



||||||| 2016-2020 Nevada  
*Strategic Highway Safety Plan*  
with 2017 Supplement Document



Always Buckle Up



Don't Drive Impaired



Focus on the Road



Stop on Red



Be Pedestrian Safe



Ride Safe

**zero**  
**Fatalities**  
*Drive Safe Nevada*

# TABLE OF CONTENTS

<b>PARTNER PLEDGE</b>	<b>2</b>
<b>ACKNOWLEDGMENTS</b>	<b>3</b>
<b>WHAT IS THE STRATEGIC HIGHWAY SAFETY PLAN?</b>	<b>5</b>
BACKGROUND	5
SHSP ORGANIZATIONAL STRUCTURE	6
ROLES AND RESPONSIBILITIES	6
UPDATING THE NEVADA STRATEGIC HIGHWAY SAFETY PLAN	8
<b>SHSP GOALS</b>	<b>9</b>
MAP-21 PERFORMANCE MEASURES	10
<b>CRITICAL EMPHASIS AREAS</b>	<b>12</b>
<b>IMPAIRED DRIVING</b>	<b>13</b>
<b>INTERSECTIONS</b>	<b>15</b>
<b>LANE DEPARTURES</b>	<b>17</b>
<b>MOTORCYCLES</b>	<b>19</b>
<b>OCCUPANT PROTECTION</b>	<b>21</b>
<b>PEDESTRIANS</b>	<b>23</b>
<b>DATA</b>	<b>25</b>
<b>NEXT STEPS – IMPLEMENTATION AND EVALUATION</b>	<b>26</b>
<b>2017 SUPPLEMENT</b>	<b>28</b>

*Revised: October 4, 2016 (Approved: October 11, 2016 by NECTS)*

## ACRONYMS

<b>AASHTO</b>	American Association of State Highway and Transportation Officials	<b>NDOT</b>	Nevada Department of Transportation
<b>CEA</b>	Critical Emphasis Area	<b>NECTS</b>	Nevada Executive Committee on Traffic Safety
<b>DPS</b>	Department of Public Safety	<b>NHP</b>	Nevada Highway Patrol
<b>FHWA</b>	Federal Highway Administration	<b>NHTSA</b>	National Highway Traffic Safety Administration
<b>GHSA</b>	Governors Highway Safety Association	<b>OTS</b>	Office of Traffic Safety
<b>LVMPD</b>	Las Vegas Metropolitan Police Department	<b>RTC</b>	Regional Transportation Commission
<b>MAP-21</b>	Moving Ahead for Progress in the 21st Century Act	<b>SHSP</b>	Strategic Highway Safety Plan
<b>MMUCC</b>	Model Minimum Uniform Crash Criteria	<b>TRB</b>	Transportation Research Board
<b>NCHRP</b>	National Cooperative Highway Research Program	<b>TRCC</b>	Traffic Records Coordinating Committee
		<b>TREC</b>	Traffic Records Executive Committee
		<b>TWG</b>	Technical Working Group



# PARTNER PLEDGE

Zero Fatalities is all about eliminating 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.



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# ACKNOWLEDGMENTS

The implementation and update of the Nevada Strategic Highway Safety Plan would not be possible without the hard work and commitment of the Nevada Executive Committee on Traffic Safety (NECTS), the Technical Working Group (TWG), and the Critical Emphasis Area (CEA) Teams. All groups have dedicated significant amounts of time and effort toward the development of this document and saving the lives of Nevadans. Members of the NECTS and TWG are listed below. Full rosters for each CEA team are included in the Supplement.

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Nevada Department of Transportation

Nevada Department of Public Safety

Nevada Department of Motor Vehicles

Nevada Department of Health and Human Services

Nevada Department of Education

Regional Transportation Commission of Southern Nevada

Regional Transportation Commission of Washoe County

Nevada Association of Counties

Nevada Sheriffs' and Chiefs' Association

Administrative Office of the Courts

Nevada League of Cities

Southern Nevