureka County Fatal Crashes from 2015 - 2019	58
Humboldt County Fatal Crashes from 2015 - 2019	59
Lander County Fatal Crashes from 2015 - 2019	60
Lincoln County Fatal Crashes from 2015 - 2019	61
Lyon County Fatal Crashes from 2015 - 2019	62
Mineral County Fatal Crashes from 2015 - 2019	63
Nye County Fatal Crashes from 2015 - 2019	64
Pershing County Fatal Crashes from 2015 - 2019	65
Storey County Fatal Crashes from 2015 - 2019	66
Washoe County Fatal Crashes from 2015 - 2019	67
Reno-Sparks Area Fatal Crashes from 2015 - 2019	68
White Pine County Fatal Crashes from 2015 - 2019	69

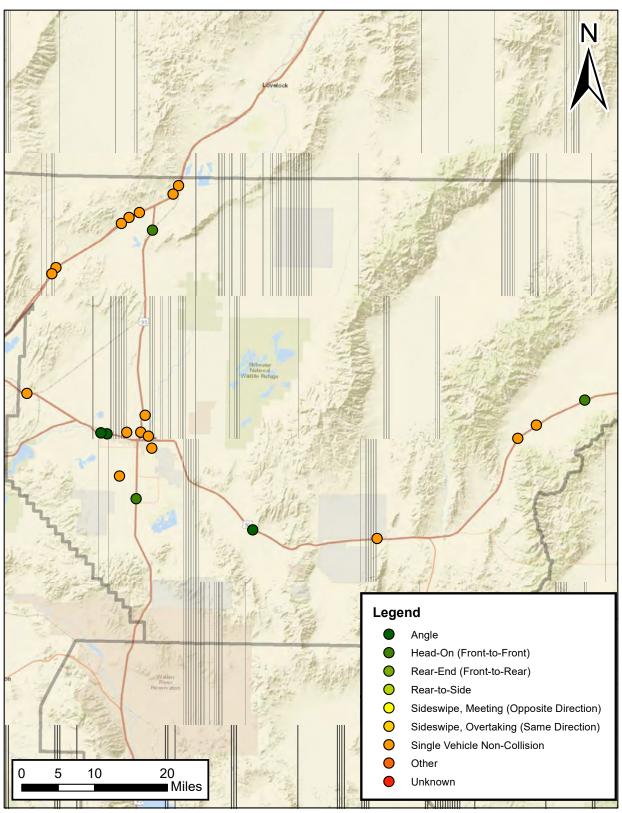


arson City (City) Arrowh ead Dr Airport W Winnie Ln Mills Park Carson City W King St Legend Angle 518 Head-On (Front-to-Front) Rear-End (Front-to-Rear) Rear-to-Side Sideswipe, Meeting (Opposite Direction) Sideswipe, Overtaking (Same Direction) Single Vehicle Non-Collision Other 0.5 1 2 Unknown ■ Miles

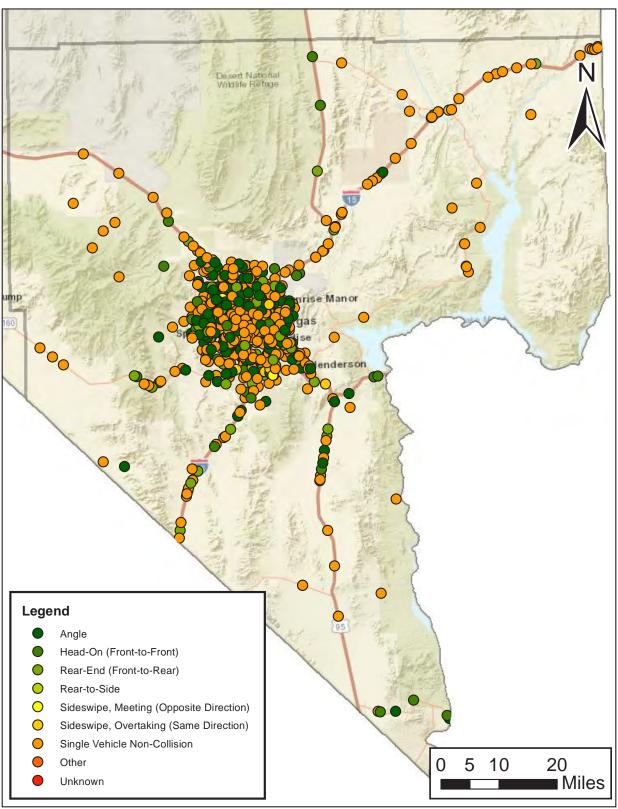
Carson City County Fatal Crashes from 2015 - 2019



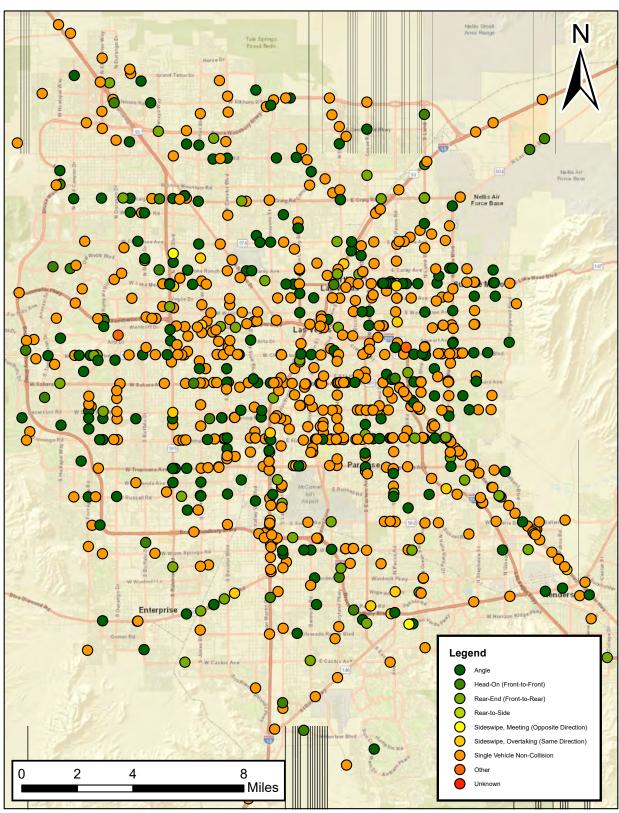
Churchill County Fatal Crashes from 2015 - 2019



Clark County Fatal Crashes from 2015 - 2019



Las Vegas Valley Fatal Crashes from 2015 - 2019

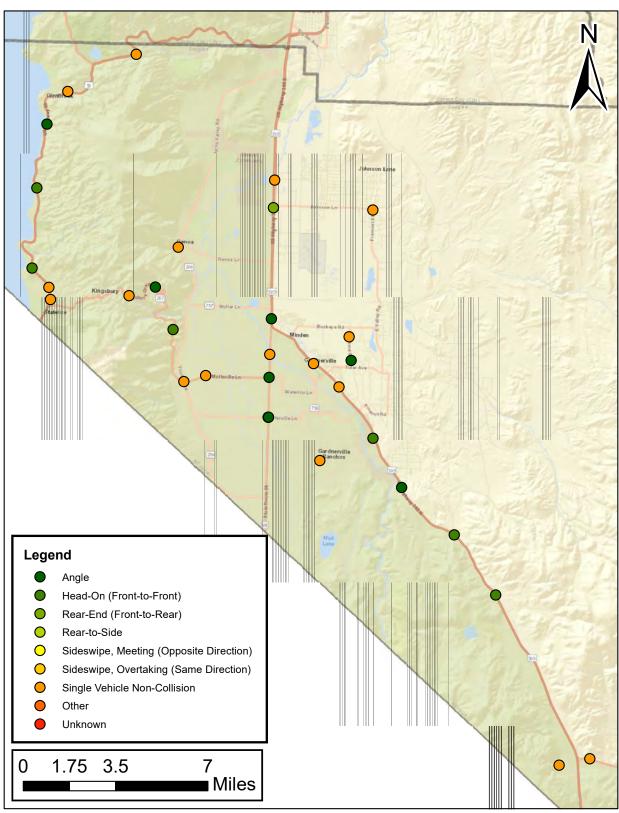


King Blvd th Las s Airport E Evans Ave 0 O North La W Carey Veg 0 599 O Woodlawn Cemetery ens Ave E Ow s Ave Vegas Dr as Vegas Solf Club Lorenzi Park E Wasl gtor 578 W Was Ington Ave Park W Bonanza Rd Oas Veg E Bonanza Rd Desert Pines Ortavo Golf Club FremontSt Alta Dr Park 0 E Charles Blvd W Charleston 0 E Stouis Ave 589 (COO eod Dr Las Vegas Country Club Desertinn Rd 6 E Deser ORO O 00 Las Vega untain Rd Golf Club & 0 National Gd Sinds Ave 0 Legend 92 000 E Flam go Rd Head-On (Front-to-Front) Rear-End (Front-to-Rear) Rear-to-Side University of Nevada-Las Sideswipe, Meeting (Opposite Direction) Vegas Sideswipe, Overtaking (Same Direction) 0 Single Vehicle Non-Collision 0 Other 1.2 2.4 0 0.3 0.6 1.8 Unknown Miles

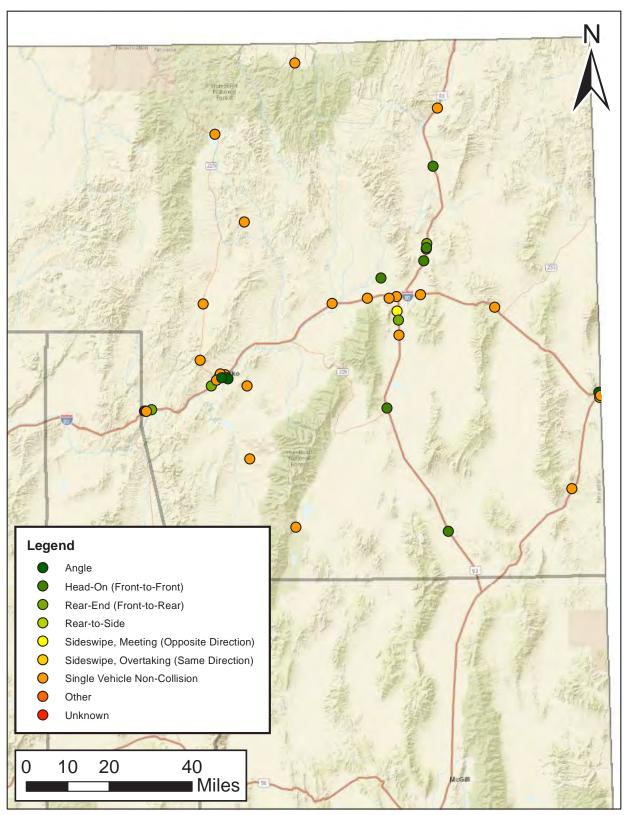
Las Vegas Downtown Fatal Crashes from 2015 - 2019



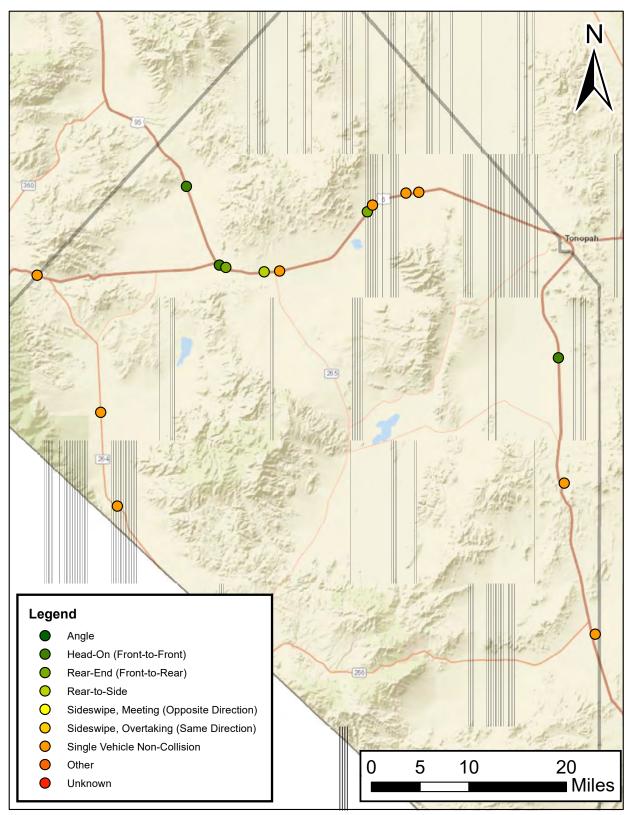
Douglas County Fatal Crashes from 2015 - 2019



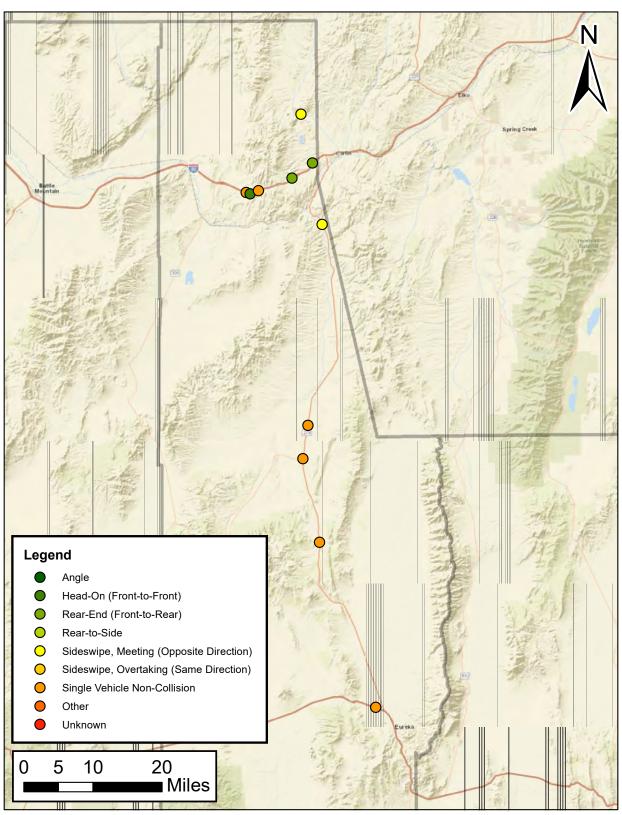
Elko County Fatal Crashes from 2015 - 2019



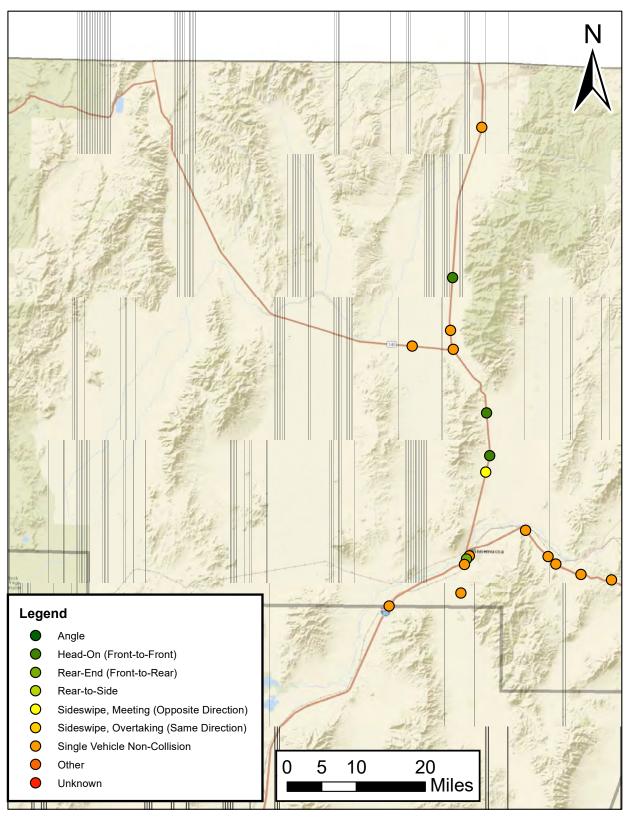
Esmeralda County Fatal Crashes from 2015 - 2019



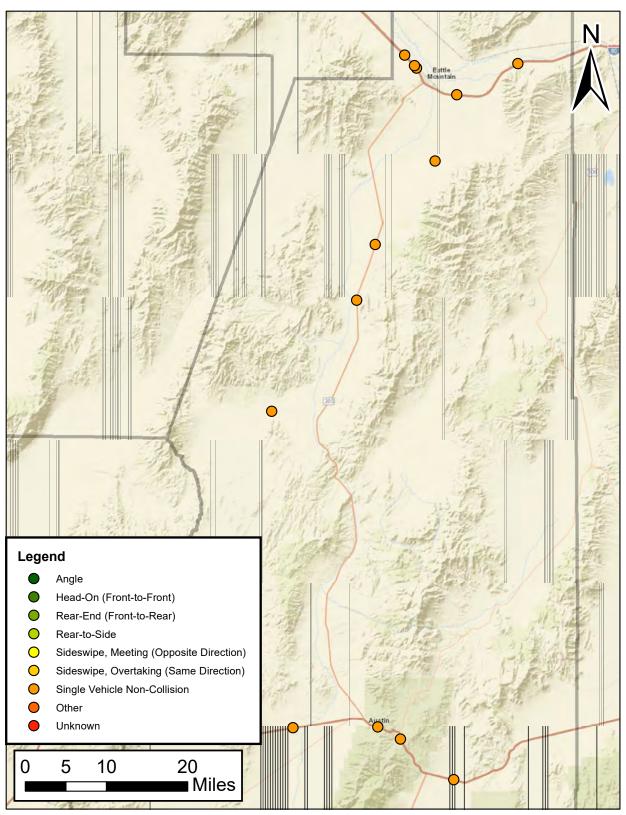
Eureka County Fatal Crashes from 2015 - 2019



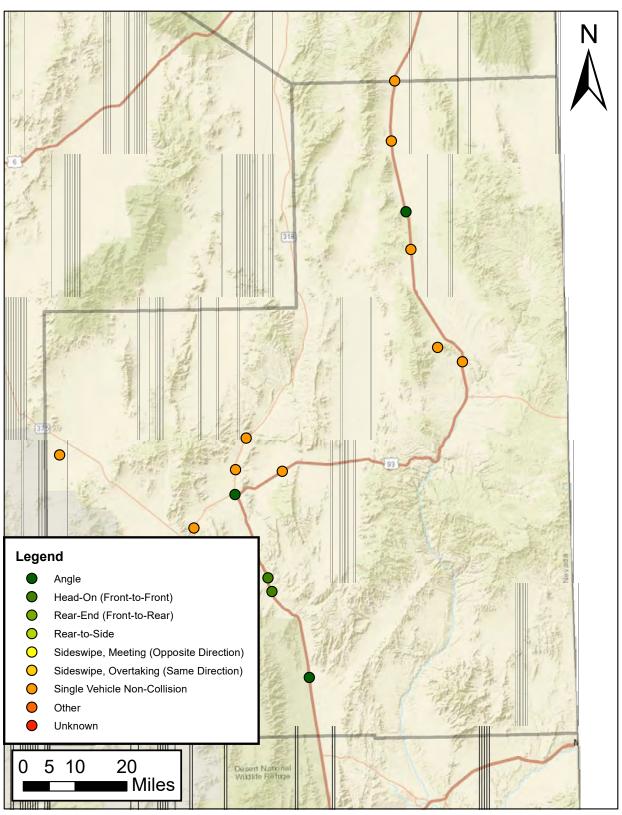
Humboldt County Fatal Crashes from 2015 - 2019

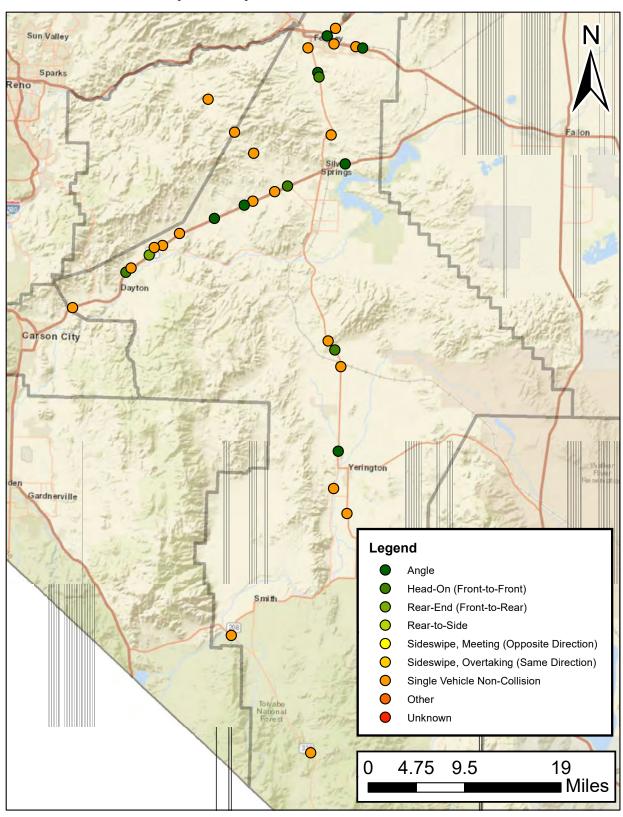


Lander County Fatal Crashes from 2015 - 2019



Lincoln County Fatal Crashes from 2015 - 2019

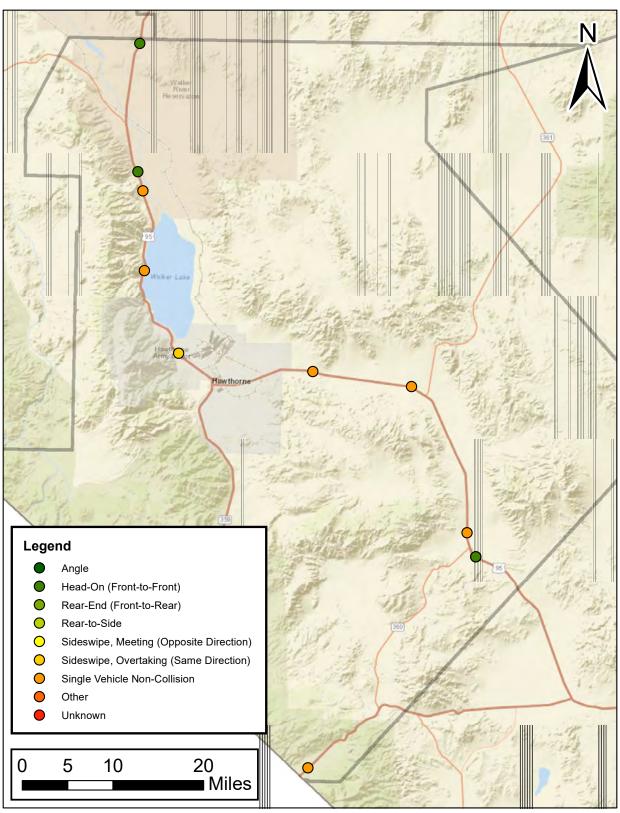




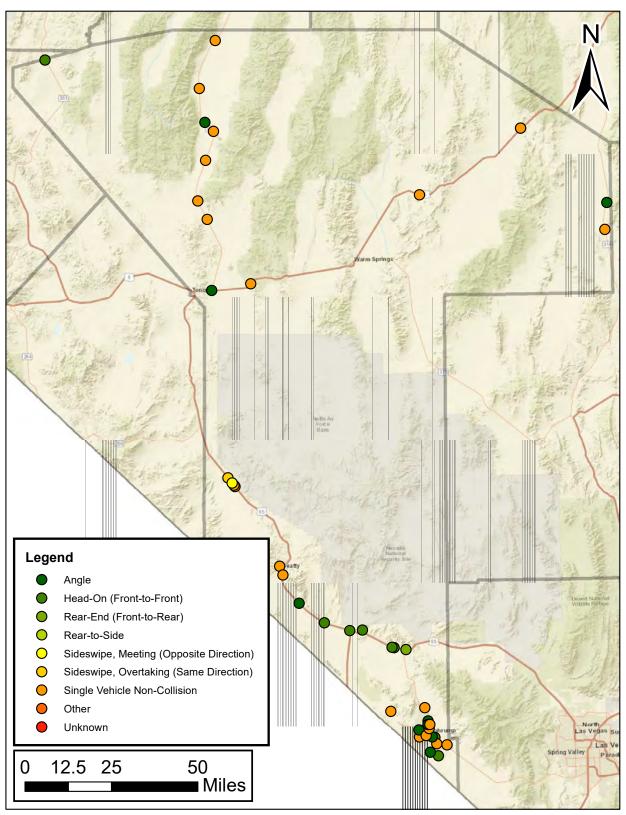
Lyon County Fatal Crashes from 2015 - 2019



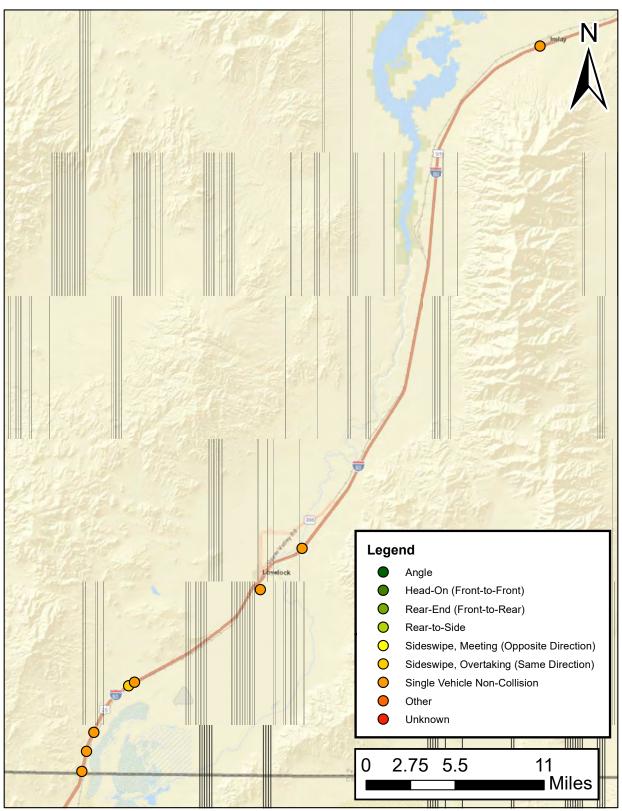
Mineral County Fatal Crashes from 2015 - 2019



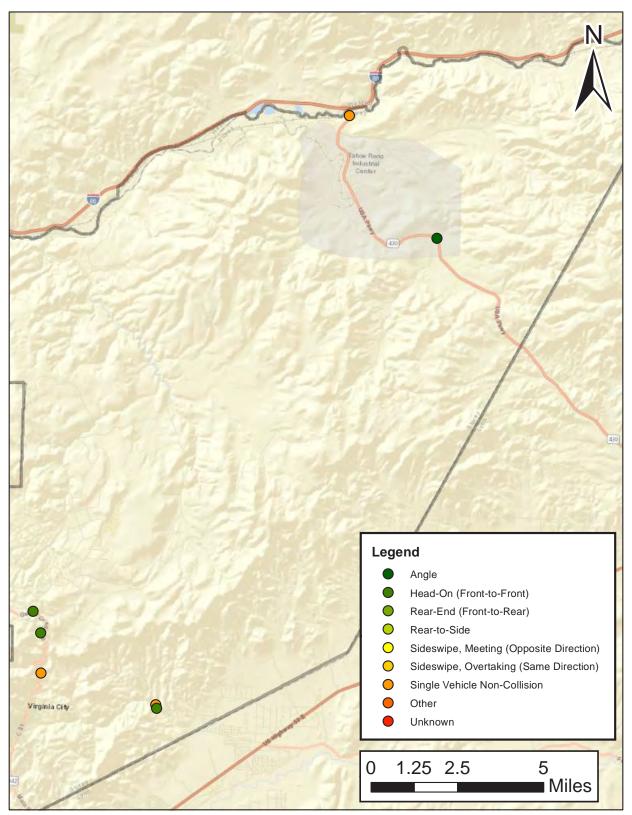
Nye County Fatal Crashes from 2015 - 2019



Pershing County Fatal Crashes from 2015 - 2019

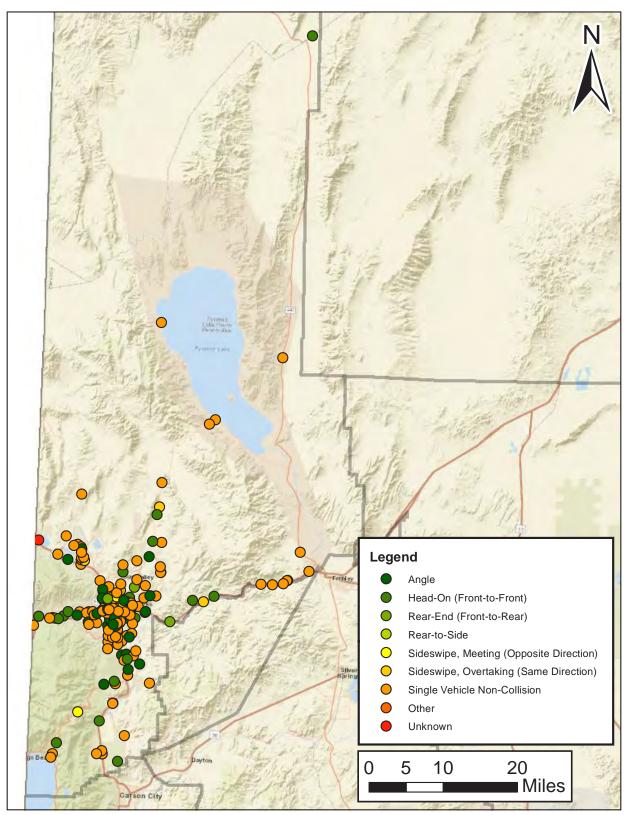


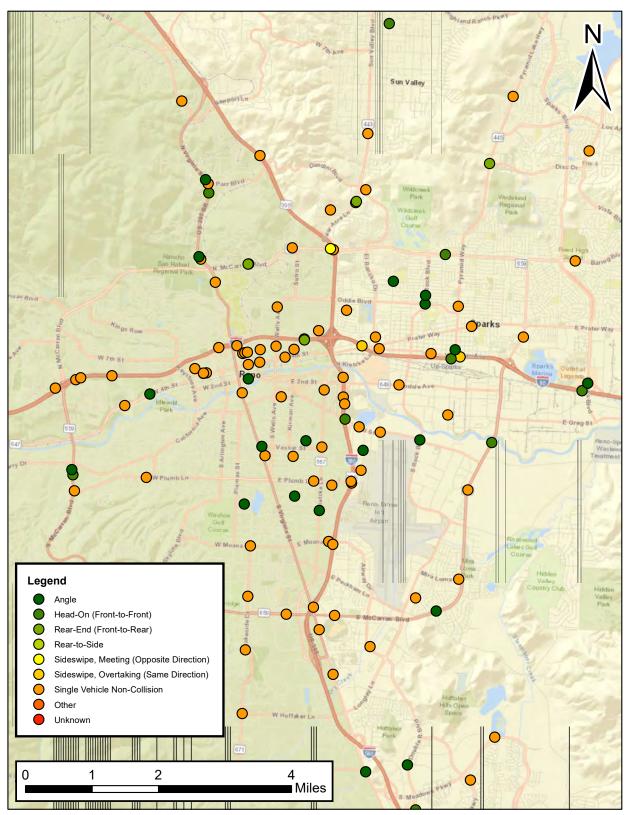
Storey County Fatal Crashes from 2015 - 2019





Washoe County Fatal Crashes from 2015 - 2019

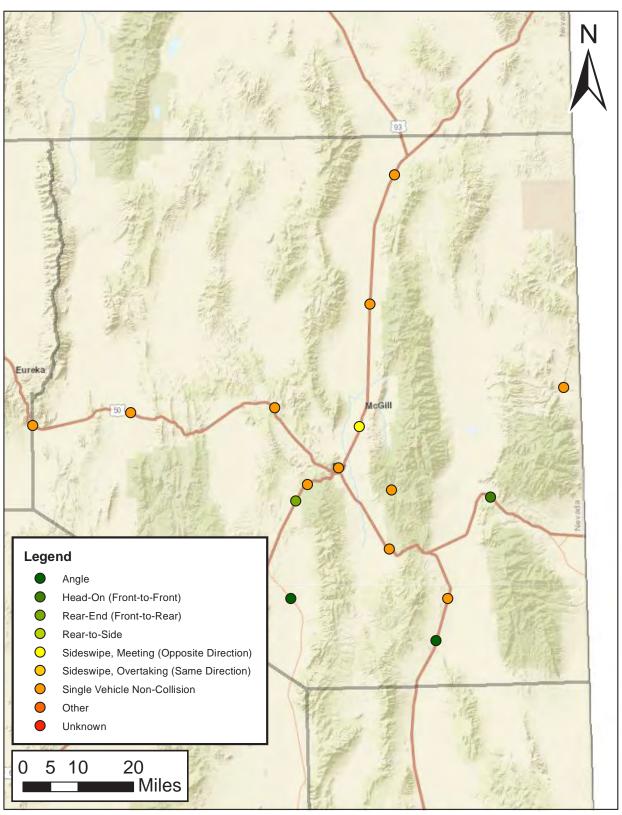




Reno-Sparks Area Fatal Crashes from 2015 - 2019



White Pine County Fatal Crashes from 2015 - 2019



Appendix B – Emphasis Area Data Query Table

Emphasis Area	Description	Source	Query			
All Data	All fatal crashes in the state of Nevada	FARS - Accident	STATE = 32 (32 = Nevada)			
Bicyclist	Fatal crash in which a bicyclist is killed	FARS - Person	ST_CASE (Person) = ST_CASE (Accident) (This ensures the data is on a crash level) AND PER_TYP = 6 or = 7 (6 = Bicyclist, 7 = Other Cyclist) AND INJ_SEV = 4 (4 = Fatal)			
Child Passenger	Fatal crash in which a child age 13 or younger died in the crash	FARS - Person	INJ_SEV = 4 (4 = Fatal) ST_CASE (Person) = ST_CASE (Accident) (This ensures the data is on a crash level) AND AGE = 0 to 13 (A child is classified as age 0 to 13 with 0 being less than 1 year old) AND PER_TYP = 2 (2 = Passenger of a Motor Vehicle In-Transport) AND INJ_SEV = 4 (4 = Fatal) AND { [REST_MIS = 0 (0 = No Indication of Misuse) AND REST_USE = 1, 2, 3, 4, 6, 8, 10, 11, 12, 97 (1 = Shoulder Belt Used; 2 = Lap Belt Used; 3 = Lap and Shoulder Belt Used; 4 = Child Restraint Type Unknown; 6 = Racing-Style Harness Used; 8 = Restraint Used - Type Unknown; 10 = Child Safety Seat - Forward Facing; 11 = Child Safety Seat - Rear Facing; 12 = Booster Seat (With Lap/Shoulder Belt Used Properly); 97 = Other)] OR REST_USE = 20 (20 = None Used / Not Applicable) OR REST_MIS = 1 (1 = Yes, Indication of Misuse) }			
Distracted Driving	Fatal crash in which the driver of the motor vehicle was distracted	FARS - Distracted	ST_CASE (Distracted) = ST_CASE (Accident) (This ensures the data is on a crash level) AND MDRDSTRD ≠ 0, 16, 96, or 99 (0 = Not Distracted, 16 = No Driver Present/ Unknown if Driver Present, 96 = Not Reported, 99 = Unknown if Distracted)			
Intersection	Fatal crashes that occur at intersections or are related to intersections	FARS - Accident	From 2010 to 2019: RELJCT2 = 2 or 3 (2 = Intersection or 3 = Intersection-Related) In 2009: RELJCT2 = 2 or 3 or 10 or 11 (2 = Intersection [Non-Interchange Area]; 3 = Intersection-Related [Non-Interchange Area]; 10 = Intersection [Interchange Area]; 11 = Intersection-Related [Interchange Area])			



Emphasis Area	Description	Source	Query			
Impaired Driving	Fatal crash involving a driver either intoxicated by alcohol (BAC = 0.08% or greater) or tested positive for one or more drugs	FARS - Person FARS - Drugs (2018 to 2019)	ST_CASE (Person) = ST_CASE (Accident) ST_CASE (Drugs) = ST_CASE (Accident) (This ensures the data is on a crash level) AND PER_TYP = 1 (1 = Driver of a Motor Vehicle In-Transport) AND From 2015 to 2019: ALC_RES ≥ 80 and ≤ 940 (80-939 = Actual Value of BAC Test (0.08-0.939%); 940 = 0.940% or Greater) AND/OR From 2018 to 2019: DRUGRES ≥ 100 and ≤ 996 or = 998 From 2015 to 2017: DRUGRES (1, 2, and/or 3) ≥ 100 and ≤ 996 or = 998 (100 to 995 = Narcotic, Depressant, Stimulant, Hallucinogen, Cannabinoid, Phencyclidine (PCP), Anabolic Steroid, Inhalant; 996 = Other Drugs; 998 = Tested for Drugs, Drugs Found, Type Unknown/Positive)			
Lane Departure	Fatal crash in which a vehicle leaves its designated lane of travel	FARS - CEvent	ST_CASE (CEvent) = ST_CASE (Accident) (This ensures the data is on a crash level) AND EVENTNUM = 1 (1 = The first event in the SOE) AND SOE = 1, 3, 19-43, 46-48, 52, 53, 57, 59, 63-65, or 68 (1 = Rollover/Overtur 3 = Immersion or Partial Immersion; 19 = Building; 20 = Impact Attenuator/Crash Cushion; 21 = Bridge Pier or Support; 23 = Bridge Rail (Includes Parapet); 24 = Guardrail Face; 25 = Concrete Traffic Barrier; 26 = Other Traffic Barrier; 30 = Utility Pole/Light Support; 31 = Post, Pole or Other Support; 32 = Culvert; 33 = Curb; 34 = Ditch; 35 = Embankment; 38 = Fence; 39 = Wall; 40 = Fire Hydrant; 41 = Shrubbery; 42 = Tree (Standing Only); 43 = Ot Fixed Object; 46 = Traffic Signal Support; 48 = Snow Bank; 52 = Guardrail End; 53 = Mail Box; 57 = Cable Barrier; 59 = Traffic Sign Support; 63 = Ran Off Road - Right; 64 = Ran Off Road - Left; 65 = Cross Median; 68 = Cross Centerline)			
Motorcycle	Fatal crash involving a motorcycle in which either the driver or a passenger on the motorcycle died	FARS - Person	ST_CASE (Person) = ST_CASE (Accident) (This ensures the data is on a crash level) AND BODY_TYP ≥ 80 and ≤ 89 (80 = Two-Wheel Motorcycle [excluding motor scooters]; 81 = Moped or Motorized Bicycle; 82 = Three-Wheel Motorcycle [2 Rear Wheels]; 83 = Off-Road Motorcycle; 84 = Motor Scooter; 85 = Unenclosed Three-Wheel Motorcycle / Unenclosed Autocycle [1 Rear Wheel]; 86 = Enclosed Three-Wheel Motorcycle / Enclosed Autocycle [1 Rew Wheel]; 87 = Unknown Three-Wheel Motorcycle Type; 88 = Other Motored Cycle Type [Mini-Bikes, Pocket Motorcycles, "Pocket"]; 89 = Unknown Mot Cycle Type) AND INJ_SEV = 4 (4 = Fatal)			

Emphasis Area	Description	Source	Query			
Motorcycle Unhelmeted Motorcycle	Fatal crash involving a motorcycle in which either the driver or a passenger on the motorcycle died and was not wearing a helmet	FARS - Person	ST_CASE (Person) = ST_CASE (Accident) (This ensures the data is on a crash level) AND BODY_TYP ≥ 80 and ≤ 89 (80 = Two-Wheel Motorcycle [excluding motor scooters]; 81 = Moped or Motorized Bicycle; 82 = Three-Wheel Motorcycle [2 Rear Wheels]; 83 = Off-Road Motorcycle; 84 = Motor Scooter; 85 = Unenclosed Three-Wheel Motorcycle / Unenclosed Autocycle [1 Rear Wheel]; 86 = Enclosed Three-Wheel Motorcycle / Enclosed Autocycle [1 Rear Wheel]; 87 = Unknown Three-Wheel Motorcycle Type; 88 = Other Motored Cycle Type [Mini-Bikes, Pocket Motorcycles, "Pocket"]; 89 = Unknown Motored Cycle Type) AND For 2019: HELM_USE = 17 (17 = No Helmet) From 2015 to 2018: REST_USE = 17 (17 = No Helmet) OR For 2019: HELM_MIS = 1 (1 = Yes, Indication of Misuse) From 2015 to 2018: REST_MIS = 1 (1 = Yes) AND INJ_SEV = 4 (4 = Fatal)			
Older Driver	Fatal crash in which one or more of the motor vehicles involved in the crash had a driver age 65 or older	FARS - Person	ST_CASE (Person) = ST_CASE (Accident) (This ensures the data is on a crash level) AND AGE ≥ 65 (An older driver is classified as a driver age 65 or older) AND PER_TYP = 1 (1 = Driver of a Motor Vehicle In-Transport)			
Pedestrian	Fatal crash in which a pedestrian dies	FARS - Person	ST_CASE (Person) = ST_CASE (Accident) (This ensures the data is on a crash level) AND PER_TYP = 5 (5 = Pedestrian) AND INJ_SEV = 4 (4 = Fatal)			
Speeding-Related	Fatal crash in which speeding is determined by the officer to be a factor in the crash	FARS - Vehicle	ST_CASE (Vehicle) = ST_CASE (Accident) (This ensures the data is on a crash level) AND SPEEDREL > 0 and < 6 (1 = Yes, 2 = Yes Racing, 3 = Yes Exceeded Speed Limit, 4 = Yes Too Fast for Conditions, 5 = Yes Specifics Unknown)			

NEVADA Traffic Safety Crash Facts

Emphasis Area	Description	Source	Query				
Unrestrained-Occupants	Fatal crash in which a person in a motor vehicle in transit dies while not using a restraining device such as a seatbelt.	FARS - Person	ST_CASE (Person) = ST_CASE (Accident) (This ensures the data is on a crash level) AND BODY_TYP = 1-11, 14-22, 24, 25, 28-41, or 45-49 (All codes correspond to NHSTA's Vehicle Body Type Classification: Passenger Vehicles (Passenger Cars, Light Trucks and Vans, Pickups, and Vans)) AND PER_TYP = 1, 2, or 9 (1 = Driver of a Motor Vehicle In-Transport; 2 = Passenger of a Motor Vehicle In-Transport; 9 = Unknown Occupant Type in a Motor Vehicle In-Transport) AND REST_USE = 0, 7, or 20 (0 = Not Applicable - no restraint available in seat position of occupant; 7 = None Used - vehicle occupant; 20 = None Used / Not Applicable) AND INJ_SEV = 4 (4 = Fatal)				
Young Driver	Fatal crash in which one or more of the motor vehicles involved in the crash had a driver age 15-20	FARS - Person	ST_CASE (Person) = ST_CASE (Accident) (This ensures the data is on a crash level) AND AGE ≥ 15 and ≤ 20 (A young driver is classified as a driver age 15 to 20) AND PER_TYP = 1 (1 = Driver of a Motor Vehicle In-Transport)				

FARS Data is available for download at the NHTSA website (https://www.nhtsa.gov/content/nhtsa-ftp/251)

FARS Data Dictionary can be found at the NHTSA website (https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/812827)



Nevada Traffic Safety Crash Facts

Prepared for:

Nevada Office of Traffic Safety 107 Jacobsen Way Carson City, Nevada 89711

775-888-7000

Prepared by:

Kimley-Horn and Associates, Inc. 6671 Las Vegas Boulevard South Suite 320 Las Vegas, Nevada 89119











APPENDIX C

Traffic Safety Policy Priority White Papers



Nevada Advisory Committee on Traffic Safety (NVACTS) 2023 Legislative/Policy Recommendations: Road Safety Cameras

Nevada Law:

NRS 484A.600 Use by governmental entity or agent of photographic, video or digital equipment to gather evidence for issuance of traffic citation. A governmental entity and any agent thereof shall not use photographic, video or digital equipment for gathering evidence to be used for the issuance of a traffic citation for a violation of chapters.484A to 484E, inclusive, of NRS unless the equipment is held in the hand or installed temporarily or permanently within a vehicle or facility of a law enforcement agency.

Link to Legislative History: 1999 Nevada State Legislature, Senate Bill 381: https://www.leg.state.nv.us/Division/Research/Library/LegHistory/LHs/1999/SB381,1999.pdf

Background:

Road safety cameras are primarily used in two ways: to reduce speeding, or to reduce instances of red light or stop signal running.

In 2017 the National Transportation Safety Board issued a Speed Safety Study Report that identified Nevada as one of 15 states that limits use of safety cameras and made the following recommendation: Finally, the NTSB recommends that the 15 states with ASE restrictions amend current laws to remove operational and location restrictions on the use of ASE, except where such restrictions are necessary to align with best practices.

In 2020 the National Transportation Safety Board issued an Accident Report regarding a vehicle collision with student pedestrians crossing to board a school bus that made the following recommendation to Nevada: Enact legislation to permit stop arm cameras on school buses to capture images and allow citations to be issued for illegal school bus passings based on the camera-obtained information.

In 2019 the Department of Public Safety/Office of Traffic Safety sponsored SB43 at the request of Governor Sandoval's office to permit local government jurisdictions to determine use of safety cameras (automated traffic enforcement). The bill, SB43, was heard not passed out of committee. This was the most recent of legislative attempts to modify NRS 484A.600.

Speed related crashes comprise 1/3 of Nevada fatal crashes; intersection crash data was not pulled for this report but can be evaluated.

Per NRS 484B.353 it is illegal to proceed past a school bus displaying flashing red signals, however, the only means by which a motorist is cited for an infraction require a law enforcement officer to observe the violation or for a school bus driver to observe the license plate of the vehicle and prepare a report of violation. If a report of violation is filed, a notice is mailed to the vehicle owner notifying them they are receiving a warning. According to the Nevada Department of Education an average of 1,770 passing violations occur each school year.



Data for crashes and citations in School zones is as follows:

Nevada	2017	2018	2019	2020	2021
Total Statewide Crashes in Active School Zone	153	152	170	92	133
Total Statewide Citations in Active School Zone	7137	6201	8059	3282	6965

Research & Data:

The benefits of safety cameras in reducing serious and fatal crashes are well studied and well documented.

Centers for Disease Control and Prevention – "The best-controlled studies suggest injury crash reductions are likely to be in the range of 20 to 25 percent at conspicuous, fixed camera sites." https://www.cdc.gov/motorvehiclesafety/calculator/factsheet/speed.html

Insurance Institute for Highway Safety – "In 2019, a total of 9,478 deaths, or 26 percent of all motor vehicle fatalities, occurred in speed-related crashes. The National Highway Traffic Safety Administration (NHTSA) estimates that the economic cost of speed-related crashes is about \$52 billion each year." https://www.iihs.org/topics/speed

National Conference of State Legislatures – "Red-light and speed cameras allow local law enforcement agencies to enforce these traffic laws remotely. Nearly 350 U.S. communities use red-light cameras and more than 150 communities use cameras to enforce speed laws. State laws regarding automated enforcement generally establish guidelines for municipal governments. Some state laws limit the use of the cameras to certain cities, streets or specific areas, such as school or work zones, while other state laws allow their use statewide."

https://www.ncsl.org/research/transportation/enforcing-traffic-laws-with-red-light-and-speed-cameras.aspx

National trends:

Per the National Conference of State Legislatures, at least 33 states and the District of Columbia have laws addressing a variety of issues related to automated enforcement, including to authorize or prohibit it. <u>State laws</u> generally establish guidelines for municipalities, such as limiting the use of cameras to certain cities or authorizing their use statewide.

Cameras are used in highway work zones in Illinois, Maryland, Oregon and Pennsylvania. Pennsylvania enacted legislation in 2018 that established a five-year pilot program for automated speed enforcement cameras in highway work zones, which began in March 2020. Drivers going 11 mph or more over the posted speed limit in work zones when highway workers are present will be given a warning after their first offense, fined \$75 after their second offense and \$150 after their third offense.

https://www.ncsl.org/research/transportation/states-increase-use-of-traffic-cameras-to-counter-surge-in-unsafe-driving-magazine2021.aspx

https://www.ncsl.org/research/transportation/enforcing-traffic-laws-with-red-light-and-speed-cameras.aspx



Special Uses: School Zones and Work Zones

A growing number of states are allowing cameras to be placed on the outside of a school bus to record illegal passing. At least 24 states have school bus stop-arm camera laws.

Delaware and Michigan became the latest states to allow stop-arm cameras in 2020 and 2021 respectively. In 2019, Idaho, Indiana, Maine, New York, Oklahoma, Tennessee and West Virginia authorized localities or school districts to use school bus stop-arm cameras. Pennsylvania did so in 2018, and in the 2017 legislative session, Arkansas and Utah passed legislation to allow school bus stop-arm cameras. In 2016, Alabama enacted a law allowing for exterior school bus cameras, expanding a program initially created in 2015 in Mobile County. In the 2014 legislative session, South Carolina and Wyoming enacted such laws. In the 2011 and 2012 legislative sessions, Connecticut, Georgia, Maryland, Rhode Island, Virginia and Washington enacted such measures.

School Bus Safety Laws:

https://www.ncsl.org/research/transportation/school-bus-safety.aspx

Comprehensive State List of Automated Enforcement Laws:

https://www.iihs.org/topics/red-light-running/automated-enforcement-laws

The newly passed 2021 Infrastructure Investment and Jobs Act (IIJA, or Bipartisan Infrastructure Law) is signaling support for safety cameras by making the following changes:

- Allows states to use federal 402 grant funds to support automated safety cameras in school or work zones, subject to USDOT guidelines
- Directs USDOT to study illegal school bus passing, related state laws, effectiveness of various technologies to enhance school bus safety, and how drivers are trained on passing school buses.

Safety Camera Pros:

Proven safety benefits, ability to provide additional data, remove law enforcement officer and eliminate concerns of disparate treatment, increase law enforcement agency's abilities to redirect crash and traffic enforcement efforts, safety camera system costs are typically self-sustaining when implemented properly, local government autonomy, widespread perception that recording cameras currently exist.

Safety Camera Cons:

Public perception, concerns of possible unconstitutionality, potential system start-up costs, government use of funds.

Options:

- Change existing statute to allow autonomy for local jurisdictions to determine use of safety cameras
- Authorize certain locations where safety cameras can be used, i.e. School Zones, Work Zones
- Do nothing



Resources & Reference:

2017 NTSB Speed Safety Study: https://www.ntsb.gov/safety/safety-studies/documents/ss1701.pdf

2020 NTSB School Bus Passing Study: https://www.in.gov/doe/files/ntsb-full-final-report-rochester-fatalities-2018-april-2020.pdf

2019 Nevada Legislature Senate Bill 43:

https://www.leg.state.nv.us/App/NELIS/REL/80th2019/Bill/5962/Text



Nevada Advisory Committee on Traffic Safety (NVACTS) 2023 Legislative/Policy Recommendations: Higher Fines in School Zones and Crossing Zones

Nevada Law:

NRS 484B-363 School Zone or School Crossing Zone does not currently address increased fines.

Background:

Most states impose higher fines in school zones if you look at their state laws. Doing a search by state of 25 laws, I only found New York to not have a law specifically to increase fines in school zones. That said, if you look up Nevada, every entry says that fines are increased for speeding in a school zone or school crossing zone, with most quoting double fines. While this could be true, it isn't in the statute quoted, NRS 484B-363, which covers school speed but not increased fines.

Research & Data:

What I did not find was research that backs up increased fines, it seems that either I did a lousy search or it is a common-sense issue that people care about cost and will slow down, or that most states do this, so we will too. I am of the belief that people pay more attention to increased fines than the possibility of hitting a child; we know that most people don't allow themselves to think in terms of crash outcomes, but they do see themselves getting a ticket.

National Trends:

To point out some of the state laws I found; most double or more the fine for speeding in a school zone, where there are differences is when the speed increases over 10 to 15 mph higher than the speed limit. I was shocked at how many states who spell out the fine by the increase in speed, most double 1 to 10 over the posted speed, but less than double for more. Several states make it 1 to 15 over.

As examples: Alabama, Arizona, Colorado Maryland, and Texas all double fines, but for several states who have added safety camera enforcement in school zones the fines are less, like in Maryland the top camera fine in a school zone is \$40. In Washington state, the fine is generally \$237, but is capped much lower if issued through a safety camera. We should be aware this if we pursue cameras in school zones.

There are many different ways states address the speeding in a school zone fine: in Missouri they add \$25 to the general speed by mph over, in Tennessee, speeding in a school zone earns the driver a reckless driving charge, but each entity is allowed to set specific fines and their speed limits, the law only says in every case \$1 fee is added to the ticket to go to the jurisdiction and that if the entity does not set the limit it is 15 for school zones and 25 for crossing zones.

In North Carolina, a standard speeding ticket is \$10 to \$50; but a school zone ticket runs \$250. In Arkansas, all fines are by scale, including school zones, which run \$25 to \$100 for the first offense, \$50 to \$250 for the second and \$250 to \$1,000 for the third. Even in neighboring California, the fines are far less, with 1-15 mph over a \$25 added fine and 16 to 25 over a \$50 fine, both on top of the standard speeding fine of \$50.



I found in many states speeding fines are cheap!

This would make a great research project; but as far as legislation goes, I believe we should pursue adding increased fines for speeding in school zones and school crossing zones to NRS 484B-363. In addition, we should raise the points added to the fine to be two-points higher than the standard speeding ticket for 1 to 10 and 11-20 over the limit and double any points higher than the points for the equal general speed citation.

Options:

- Approve recommendation to increase fines in school zones and school crossing zones.
- Do nothing



Nevada Advisory Committee on Traffic Safety (NVACTS) 2023 Legislative/Policy Recommendations: Occupant Protection/Seatbelt Laws

Nevada Law:

NRS 484D.495 Safety belts and shoulder harness assembly; requirements for driver, child and other passenger; penalties; exemptions. [Effective until the date the Federal Government rescinds the requirement for the installation of automatic restraints in new private passenger motor vehicles, if that action is based upon the enactment or continued operation of certain amendatory and transitory provisions contained in chapter 480, Statutes of Nevada 1987.]

- 1. It is unlawful to drive a passenger car manufactured after:
- (a) January 1, 1968, on a highway unless it is equipped with at least two lap-type safety belt assemblies for use in the front seating positions.
- (b) January 1, 1970, on a highway unless it is equipped with a lap-type safety belt assembly for each permanent seating position for passengers. This requirement does not apply to the rear seats of vehicles operated by a police department or sheriff's office.
- (c) January 1, 1970, unless it is equipped with at least two shoulder-harness-type safety belt assemblies for use in the front seating positions.
 - 2. Any person driving, and any passenger who:
 - (a) Is 6 years of age or older; or
 - (b) Weighs more than 60 pounds, regardless of age,

Ê who rides in the front or back seat of any vehicle described in subsection 1, having an unladen weight of less than 10,000 pounds, on any highway, road or street in this State shall wear a safety belt if one is available for the seating position of the person or passenger.

- 3. A citation must be issued to any driver or to any adult passenger who fails to wear a safety belt as required by subsection 2. If the passenger is a child who:
 - (a) Is 6 years of age or older but less than 18 years of age, regardless of weight; or
 - (b) Is less than 6 years of age but who weighs more than 60 pounds.

È a citation must be issued to the driver for failing to require that child to wear the safety belt, but if both the driver and that child are not wearing safety belts, only one citation may be issued to the driver for both violations. A citation may be issued pursuant to this subsection only if the violation is discovered when the vehicle is halted or its driver arrested for another alleged violation or offense. Any person who violates the provisions of subsection 2 shall be punished by a fine of not more than \$25 or by a sentence to perform a certain number of hours of community service.

- 4. A violation of subsection 2:
- (a) Is not a moving traffic violation under NRS 483.473.
- (b) May not be considered as negligence or as causation in any civil action or as negligent or reckless driving under <u>NRS 484B.653</u>.
- (c) May not be considered as misuse or abuse of a product or as causation in any action brought to recover damages for injury to a person or property resulting from the manufacture, distribution, sale or use of a product.



- 5. The Department shall exempt those types of motor vehicles or seating positions from the requirements of subsection 1 when compliance would be impractical.
 - 6. The provisions of subsections 2 and 3 do not apply:
- (a) To a driver or passenger who possesses a written statement by a physician or an advanced practice registered nurse certifying that the driver or passenger is unable to wear a safety belt for medical or physical reasons;
 - (b) If the vehicle is not required by federal law to be equipped with safety belts;
- (c) To an employee of the United States Postal Service while delivering mail in the rural areas of this State:
- (d) If the vehicle is stopping frequently, the speed of that vehicle does not exceed 15 miles per hour between stops and the driver or passenger is frequently leaving the vehicle or delivering property from the vehicle; or
- (e) Except as otherwise provided in <u>NRS 484D.500</u>, to a passenger riding in a means of public transportation, including a school bus or emergency vehicle.
- 7. It is unlawful for any person to distribute, have for sale, offer for sale or sell any safety belt or shoulder harness assembly for use in a motor vehicle unless it meets current minimum standards and specifications of the United States Department of Transportation.

Background:

Primary seat belt laws allow police to stop and ticket a motorist if the driver or passengers are not buckled up. Secondary belt laws allow police to issue a citation only if the driver is first stopped for another infraction. Nevada has a Secondary seat belt law.

Research affirms that seat belt laws significantly increase seat belt use and that primary enforcement laws are more effective than secondary enforcement laws. According to NHTSA, 92% of front seat occupants in states with primary enforcement laws buckled up, in contrast to 86.2% of front-seat occupants in states with secondary enforcement or no laws in 2019. The effect of seat belt laws on rearseat occupants is also noteworthy. In 2019, 84% of occupants in back seats used belts in states with seat belt laws for all seating positions, while 68% of occupants in rear seats used belts in states with front-seat-only belt laws.

State adult seat belt laws can be grouped into the following categories:

- Primary enforcement laws for all occupants: 20 states—Alaska, California, Delaware, Hawaii, Illinois, Indiana, Kentucky, Louisiana, Maine, Minnesota, Mississippi, New Mexico, New York, Oregon, Rhode Island, South Carolina, Texas, Utah, Washington and Wisconsin, plus the District of Columbia, Guam, the Northern Mariana Islands and Puerto Rico.
- Primary front seat belt law and secondary rear seat belt law: Five states—Alabama, Kansas, Maryland, New Jersey and North Carolina.
- <u>Secondary laws for all occupants: Six states</u>—Idaho, Massachusetts, Montana, **Nevada**, Vermont and Wyoming.
- Primary front-seat-only belt laws: Nine states—Arkansas, Connecticut, Florida, Georgia, Iowa, Michigan, Oklahoma, Tennessee and West Virginia—and the Virgin Islands.
- <u>Secondary front-seat-only belt laws: Nine states</u>—Arizona, Colorado, Missouri, Nebraska, North Dakota, Ohio, Pennsylvania, South Dakota and Virginia.
- New Hampshire and American Samoa are the only state and territory without a seat belt law for adults.



Nevada:

- 5.8 percent of Nevadans–179,000 people–are still not buckling up.
- An estimated 78 lives were saved by seat belts in Nevada in 2017 and 14 additional lives could have been saved with 100 percent seat belt use.
- In 2019, 158 vehicle occupants died while riding in cars and light trucks in Nevada. Of these, 37 percent died while not wearing their seat belts. (2019 FARS Data)
- 37 percent (111/304) of the State's motor vehicle traffic fatalities occur in rural areas; however, the fatality rate per 100 million vehicle miles traveled in rural Nevada is more than two times higher than the rate in urban areas. (2019 FARS Data)
- In 2019, 49 percent of nighttime passenger vehicle occupant fatalities in Nevada were unrestrained compared to 27 percent of daytime passenger vehicle occupant fatalities. (2019 FARS Data)
- Current state law does not require use of child passenger safety seats in rideshare vehicles.
- 50-60% of Nevada vehicle occupant fatalities annually are unrestrained.

Research & Data:

Wearing a seat belt reduces the risk of fatal injury by nearly half for occupants of passenger cars and by more than half for occupants of light trucks and vans. The national seat belt use rate by adult front-seat passengers was 90.7% in 2019. According to CDC's Tribal Road Safety Fact Sheets, low seat belt use is among the major risk factors for traffic fatalities in tribal communities. Front seat belt use also varies between age and gender. Occupants ages 16 to 24 years continued to have the lowest rate among any age group at 87.6%, according to 2019 data. The seat belt use rate for male occupants was 89.1%, compared with 92.7% for female occupants. While the number of occupants who buckle up in the back seat has increased in recent years, it continues to be significantly lower than front seat belt users. Rear seat belt use among occupants eight years and older was 77.5% in 2019. Finally, a study suggests that rear seat belt use is higher in private vehicles than in taxis, and results are mixed regarding ride-hailing services such as Uber and Lyft.

https://www.ncsl.org/research/transportation/traffic-safety-trends-state-legislative-action-2020.aspx

Per NHTSA's Special Report: Examination of the Traffic Safety Environment During the Second Quarter of 2020: "...there is evidence of an increase in ejection rates among people who were in crashes, suggesting a decrease in the seat belt use rate of vehicle occupants. This increase was heavily tilted toward males, people 18 to 34 years old, and people in rural areas.

https://rosap.ntl.bts.gov/pdfjs/web/viewer.html?file=https://rosap.ntl.bts.gov/view/dot/50940/dot 50940 D S1.pdf

National trends:

During the 2020 legislative session, 17 states considered at least 55 bills related to seat belts. However, few were enacted. New York passed four bills in 2020 dealing with various aspects of seat belt law.

Every state and the District of Columbia have enacted child restraint laws that require children of certain ages and sizes to ride in appropriate, federally approved child restraints. Although each state has a law, some laws only cover children up to a certain size or age, while others allow the use of adult safety belts to restrain children.



Primary Seatbelt Law Pros:

Proven safety benefits, reduction in road closures due to fatal crashes, perception that primary seatbelt laws currently exist.

Primary Seatbelt Law Cons:

Concerns regarding disparate treatment, concerns regarding cost burden to ticketed drivers.

Options:

- Primary Seatbelt Law, all drivers/passengers, optional pilot project/sunset provision
- Primary Seatbelt Law/Graduated Driver's License requirement
- Child Passenger Safety Seats- establish rideshare requirement
- Do nothing

Resources & Reference:

UNLV School of Medicine Occupant Protection Research Libarary: https://drive.google.com/drive/folders/0B2qSfw7l8XYqX0ZjUllFWTlsbE0?resourcekey=0-83GAnG2udzRSfMPfg_QqwA

NHTSA Seat Belts: https://www.nhtsa.gov/risky-driving/seat-belts

NHTSA State Traffic Safety Information/Nevada: https://cdan.nhtsa.gov/stsi.htm#

Insurance Institute for Highway Safety: https://www.iihs.org/topics/seat-belts



Nevada Advisory Committee on Traffic Safety (NVACTS) 2023 Legislative/Policy Recommendations: Graduated Drivers License

Nevada Law:

NRS LOOPHOLE THAT ALLOWS YOUNG DRIVERS TO AVOID COMPLETING THE SUPERVISED DRIVING

AN ACT relating to motor vehicles; authorizing completion of a hands-on defensive driving course in lieu of certain supervised driving experience for any applicant for a driver's license who is under 18 years of age; requiring the Department of Motor Vehicles to approve and maintain a list of such courses; making an appropriation; and providing other matters properly relating thereto.

Legislative Counsel's Digest:

Existing law authorizes the issuance of a driver's license to a person who is 16 or 17 years of age under certain circumstances, including, with certain exceptions, completion by the person of a course in automobile driver education or a course provided by a school for training drivers that is licensed in this State. Such a person must also provide proof of at least 50 hours of supervised driving experience. (NRS 483.2521) Section 3 of this bill allows any person under the age of 18 years to complete an approved hands-on course in defensive driving in lieu of completing 50 hours of supervised driving experience to obtain a driver's license. Section 2 of this bill requires the Department of Motor Vehicles to approve for the purposes of this provision any hands-on defensive driving course that: (1) includes both theory of defensive driving and practical experience in defensive driving skills and maneuvers; (2) is provided by a school for training drivers that is licensed in this State; and (3) is conducted by a person who is licensed in this State as an instructor for a school for training drivers. Section 2 also requires the Department to place a list of approved courses on the Internet website of the Department. Sections 6-10 of this bill make conforming changes. Section 10.7 of this bill makes an appropriation to the Department for the personnel and operating costs to approve and audit the hands-on courses in defensive driving.

EXPLANATION - Matter in bolded italics is new; matter between brackets [omitted material] is material to be omitted.

THE PEOPLE OF THE STATE OF NEVADA, REPRESENTED IN SENATE AND ASSEMBLY, DO ENACT AS FOLLOWS:

Section 1. (Deleted by amendment.)

- Sec. 2. Chapter 483 of NRS is hereby amended by adding thereto a new section to read as follows:
- 1. The Department shall approve a hands-on course in defensive driving for the purposes of NRS 483.2521 if the course:
 - (a) Includes instruction in the theory and practical applications of defensive driving;

V2019 Statutes of Nevada, Page 2971 (<u>CHAPTER 494, AB 338</u>)**V**

- (b) Requires a person taking the course to practice defensive driving skills and maneuvers, including, without limitation, emergency avoidance and response techniques;
- (c) Is provided by a school for training drivers that meets the requirements of this section and NRS 483.700 to 483.780, inclusive; and
- (d) Is conducted by a person who holds a license as an instructor for a school for training drivers and who meets the requirements of this section and NRS 483.700 to 483.780, inclusive.
- 2. The Department shall maintain on the Internet website of the Department a list of hands-on courses in defensive driving that are approved pursuant to this section. The list must identify those courses which are provided for free. In the event that no such free courses are available, the Internet website must provide notice of that fact.
 - 3. The Department may adopt regulations to carry out the provisions of this section.
 - Sec. 3. NRS 483.2521 is hereby amended to read as follows:
- 483.2521 1. Except as otherwise provided in subsection [3,] 4, the Department may issue a driver's license to a person who is 16 or 17 years of age if the person:



- (a) Except as otherwise provided in subsection 2, has completed:
 - (1) A course in automobile driver education pursuant to NRS 389.090; or
- (2) A course provided by a school for training drivers which is licensed pursuant to NRS 483.700 to 483.780, inclusive, *and section 2 of this act* and which complies with the applicable regulations governing the establishment, conduct and scope of automobile driver education adopted by the State Bo
- (c) [Submits] Except as otherwise provided in subsection 3, submits to the Department, on a form provided by the Department, a log which contains the dates and times of the hours of supervised experience required pursuant to this section and which is signed:
 - (1) By his or her parent or legal guardian; or
- (2) If the person applying for the driver's license is an emancipated minor, by a licensed driver who is at least 21 years of age or by a licensed driving instructor,
- who attests that the person applying for the driver's license has completed the training and experience required pursuant to paragraphs (a) and (b);
 - (d) Submits to the Department:
- (1) A written statement signed by the principal of the public school in which the person is enrolled or by a designee of the principal and which is provided to the person pursuant to NRS 392.123;
- (2) A written statement signed by the parent or legal guardian of the person which states that the person is excused from compulsory attendance pursuant to NRS 392.070;
- (3) A copy of the person's high school diploma or certificate of attendance; or ard of Education pursuant to NRS 389.090;
- (b) [Has] Except as otherwise provided in subsection 3, has at least 50 hours of supervised experience in driving a motor vehicle with a restricted license, instruction permit or restricted instruction permit issued pursuant to NRS 483.267, 483.270 or 483.280, including, without limitation, at least 10 hours of experience in driving a motor vehicle during darkness;

Background:

Problem

Motor vehicle crashes are a leading killer of U.S. teenagers. Teen drivers are far more likely than other drivers to be involved in fatal crashes because they lack driving experience and tend to take greater risks. The crash rate for teen drivers (16-19 years) is three times that of drivers 20 and older.

Solution

GDL programs allow teen drivers to learn to drive under lower risk conditions, and consist of a learner's stage, then an intermediate stage, before being granted an unrestricted license. The learner's stage requires teen drivers to complete a minimum amount of time of adult-supervised driving to move to the next phase and drive unsupervised. The intermediate stage restricts teens from driving in high-risk situations for a specified period before receiving an unrestricted license.

Learner's Stage: Minimum Age 16 for Learner's Permit

A beginning teen driver is prohibited from obtaining a learner's permit until the age of 16. A survey conducted by IIHS shows that parents even favor GDL laws that are as strict or even stricter than currently exist in any state. More than half think the minimum licensing age should be 17 or older.

Learner's Stage: 6-Month Holding Period Provision

A beginning teen driver must be always supervised by an adult licensed driver during the learner's stage. If the learner remains citation-free for six months and is not involved in any crashes, they may progress to the intermediate stage. Research has found that a minimum holding period of nine months to a year results in a 21% reduction in fatal crash rates.



Intermediate Stage: Nighttime Driving Restriction Provision

Unsupervised driving should be prohibited from at least 10 p.m. to 5 a.m. States with nighttime driving restrictions show crash reductions of up to 60% during restricted hours.

Intermediate Stage: Cell phone restriction to the Nevada GDL system

Studies have shown that using a cell phone, the legit way, reduces brain activity by up to 37%. In 2019, 39% of high school students reported texting or emailing while driving during the past month. Currently, there are 37 states that ban all cell phone use by novice drivers.

Intermediate Stage: Require seatbelt use for drivers and passengers by making it a primary law during their GDL.

In 2019, 45% of teen drivers who died were unbuckled. Even more troubling, when the teen driver in a fatal crash was unbuckled, 9 out of 10 of the passengers who died were also unbuckled.

Intermediate Stage: Passenger Restriction Provision

This provision limits the number of passengers who may legally ride with a teen driver without adult supervision. A study by AAA found that when a teen driver has only teen passengers in their vehicle (as opposed to older passengers), the fatality rate for all people involved in a crash increased 51%.

Age 18 for Unrestricted License

A teen driver is prohibited from obtaining an unrestricted license until the age of 18, and either the nighttime or the passenger restrictions, or both, must last until age 18 and meet the definition for an optimal law.

Conclusion

GDL programs have been effective in reducing teen crash deaths. In states that have adopted GDL programs, studies have found overall crash reductions among teen drivers of about 10 to 30%. The most effective, evidence-based countermeasure for young drivers involves a comprehensive system of GDL restrictions that allow new drivers to gain experience while restricting their exposure to dangerous driving situations.

Research & Data:

Studies show that graduated driver licensing significantly decreases the risk of fatal teen crashes among 16- to 17-year-old drivers. Research funded by the National Institutes of Health found that the most effective legislation had at least five of the following seven key elements:

- A minimum age of 16 for a learner's permit
- A mandatory waiting period of at least six months before a driver can apply for an intermediate license
- A requirement for 50 to 100 hours of supervised driving before testing for an intermediate license
- A minimum age of 17 for an intermediate license
- · Restrictions on nighttime driving
- A limit on the number of teenaged passengers allowed in the car
- A minimum age of 18 for a full license

All 50 states and the District of Columbia have some form of GDL program. However, according to the Insurance Institute for Highway Safety, if every state adopted the strictest limitations related to five components, the nation would reduce the number of crashes each year by more than 9,500 and save more than 500 lives.



In 2019, 45% of teen drivers who died were unbuckled. Even more troubling, when the teen driver involved in the fatal crash was unbuckled, nine out of 10 of the passengers who died were also unbuckled. As teens start driving and gradually gain independence, they don't always make the smartest decisions regarding their safety. They may think they are invincible, that they don't need seat belts. They may have a false notion that they have the right to choose whether or not to buckle up.

National Trends:

Motor vehicle crashes are the leading cause of death for teens in the United States (<u>reported in WISQARS</u>). Per mile driven teens, ages 16 to 19 are nearly three times more likely than older drivers to be in a fatal crash. Graduated driver licensing programs (GDL) have consistently proven to be effective at reducing the crash risk for beginning drivers, including teens. GDL addresses the high crash risks that new drivers face by allowing them to get their initial driving experience under low-risk conditions through restrictions that are enforceable by law. GDL has three stages, beginning with a fully supervised learning period, followed by an intermediate stage that allows independent driving with some restrictions on high-risk driving conditions, and concluding with unrestricted, full driving privileges.

Although GDL programs vary from state to state, they generally include seven main components:

- Minimum age to obtain a learner permit
- Mandatory holding period for the learner permit
- Minimum number of hours of supervised driving during the learner permit stage—both daytime and nighttime
- Minimum age to obtain an intermediate license
- Nighttime driving restrictions during the intermediate stage
- Passenger restrictions during the intermediate stage
- Minimum age for full licensing

Some states have applied additional restrictions on young drivers, including

- Cell phone bans
- Texting bans
- Seat belt requirements
- Zero tolerance for driving under the influence of drugs or alcohol
- Stronger penalties for offenses that during the intermediate stage
- Minimum standards for driver education

According to NHTSA's Countermeasures that work:

The most effective, evidence-based countermeasure for young drivers involves a comprehensive system of GDL restrictions that allow new drivers to gain experience while restricting their exposure to dangerous driving situations. At the same time, efforts should continue to evaluate and develop innovative programs for young drivers such as those using peer-to-peer.

Studies show that graduated driver licensing significantly decreases the risk of fatal teen crashes among 16- to 17-year-old drivers. Research funded by the National Institutes of Health found that the most effective legislation had at least five of the following seven key elements:

• A minimum age of 16 for a learner's permit



- A mandatory waiting period of at least six months before a driver can apply for an intermediate license
- A requirement for 50 to 100 hours of supervised driving before testing for an intermediate license
- A minimum age of 17 for an intermediate license
- Restrictions on nighttime driving
- A limit on the number of teenaged passengers allowed in the car
- A minimum age of 18 for a full license

All 50 states and the District of Columbia have some form of GDL program. However, according to the Insurance Institute for Highway Safety, if every state adopted the strictest limitations related to five components, the nation would reduce the number of crashes each year by more than 9,500 and save more than 500 lives.

NHTSA-Recommended GDL Provisions and Restrictions

Stage 1: Learner's Permit

- State sets minimum age for a learner's permit at no younger than 16 years old;
- Pass vision and knowledge tests, including rules of the road, signs, and signals;
- Completion of basic driver training;
- Licensed adult (who is at least 21 years old) required in the vehicle at all times;
- All occupants must wear seat belts;
- Zero alcohol in system while driving;
- Learners permit is visually distinctive from other driver licenses;
- Must remain crash- and conviction-free, including violations of the seat belt, zero-tolerance, speed, and other GDL provisions, for at least 6 consecutive months to advance to the next level;
- Parental certification of 30 to 50 practice hours; and
- No use of portable electronic communication or entertainment devices while driving.

Stage 2: Intermediate (Provisional) License

- Completion of Stage 1;
- State sets minimum age of 16.5 years old;
- Completion of intermediate driver education training (e.g., safe driving decision-making, risk education);
- All occupants must wear seat belts;
- Licensed adult required in the vehicle from 10 p.m. until 5 a.m. (e.g., nighttime driving restriction) with limited exceptions (e.g., religious, medical, or school- or employment-related driving);
- Zero alcohol in system while driving:
- Provisional license is visually distinctive from a regular license:
- Teenage passenger restrictions not more than one teen passenger for the first 12 months of Intermediate License. Afterward, limit the number of teen passengers to two until age 18;
- Must remain crash- and conviction-free, including violations of the seat belt, zero-tolerance, speed, and other GDL provisions, for at least 6 consecutive months to advance to the next level; and
- No use of portable electronic communication or entertainment devices while driving.

Stage 3: Full Licensure

- Completion of Stage 2:
- State sets minimum age of 18 for lifting of passenger and nighttime restrictions;
- · Zero alcohol in system while driving; and
- Visually distinctive license for drivers under the age of 21.

States that have this measure in place and what other states are doing.

https://www.ghsa.org/state-laws/issues/teen%20and%20novice%20drivers



Pros:

GDL programs have consistently proven effective at reducing crash risk for beginning drivers.

GDL programs are a proven Countermeasure that works

Cons:

Options:

- Adopt all suggestions All the GDL recommendations be submitted to Legislation
- Select of few of the GDL recommendations and submit to Legislation.
- Do nothing

Resources & Reference:

https://www.nhtsa.gov/road-safety/teen-driving

https://www.ghsa.org/state-laws/issues/teen%20and%20novice%20drivers

https://www.teendriversource.org/thinking-of-driving/recommended-minimum-gdl-requirements

https://www.cdc.gov/phlp/publications/topic/gdl.html

Graduated Driver Licensing Systems | US Department of Transportation

https://www.transportation.gov/mission/health/Graduated-Driver-Licensing-Systems

https://saferoads.org/wp-content/uploads/2022/01/FINAL-2022-Roadmap-of-State-Highway-Safety-Laws.pdf

https://www.cdc.gov/phlp/publications/topic/gdl.html

<u>Countermeasures That Work: A Highway Safety Countermeasure Guide for State Highway Safety Offices, 10th Edition, 2020 (nhtsa.gov)</u>



Nevada Advisory Committee on Traffic Safety (NVACTS) 2023 Legislative/Policy Recommendations: Roadside Oral Fluid Testing

Nevada Law:

In Nevada, roadside preliminary breath testing for the presence of alcohol is addressed in NRS 484C.150.

NRS 484C.150. Implied consent to preliminary test of person's breath; effect of failure to submit to test; use of results of test.

- 1. Any person who drives or is in actual physical control of a vehicle on a highway or on premises to which the public has access shall be deemed to have given his or her consent to a preliminary test of his or her breath to determine the concentration of alcohol in his or her breath when the test is administered at the request of a police officer at the scene of a vehicle crash or where the police officer stops a vehicle, if the officer has reasonable grounds to believe that the person to be tested was:
- (a) Driving or in actual physical control of a vehicle while under the influence of intoxicating liquor or a controlled substance; or
- (b) Engaging in any other conduct prohibited by NRS 484C.110, 484C.120, 484C.130 or 484C.430.
- 2. If the person fails to submit to the test, the officer shall, if reasonable grounds otherwise exist, arrest the person and take him or her to a convenient place for the administration of a reasonably available evidentiary test under NRS 484C.160.
- 3. The result of the preliminary test must not be used in any criminal action, except to show there were reasonable grounds to make an arrest.

Currently, there is no similar provision for roadside oral fluid testing for drugs.

Background:

Provide background information, reference to national studies, national recommendations, information from other states.

As taught in Peace Officer Standards and Training (POST) academies across the nation from the National Highway Transportation Safety Administration (NHTSA) curricula, preliminary breath testing is a standardized part of the impaired driving investigation. It is conducted at the roadside and is the last step of the investigation before the law enforcement officer makes an arrest decision. It is not admissible in court and is not used to show the amount of impairment. It is used to help the officer determine what is causing the impairment that he/she has already observed.

If the preliminary breath testing device (PBT) displays a BAC reading that is in parity with the impairment the officer has observed, the officer may have no reason to suspect drug impairment. In Nevada when this situation exists, the driver has a statutory right under NRS 484C.160(5) to choose to submit to an



evidentiary breath test with an approved testing device (currently the Intoxilyzer 8000 in Nevada) instead of a blood test to determine the concentration of alcohol in the driver's body.

If, on the other hand, the PBT displays a BAC value that is lower than what the officer would expect to see for the level of impairment observed up to that point, the officer would have reason to suspect something other than or in addition to alcohol was impairing the driver. In such an instance, the officer can preclude the driver from choosing a breath test and, also pursuant to NRS 484C.160(5), will direct the suspect to submit to a blood test.

However, what is not known is what type of other substances have been recently used by the driver. In the second scenario, even if the driver submits to an evidentiary blood test, results of that forensic toxicology analysis are not available for months. In the interim, there is no objective way to determine how to help the driver if he or she has a substance use disorder and no guidance for pretrial services officers with regard to testing the DUI defendant.

It is more problematic in the first scenario, where the driver's BAC is high enough that the officer permits the driver to submit to a breath test. In that scenario, there is no blood toxicology testing at all, so any substance use by the DUI defendant will remain unknown to the officer and the court and any treatment court or counseling to which the defendant may be later directed. The services that are ready and able to help the defendant and protect the public from subsequent impaired driving conduct are essentially hobbled.

Nevada's impaired driving fatality statistics show a steady increase in the use of a combination of impairing substances. The following table shows data covering 2016 to 2019 and collected by the Office of Traffic Safety for fatal crashes where alcohol and drugs were involved. It was originally compiled to show if there was any impact on the legalization of cannabis on roadway fatalities, but the data is informative for the instant purpose as well.

PERCENT OF TOTAL SUBSTANCE INVOLVED FATAL CRASHES						
	Alcohol only (.08+ BAC)	Marijuana only	Other Drug	Poly- Any Marijuana		
				Substance		
2016	38.10%	11.11%	5.29%	46.03%	35.98%	
2017	25.00%	16.48%	6.82%	49.43%	40.34%	
2018	22.16%	13.07%	10.23%	53.41%	39.20%	
2019	26.51%	18.07%	14.46%	51.81%	51.20%	

As shown, fatal crashes involving a driver using drugs alone or in combination with another substance comprise a majority of the fatal crashes in Nevada.

Roadside detection of recent drug use and impairment, however, is limited to the individual officer's ability to effectively conduct field sobriety tests. These tests may or may not be available to the officer for a variety of reasons, including, but not limited to weather, circumstances of the stop (e.g., a crash may preclude administration of psychophysical testing), and age, weight, and other medical conditions of the driver.



Research & Data:

In 2019, Michigan issued a report on their oral fluid roadside testing pilot program. From the report:

Preliminary oral fluid drug screening on the roadside has many benefits. Studies have shown that drugs accumulate in the oral fluid by passive diffusion from the blood (Cone & Huestis, 2007). Certain drugs tested in oral fluid are well correlated with positive results from the same drug when tested in the blood (Moore & Miles, 2015). Collecting oral fluid from a driver on the roadside can be easy, quick, and non-invasive. There is limited risk of adulteration from the oral fluid sample and the collection is painless (Edwards, Smith, & Savage, 2017). Oral fluid collection can occur at the scene, close to the time the driver was operating a vehicle (Moore & Miles, 2015). The oral fluid test instrument provides the investigating police officer positive or negative results, within five minutes, on recent drug intake (Alere Toxicology, 2019).

Michigan State Police (2019, February, p. 3).

The Michigan State Police's pilot program and research was robust. In their two-volume 2019 published study, the MSP committee concluded:

Roadside Oral Fluid testing in the Phase II Pilot has been proven to be accurate to a certain degree as demonstrated in the data contained within this report. Each of the six drug classes demonstrated varied percentages of accuracy when compared to the "Gold Standard", which is a blood test. Oral fluid testing does not equal the "Gold Standard" but has been found to be accurate for purposes of preliminary roadside testing.

ld.

In Nevada, NRS 484C.160 includes the evidentiary testing of oral fluid by referencing "blood, urine, breath or other bodily substance" in the implied consent provisions of subsection 1. However, there is no provision for use of non-evidentiary or preliminary testing of oral fluid at the roadside akin to the preliminary breath test referenced in NRS 484C.150.

National Trends:

As noted above, Michigan determined oral fluid testing to be accurate for use in impaired driving investigations after an extensive two-part pilot program.

Alabama currently has an oral fluid testing program after completing their pilot program.

Indiana is currently using a pilot oral fluid testing program for DRE use only. It will use the results of the program to determine whether to expand it beyond DRE use.

Pros:

• Minimally-invasive search.



- No pain or discomfort to the subject.
- Provides the officer with information of recent drug use in a short period of time, usually less than
 5 minutes.
- Provides the officer with information that would assist with determining if an evidentiary breath or blood test should be administered.
- Provides insight for pre-adjudication supervision and treatment options for the arrested suspect.
- Minimal training required to competently operate.

Cons:

- Initial cost of individual devices and subsequent replacements as needed.
- Devices would need to be maintained and calibrated regularly, much like the preliminary breath testing devices are now. Calibration of devices is typically performed by the manufacturer at a cost.
- Non-evidentiary, which is the same as the preliminary breath testing devices currently utilized.

Options:

- Pass and implement for statewide use in all agencies that wish to use the devices.
- Pass, but limit utilization of the devices to Nevada peace officers who are Drug Recognition
 Experts with current credentials certified by the International Association of the Chiefs of Police
 (IACP).
- Do nothing

Resources & Reference:

- Bloch, S. National Conference of State Legislatures (2021, May). *States Explore Oral Fluid Testing to Combat Impaired Driving*. https://www.ncsl.org/research/transportation/states-explore-oral-fluid-testing-to-combat-impaired-driving.aspx
- Moore, C., Lindsey, B., Harper, C.E., & Knudsen, J.R. (2020, Oct.). Use of Oral Fluid to Detect
 Drugged Drivers, Between the Lines (National Traffic Law Center), 28:10. https://ndaa.org/wp-content/uploads/October-2020-BTL-Oral-Fluid.pdf
- Oral Fluid Roadside Analysis Pilot Program Committee, Michigan State Police (2019, Feb.). Oral Fluid Roadside Analysis Pilot Program, Retrieved from: https://www.michigan.gov/documents/msp/Oral Fluid Report 646833 7.pdf

APPENDIX D

2021-2025 Strategic Highway Safety Plan and Action Plan











2021-2025

Nevada Strategic Highway Safety Plan

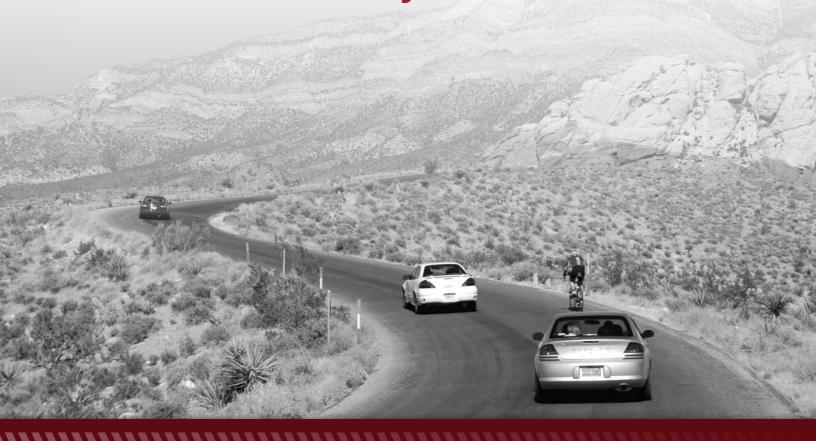


Table of Contents

Acronyms	iv
Letter from Governor	V
Partner Pledge	vi
Acknowledgments	vii
Nevada Executive Committee on Traffic Safety	
Task Force Leaders	viii
Implementation Team	viii
What is the Strategic Highway Safety Plan?	1
Background	2
2021-2025 SHSP Update Overview	2
SHSP Organizational Structure	4
Roles and Responsibilities	5
SHSP Update Process	6
Emphasis Areas	7
2016-2020 SHSP Highlights	8
SHSP Goals and Performance Measures	9
Nevada Traffic Fatalities Compared to Other Western States and National Average	12
Key Areas	13
Safer Roads	
Safe Speed	15
Lane Departures	17
Intersections	19
Vulnerable Road Users	21
Pedestrians	22
Motorcyclists	24
Safer Drivers and Passengers	26
Occupant Protection	27
Older Drivers	29
Young Drivers	31
Impaired Driving Prevention	33
Impaired Driving	34
Safety Data Analysis	36
Next Steps	37
Implementation	37
Connecting with the Community	41



Figures

Figure 1. SHSP Organizational Structure	4
Figure 2. SHSP Development Timeline	6
Figure 3. Total Fatalities and Serious Injuries and Percent of Total Fatalities and Serious Injuries by Emphasis Area	7
Figure 4. Nevada Fatalities, Five-Year Average and 2025 Target	9
Figure 5. Nevada Serious Injuries, Five-Year Average and 2025 Target	10
Figure 6. Nevada Fatality Rates, Five-Year Average and 2025 Target	10
Figure 7. Nevada Serious Injury Rates, Five-Year Average and 2025 Target	11
Figure 8. Nevada Non-Motorized Fatalities and Serious Injuries, Five-Year Average and 2025 Target	11
Figure 9. 2018 State Fatalities and Fatality Rates Comparison	12
Figure 10. 2018 Percent of Fatalities by Person Type State Comparison	12
Figure 11. 2014-2018 Nevada Speed-Related Fatalities	15
Figure 12. 2014-2018 Nevada Speed-Related Serious Injuries	15
Figure 13. 2014-2018 Nevada Lane Departure Fatalities	17
Figure 14. 2014-2018 Nevada Lane Departure Serious Injuries	17
Figure 15. 2014-2018 Nevada Intersection Fatalities	19
Figure 16. 2014-2018 Nevada Intersection Serious Injuries	19
Figure 17. 2014-2018: Nevada Pedestrian Fatalities	22
Figure 18. 2014-2018 Nevada Pedestrian Serious Injuries	22
Figure 19. 2014-2018 Nevada Motorcyclist Fatalities	24
Figure 20. 2014-2018 Nevada Motorcyclist Serious Injuries	24
Figure 21. 2014-2018 Nevada Occupant Protection Fatalities	27
Figure 22. 2014-2018 Nevada Occupant Protection Serious Injuries	27
Figure 23. 2014-2018 Nevada Older Driver Fatalities	29
Figure 24. 2014-2018 Nevada Older Driver Serious Injuries	29
Figure 25. 2014-2018 Nevada Young Driver Fatalities	31
Figure 26. 2014-2018 Nevada Young Driver Serious Injuries	31
Figure 27. 2014-2018 Nevada Impaired Driving Fatalities	34
Figure 28. 2014-2018 Nevada Impaired Driving Serious Injuries	34
Figure 29. Nevada Online Crash Data Dashboard	
Figure 30, Nevada SHSP Implementation Tracking Progress Summary	38



Acronyms

6 "Es"	Equity, Engineering, Education, Enforcement, Emergency Medical Services/Emergency Response/Incident Management, and Everyone
AASHTO	American Association of State Highway and Transportation Officials
ARIDE	Advanced Roadside Impaired Driving Enforcement
CEA	Critical Emphasis Area
CVSP	Commercial Vehicle Safety Plan
DRE	Drug Recognition Expert
DUI	Driving Under the Influence
FAST	Fixing America's Surface Transportation Act
FHWA	Federal Highway Administration
GHSA	Governors Highway Safety Association
HRRR	High-Risk Rural Roads
HSIP	Highway Safety Improvement Program
HSM	Highway Safety Manual
HSP	Highway Safety Plan
ICE	Intersection Control Evaluation
MAP-21	Moving Ahead for Progress in the 21st Century Act
MMUCC	Model Minimum Uniform Crash Criteria
MPO	Metropolitan Planning Organization
NCATS	Nevada Citation and Accident Tracking System
NDOT	Nevada Department of Transportation
NECTS	Nevada Executive Committee on Traffic Safety
NHP	Nevada Highway Patrol
NHTSA	National Highway Traffic Safety Administration
OTS	Office of Traffic Safety
RSA	Road Safety Assessment
SAFETEA-LU	Safe, Accountable, Flexible, Efficient, Transportation Equity Act: A Legacy for Users
SMP	Safety Management Plan
SHSP	Strategic Highway Safety Plan
SFST	Standard Field Sobriety Test
TRCC	Traffic Records Coordinating Committee
TWG	Technical Working Group
VMT	Vehicle Miles Traveled



Page iv 02/19/2021

Letter from Governor

One Hundred One North Carson Street Carson City, Nevada 89701 Office: (775) 684-5670 Fax No.: (775) 684-5683



555 East Washington Avenue. Suite 5100 Las Vegas, Nevada 89101 Office: (702) 486-2500 Fax No.: (702) 486-2505

Office of Governor Steve Sisolak

January 15, 2021

Dear Nevadans,

As Governor of the State of Nevada, I want every trip to be a safe one for our residents and visitors. To ensure the quality of life we enjoy and to keep our economy strong, we need a transportation system that moves people and goods safely and efficiently. To that end, Nevada's goal of Zero Fatalities is more critical than ever. Every year, more than 300 people die and more than 1,000 people are seriously injured on Nevada roadways. The 2021-2025 Nevada Strategic Highway Safety Plan (SHSP) is the roadmap needed to reduce these preventable traffic-related tragedies.

The 2021-2025 SHSP continues the legacy of previous safety action plans and provides a comprehensive framework for the next chapter of transportation safety in Nevada. With the goal of Zero Fatalities, the SHSP integrates Equity, Engineering, Education, Enforcement, and Emergency Medical Services/Emergency Response/ Incident Management into data-driven statewide highway safety goals and priorities.

This SHSP is the result of many diverse safety stakeholders providing their ideas and thoughts on how Nevada can make meaningful reductions in traffic fatalities and serious injuries. I am proud of the work done by the Nevada Department of Transportation, the Department of Public Safety, Office of Traffic Safety, the Nevada Executive Committee on Traffic Safety, and the many others who have joined forces to identify and implement solutions that will show results.

Together, we can meet our goal of Zero Fatalities. Achieving that goal will require continued collaboration, cooperation, and the sharing of knowledge and resources throughout the implementation of this Plan. Whether you drive, walk, ride, or bike, we must all do our part in keeping Nevada's roadways safe. Together, we can make a positive difference in the lives of our citizens and visitors and move forward toward Zero Fatalities Nevada.

Sincerely,

Governor Steve Sisolak

State of Nevada

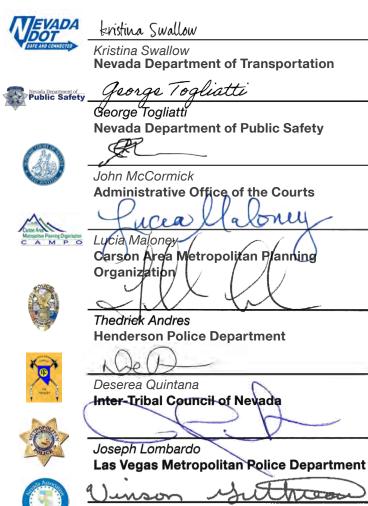


Page v 02/19/2021

Partner Pledge

The goal of Zero Fatalities is to eliminate fatalities on our roadways. Some people may think zero is an impossible goal, but when it comes to your family and friends, what other number would be acceptable? We are aiming for zero fatalities because everyone matters.

As a member of Nevada's Strategic Highway Safety Plan's Executive Committee on Traffic Safety, my agency pledges to support Nevada's goal of Zero Fatalities.





Nevada Department of Health and

Nevada Department of Motor Vehicles



Administration

Administration

Gina Espinosa-Salcedo

National Highway Traffic Safety



Richard Whitley

Human Services

Genera Solvedo

Acknowledgments

The implementation and update of the Nevada SHSP would not be possible without the hard work and commitment of the Nevada Executive Committee on Traffic Safety (NECTS), Task Force Leadership, and the Implementation Team. All individuals have dedicated significant amounts of time and effort toward the development and/or implementation of Nevada's SHSP and saving the lives of Nevadans. Members of the NECTS, Task Force Leaders, and the Implementation Team are listed below and on the following page.

Nevada Executive Committee on Traffic Safety

NECTS Agency Department	NECTS Appointee		
Nevada Department of Transportation	Kristina Swallow		
	Sondra Rosenberg		
Nevada Department of Public Safety	Amy Davey (Office of Traffic Safety)		
	Col. Anne Carpenter (Nevada Highway Patrol)		
Administrative Office of the Courts	John McCormick		
Carson Area Metropolitan Planning Organization	Lucia Maloney		
Henderson Police Department	Lt. John Lotito		
Inter-Tribal Council of Nevada	Deserea Quintana		
Las Vegas Metropolitan Police Department	Joseph Lombardo		
Nevada Association of Counties	Vinson Guthreau		
Nevada Department of Education	Jennah Fiedler		
Nevada Department of Health and Human Services	Don Watson		
Nevada Department of Motor Vehicles	Julie Butler		
Nevada League of Cities	Jo Walker		
Regional Emergency Medical Services Authority	Dean Dow		
Nevada Sheriffs' and Chiefs' Association	Eric Spratley		
Regional Transportation Commission of Southern Nevada	Mohammad Farhan		
Regional Transportation Commission of Washoe County	Rebecca Kapuler		
Southern Nevada Health District	Chad Kingsley		
Tahoe Regional Planning Agency	Nick Haven		
Federal Highway Administration	Susan Klekar		
Federal Motor Carrier Safety Administration	Bill Bensmiller		
National Highway Traffic Safety Administration	Gina Espinosa-Salcedo		



Page vii 02/19/2021

Task Force Leaders

Kyle Bacon, Nevada Department of Transportation, Traffic Safety Engineering

Erin Breen, University of Nevada, Las Vegas - Vulnerable Road Users Partnership

Shannon Bryant, Nevada Traffic Safety Resource Prosecutor

Lori Campbell, Nevada Department of Transportation, Traffic Safety Engineering

Victoria Hauan, Office of Criminal Justice Assistance

Christina Karanikolas, City of Las Vegas

Kevin Moore, Department of Public Safety, Office of Traffic Safety

Shashi Nambisan, University of Nevada, Las Vegas

Fred Shakal, Nevada Department of Transportation, Traffic Safety Engineering

Lt. Scott Shaw, Reno Police Department

Bill Story, NDOT Multimodal Planning and Program Development

Genevieve Swain, Department of Public Safety, Office of Traffic Safety

Pete Vander Aa, Department of Public Safety, Office of Traffic Safety

Lt. Jeff Varner, Department of Public Safety, Nevada Highway Patrol

Narcisa Zepeda, Department of Public Safety, Office of Traffic Safety

Implementation Team

Andrew Bennett, Department of Public Safety, Office of Traffic Safety

Juan Balbuena, Federal Highway Administration

Amy Davey, Department of Public Safety, Office of Traffic Safety

Fred Shakal, Nevada Department of Transportation, Traffic Safety Engineering

Lacey Tisler, Nevada Department of Transportation, Traffic Safety Engineering

Jaime Tuddao, Nevada Department of Transportation, Traffic Safety Engineering

Kimley-Horn Consultant Team

Mike Colety	Meg Merry	Lindsay Saner	
David Giacomin	Taylor Michaels	Carrie Sorensen	
Anabel Hernandez	Molly O'Brien	Karen Sprattler	

Emily Hilby

What is the Strategic Highway Safety Plan?

Nevada's Strategic Highway Safety Plan (SHSP) is a comprehensive statewide safety plan that identifies the greatest causes of fatalities and serious injuries on Nevada roadways and provides a coordinated framework for reducing the crashes that cause fatalities and serious injuries. 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 purpose of the SHSP is to eliminate traffic-related fatalities and serious injuries by combining and sharing resources across disciplines and strategically targeting efforts to the areas of greatest need. Nevada has enlisted stakeholders from state, local, tribal, and federal agencies; institutions; private-sector organizations; and concerned citizens to develop goals and strategies to solve this problem.

SHSPs were first mandated under the Safe, Accountable, Flexible, Efficient, Transportation Equity Act: A Legacy for Users (SAFETEA-LU), and extended under the Moving Ahead for Progress in the 21st Century Act (MAP-21) and the Fixing America's Surface Transportation (FAST) Act. Both extended the use of the Highway Safety Improvement Program (HSIP) as a federal-aid program. A SHSP is a major component and requirement of the HSIP (23 U.S.C. § 148). It is a statewide coordinated safety plan that provides a comprehensive framework for reducing highway fatalities and serious injuries on all public roads. A SHSP identifies a state's key safety needs and guides investment decisions towards strategies and countermeasure with the most potential to save lives and prevent injuries.

The FAST Act provides guidance for developing the SHSP and requires consultation with safety stakeholders, such as:

- Highway safety representatives of the Governor of the State
- Metropolitan Planning Organizations (MPOs)
- Representatives of major modes of transportation
- State and local traffic enforcement officials
- Rail-highway grade-crossing safety representatives
- Motor carrier safety program reprsentatives
- Motor vehicle administration agencies
- City and county transportation officials
- State representatives of non-motorized users
- Other major federal, state, tribal, and local safety stakeholders

The SHSP is aligned with other statewide planning efforts and provides guidance for statewide traffic safety plans and local plans, and guides the investment of funds for three federally-funded programs:

- HSIP managed by the Nevada Department of Transportation (NDOT)
- Highway Safety Plan (HSP) managed by the Office of Traffic Safety (OTS)
- Commercial Vehicle Safety Plan (CVSP) managed by the Nevada Highway Patrol (NHP)



Page 1 02/19/2021

Background

Nevada's efforts to develop the SHSP began in 2004 when NDOT Traffic Safety Engineering formed a Technical Working Group (TWG) of traffic safety representatives that initiated coordination and later supported the activities of NECTS. The role of NECTS, as established in 2005, is to provide guidance, approve the SHSP (and subsequent updates), and help gain consensus at a high level among local, state, tribal, and federal agencies that improve traffic safety.

Nevada's first five Critical Emphasis Areas (CEAs) were identified at the 2004 Traffic Safety Summit—the first to be held in Nevada. The original CEAs included: making walking and street crossing safer (**Pedestrians**), reducing impaired driving (**Impaired Driving**), increasing seat belt usage (Seat Belts, now called **Occupant Protection**), improving the design and operation of highway intersections (**Intersections**); and keeping vehicles on the roadway (**Lane Departures**).

In 2010, Nevada adopted a statewide goal of Zero Fatalities, consistent with the national Toward Zero Deaths strategy sponsored by the Federal Highway Administration (FHWA), the National Highway Traffic Safety Administration (NHTSA), the American Association of State Highway and Transportation Officials (AASHTO), and the Governors Highway Safety Association (GHSA). In 2010, as an interim goal to reach Zero Fatalities, Nevada established the goal of reducing fatalities by year 2030 to half of those recorded in 2008.

In 2014, the SHSP was amended to incorporate special user groups including bicyclists, pedestrians, motorcyclists, younger road users, and older road users into all CEAs and to incorporate Emergency Responders and Traffic Incident Management into the "E" for Emergency Medical Services. The NECTS also approved the sixth CEA—Motorcycles—due to the increasing trends in motorcycle fatalities and serious injuries both in Nevada and on a national level.

The NECTS approved the addition of Young Drivers as the seventh CEA in 2017. The Young Drivers Task Force held their first meeting at the 2017 Nevada Traffic Safety Summit in Reno to establish strategies and action steps to reduce fatalities and serious injuries involving young drivers (ages 16-20).

2021-2025 SHSP Update Overview

The SHSP is administered by NDOT in primary coordination with the Nevada Department of Public Safety, Office of Traffic Safety (DPS-OTS). NECTS provides direction and oversight of the specific elements for the development and implementation of the SHSP.

SHSP Guiding Principles

The 2021-2025 SHSP adopts four guiding principles that align with the Road to Zero Coalition's initiatives to achieve the goal of zero roadway fatalities by the year 2050 (The Road to Zero: A Vision for Achieving Zero Roadway Deaths by 2050, Rand Corporation, 2018).

Incorp

Incorporate Equity

The SHSP will incorporate equity in all aspects of the plan, including processes, strategies, and outcomes of the SHSP to serve all, but particularly vulnerable and traditionally under-served populations.

Implementation of the SHSP will include development of a data analysis process that incorporates equity among all road users. Existing action steps will be evaluated with the following questions during the life of the SHSP:

- Which groups will benefit from implementation of this action step?
- Who may be negatively impacted by implementation of this action step?
- Was demographic and socioeconomic data considered in the development of the action step?
- Who was involved in developing the action step?



Page 2 02/19/2021

The evaluation process for how equity is measured in action steps, identified projects, adoption of standards and other decisions will be documented.

Prioritize Safe Speed

Speeding accounts for nearly one-third of all traffic fatalities in Nevada; however, we know that speed is a contributing factor to all fatal and serious injury crashes. Speeding and excessive speed endangers not only the life of the driver, but all the people on the road around them. Implementation of all action steps should factor in speed and acknowledge that reducing speed can lessen the severity of impact on the humans involved in three ways: reducing impact forces, providing additional time for drivers to stop, and improving visibility.

Double Down on What Works

The key to the success of the SHSP is to include strategies and action steps that are data-driven and evidence-based, including proven safety countermeasures that are highly effective in reducing fatalities and serious injuries. These include the Federal Highway Administration's (FHWA) Proven Safety Countermeasures as well as the National Highway Traffic Safety Administration's (NHTSA) Countermeasures That Work and the Crash Modification Factors (CMF) Clearinghouse. This priority also includes a strong emphasis on improving data availability, quality, and analysis tools.

Accelerate Advanced Technology

New emerging technologies have applications that impact the vehicles, drivers and passengers, and the ways all road users interact and communicate with the built environment and each other. The SHSP embraces emerging technologies by establishing partnerships with technology providers, health and safety groups, manufacturers, and government partners to prioritize safety.

Structuring the SHSP

For the 2021-2025 SHSP, four Key Areas were selected to prioritize collaboration among the 6 "Es" for SHSP implementation: **Safer Roads**, **Vulnerable Road Users**, **Safer Drivers and Passengers**, and **Impaired Driving Prevention**. The plan established task forces for each Key Area, which will be responsible for collaboration and monitoring progress on the implementation of strategies and action steps.



Safer Roads



Vulnerable Road Users



Safer Drivers and Passengers



Impaired Driving Prevention

As shown in the **SHSP Organizational Structure** on the next page, the SHSP established 13 emphasis areas organized under the four Key Areas, including nine CEAs that have developed strategies and action steps for implementation. Selection of the nine CEAs for the 2021-2025 SHSP Update was a data-driven process and includes emphasis areas with the highest number of fatalities and serious injuries over the previous five years (2014-2018). Seven CEAs are consistent with the previous SHSP (Impaired Driving, Intersections, Lane Departures, Motorcycles, Occupant Protection, Pedestrians and Young Drivers) and there are two new CEAs for the 2021-2025 Update: Safe Speed and Older Drivers.

In addition to the Key Area Task Forces responsible for implementing the plan, the Traffic Records Coordination Committee (TRCC) focuses on improving the available data to strengthen the ability of safety practitioners to strategically select and implement strategies. Communications and outreach through the Zero Fatalities program supports the SHSP implementation. The structure and roles and responsibilities for these groups are provided in the following sections.

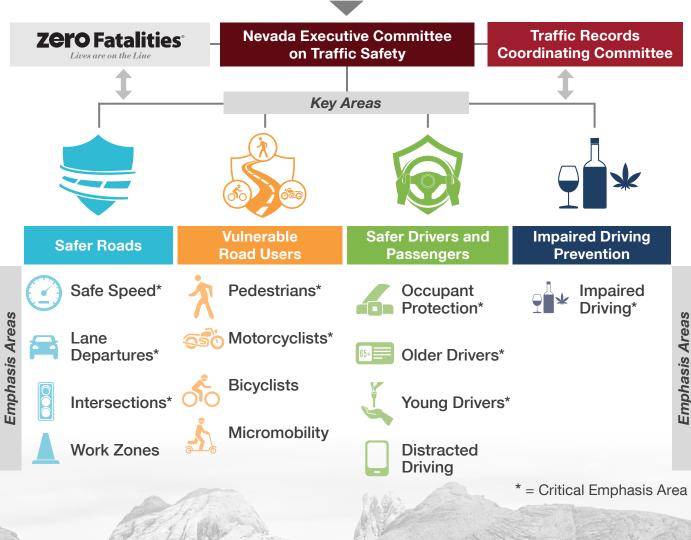


Page 3 02/19/2021

SHSP Organizational Structure

Figure 1. SHSP Organizational Structure





Zero Fatalities

Roles and Responsibilities

To keep the SHSP process moving forward, Nevada established roles and responsibilities for each of the entities involved in the plan. A description of those roles is shown below.

Nevada Executive Committee on Traffic Safety

- Establishes SHSP policies and procedures, reviews progress, provides advice and guidance, addresses challenges, and removes barriers
- Provides support and assistance to specific SHSP strategies as appropriate
- Consults the SHSP when updating agency or organization plans and programs and shares progress on safety initiatives

Key Area Task Force Leadership





Sulnerable Road Users



Safer Drivers and Passengers | Impaired Driving Prevention



- Ensures team membership is multidisciplinary and includes representatives from at least three of the 6 "Es" of safety and follows up with SHSP implementation team if assistance is needed on team composition
- Schedules group meetings, notifies participants, and prepares meeting reports including action item implementation progress/status after each meeting
- Tracks progress on implementation of the action plan with assistance from various action step leaders and notifies the state SHSP coordinators if assistance is needed to implement any action step
- Prepares quarterly progress reports describing what progress has been made on each of the action steps
- Reviews the strategies and determines if any should be revised or deleted, identifies new strategies, and develops action plans
- Applies the SHSP to help implement a task or project

Traffic Records Coordinating Committee Leadership

- Facilitates the Nevada TRCC and supports the continued improvement of data in the Nevada Citation and Accident Tracking System (NCATS) and/or other state safety databases
- Supports efforts to ensure that NCATS meets the standards of the Model Minimum Uniform Crash Criteria (MMUCC)
- Assists with the distribution of NCATS data to government and non-government agencies



SHSP Update Process

The 2021-2025 SHSP Update was developed through a collaborative, data-driven process that identified goals for the four Key Areas and outlined effective strategies and action steps for the nine CEAs. The **SHSP Action Plan**, included as a supplementary document, expands on the CEA strategies to include detailed, trackable action steps. Safety stakeholders from public- and private-sector agencies and organizations representing the 6 "Es" of safety work together to create and implement the plan under the direction of NECTS.

Stakeholder Involvement

In Summer 2020, safety stakeholders throughout Nevada were surveyed to better understand the perspectives of those involved in the SHSP process. Responses were received from 77 safety partners, covering all 6 "Es" of traffic safety. The survey results showed that the SHSP's greatest strengths included its interagency cooperation and collaboration, as well as the data-driven nature of the process. Some of the challenges noted by survey respondents included resources, the legislative process, and the size and geographic diversity of the state. When asked to discuss possible improvements to the process, many ideas were expressed, but a common response was increased involvement of local partners and local agencies. Along with an emphasis on accountability and measurable action steps, stakeholders also indicated that an even greater focus on data-driven activities would be helpful in reducing fatal and serious injury crashes.

Moving forward, stakeholders indicated that their highest priorities for the 2021-2025 SHSP are data-driven implementation and resource allocation; increased coordination between federal, state, local, and tribal entities; and coordination with other safety initiatives such as Vision Zero. Nevada safety stakeholders are eager to work together to build partnerships that will bring Nevada closer to its goal of Zero Fatalities.

Development of the strategies and action steps for the new SHSP was a year-long effort that involved input from Chairs, Vice Chairs, Action Step Leaders, and all members of the Task Forces. Task Forces reviewed crash data, successes, and challenges from the 2016-2020 SHSP to determine new strategies and action steps during the summer of 2020. The draft SHSP was presented to the NECTS in December 2020. The final document was approved by the NECTS and provided to NDOT and FHWA for approval in January 2021. The project timeline for the 2021-2025 SHSP is shown in **Figure 2**.

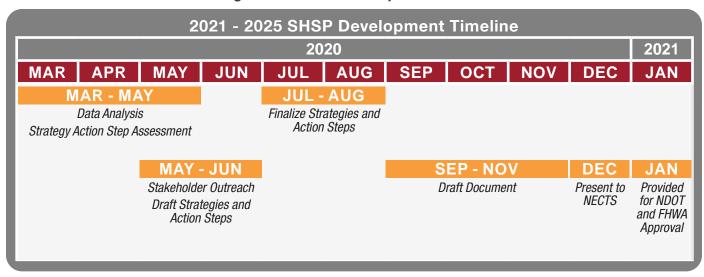


Figure 2. SHSP Development Timeline



Page 6 02/19/2021

Emphasis Areas

To identify commonalities, causes, and driver factors, statewide traffic-related fatalities, and serious injuries from the most recent five-year period (2014-2018) were combined for each of the emphasis areas. As shown in **Figure 3**, the top categories of combined fatalities and serious injuries for the five-year period include the seven CEAs from the 2016-2020 SHSP (Impaired Driving, Intersections, Lane Departures, Motorcycles, Occupant Protection, Pedestrians, and Young Drivers), and two new CEAs, Older Drivers, and Safe Speed. Distracted Driving, Work Zones, Bicyclists, and Micromobility fatalities and serious injuries are lower on the chart; however, these emphasis areas will be included in the plan and monitored by the Key Area Task Forces.

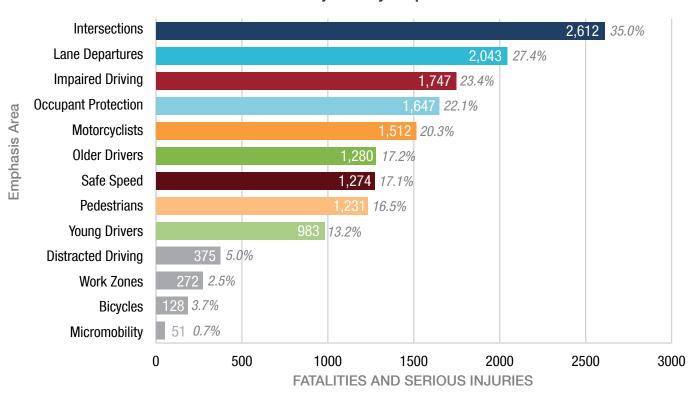


Figure 3. Total Fatalities and Serious Injuries and Percent of Total Fatalities and Serious Injuries by Emphasis Area*

*Note: A crash may be categorized in more than one emphasis area (e.g., an impaired motorcyclist at an intersection.) Therefore, the values exceed the total number of fatalities and serious injuries and the sum of the percentages is more than 100%.



Page 7 02/19/2021

2016-2020 SHSP Highlights

Accomplishments of the 2016-2020 SHSP were reviewed to celebrate the successes of the plan and to identify areas to build upon for the 2021-2025 SHSP. The following list includes a summary of the actions and effective efforts that were completed during the 2016-2020 SHSP Implementation. The SHSP team and partners are proud of the accomplishments of the traffic safety community in Nevada.

Coordinated outreach efforts of partners and local agencies to present a consistent Zero Fatalities message

Conducted numerous outreach events to promote Zero Fatalities, including the following campaigns:

- Look Twice
- Don't Kill a Dream
- Worst Year Ever
- Lives are on the Line

Conducted numerous annual Joining Forces and High-Visibility Enforcement Events

Conducted Advanced Roadside Impaired Driving Enforcement (ARIDE), Drug Recognition Expert (DRE), and Standard Field Sobriety Test (SFST) training for law enforcement officers

Developed an interactive online crash data tool

Hosted the annual Nevada Traffic Safety Summit for over 200 safety professionals in Las Vegas (2016, 2018) and Reno (2017, 2019), and a virtual Traffic Safety Summit in 2020

Formed the multi-agency Driving Under the Influence (DUI) Strike Team in Southern Nevada, which has made over 2,200 DUI arrests

Formalized Vision Zero Truckee Meadows and adopted a Vision Zero Action Plan for Northern Nevada

Formalized the Young Drivers Task Force, with consistent participation from all "Es" of traffic safety

Completed numerous NDOT Road Safety Assessments (RSAs) and Safety Management Plans (SMPs) statewide

Adopted the NDOT Complete Streets Policy in 2017

Implemented Intersection Control Evaluations (ICE) for intersection analysis

Updated the NDOT Access Management System and Standards document in 2017

Passed a law for Nevada 24/7 Sobriety and Drug Monitoring Program, modeled after Washoe County's "Sober 24" program

Passed laws to require registration of mopeds and riders to wear a helmet

Utilized WayCare technology to predict traffic incidents and decrease response times on Southern Nevada roadways

Developed Task Force "Legislative Advisory Opinions," recommendations on traffic-safety-related legislation





Page 8 02/19/2021

SHSP Goals and Performance Measures

The overall goal for Nevada is Zero Fatalities by 2050. There are five performance measures that NDOT is required to submit to FHWA annually and there performance measures are also be used for the SHSP:

- 1 Number of fatalities
- 4 Serious injury rate
- 2 Number of serious injuries
- 5 Non-motorized fatalities and serious injuries

3 Fatality rate

The performance measure targets were set to meet Nevada's goal of Zero Fatalities by 2050. The current trend was projected through 2021 and then a straight-line reduction from the 2021 projection was calculated to meet the goal. The following figures show the values used to set the 2025 targets for each performance measure.

Performance Measure 1: Number of Fatalities

The 2025 Target for Performance Measure 1 is 258.8 fatalities.

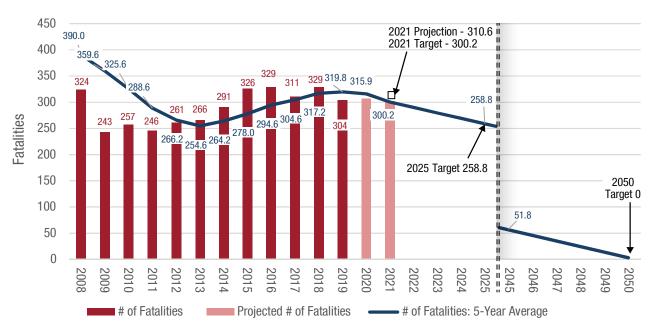


Figure 4. Nevada Fatalities, Five-Year Average and 2025 Target

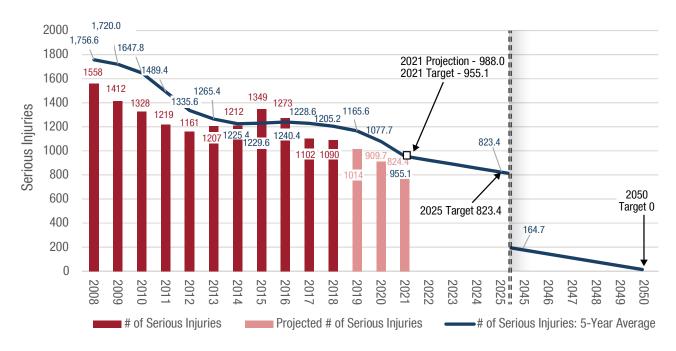
Zero Fatalities[®]

Page 9 02/19/2021

Performance Measure 2: Number of Serious Injuries

The 2025 Target for Performance Measure 2 is 823.4 serious injuries.

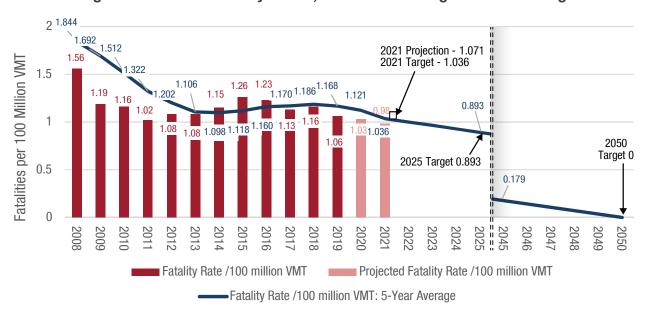
Figure 5. Nevada Serious Injuries, Five-Year Average and 2025 Target



Performance Measure 3: Fatality Rate

The 2025 Target for Performance Measure 3 is 0.893 per 100 Million Vehicle Miles Traveled (VMT).

Figure 6. Nevada Fatality Rates, Five-Year Average and 2025 Target





Page 10 02/19/2021

Performance Measure 4: Serious Injury Rate

The 2025 Target for Performance Measure 4 is 2.792 per 100 Million VMT.

Serious Injuries per 100 Million VMT 8.00 2021 Projection - 3.351 2021 Target - 3.239 6.75 7.00 5.683 6.141 6.00 5.285 **5.38** 4.974 6.00 5.45 4.779 4.477 - 4.248 5.00 .76 2025 Target 2.792 5.12 5.162 3 757 4.00 4.12 2050 3.00 3.61 3.239 Target 0 2.00 2.792 0.558 1.00 0.00 2022 2023 2024 202 2020 Serious Injury Rate / 100 Million VMT Projected Serious Injury Rate / 100 Million VMT Serious Injury Rate / 100 Million VMT: 5-Year Average

Figure 7. Nevada Serious Injury Rates, Five-Year Average and 2025 Target

Performance Measure 5: Non-Motorized Fatalities and Serious Injuries

The 2025 Target for Performance Measure 5 is 233.1 non-motorized fatalities and serious injuries.

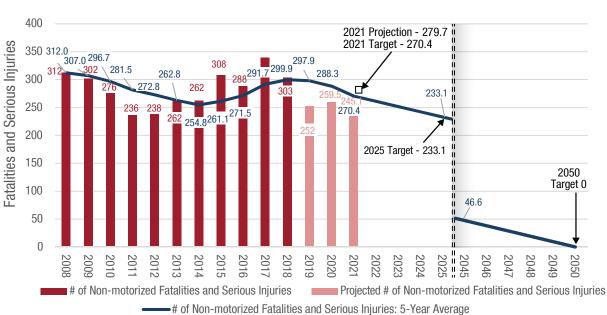


Figure 8. Nevada Non-Motorized Fatalities and Serious Injuries, Five-Year Average and 2025 Target

of Nort Hiotorized Fatalities and Schods Injuries. 5 Teal Average



Page 11 02/19/2021

Nevada Traffic Fatalities Compared to Other Western States and National Average

The following two tables show fatality data for Nevada, three neighboring states, and the national average for comparison.

Figure 9. 2018 State Fatalities and Fatality Rates Comparison*

				Fatality Rates per		
State	Traffic Fatalities	Population (thousands)	VMT (Millions)	100,000 Population	100 Million VMT	
Arizona	1,010	7,171,646	66,145	14.08	1.53	
Idaho	231	1,754,208	17,709	13.17	1.30	
Nevada	330	3,034,392	28,319	10.88	1.16	
Utah	260	3,161,105	32,069	8.22	0.81	
National	36,560	327,167,434	3,240,327	11.17	1.13	

^{*}Source: NHTSA 2014-2018 Data Summary

Figure 10. 2018 Percent of Fatalities by Person Type State Comparison*

State	Percent of Fatalities by Person Type					
Sta	Drivers	Passengers	Motorcycles	Pedestrians	Bicyclists	Other
Arizona	54.26%	49.60%	14.75%	23.47%	2.28%	0.89%
Idaho	71.43%	64.50%	16.45%	7.36%	0.87%	9.09%
Nevada	59.39%	52.12%	17.88%	23.94%	2.42%	1.52%
Utah	63.85%	60.00%	18.08%	13.85%	1.15%	0.77%
National	62.71%	17.03%	13.38%	17.19%	2.34%	0.15%



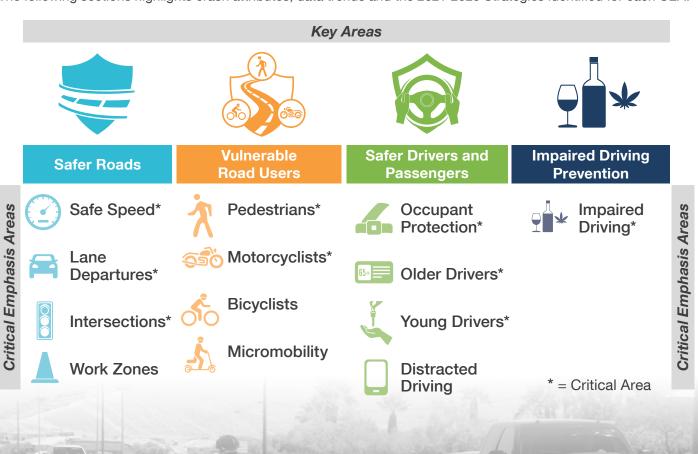
Key Areas

For the 2021-2025 SHSP Update, the 13 emphasis areas are organized under four Key Areas. The Key Areas are intended to promote collaboration between the emphasis areas to strengthen SHSP implementation. The four Key Areas include **Safer Roads**, **Vulnerable Road Users**, **Safer Drivers and Passengers**, and **Impaired Driving Prevention**. Task Force Chairs will lead quarterly meetings with members of each task force.

As shown in the figure below, nine of the 13 emphasis areas are CEAs with specific strategies and action steps. The nine CEAs include Safe Speed, Lane Departures, Intersections, Pedestrians, Motorcyclists, Occupant Protection, Older Drivers, Young Drivers, and Impaired Driving. Based on the most recently available crash data, focusing on the nine CEAs could have the greatest potential for reducing fatalities and serious injuries as these emphasis areas historically have higher numbers of fatalities and serious injuries.

The CEAs have a set of strategies and action steps for implementation for the five-year SHSP. Task forces will be led by a Vice Chair for each CEA and will include action step leaders and other active members. The Key Area Task Forces will track and discuss any actions for the additional emphasis areas (Work Zones, Bicyclists, Micromobility, and Distracted Driving).

The following sections highlights crash attributes, data trends and the 2021-2025 Strategies identified for each CEA.



Safer Roads





Safe Speed



Lane Departures



Intersections



Work Zones

The Safer Roads Key Area includes emphasis areas relative to the built environment. The Safer Roads Key Area will implement actions to reduce fatalities and serious injuries due to Speed, Lane Departures, Intersections, and Work Zones.





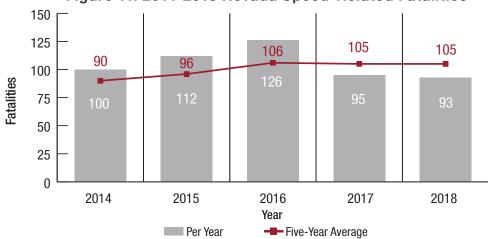


Safe Speed

Speed-related fatalities have dropped from a high of 126 in 2016 to a low of 93 in 2018. Serious injuries have decreased from a high of 174 in 2015 to a low of 106 in 2018. However, speed is a major contributing factor to driver, pedestrian, and bicyclist fatalities, and accounts for one-third of all traffic fatalities in Nevada. It is known that speed is a contributing factor in all fatal and serious injury crashes.

As one of Nevada's new CEAs for the 2021-2025 SHSP, a Safe Speed Task Force will be formed to implement and track new strategies and action steps that focus on eliminating fatalities and serious injuries related to vehicles exceeding safe speed. Between 2014 and 2018, the five-year average for speed-related crashes increased 3.9% annually for fatalities and decreased 0.1% annually for serious injuries.

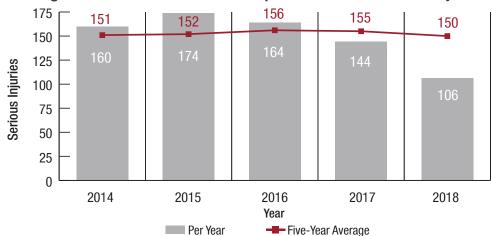
Figure 11. 2014-2018 Nevada Speed-Related Fatalities



Average Annual **Percent Change of Five-Year Average** (2014-2018)



Figure 12. 2014-2018 Nevada Speed-Related Serious Injuries



Zero Fatalities

Page 15 02/19/2021

Safer Roads





Safe Speed

Most Common Fatality and Serious Injury Crash Attributes

- Impairment (60%), Lane Departures (48%), and Occupant Protection (32%) were also common factors in speed-related fatal crashes (see below)
- Male at-fault drivers, age 21–35
- Male fatalities and serious injuries: age 21–35
- Day of week: Saturday
- Speed-related crashes occured most often during daylight (51%) and in dark but lighted locations (24%)
- Single vehicle, rear-end, and angle crashes are the most common crash types

Performance Measures

- Number of speed-related fatalities
- Number of speed-related serious injuries

Strategies

- 1. Advance the use of infrastructure techniques and technology to manage target speeds and set speed limits
- 2. Utilize high-visibility speeding enforcement targeted at high-risk locations to reduce crash severity
- 3. Improve effectiveness of education and outreach about safe speed and aggressive driving

Percent of Other CEAs in Speed-Related Fatal Crashes



60%





32%



26%

31%



15%



Older Drivers



13%

Pedestrians 7%







Lane Departures

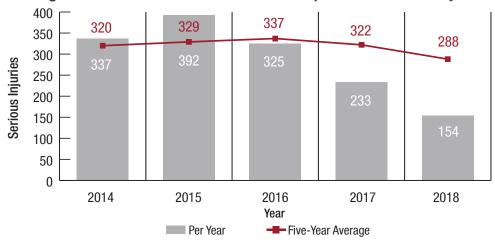
Lane departure crashes are non-intersection crashes in which a vehicle crosses an edgeline or lane line and may leave the roadway or cross the centerline. Although lane departure countermeasures have historically been focused on High-Risk Rural Roads (HRRR), the focus of the Lane Departure Task Force has been expanded to include urban and suburban areas. Lane departure fatalities have dropped from a high of 146 in 2015 to a low of 112 in 2018. Serious injuries have decreased from a high of 392 in 2015 to a low of 154 in 2018. Between 2014 and 2018, the five-year average for lane departures stayed the same for fatalities and decreased 2.2% for serious injuries. The Lane Departure Task Force has developed new strategies and action steps to continue progress in eliminating fatalities and serious injuries occurring from lane departure crashes.

Figure 13. 2014-2018 Nevada Lane Departure Fatalities 150 124 123 122 120 120 125 100 Fatalities 75 50 25 0 2014 2015 2016 2017 2018 Per Year Five-Year Average

Average Annual Percent Change of Five-Year Average (2014-2018)

0%





2.2%

Zero Fatalities

Page 17 02/19/2021

Safer Roads





Lane Departures

Most Common Fatality and Serious Injury Crash Attributes

- Impairment (56%), Occupant Protection (41%), and Speed-Related (31%) are all common factors in Lane Departure fatal crashes (see below)
- Male at-fault drivers, age 26–55
- Day of week: Saturday
- Lane departure crashes occured most often during daylight (54%) and in dark unlighted locations (18%)
- Single-vehicle, angle, and head-on crashes are the most common crash types

Performance Measures

- Number of lane departure fatalities
- Number of lane departure serious injuries

Strategies

- 1. Apply proven engineering countermeasures and roadway improvements to keep vehicles in their lanes
- 2. Increase survivability in the event of a lane departure through engineering and emergency response

Percent of Other CEAs in Lane Departures Fatal Crashes



56%



Occupant Protection 41%











Pedestrians

8% 4%

31%

18% **17%** 11%



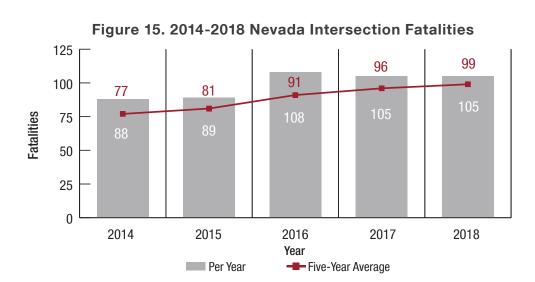
02/19/2021





Intersections

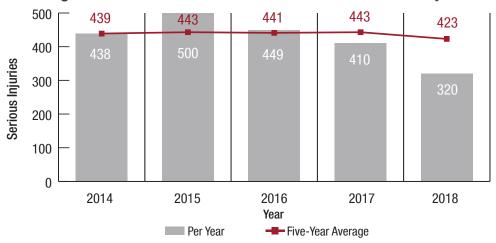
With different crossing and entering movements by both drivers and pedestrians, an intersection is one of the most complex traffic situations that motorists encounter. Intersection fatalities have increased from a low of 88 in 2014 to a high of 105 in 2018. Serious injuries have decreased from a high of 500 in 2015 to a low of 320 in 2018. Between 2014 and 2018, the five-year average for intersection crashes increased an average of 6.7% annually for fatalities and decreased an average of 0.7% annually for serious injuries. The Intersection Safety Task Force has developed new strategies and action steps to continue progress in eliminating fatalities and serious injuries at intersections.



Average Annual Percent Change of Five-Year Average (2014-2018)

6.7%

Figure 16. 2014-2018 Nevada Intersection Serious Injuries



0.7%

Zero Fatalities[®]

Page 19 02/19/2021

Safer Roads





Intersections

Most Common Fatality and Serious Injury Crash Attributes

- Intersection fatal crashes also included Impairment (46%), Speed-Related (31%), and Pedestrians (28%) (see below)
- Male at-fault drivers, age 21–45
- Days of week: Friday and Saturday
- Intersection crashes occured most often during daylight (61%) and in dark but lighted locations (25%)
- Angle, single-vehicle, and rear-end crashes are the most common crash types

Performance Measures

- Number of intersection fatalities
- Number of intersection serious injuries

Strategies

- Screen the roadway network for high-risk intersections and apply effective and/or innovative countermeasures
- 2. Screen the roadway network for high-risk segments and apply effective and/or innovative countermeasures to improve intersection safety
- 3. Conduct outreach and education initiatives for target audiences that focus on eliminating high-risk behaviors at intersections

Percentage of Other CEAs in Intersection Fatal Crashes



Impaired Driving 46%



Safe Speed 31%



Pedestrian

28%

1



25%

550

19%



Protection



Drivers



Lane
Departures
___10%



Page 20

02/19/2021





Pedestrians



Motorcyclists



Bicyclists



Micromobility

The Vulnerable Road Users Key Area includes emphasis areas related to non-motorized road users, such as pedestrians, bicyclists, those on scooters and other forms of micromobility, and motorcyclists. The Vulnerable Road Users Key Area includes the CEA Task Forces for Pedestrians and Motorcyclists, which have specific strategies presented on the following pages. Future actions related to bicyclists and micromobility safety will be addressed by the task force as needed.

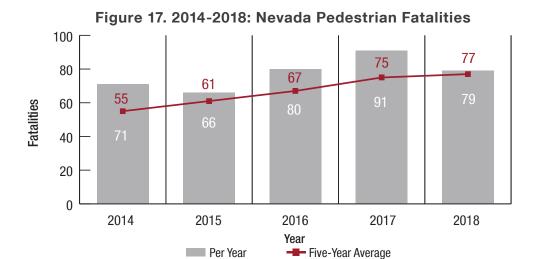






Pedestrians

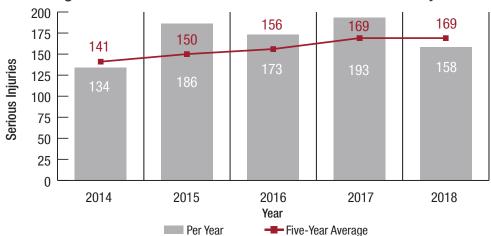
NHTSA estimates that in 2018, 6,283 pedestrians were killed in traffic crashes across the United States. In Nevada, there were 79 pedestrian fatalities and 158 serious injuries in 2018. Most pedestrian fatalities occurred mid-block on a roadway, and a large percent occurred in marked crosswalks. The greatest proportion of pedestrian serious injuries occurred at intersections. Between 2014 and 2018, the five-year average for pedestrian fatalities increased an average of 8.9% annually and the serious injuries five-year average increased an average of 4.8% annually. To address the issue, the Pedestrian Safety Task Force has developed new strategies and action steps for eliminating fatalities and serious injuries.



Average Annual Percent Change of Five-Year Average (2014-2018)



Figure 18. 2014-2018 Nevada Pedestrian Serious Injuries





Page 22 02/19/2021





Pedestrians

Most Common Fatality and Serious Injury Crash Attributes

- Intersections (34%), Impairment (23%), and Older Drivers (13%) are most common among Pedestrian fatal crashes (see below)
- Male at-fault drivers, age 21–45
- Male pedestrian serious injuries, age 26–55
- Male pedestrian fatalities, age 51–65
- Cashes occurred most often on weekdays (Monday through Friday)
- Time of day: noon to midnight
- Pedestrian crashes occurred most often at night, in dark conditions (76%) and dark with light conditions (62%)

Performance Measures

- Number of pedestrian fatalities
- Number of pedestrian serious injuries

Strategies

- 1. Screen the roadway network for high-risk signalized intersections and apply effective and/or innovative countermeasures for pedestrians
- 2. Screen the roadway network for high-risk segments and apply effective and/or innovative countermeasures for pedestrians
- 3. Conduct outreach and education initiatives for target audiences that focus on eliminating high-risk pedestrian behaviors

Percentage of Other CEAs in Pedestrian Fatal Crashes



0%

6%



34%

23%

Older Drivers

13%

Safe Speed

9%

6%







Motorcyclists

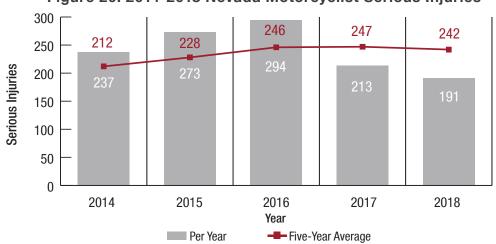
Motorcyclist fatalities have dropped from a high of 74 in 2016 to a low of 58 in 2018. Serious injuries have decreased from a high of 294 in 2016 to a low of 191 in 2018. However, the five-year average for motorcyclists increased an average of 5.1% annually for fatalities and increased an average of 3.3% annually for serious injuries between 2014 and 2018. The Motorcycle Safety Task Force has developed new strategies and action steps to continue progress in eliminating motorcyclist fatalities and serious injuries.

Figure 19. 2014-2018 Nevada Motorcyclist Fatalities 80 70 61 61 59 52 60 51 50 40 30 20 10 0 2014 2015 2016 2017 2018 Per Year Five-Year Average

Average Annual Percent Change of Five-Year Average (2014-2018)

5.1%

Figure 20. 2014-2018 Nevada Motorcyclist Serious Injuries



3.3%



Page 24 02/19/2021





Motorcyclists

Most Common Fatality and Serious Injury Crash Attributes

- Impairment (59%), Speed-related (45%), and Lane Departures (37%) are common in Motorcyclist fatal crashes (see below)
- Male at-fault drivers, age 21-55
- Male motorcyclist fatalities and serious injuries, age 21-25
- Days of week: Saturday and Sunday
- Motorcycle crashes occured most often during daylight (64%) and in dark but lighted locations (20%)
- Angle, single vehicle, and rear-end crashes are the most common crash types
- Going straight or turning left are the most common vehicle/motorcycle actions/maneuvers that caused crashes

Performance Measures

- Number of motorcyclist fatalities
- Number of motorcyclist serious injuries

Strategies

- 1. Conduct public education programs for high-risk motorcyclist behaviors (speeding, aggressive, reckless, and impaired riding) and for motorists to yield to motorcycles
- 2. Increase the percentage of motorcyclists that are trained and licensed
- 3. Integrate the unique characteristics of motorcycles and rider vulnerability into motorcycle-friendly roadway design, traffic control, construction, and maintenance policies and practices
- 4. Increase crash survivability through education and training

Percentage of Other CEAs in Motorcycle Fatal Crashes







Safe Speed



Lane
Departures

37%







33% 18%



Young Drivers 12%



Pedestrians

1%





Page 25

02/19/2021







Older Drivers





The Safer Drivers and Passengers Key Area includes CEA Task Forces for Occupant Protection, Older Drivers, and Younger Drivers, which have specific strategies presented on the following pages. Future actions related to Distracted Driving will be addressed by the task force as needed.

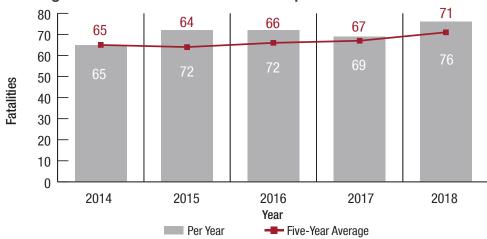




Occupant Protection

Unrestrained occupant fatalities increased from a low of 65 in 2014 to a high of 76 in 2018. Serious injuries have decreased from a high of 331 in 2016 to a low of 161 in 2018. Between 2014 an 2018, the five-year average for unrestrained motor vehicle occupants increased an average of 2.1% annually for fatalities and increased an average of 1.9% annually for serious injuries. Although the restraint usage rate has reached an all-time high both nationally and in Nevada, reducing the number of unrestrained fatalities and serious injuries continues to be a top priority. The Occupant Protection Task Force has developed new strategies and action steps to continue progress in eliminating unrestrained vehicle occupant fatalities and serious injuries.

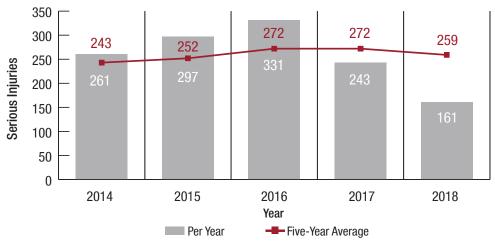
Figure 21. 2014-2018 Nevada Occupant Protection Fatalities



Average Annual Percent Change of Five-Year Average (2014-2018)

2.1%

Figure 22. 2014-2018 Nevada Occupant Protection Serious Injuries





Page 27 02/19/2021





Occupant Protection

Most Common Fatality and Serious Injury Crash Attributes

- Occupant Protection fatal crashes commonly included Lane Departures (67%), Impairment (60%), and Speed-Related (44%) (see below)
- Unrestrained male motor vehicle occupant fatalities, age 21-35
- Male at-fault drivers, age 21–45
- Commonly occurred on Friday, Saturday, and Sunday
- Single-vehicle, angle, and rear-end crashes are the most common crash types

Performance Measures

- Number of occupant protection fatalities
- Number of occupant protection serious injuries

Strategies

- 1. Improve occupant protection use laws
- 2. Maximize proper restraint use by coordinating training and checkpoints with enforcement and the medical community
- 3. Create awareness of proper restraint use with public outreach activities
- 4. Analyze data and prepare documents to support occupant protection use

Percentage of Occupant Protection-Related Fatal Crashes





60%



21%











44%

14% 13%

N/A

N/A



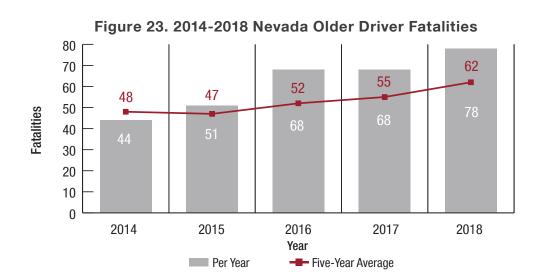
02/19/2021





Older Drivers

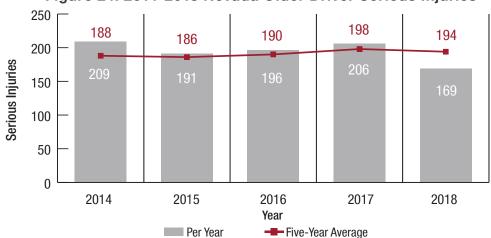
With the aging population in Nevada and a rise in fatalities, Older Drivers (age over 65) is a new CEA for the SHSP. Older driver fatalities have steadily increased from a low of 44 in 2014 to a high of 78 in 2018. Serious injuries have decreased from a high of 209 in 2014 to a low of 169 in 2018. Between 2014 and 2018, the five-year average for older drivers increased an average of 6.9% annually for fatalities and increased an average of 1.3% annually for serious injuries. An Older Drivers Task Force will be formed to take action on new strategies and action steps to help progress toward eliminating fatalities and serious injuries from crashes involving older drivers.



Average Annual Percent Change of Five-Year Average (2014-2018)

6.9%

Figure 24. 2014-2018 Nevada Older Driver Serious Injuries





Page 29 02/19/2021





Older Drivers

Most Common Fatality and Serious Injury Crash Attributes

- Intersections (40%), Impairment (34%), and Lane Departures (33%) are common CEAs among Older Drivers fatal crashes (see below)
- Male at-fault drivers
- Male fatality or seriously injured
- Older driver crashes occured most often during daylight (74%) and in dark but lighted locations (13%)
- Angle, single-vehicle, and rear-end crashes are the most common crash types

Performance Measures

- Number of older driver fatalities
- Number of older driver serious injuries

Strategies

- 1. Promote and educate older drivers and family members on comprehensive driving evaluations and encourage early planning to transition from driving
- 2. Incorporate roadway design features to meet the mobility needs of older drivers
- 3. Expand transportation choices to improve the mobility options for older drivers

Percentage of Other CEAs in Older Driver Fatal Crashes



40%



Driving



33%



21%



Pedestrians

17%

17%





17% 7%

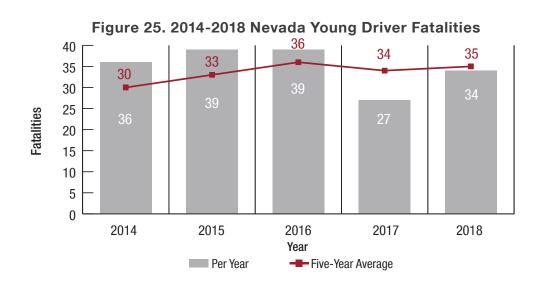






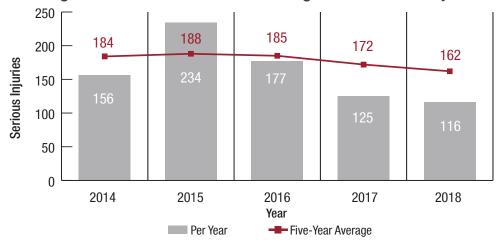
Young Drivers

Young driver (age 16-20) fatalities have dropped from a high of 39 in 2015 to a low of 34 in 2018. Serious injuries decreased from a high of 234 in 2015 to a low of 116 in 2018. Between 2014 and 2018, the five-year average for young drivers increased an average of 3.5% annually for fatalities and decreased an average of 3.4% annually for serious injuries. The Young Drivers Task Force has developed new strategies and action steps to continue progress in eliminating fatalities and serious injuries involving young drivers.



Average Annual Percent Change of Five-Year Average (2014-2018)

Figure 26. 2014-2018 Nevada Young Driver Serious Injuries



Zero Fatalities

Page 31 02/19/2021





Young Drivers

Most Common Fatality and Serious Injury Crash Attributes

- Impairment (48%), Speed-related (43%), and Lane Departures (37%) are common among Young Drivers fatal crashes (see below)
- Males (age 16-20) most commonly at-fault
- 57% during daylight and 23% in dark, but lighted locations
- Single-vehicle, angle, and head-on crashes are the most common crash types

Performance Measures

- Number of young driver fatalities
- Number of young driver serious injuries

Strategies

- 1. Improve driver licensing for young drivers in Nevada to meet or exceed national Graduated Driver Licensing (GDL) best practices
- 2. Improve driver education for young drivers in Nevada
- 3. Support traffic law enforcement of young driver-related laws
- 4. Conduct targeted young driver outreach to young drivers and their parents/guardians

Percentage of Other CEAs in Young Driver Fatal Crashes



48%





37%



37%



27%





Older Drivers

13%

11%

02/19/2021



18%

Impaired Driving Prevention





The Impaired Driving Prevention Key Area will track strategies and action steps directly related to the prevention of fatalities and serious injuries due to alcohol- and drug-impaired driving.



Impaired Driving Prevention

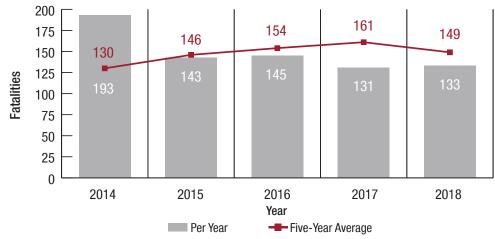




Impaired Driving

Impaired driving-related fatalities dropped from a high of 193 in 2014 to a low of 133 in 2018. Serious injuries have decreased from a high of 246 in 2015 to a low of 164 in 2018. Between 2014 and 2018, the five-year average for impaired driving-related crashes increased an average of 3.5% annually for fatalities and decreased an average of 1.3% annually for serious injuries. Impaired driving crashes accounted for 47% of serious injuries and 17% of all fatalities. The Impaired Driving Prevention Task Force has developed new strategies and action steps to continue progress in eliminating fatalities and serious injuries resulting from alcohol-impaired and drug-impaired drivers.

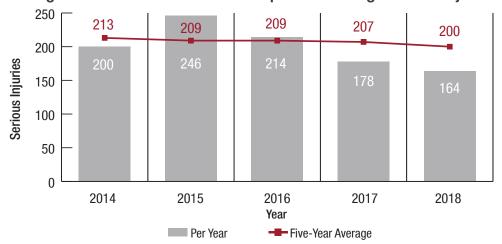
Figure 27. 2014-2018 Nevada Impaired Driving Fatalities



Average Annual Percent Change of Five-Year Average (2014-2018)



Figure 28. 2014-2018 Nevada Impaired Driving Serious Injuries





Page 34 02/19/2021

Impaired Driving Prevention





Impaired Driving

Most Common Fatality and Serious Injury Crash Attributes

- Lane Departures (45%), Speed-related (41%), and Intersections (31%) are common among Impaired Driving fatal crashes (see below)
- Male at-fault drivers, age 21–45
- Male fatalities or seriously injured, age 21-55
- Single-vehicle, angle, head-on, and rear-end crashes are the most common crash types
- Impaired driving-related crashes occurred most often from 6:00 PM to 6:00 AM (64%)

Performance Measures

- Number of impaired driving-related fatalities
- Number of impaired driving-related serious injuries

Strategies

- 1. Enhance DUI deterrence through improved criminal justice system response
- 2. Support training and education for law enforcement agencies and commit to highvisibility DUI enforcement
- 3. Improve understanding of impaired driving issues through better data
- 4. Improve primary prevention efforts aimed at DUI or riding with an impaired driver

Percentage of Impaired Driving Fatal Crashes















Protection











Pedestrians



41%



24%

15%

13%



Safety Data Analysis

The Nevada SHSP continues to be as data-driven as possible. Results of the data analysis have guided specific action steps for each CEA. Progress continues with the electronic collection of data from law enforcement agencies that is transferred into NCATS. The availability of data associated with crash analysis and tools to analyze the data continues to grow significantly. Thus, it is critically important that the SHSP implementation continues to emphasize the importance of collecting and analyzing crash data based on the Highway Safety Manual (HSM) and focus on the development of a robust database of crash data that is geospatially referenced to relevant traffic and roadway data.

The Nevada SHSP's TRCC focuses on streamlining the process of transferring and cleaning crash data from law enforcement agencies into NCATS and providing crash data summaries to support the SHSP implementation actions. For the 2021-2025 SHSP, the TRCC will focus on the following strategies:

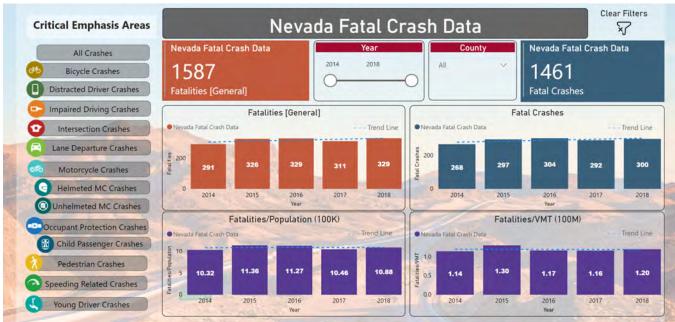
- Facilitate the Nevada TRCC and support the continued improvement of data in the NCATS
- Support the development of the database and tools to support SHSP Implementation
- Support incorporating the quantification of safety impacts for transportation improvement projects at the network and individual project level into the project development process at agencies in Nevada

The Nevada crash data dashboard is shown in **Figure 29**, prior to incorporation of 2018 and 2019 data. The data related to SHSP implementation to be correlated for safety analysis includes but is not limited to:

- Crash data
- Traffic volume data
- Roadway geometrics data

- Traffic control data
- Trauma data
- Citation data

Figure 29. Nevada Online Crash Data Dashboard



Click here to view crash data online

The TRCC will complete an annual review of the performance measures as well as provide an annual update of crash data to support CEA strategies and action steps.



Page 36 02/19/2021

Next Steps

Implementation

SHSP Action Plan

The Nevada SHSP's implementation plan for the next five years includes the formal SHSP (this document) that outlines the emphasis areas, strategies, and performance measure targets for the five-year plan. The next steps for implementation are outlined in the SHSP Action Plan that includes action steps, output measures, and identifies an action step leader for each emphasis area's set of strategies to track progress towards the goal of reducing traffic-related fatalities and serious injuries. The SHSP Action Plan can be modified as action items are completed or need to be adjusted throughout the life of the 2021-2025 SHSP.

Development of the 2021-2025 SHSP improved the understanding of Nevada's safety issues and focused on the steps needed to reduce traffic fatalities and serious injuries. The updated SHSP and the accompanying Action Plan provide a plan for effective implementation of the SHSP's strategies and action steps.

Setting Strategies and Action Steps

Action steps for each emphasis area included in the 2021-2025 SHSP Action Plan will be evaluated and updated as needed throughout the life of this SHSP. All action items should be SMART:



Specific

Clearly describes action step



Measurable

Defined performance measures and output measures



Achievable

Committed resources by responsible organization and action step lead



Relevant

Data-driven issue and countermeasure



Time Constrained

Achievable within a designated time frame (annually, five-year plan, reoccurring, etc.)

As action steps and strategies are implemented and evaluated by the task forces and the SHSP team throughout the life of the plan, the following elements will be considered:

- FHWA Proven Safety Countermeasures
- NHTSA Countermeasures that Work
- Systemic improvements
- Low-cost improvements
- RSA findings

Evaluation

In addition to tracking the annual and five-year averages of fatalities and serious injuries for the plan overall and each CEA, the SHSP implementation will include evaluation of behavior changes as well as knowledge gained by the task forces and SHSP partner agencies. These could include opportunities to incorporate emerging technologies, partnering with large corporations or institutions, and applying national best practices.

Tracking

Progress of strategies and action steps for each CEA is tracked using a spreadsheet similar to the one shown on the next page. Progress is tracked if it is an annual reoccurring action or a one-time action, and status can be "not started," "early progress," "underway," "substantial progress," or "completed."

Ongoing evaluation is critical to understanding what is working and worthy of investment, and what is less effective and a candidate for revision or discontinuation. In this way, Nevada can allocate resources focused on strategies

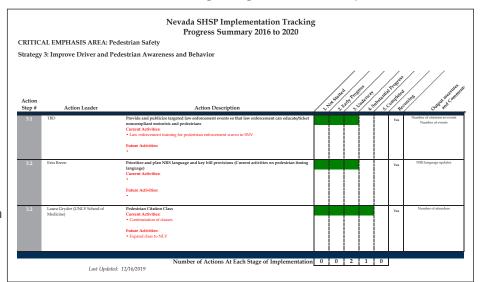


Page 37 02/19/2021

and action steps that will lead to reaching SHSP goals.

As part of the SHSP efforts, the SHSP Implementation Team along with Task Force Chairs and Vice Chairs, NECTS, and the TRCC will annually review progress and performance to examine roles and responsibilities, action step status, and evaluate data management and resources. Data will be reviewed annually to see if it is tracking with annual HSIP and HSP performance measure targets. Crash data for each emphasis area will be compiled annually and compared to previous years' data to assess trends and inform the public and decision makers.

Figure 30. Nevada SHSP Implementation Tracking Progress Summary



The key to the SHSP's success is to include strategies and action steps that are data-driven and evidence-based, and identify output measures that are measurable.

Updated versions of statewide safety plans such as the HSIP, HSP, and CVSP will be reviewed for alignment with the SHSP when plans become available. The SHSP Implementation Team and NECTS will receive status updates on the key aspects of these documents, as well as an assessment of the inclusion of the SHSP elements in these important safety partners' plans.

Task Force Chairs, Vice Chairs, SHSP Implementation Team and FHWA will continuously evaluate traffic safety data and manage the tracking and development of performance measures, strategies, and actions. This group may also hold a meeting each year at the annual Nevada Traffic Safety Summit to review performance measures and data, action step progress, and output measures to develop the SHSP Action Plan for the upcoming year.

Key Area and CEA Task Forces

Key Area Task Forces meet on a quarterly basis to collaborate, share ideas, and receive updates from the SHSP implementation team on data, plan progress, and Zero Fatalities campaigns. The quarterly Key Area Task Force meetings will be led by the Chair and supported by Vice Chairs that represent each of the CEA Task Forces.

In between the Key Area Task Force quarterly meetings, Vice Chairs will hold interim CEA Task Force meetings with action step leaders to discuss status and progress of action steps, highlight successes, and identify challenges.

All Chairs and Vice Chairs will meet quarterly for a Task Force Leadership meeting to exchange ideas, review strategies, and discuss data needs.

Zero Fatalities

The year 2021 commemorates the 10th anniversary of Nevada's Zero Fatalities program. In honor of the 10th anniversary, Zero Fatalities will tell the story of how the program has impacted Nevadans over the past decade by championing the life-saving mission of getting every road user home safely. Engagements, events, outreach, and campaigns will recognize and celebrate the achievements of the Zero Fatalities program; the work of the people, partners, and grantees with whom the program collaborates; and continue an ongoing commitment to achieving the ultimate goal of Zero Fatalities.



Page 38 02/19/2021

In honor of 10 years, Zero Fatalities launched a new program tagline "Lives are on the Line." Replacing the decade-old tagline "Drive Safe Nevada," the new tagline conveys a sense of urgency and responsibility to all Nevadans to take action to reduce and eventually eradicate roadway fatalities because **Lives are on the Line**. To continue momentum throughout the entire year, each month of the 2021 calendar year will celebrate a different year of the Zero Fatalities program to highlight influential personalities, milestones, and events that contributed to the Zero Fatalities program. The Zero Fatalities program will continue amplifying this message locally and statewide through marketing efforts, grassroots engagement within the community, and public forums including multi-faceted behavioral campaigns, impactful press placements, and engaging in current events (zerofatalitiesnv.com).



High-Risk Rural Roads

The Nevada SHSP Implementation includes an emphasis on High-Risk Rural Roads (HRRR) within the Lane Departures Task Force. HRRRs are defined as any roadway functionally classified as a rural major or minor collector or rural local road on which the crash rate for fatalities and serious injuries exceeds the statewide average for those functional classifications or roadways. They can also include traffic crashes involving freight transportation via commercial vehicles. For situations where there is not accurate data to determine the fatal or serious injury rate, a combination of methods will be used to determine the HRRR.

The first method will be a review of the geometrics of the roadways that share common characteristics of known features that contribute to fatal and serious injury crashes. Common characteristics include, but are not limited to narrow, unpaved shoulders; steep slopes; roadside obstacles; curve geometry; lack of signs on curves; and lack of rumble strips.

The second method will be to utilize information gathered through means such as field reviews, RSAs, and local knowledge and experience. Using information from observations in the field can identify high-risk locations that may not be identified through data analysis or by identifying roadway characteristics.

Coordination with Other State, Local, and Tribal Plans

NDOT Railroad Safety Program

The NDOT Railroad Safety Program is the administrative agency for the State of Nevada for all public at-grade railroad crossings. NDOT is working to develop an action plan to guide the railroad safety program. This plan is in response to the final rule issued by the Federal Rail Association (FRA) in response to the FAST Act. The plan will be published in 2021 and will serve as a guide to identify and improve the safety of state highway railroad crossings.

One Nevada Transportation Plan

The One Nevada Transportation Plan's "Enhance Safety" goal continues NDOT's long-standing commitment to Zero Fatalities by building, maintaining, and operating the safest transportation system possible. The goal builds on

Nevada's SHSP and also considers how this vision can be extended to all modes of travel, such as transit and rail. Further, NDOT also takes a broad view of public safety, recognizing the importance of identifying, mitigating, preparing for, and responding to a growing number of security risks and potential emergencies involving Nevada's transportation system.





Page 39 02/19/2021

The One Nevada Transportation Plan lists the following principles to achieve the "Enhance Safety" goal:

- Reduce traffic fatalities and serious injuries on all public roads through engineering, education, enforcement, and emergency response strategies
- Reduce fatalities and serious injuries involving pedestrians, bicyclists, motorcyclists, and other vulnerable road users
- Expand partnerships with safety advocates around the state to identify and implement safety improvement strategies and investments
- Support automated and connected vehicle technology advancements that improve safety
- Improve incident management and emergency response capabilities

Local Public Agency Process

NDOT's Traffic Safety Engineering team supports Nevada's city, county and tribal safety projects that mean the most to the people that live in those communities. NDOT is developing a process to allow all local agencies to apply for Highway Safety Improvement Plan (HSIP) funds through the NDOT Local Public Agency (LPA) process. In addition, NDOT is encouraging all locals to develop a Local Road Safety Plan (LRSP) that identifies local safety priorities in a data-driven manner. Tribes will be able to submit eligible safety projects from their tribal transportation plan (TTP). Once projects are identified through the LPA process, local agencies will scope, design, and build their own projects, which are eligible for HSIP fund reimbursement of up to 95% of the total project cost.

Commercial Vehicle Safety Plan

NHP's Commercial Vehicle Safety Plan (CVSP) includes integration of the CEAs in the SHSP and partnering with NDOT and OTS to develop educational messaging regarding commercial vehicle safety. The Annual Update for Fiscal Year 2021 was approved on November 16, 2020.

Nevada Highway Patrol Strategic Plan

NHP's Strategic Plan identifies goals, objectives, and strategies to prevent fatalities and serious injuries on Nevada's roadways. As a key stakeholder in the SHSP, NHP is involved in the implementation of the strategies and action steps for all of the CEAs.

Vision Zero

Vision Zero Truckee Meadows has adopted Vision Zero policies and action plans and has applied to join the national Vision Zero Network. The City of Las Vegas is also considering joining the Network. Vision Zero started in Sweden as a response to traffic fatalities and serious injuries and has since spread to cities throughout the United States. While each city is tackling the policy in its own unique way, each city is staying true to the idea that when people make mistakes on our streets, fatalities and serious injuries should not be the result. Vision Zero Truckee Meadows' goal is Zero Fatalities by 2030. Implementing Vision Zero has been identified as one of the



strategies for the Pedestrian CEA. Local agencies and other stakeholders that participate in the Pedestrian Task Force will discuss the relationship between the Vision Zero cities and other safety plans, and how they can coordinate with the SHSP.



Page 40 02/19/2021

Connecting with the Community

SHSP Website

The SHSP website provides information for each task force, including crash facts, a link to the interactive online crash tool, task force meeting agendas and meeting summaries, upcoming traffic-safety related trainings and webinars, and resources for the NECTS and TRCC. The SHSP website is incorporated into the Zero Fatalities website for Nevada, and is available to the public to review and request more information on how to get involved. The SHSP website is located at: https://zerofatalitiesnv.com/safety-plan-what-is-the-shsp/.

Quarterly Safety Culture Connection Newsletter

The SHSP team publishes a quarterly newsletter in support of the SHSP. The newsletter includes recent safety projects, upcoming campaigns, and a reoccurring "Safety Spotlight" that highlights a local agency's traffic safety initiatives or programs.

Welcome Packet for NECTS and Task Forces

Informational brochures about the SHSP and the roles and responsibilities of the various partners and groups within the SHSP are distributed to new members of the NECTS or Task Forces, or contacts looking for more information about Nevada's SHSP.

Annual Nevada Traffic Safety Summit

The Nevada Traffic Safety Summit is held annually and alternates between Reno and Las Vegas. The Summit has an attendance of about 200 people each year and provides two and a half days of educational sessions, trainings, keynote speakers, and networking opportunities for Nevada's traffic safety partners from all 6 "Es" of traffic safety. (zerofatalitiesnv.com/safety-summit/)



Page 41 02/19/2021















2021-2025

Nevada Strategic Highway Safety Plan

Action Plan





2021-2025 Action Plan Table of Contents

Acronyms	
Overview	5
Action Plan Implementation	5
SHSP Overview	5
Structuring the SHSP	6
SHSP Organizational Structure	7
Safe Speed Action Plan	12
Lane Departures Action Plan	13
Intersections Action Plan	14
Pedestrians Action Plan	17
Motorcyclists Action Plan	19
Occupant Protection Action Plan	22
Older Drivers Action Plan	24
Young Drivers Action Plan	25
Impaired Driving Action Plan	28
TRCC Action Plan	30



Acronyms

6 "Es"	Equity, Engineering, Education, Enforcement, Emergency Response, and Everyone		
AAVMA	American Association of Motor Vehicle Administrators		
ANSTSE	Association of National Stakeholders in Traffic Safety Education		
ARIDE	Advanced Roadside Impaired Driving Enforcement		
CEA	Critical Emphasis Area		
CMF	Crash Modification Factor		
CPS	Child Passenger Seat		
CVSP	Commercial Vehicle Safety Plan		
DMV	Department of Motor Vehicles		
DPS-OTS	Department of Public Safety, Office of Traffic Safety		
DRE	Drug Recognition Expert		
DUI	Driving Under the Influence		
EMS	Emergency Medical Services		
FAST	Fixing America's Surface Transportation Act		
FHWA	Federal Highway Administration		
FMCSA	Federal Motor Carrier Safety Administration		
FRA	Federal Rail Administration		
GDL	Graduated Drivers' License		
HFST	High Friction Surface Treatment		
HSIP	Highway Safety Improvement Program		
HSP	Highway Safety Plan		
HVE	High Visibility Enforcement		
JOL	Judicial Outreach Liaison		
KKSOM	Kirk Kerkorian School of Medicine at the University of Nevada, Las Vegas		
LEL	Law Enforcement Liaison		
LPA	Local Public Agency		
LPI	Lead Pedestrian Interval		
LRSP	Local Road Safety Plans		
NACTO	National Association of City Transportation Officials		
NCATS	Nevada Citation and Accident Tracking System		
NCHRP	National Cooperative Highway Research Program		
NDOT	Nevada Department of Transportation		
NECTS	Nevada Executive Committee on Traffic Safety		
NHP	Nevada Highway Patrol		
NHTSA	National Highway Traffic Safety Administration		
NRS	Nevada Revised Statutes		
PHB	Pedestrian Hybrid Beacon		
PIO	Public Information Officer		



2021-2025 NEVADA SHSP ACTION PLAN

PRISM Performance and Registration System Management **PSA** Public Service Announcement **RPD** Reno Police Department **RRFB** Rectangular Rapid Flashing Beacon **RSA** Road Safety Assessment **RTC Regional Transportation Commission** SHSP Strategic Highway Safety Plan **SMP** Safety Management Plan TIM Traffic Incident Management **TRCC** Traffic Records Coordinating Committee **TSRP** Traffic Safety Resource Prosecutor **TTP** Tribal Transportation Plan **UNLV** University of Nevada Las Vegas **UNLVTRC** University of Nevada Las Vegas Transportation Research Center **UNR** University of Nevada Reno

Overview

Action Plan Implementation

The Nevada Strategic Highway Safety Plan's (SHSP) implementation plan for the next five years includes the formal 2021-2025 SHSP Update that outlines the emphasis areas, strategies, and performance measure targets for the five-year plan and the next steps for implementation. The SHSP Action Plan includes action steps, output measures, and identifies action step leaders for each emphasis area's set of strategies to track progress towards the goal of reducing traffic-related fatalities and serious injuries. The SHSP Action Plan uses the most complete five years of crash data (2014-2018) and the evaluation of performance measures to set the action steps and targets for 2021. This document can be modified as action items are completed or need to be adjusted throughout the life of the 2021-2025 SHSP.

SHSP Overview

The SHSP is administered by the Nevada Department of Transportation (NDOT) in primary coordination with the Department of Public Safety, Office of Traffic Safety (DPS-OTS). Nevada's efforts to develop the SHSP began in 2004, and continue today and for the next five years with the approval of the 2021-2025 SHSP Update. The 2021-2025 SHSP adopts four guiding principles that align with the Road to Zero Coalition's initiatives to achieve the goal of zero roadway fatalities by the year 2050 (The Road to Zero: A Vision for Achieving Zero Roadway Deaths by 2050, Rand Corporation, 2018). These guiding principles, along with input from all 6 "Es" of traffic safety (Equity, Engineering, Education, Enforcement, Emergency Medical Services/Emergency Response/Incident Management, and Everyone), informed the development of SHSP strategies and the action steps in the SHSP Action Plan.

Incorporate Equity

Equity will be incorporated into the SHSP and Action Plan through implementation and evaluation of strategies and action steps that serve all, but particularly vulnerable and traditionally underserved populations.

Implementation of the SHSP will include development of a data analysis process that incorporates equity among all road users. Existing action steps will be evaluated with the following questions during the life of the SHSP:

- Which groups will benefit from implementation of this action step?
- Who may be negatively impacted by implementation of this action step?
- Was demographic and socioeconomic data considered in the development of the action step?
- Who was involved in developing the action step?

The evaluation process for how equity is measured in action steps, identified projects, adoption of standards and other decisions will be documented.

Prioritize Safe Speed

Speeding accounts for nearly one-third of all traffic fatalities in Nevada; however, we know that speed is a contributing factor to all fatal and serious injury crashes. Speeding and excessive speed endangers not only the life of the driver, but all the people on the road around them. Implementation of all action steps should factor in speed and acknowledge that reducing speed can lessen the severity of impact on the humans involved in three ways: reducing impact forces, providing additional time for drivers to stop, and improving visibility.



Double Down on What Works

The key to the success of the SHSP is to include strategies and action steps that are data-driven and evidence-based, including proven safety countermeasures that are highly effective in reducing fatalities and serious injuries. These include the Federal Highway Administration's (FHWA) *Proven Safety Countermeasures* as well as the National Highway Traffic Safety Administration's (NHTSA) *Countermeasures That Work* and the Crash Modification Factors (CMF) Clearinghouse. This priority also includes a strong emphasis on improving data availability, quality, and analysis tools.

Accelerate Advanced Technology

New emerging technologies have applications that impact the vehicles, drivers and passengers, and the ways all road users interact and communicate with the built environment and each other. The SHSP embraces emerging technologies by establishing partnerships with technology providers, health and safety groups, manufacturers, and government partners to prioritize safety.

Structuring the SHSP

For the 2021-2025 SHSP, four Key Areas were selected to prioritize collaboration among the 6 "Es" for SHSP implementation: **Safer Roads, Vulnerable Road Users, Safer Drivers and Passengers**, and **Impaired Driving Prevention**. The plan established task forces for each Key Area, which will be responsible for collaboration and monitoring progress on the implementation of strategies and action steps.









Safer Roads

Vulnerable Road Users

Safer Drivers and Passengers

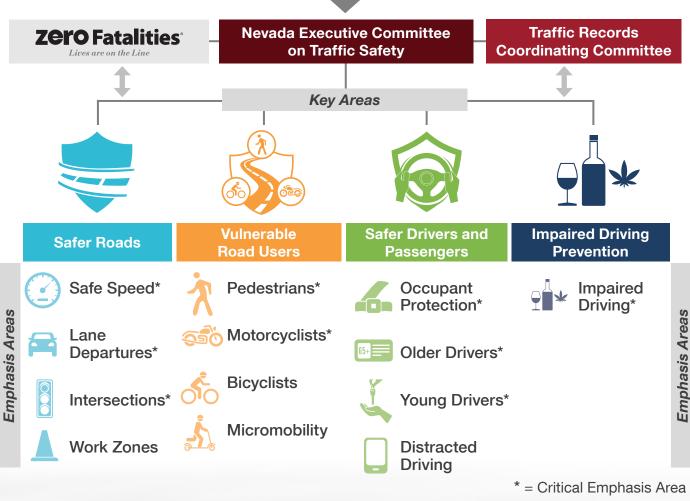
Impaired Driving Prevention

As shown in the **SHSP Organizational Structure** on the following page, the SHSP established 13 emphasis areas organized under the four Key Areas, including nine Critical Emphasis Areas (CEA) that have developed strategies and action steps for implementation. Selection of the nine CEAs for the 2021-2025 SHSP Update was a data-driven process and includes emphasis areas with the highest number of fatalities and serious injuries over the previous five years (2014-2018). Seven CEAs are consistent with the previous SHSP (Impaired Driving, Intersections, Lane Departures, Motorcycles, Occupant Protection, Pedestrians and Young Drivers) and there are two new CEAs for the 2021-2025 Update: Safe Speed and Older Drivers.

SHSP Organizational Structure









Coordination with Other State, Local, and Tribal Plans

NDOT Railroad Safety Program

The NDOT Railroad Safety Program is the administrative agency for the State of Nevada for all public at-grade railroad crossings. NDOT is working to develop a State Highway-Rail Grade Crossing Action Plan (SAP) to guide the railroad safety program. The SAP is in response to the final rule issued by the Federal Rail Association (FRA) in response to the Fixing America's Surface Transportation (FAST) Act. The plan will be available by early 2022 and will serve as a guide to identify and improve the safety of state highway railroad crossings.

One Nevada Transportation Plan

The One Nevada Transportation Plan's "Enhance Safety" goal continues NDOT's long-standing commitment to Zero Fatalities by building, maintaining, and operating the safest transportation system possible. The goal builds on Nevada's SHSP and also considers how this vision can be extended to all modes of travel, such as transit and rail. Further, NDOT also takes a broad view of public safety, recognizing the importance of identifying, mitigating, preparing for, and responding to a growing number of security risks and potential emergencies involving Nevada's transportation system.

The One Nevada Transportation Plan lists the following principles to achieve the "Enhance Safety" goal:

- Reduce traffic fatalities and serious injuries on all public roads through engineering, education, enforcement, and emergency response strategies
- Reduce fatalities and serious injuries involving pedestrians, bicyclists, motorcyclists, and other vulnerable road users
- Expand partnerships with safety advocates around the state to identify and implement safety improvement strategies and investments
- Support automated and connected vehicle technology advancements that improve safety
- Improve incident management and emergency response capabilities



Local Public Agency Process

NDOT's Traffic Safety Engineering team supports Nevada's city, county and tribal safety projects that mean the most to the people that live in those communities. NDOT is developing a process to allow all local agencies to apply for Highway Safety Improvement Plan (HSIP) funds through the NDOT Local Public Agency (LPA) process. In addition, NDOT is encouraging all locals to develop a Local Road Safety Plan (LRSP) that identifies local safety priorities in a data-driven manner. Tribes will be able to submit eligible safety projects from their tribal transportation plan (TTP). Once projects are identified through the LPA process, local agencies will scope, design, and build their own projects, which are eligible for HSIP fund reimbursement of up to 95% of the total project cost.

Commercial Vehicle Safety Plan

Nevada Highway Patrol's (NHP) Commercial Vehicle Safety Plan (CVSP) includes integration of the CEAs in the SHSP and partnering with NDOT and OTS to develop educational messaging regarding commercial vehicle safety. The Annual Update for Fiscal Year 2021 was approved on November 16, 2020.

NHP Strategic Plan

NHP's Strategic Plan identifies goals, objectives, and strategies to prevent fatalities and serious injuries on Nevada's roadways. As a key stakeholder in the SHSP, NHP is involved in the implementation of the strategies and action steps for all of the CEAs.



Vision Zero

Vision Zero Truckee Meadows has adopted Vision Zero policies and action plans and has applied to join the national Vision Zero Network. The City of Las Vegas is considering joining the Network. Vision Zero started in Sweden as a response to traffic fatalities and serious injuries and has since spread to cities throughout the United States. While each city is tackling the policy in its own unique way, each city is staying true to the idea that when people make mistakes on our streets, fatalities and serious injuries should not be the result. Vision Zero Truckee Meadows' goal is Zero Fatalities by 2030. Implementing Vision Zero has been identified as one of the



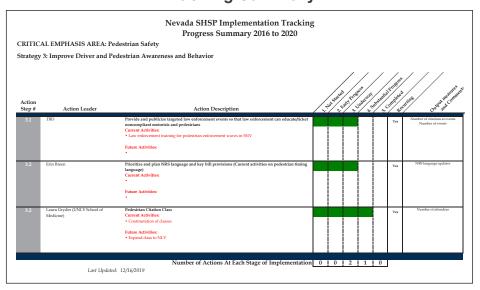
strategies for the Pedestrians CEA. Local agencies and other stakeholders that participate in the Pedestrians Task Force will discuss the relationship between the Vision Zero cities and other safety plans, and how they can coordinate with the SHSP.

Tracking

Progress of strategies and action steps for each CEA is tracked using a spreadsheet similar to the one shown to the right. Progress is tracked if it is an annual reoccurring action or a one-time action, and status can be "not started," "early progress," "underway," "substantial progress," or "completed."

Ongoing evaluation is critical to understanding what is working and worthy of investment, and what is less effective and a candidate for revision or discontinuation. In this way, Nevada can allocate resources focused on strategies and action steps that will lead to reaching SHSP goals.

Nevada SHSP Implementation Tracking Summary



As part of the SHSP efforts, the SHSP Implementation Team along with Task Force Chairs and Vice Chairs, Nevada Executive Committee on Traffic Safety (NECTS), and the Traffic Records Coordinating Committee (TRCC) will annually review progress and performance to examine roles and responsibilities, action step status, and evaluate data management and resources. Data will be reviewed annually to see if it is tracking with annual HSIP and Highway Safety Plan (HSP) performance measure targets. Crash data for each emphasis area will be compiled annually and compared to previous years' data to assess trends and inform the public and decision makers.

The key to the SHSP's success is to include strategies and action steps that are data-driven and evidence-based, and identify output measures that are measurable.

Updated versions of statewide safety plans such as the HSIP, HSP, and CVSP will be reviewed for alignment with the SHSP when plans become available. The SHSP Implementation Team and NECTS will receive status updates on the key aspects of these documents, as well as an assessment of the inclusion of the SHSP elements in these important safety partners' plans.



2021-2025 NEVADA SHSP ACTION PLAN

The Task Force Chairs, Vice Chairs, and SHSP Implementation Team will continue to evaluate the traffic safety data and manage the tracking and development of performance measures, strategies, and actions. This group will hold a special meeting at the annual Nevada Traffic Safety Summit to review performance measures and data, action step progress, and output measures to develop the SHSP Action Plan for the upcoming year.

Key Area and CEA Task Forces

Key Area Task Forces meet on a quarterly basis to collaborate, share ideas, and receive updates from the SHSP implementation team on data, plan progress, and Zero Fatalities campaigns. The quarterly Key Area Task Force meetings will be led by the Chair of the Key Area and supported by Vice Chairs that represent each of the CEA Task Forces.

In between the Key Area Task Force quarterly meetings, Vice Chairs will hold interim CEA Action Update meetings with action step leaders to discuss status and progress of action steps, highlight successes, identify challenges, and determine updates to provide at the Key Area Task Force quarterly meetings.

All Key Area Chairs and CEA Task Force Vice Chairs will meet quarterly for a Task Force Leadership meeting to exchange ideas, review strategies, and discuss data needs.

In addition to the Key Area Task Forces responsible for implementing the plan, the TRCC focuses on improving the available data to strengthen the ability of safety practitioners to strategically select and implement strategies.

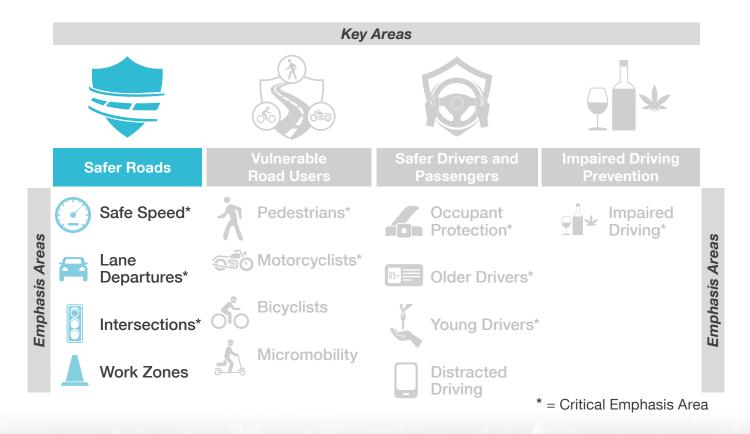


Key Area: Safer Roads



The Safer Roads Key Area includes emphasis areas relative to the built environment. The Safer Roads Key Area will implement actions to reduce fatalities and serious injuries due to Speed, Lane Departures, Intersections, and Work Zones.

Chair: Lacey Tisler, NDOT Traffic Safety Engineering







Safe Speed Action Plan

Vice Chair: Todd Hartline, Nevada Department of Public Safety, Office of Traffic Safety

Strategy #1

Advance the use of infrastructure techniques and technology to manage target speeds and set speed limits.

Action Step #	Action Step Leader	Description	Output Measure
1.1	Lacey Tisler, NDOT	Develop a statewide Speed Management Action Plan for Nevada.	NDOT Speed Management Action Plan completed by 2022.
1.2	Lacey Tisler, NDOT	Implement context-sensitive speed setting approach for state-owned roadways.	Establish target speeds for state- owned facilities by 2022.
1.3	Lacey Tisler, NDOT	Install dynamic speed feedback signs within transition zones, preferably with geometric improvements, to reduce speeds where speeds/crashes are an issue.	Select three locations to provide guidance from NDOT Speed Management Action Plan.

Strategy #2

Utilize high-visibility speeding enforcement targeted at high-risk locations to reduce crash severity.

Action Step #	Action Step Leader	Description	Output Measure
2.1	Todd Hartline, OTS	Support High Visibility Enforcement (HVE) efforts for aggressive driving and speed with strong multiple-channel messaging and outreach to encourage appropriate speeds.	Report on the statistics from each HVE event.
2.2	Lacey Tisler, NDOT; Todd Hartline, OTS	Support legislative opportunities to curb speed and aggressive driving, such as automated enforcement in school and work zones.	Automated enforcement legislation in the 2023 session.

Strategy #3

Improve effectiveness of education and outreach about safe speed and aggressive driving.

Action Step #	Action Step Leader	Description	Output Measure
3.1	TBD	Use education and messaging to change culture of normalized speeding.	One speed campaign and presentation that focuses on culture change per year.
3.2	Nick Nordyke, OTS	Promote peer-to-peer outreach programs to address social norms and shared driving behaviors for all roadway users to reduce speed and aggressive driving.	Hold at least one peer-to-peer outreach program per year.



Lane Departures



Lane Departures Action Plan

Vice Chair: Shawn Paterson, NDOT Roadway Design

Strategy #1

Apply proven engineering countermeasures and roadway improvements to keep vehicles in their lanes.

Action Step #	Action Step Leader	Description	Output Measure
1.1	Lacey Tisler, NDOT	Prioritize high-risk horizontal curves and apply countermeasures.	Apply countermeasures such as high-friction surface treatment (HFST) and enhanced signage.
1.2	David Greif, NDOT	Develop a statewide climbing and passing lane program.	Prepare Climbing and Passing Lane Study and prioritize locations (multi-jurisdictional).
1.3	Jorden Kaczmarek, NDOT	Prioritization list of re-rumble strip projects.	Prioritization list.

Strategy #2

Increase survivability in the event of a lane departure through engineering and emergency response.

Action Step #	Action Step Leader	Description	Output Measure
2.1	TBD	Implement projects designed to increase survivability of run-off-the-road crashes (slope flattening, shoulder widening, and roadside object removal projects).	Number of projects that address slope flattening, shoulder widening and object removal.
2.2	LaShonn Ford, NDOT	Apply traffic incident management (TIM) strategies to minimize disruption after incidents to improve emergency response times to crashes, improve first responders safety while on scene, reduce secondary crashes through training.	Increase number of responders trained.
2.3	Nova Simpson, NDOT	Decrease animal vehicle collisions: prioritize problem areas with crash data (statewide assessment).	Report on integration of wildlife mitigation into NDOT projects and continued research on problem areas.
2.4	TBD	Identify and support technology that will increase the survivability and decrease the probability of lane departure crashes.	Document successes and crash reduction associated with technologies. Increase implementation of current technologies and identify one new technology.



Intersections



Intersections Action Plan

Vice Chair: Rod Schilling, NDOT Roadway Systems

Strategy #1

Screen the roadway network for high-risk intersections and apply effective and/or innovative countermeasures.

Action Step #	Action Step Leader	Description	Output Measure
1.1	Shara Thiesen, NDOT Traffic Safety	Screen the network to identify the top high-risk signalized intersections.	Top high-risk signalized intersections.
1.2	Shara Thiesen, NDOT Traffic Safety	Screen the network to identify the top high-risk unsignalized intersections (separated by rural and urban).	Top high-risk unsignalized intersections.
1.3	Maurilio Olivares, NDOT Traffic Safety	Identify countermeasures to apply to the top high-risk signalized intersections.	Identify projects to improve safety at top high-risk signalized intersections.
1.4	Maurilio Olivares, NDOT Traffic Safety	Identify countermeasures to apply to the top high-risk unsignalized intersections.	Identify projects to improve safety at top high-risk unsignalized intersections.
1.5	Jorden Kaczmarek, NDOT Traffic Safety	Conduct safety analysis at unsignalized and signalized intersections throughout the state to determine potential systemic countermeasures to apply at intersections.	Systemic safety analysis and identification of proven safety countermeasures.



Intersections



Strategy #2

Screen the roadway network for high-risk segments and apply effective and/or innovative countermeasures to improve intersection safety.

Action Step #	Action Step Leader	Description	Output Measure
2.1	Dr. Hao, University of Nevada Reno (UNR); Lori Campbell, NDOT Traffic Safety	Determine locations with high nighttime crashes and make recommendations to increase lighting.	Provide recommendations to add lighting to high nighttime crash locations. Work with agencies to educate them on lighting standards. Education on destination lighting in rural locations.
2.2	Lori Campbell, NDOT Traffic Safety	Determine a high-crash corridor where crashes could be mitigated through corridor access management, and identify a project to install islands to limit access. Utilize results from Safety Management Plans (SMP).	Determine how access management is implemented at the local level. Determine a high-crash corridor and identify a project to install islands to limit access. Access management as recommended in SMPs. Number of access management measures incorporated into NDOT Encroachment Permits.
2.3	Gena Kendall, Regional Transportation Commission of Southern Nevada (RTCSNV); Lori Campbell, NDOT Traffic Safety	Support and document roadway lane reconfigurations throughout the state.	White paper on benefits of roadway lane reconfiguration. Determine what local agencies' policies are. Reach out to agencies yearly to determine if roadway lane reconfigurations are being implemented.

Strategy #3

Conduct outreach and education initiatives for target audiences that focus on eliminating high-risk behaviors at intersections.

Action Step #	Action Step Leader	Description	Output Measure
3.1	Erin Breen, University of Nevada Las Vegas (UNLV); Laura Gryder-Culver, Kirk Kerkorian School of Medicine at the University of Nevada, Las Vegas (KKSOM); Lt. Mike Browett, Reno Police Department (RPD)	Support efforts for automated enforcement in the state through the use of safety cameras.	Conduct a study to prove the issue. Review hearing to determine what made the bill fail and look to make changes to address those concerns, Conduct a best practice review on automated enforcement technology, address equity in automated enforcement. (Consider calling these "safety cameras").
3.2	Laura Gryder-Culver, KKSOM	Conduct saturation enforcement of red light running.	Number of red-light running citations reported statewide.
3.3	Albert Jacquez, NDOT	Support efforts for roundabout training in driver education and on driving test.	Review driver education materials to see if they incorporate information on roundabouts. Coordinate with the Department of Motor Vehicles (DMV) to have roundabouts included in the driving test when they are located near a DMV.

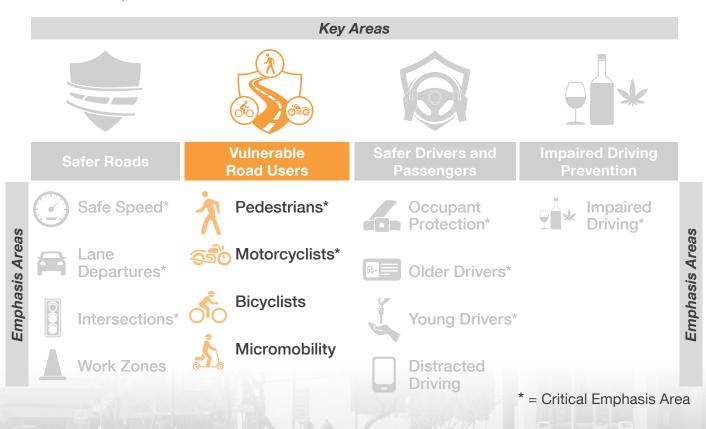


Key Area: Vulnerable Road Users



The Vulnerable Road Users Key Area includes emphasis areas related to non-motorized road users, such as pedestrians, bicyclists, motorcyclists; and those on scooters and other forms of micromobility. The Vulnerable Road Users Key Area includes the CEA Task Forces for Pedestrians and Motorcyclists, which have specific strategies presented on the following pages. Future actions related to bicyclists and micromobility safety will be addressed by the task force as needed.

Chair: Rebecca Kapuler, RTC Washoe



Pedestrians



Pedestrians Action Plan

Vice Chair: Erin Breen, UNLV Vulnerable Road Users Project

Strategy #1

Screen the roadway network for high-risk intersections and apply effective and/or innovative countermeasures for pedestrians.

Action Step #	Action Step Leader	Description	Output Measure
1.1	Shara Thiesen, NDOT Traffic Safety	Screen the network to identify the top high-crash pedestrian locations at signalized intersections.	Top high-crash pedestrian locations at signalized intersections.
1.2	Shara Thiesen, NDOT Traffic Safety	Screen the network to identify the top high-crash pedestrian locations at unsignalized intersections.	Top high-crash pedestrian locations at unsignalized intersections.
1.3	Shara Thiesen, NDOT Traffic Safety	Screen the network to identify the top-high crash pedestrian locations at unsignalized midblock locations.	Top high-crash pedestrian locations at unsignalized midblock locations.
1.4	Erin Breen, UNLV	Identify countermeasures to apply to the top high-crash pedestrian signalized intersections.	Identify projects to improve pedestrian safety at top high-crash signalized intersections.
1.5	Erin Breen, UNLV	Identify countermeasures to apply to the top high-crash pedestrian unsignalized intersections.	Identify projects to improve pedestrian safety at top high-crash unsignalized intersections.
1.6	Erin Breen, UNLV	Identify countermeasures to apply to the top high-crash pedestrian mid-block crossing locations.	Identify projects to improve pedestrian safety at top high-crash mid-block crossing locations.
1.7	Erin Breen, UNLV	Conduct pedestrian safety analysis throughout the state to determine potential systemic countermeasures to apply to improve pedestrian safety.	Systemic safety analysis and identification of proven safety countermeasures.



Pedestrians



Strategy #2

Screen the roadway network for high-risk segments and apply effective and/or innovative countermeasures for pedestrians.

Action Step #	Action Step Leader	Description	Output Measure
2.1	Dr. Hao, UNR; Lori Campbell, NDOT Traffic Safety	Use results of the UNR pedestrian lighting study to determine if there is a correlation between lighting levels and pedestrian crashes.	Develop recommendations to modify lighting standards and evaluate modifications to speed limits to address headlight sight distance versus stopping sight distance.
2.2	Lori Campbell, NDOT Traffic Safety	Develop Unsignalized Crosswalk Guidelines for local agencies.	Guidelines document for Local Agencies.
2.3	Gena Kendall, RTCSNV; Lori Campbell, NDOT Traffic Safety	Support and document roadway lane reconfigurations to support pedestrian safety throughout the state.	Education on roadway lane reconfigurations that benefit pedestrian safety. Reach out to agencies and ask them to self-report lane reconfiguration projects.

Strategy #3

Conduct outreach and education initiatives for target audiences that focus on eliminating highrisk pedestrian behaviors.

Action Step #	Action Step Leader	Description	Output Measure
3.1	Andrew Bennett, Clark County; Albert Jacquez, NDOT; Rebecca Kapuler, RTC Washoe	Conduct pedestrian awareness campaigns incorporating media outreach and education material on Nevada Revised Statutes (NRS) to provide to violators (drivers and pedestrians).	Number of events, campaigns, outreach materials.
3.2	Carrie Krupp, OTS	Conduct HVE events focused on pedestrian safety.	Number of events, number of citations (driver and pedestrian). Obtain citation data locations from pedestrian citation class.
3.3	Lt. Mike Browett, RPD	Implement pedestrian safety zones.	Number of pedestrian safety zones implemented.
3.4	Lt. Mike Browett, RPD; Rebecca Kapuler, RTC Washoe; Erin Breen, UNLV, Laura Gryder- Culver, KKSOM	Expand the pedestrian citation class.	Number of classes and participants. Implement pedestrian citation class in Washoe County. Pilot program with middle schools requiring them to take citation class.
3.5	Rebecca Kapuler, RTC Washoe	Continue advancing Vision Zero in Northern Nevada.	Report output from Vision Zero in Northern Nevada.
3.6	Maggie Saunders	Start Vision Zero in Southern Nevada.	Development of Vision Zero in Southern Nevada.



Motorcyclists



Motorcyclists Action Plan

Vice Chair: Justin McDonald, Department of Public Safety - Office of Traffic Safety

Strategy #1

Conduct public education programs for high-risk motorcyclist behaviors (speeding, aggressive, reckless, and impaired riding) and for motorists to yield to motorcycles.

Action Step #	Action Step Leader	Description	Output Measure
1.1	PK Handley	Create and run motorcycle safety campaigns for motorcyclists and other motorists to watch out for motorcyclists.	Minimum of two motorcycle safety campaigns each year - one directed at motorcyclists and another directed at motorists.
1.2	TBD	Develop a motorcycle safety topic/article to include in the SHSP quarterly newsletter.	One topic/quarter.
1.3	TBD	Include motorcycle safety in presentations to corporate partners.	Traffic safety presentations to include motorcycle safety message.
1.4	Damon Schuetze; PK Handley	Increase outreach and partnering with dealerships in the Las Vegas area to educate riders and to gain dealership's support for motorcycle safety initiatives.	Develop outreach program for 2021.
1.5	TBD	Develop Nevada-specific materials to educate riders about selecting a motorcycle compatible with skill level, the need for hi-visibility riding gear, proper protective gear, danger of excessive speed, etc.	Distribute through Nevada Rider booths at outreach events and at dealerships.
1.6	TBD	Develop and conduct rider surveys.	Develop online survey for use virtually and in person at outreach events.
1.7	Rob Honea, OTS	Encourage law enforcement agencies to conduct education sessions, social media outreach and on-cycle training for the public.	Track what agencies are doing, develop plan to expand outreach and education.
1.8	Damon Schuetze; PK Handley	Outreach/partnering with motorcycle clubs.	Develop outreach/communication plan for 2021.

Strategy #2

Increase the percentage of motorcyclists that are trained and licensed.

Action Step #	Action Step Leader	Description	Output Measure
2.1	Damon Schuetze	Expand availability of mid-level and advanced motorcycle courses in Northern and Southern Nevada.	Offer Circuit Rider Course with elite instructors.
2.3	TBD	Conduct virtual Moto 101 Training for Teens.	Convert Moto 101 training curriculum to virtual platform, promote and schedule online sessions.



Motorcyclists



Strategy #3

Integrate the unique characteristics of motorcycles and rider vulnerability into motorcycle-friendly roadway design, traffic control, construction, and maintenance policies and practices.

Action Step #	Action Step Leader	Description	Output Measure
3.1	Lacey Tisler, NDOT Traffic Safety	Implement the use of motorcycle-specific signage and/or countermeasures where unavoidable hazardous conditions exist or where data indicates higher levels of motorcycle crashes.	Develop list of signage and countermeasures that are effective for motorcycles and develop implementation plan.
3.2	Lacey Tisler, NDOT Traffic Safety	Review and evaluate recommendations in the National Cooperative Highway Research Program (NCHRP) Scan Team Report – Leading Practices for Motorcyclist Safety. Implement recommendations that are in alignment with NDOT policies and procedures.	Review Scan Team Report and develop action plan for Nevada roads.
3.3	Lacey Tisler, NDOT Traffic Safety	Include DPS motorcycle safety staff on Road Safety Assessment (RSA) teams and as appropriate in the SMP process.	Invite motorcycle safety staff to participate in all RSA field reviews.

Strategy #4

Increase crash survivability through education and training.

Action Step #	Action Step Leader	Description	Output Measure
4.1	TBD	Increase and support bystander assistance training for motorcyclists.	Develop plan for bystander training seminars in Nevada.
4.2	Laura Gryder- Culver, KKSOM	Maintain universal helmet law for motorcycle and moped riders.	Unhelmeted crash data presentation for 2023 and 2025 Legislative Sessions.

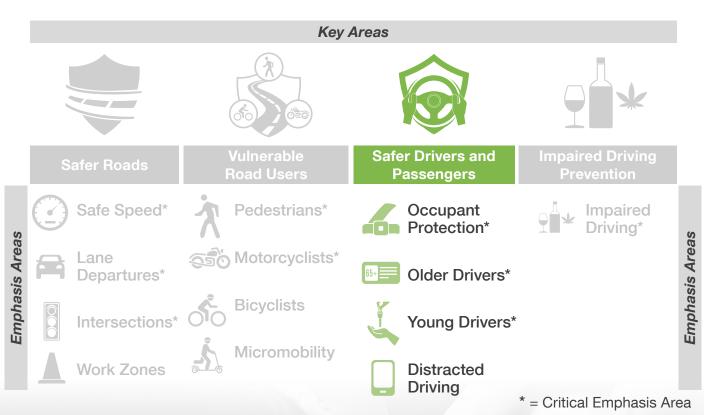


Key Area: Safer Drivers and Passengers



The Safer Drivers and Passengers Key Area includes CEA Task Forces for Occupant Protection, Older Drivers, and Younger Drivers, which have specific strategies presented on the following pages. Future actions related to Distracted Driving will be addressed by the task force as needed.

Chair: Dr. Shashi Nambisan, UNLV Transportation Research Center (TRC)



Occupant Protection



Occupant Protection Action Plan

Vice Chair: Laura Gryder-Culver, KKSOM

Strategy #1

Improve occupant protection use laws.

Action Step #	Action Step Leader	Description	Output Measure
1.1	Erin Breen, UNLV	Enact a primary enforcement seat belt law.	Enactment of primary seat belt law.
1.2	Erin Breen, UNLV	Strengthen child restraint laws for children between the ages of required child passenger safety (CPS) seat use and adult seat belt use.	Enactment of CPS laws covering children past CPS seats but not yet using adult seat belts.
1.3	Erin Breen, UNLV	Require seat belt use for young drivers and their passengers as a condition of Nevada's Graduated Driver Licensing (GDL) system.	Legislative action by 2023.
1.4	Sherry Ely- Mendez, Pyramid Lake Paiute Tribe and Jan Morris, National Tribal Judicial Center	Encourage Local Primary Enforcement Seat Belt Use Laws for tribal lands.	Establish one local agency or tribe to enact a primary seat belt law.

Strategy #2

Maximize proper restraint use by coordinating training and checkpoints with enforcement and the medical community.

Action Step #	Action Step Leader	Description	Output Measure
2.1	Carrie Krupp, OTS	Utilize Joining Forces Coordinators across the state to conduct HVE of seat belt laws in each area (Clark County, Washoe County, and rural areas).	Conduct two HVE occupant protection events and record outcomes (e.g., Seat belt use rates, media coverage).

Strategy #3

Create awareness of proper restraint use with public outreach activities.

Action Step #	Action Step Leader	Description	Output Measure
3.1	Lt. Mike Browett, RPD	Prioritize outreach and communication activities that support occupant protection-related enforcement efforts.	Number and outcome of outreach campaigns or activities related to the support of occupant protection enforcement.
3.2	Nick Nordyke, OTS	Educate younger teen road users on safe behaviors through high school education programs (Zero Teen Fatalities).	Number and outcome of high school programs conducted.
3.3	Nick Nordyke, OTS	Target outreach efforts that support occupant protection enforcement to low-belt-use groups.	Number and outcome of campaigns or outreach activities supporting occupant protection enforcement that specifically target low-belt-use groups.
3.4	Judy Mata, OTS; Johnean Morrison, OTS; Sara Evans	Conduct public outreach on Child Passenger Safety issues throughout Nevada, including tribal communities.	Number and outcome of campaigns or outreach activities supporting CPS use.







Strategy #4

Analyze data and prepare documents to support occupant protection use.

Action Step #	Action Step Leader	Description	Output Measure
4.1	Laura Gryder- Culver, KKSOM	Improve the quality, integration, and analysis of occupant protection data.	Improve the existing linked and standalone databases by: refactoring tables, creating a source-destination crosswalk, integration enhancement, accessibility enhancement, assuring data hygiene, and documentation (data dictionary).
			Maintain timely secondary traffic safety data, dependent upon availability and delivery from primary data owners.
			Incorporate new secondary data sets as they become available from data owners (e.g. Nevada Citation and Tracking System (NCATS), Emergency Medical Services (EMS), DMV, statewide hospital discharge data, etc.)
			Develop enabling agreements and use limitations documents.
4.2	Pushkin Kachroo, UNLVTRC	Make multi-year Nevada seat belt usage data available online.	Publish data online.
4.3	Pushkin Kachroo, UNLVTRC	Collect observational seat belt data and compare with past data.	Analyze data and provide summary of anlaysis.
4.4	Pushkin Kachroo, UNLVTRC	Analyze seat belt attitudinal/observational data to develop systematic implementable feedback-based control countermeasure framework.	Finalize survey instrument, questions, and mechanisms to administer the surveys.
4.5	Shashi Nambisan, UNLVTRC	Create clearinghouse of occupant protection education and analysis; publicize to partners.	Publish materials online.

Older Drivers



Older Drivers Action Plan

Vice Chair: Xochitl Kambak, Healthy Living Institute UMC

Strategy #1

Promote and educate older drivers and family members on comprehensive driving evaluations and encourage early planning to transition from driving.

Action Step #	Action Step Leader	Description	Output Measure
1.1	Andrew Bennett, Clark County; Emily Strickler, KKSOM	Enhance information resources and conduct outreach for older driver safety screening for family, friends, physicians, and law enforcement to report at-risk drivers.	Prepare and publish resources.
1.2	Nick Nordyke, OTS	Evaluate the need to expand the use of variable driver's licenses restrictions, or "graduated de-licensing" (e.g., restrictions on high-speed roadways, night-time driving, within geographic boundaries).	Complete evaluation and report on recommendations.

Strategy #2

Incorporate roadway design features to meet the mobility needs of older drivers.

Action Step #	Action Step Leader	Description	Output Measure
2.1	Lori Campbell, NDOT Traffic Safety	Improve traffic signs, pavement markings, overall lighting, and pedestrian-scale lighting to make the roadway, intersections, and pedestrians/bicyclists more visible to drivers in low light and poor weather conditions.	Review national guidance for older drivers and develop recommendations for Nevada.

Strategy #3

Expand transportation choices to improve the mobility options for older drivers.

Action Step #	Action Step Leader	Description	Output Measure
3.1	Mohammad Farhan, RTCSNV; Rebecca Kapuler, RTC Washoe	Establish accessible and safe mobility options for at-risk older drivers who are seeking to reduce or cease driving.	Review national best practices and develop recommendations for Nevada.
3.2	Andrew Bennett, Clark County	Establish an interagency stakeholder team to assess existing programs, services, education, and public outreach that address the needs of at-risk mature drivers. An interagency team would include representatives from licensing, health care, roadway engineering, transit, law enforcement, health care, and aging and transportation stakeholder groups.	Establish team and complete assessment.



Young Drivers



Young Drivers Action Plan

Vice Chair: Nick Nordyke, OTS

Strategy #1

Improve driver licensing for young drivers in Nevada to meet or exceed national Graduated Driver Licensing (GDL) best practices.

Action Step #	Action Step Leader	Description	Output Measure
1.1	Laura Gryder- Culver, KKSOM; Jeff Garrett, Nevada Drive Academy	Extend GDL requirements through age 20.	Legislative action by 2023.
1.2	Laura Gryder- Culver, KKSOM	Add an intermediate GDL step that spans months 6-12 after initial licensure.	Legislative action by 2023.
1.3	Laura Gryder- Culver, KKSOM	Add a cell phone restriction to Nevada GDL requirements.	Legislative action by 2023.
1.4	Erin Breen, UNLV	Require seat belt use for young drivers and their passengers as a condition of Nevada's GDL system.	Legislative action by 2023. Shared action step with Occupant Protection.
1.5	Nathan Tea; Jeff Garrett, Nevada Drive Academy	Develop corrective recommendations and outreach materials for policymakers to rectify AB338 (passed in 2019).	Recommendations and materials developed for legislative effort in 2023.

Strategy #2

Improve driver education for young drivers in Nevada.

Action Step #	Action Step Leader	Description	Output Measure
2.1	Laura Gryder- Culver, KKSOM	Investigate opportunities for Driver Education and Behind the Wheel training for low-income schools and/or students to improve access to driver education (in coordination with Safe Speed Action Step 2.3).	Identify possible sources or partners for Driver Education funding. Identify schools and/or students needing assistance.
2.2	Nick Nordyke, OTS	Convene a study group to complete a gap analysis of young driver education efforts in Nevada.	Recommendations and/or next step development.

Strategy #3

Support traffic law enforcement of young driver-related laws.

Action Step #	Action Step Leader	Description	Output Measure
3.1	Lt. Mike Browett, RPD; Andrew Bennett, Clark County	Educate officers or law enforcement agencies on the importance of addressing GDL violations through HVE.	Number of education efforts and/or materials produced.







Strategy #4

Conduct targeted young driver outreach to young drivers and their parents/guardians.

Action Step #	Action Step Leader	Description	Output Measure
4.1	Nathan Tea; Tiffany Ward, Dream Safe Project; Keith Habig, CCSDPD	Increase adult involvement in novice driver management through increased communication about parents' role in GDL success.	Number of outreach efforts targeted at parents.
4.2	Tiffany Ward, Dream Safe Project; Jeff Payne, Drivers Edge; Keith Habig, CCSDPD	Increase awareness of young driver issues by targeting outreach to high-risk drivers ages 15-20 at events and locations frequented by these drivers and their parents/guardians (e.g., military, car meets, tailgating events, etc.)	Number of outreach efforts targeted at high-risk young drivers.

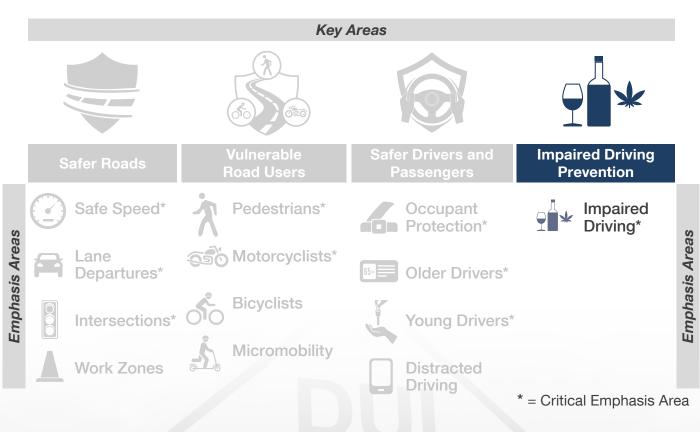


Key Area: Impaired Driving Prevention



The Impaired Driving Prevention Key Area will track strategies and action steps directly related to the prevention of fatalities and serious injuries due to alcohol- and drug-impaired driving.

Chair: Shannon Bryant, Nevada Traffic Safety Resource Prosecutor (TSRP)



Zero Fatalities

Impaired Driving



Impaired Driving Action Plan

Chair: Shannon Bryant, Nevada Traffic Safety Resource Prosecutor

Vice Chair: Meg Matta, DPS-OTS

Strategy #1

Enhance driving under the influence (DUI) deterrence through improved criminal justice system response.

Action Step #	Action Step Leader	Description	Output Measure
1.1	Rob Honea, OTS	DRE Call-out Program.	Program development, number of times implemented, cumulative statistics.
1.2	Doug Hedger, Nevada Judicial Outreach Liaison	Pursue legislation or rule change to mandate substance abuse assessments for all DUI offenders.	Legislative or rule change to implement.
1.3	Dani Hafeman, OTS	Expand ignition interlock usage by DUI offenders and revise requirements to eliminate loopholes in	Number of DUI offenders installing ignition interlocks.
		sanction application.	Revise ignition interlock requirements.
1.4	Rob Honea, OTS	Expand 24/7 Sobriety Program to Clark County.	Implementation of a 24/7 program in Clark County.
1.5	Meg Matta, OTS	Support capacity of DUI Courts in Nevada and support education on best practices.	Recidivism rates
1.6	Shannon Bryant, TSRP	Improve the ability of the criminal justice system to effectively and appropriately manage impaired driving cases through coordination and education directed to prosecutors, toxicologists, law	Conduct trainings for law enforcement, prosecutors, joint law enforcement/ prosecutors. Work with JOL to train judges.
	enforcement, and judges.	Develop online database of recorded and printed media (video presentations and brief banks).	
			Present to judicial conferences.
1.7	Meg Matta, OTS	Work together with NHTSA Region 8 JOL to strengthen ties with the Nevada DUI Courts.	Increase meetings and collabroation.
1.8	Meg Matta, OTS	Establish and support a Nevada State JOL position.	Establishment of new program.
1.9	Meg Matta, OTS	Establish and support a Tribal Court Liaison.	Establishment of new program.
1.10	Shannon Bryant, TSRP	Implement recommendations from the 2020 Nevada Forensic Toxicoloy Lab Assessment.	Implement recommendations.



Impaired Driving



Strategy #2

Support training and education for law enforcement agencies and commit to high-visibility DUI enforcement.

Action Step #	Action Step Leader	Description	Output Measure
2.1	Meg Matta, OTS; Carrie Krupp, OTS	Continue HVE DUI saturation patrols.	Number of HVE saturations. Increase number of arrests.
2.2	Carrie Krupp, OTS	Continue Joining Forces integrated impaired driving and seatbelt enforcement.	Number of integrated enforcement efforts. Increased arrests.
2.3	Rob Honea, OTS	Enhance law enforcement training in alcohol and drug detection and equipment training. Support and expand DRE and ARIDE training.	Number of officers trained in DRE and ARIDE.
2.4	TBD	Public awareness of impaired driving enforcement efforts.	Track public information or outreach efforts that focus on impaired driving.
2.5	OTS	Sustain Law Enforcement Liaison (LEL) program.	LEL Program is maintained.

Strategy #3

Improve understanding of impaired driving issues through better data.

Action Step #	Action Step Leader	Description	Output Measure
3.1	Meg Matta, OTS	Improve alcohol- and drug-impaired driving data and testing.	Establish a process to collect more alcohol and drug related data.
3.2	Jan Morris, National Tribal Judicial Center	Obtain DUI court data on caseloads and recidivism.	Improved data on DUI court outcomes, or clarity on the overall percentage of DUI cases referred to specialty court.

Strategy #4

Improve primary prevention efforts aimed at driving under the influence or riding with an impaired driver.

Action Step #	Action Step Leader	Description	Output Measure
4.1	Meg Matta, OTS	Expand programmatic efforts toward DUI prevention.	Implement additional programs to address prevention.
4.2	Nick Nordyke, OTS	Provide education to young drivers regarding impaired driving.	Prevention efforts aimed at populations and areas at greatest risk.



TRCC Action Plan

Chair: Casey Smith, NDOT Traffic Safety Engineering

Vice Chair: Kevin Tice, DPS-OTS

Strategy #1

TRCC Management, Strategic Planning, and Data Use and Integration.

Action Step #	Action Step Leader	Description
1.1	Mike Colety, Kimley-Horn	Develop a comprehensive Traffic Records Inventory by consolidating the discrete systems documentation maintained by custodial agencies into a coherent whole to improve accessibility and analysis for all stakeholders and to help encourage interactions between data analysts, data users, and those whose jobs are tangential to traffic safety.
1.2	Mike Colety, Kimley-Horn	Leverage its collaborative efforts to ensure that all components of the traffic records data system (TRS) are supported by formal data quality management programs.

Strategy #2

Crash.

Action Step #	Action Step Leader	Description
2.1	Kevin Tice, OTS	Formalize the process to incorporate changes into the crash data dictionary and corresponding documents.
2.2	Kevin Tice, OTS	Improve the consistency and reliability of delivery of the crash files from law enforcement to the State to minimize processing effort, reduce the time between crash and data availability, and reduce opportunities for data quality corruption.
2.3	Matt Williams, NDOT	Implement more timely uploads to NCATS to give users closer to real-time data with which to make critical programmatic and infrastructure enhancements.
2.4	Kevin Tice, OTS; Matt Williams, NDOT	Enhance procedures for managing errors and incomplete data and formalize efforts to ensure that data from reports with validation errors are fixed and entered into the repository. This should include formal changes to the data dictionary as necessary.
2.5	Matt Williams, NDOT, Kevin Tice, OTS	Implement a report for officers related to timeliness, accuracy, and completeness feedback. This can be useful for training, updates to manuals, and form revisions. Allow feedback from users to collectors to further enhance data quality.

Strategy #3

Vehicle/Driver.

Action Step #	Action Step Leader	Description
3.1	Kevin Tice, OTS	Increase active representation on TRCC and providing vehicle data system quality management reports, which could potentially result in obtaining priority consideration for federal traffic records grant funding to enhance the vehicle data system.
3.2	Kevin Tice, OTS	Attain the driver and vehicles system data from the DMV and link to the crash system NCATS.
3.3	Kevin Tice, OTS	Obtain the required authorizations or attain a non-proprietary version of the driver system documents and narratives to assist with future assessments and system evaluations.



Strategy #4

Roadway.

Action Step #	Action Step Leader	Description
4.1	Mike Colety, Kimley-Horn; NDOT	Coordinate with all the entities using and providing roadway data, including entities in the TRCC / NECTS.
4.2	NDOT	Set access standards for all State users.
4.3	NDOT; Kevin Tice, OTS	Use roadway database information already available (e.g., for timeliness calculations).
4.4	NDOT	Organizing the roadway history for archiving in conjunction with the vendor.
4.5	Matt Williams, NDOT	Develop a database or enterprise system that combines roadway and traffic crash data elements.
4.6	NDOT	Develop a formal quality control program.

Strategy #5

Citation/Adjudication.

Action Step #	Action Step Leader	Description
5.1	TBD	Explore the development of a complete set of performance measures related to the quality of citation systems' data

Strategy #6

EMS/Injury Surveillance.

Action Step #	Action Step Leader	Description
6.1	Kevin Tice, OTS	Share information and data management reports with TRCC on a regular basis.
6.2	Kevin Tice, OTS; Laura Gryder- Culver, KKSOM	Build on the success of the integration of the State crash file and the statewide Nevada trauma registry data and integrate all components of the injury surveillance system.
6.3	Kevin Tice, OTS	Develop the core injury surveillance data into an important resource to define, evaluate, and support highway safety programs and projects through enhanced coordination with the State's health agencies.













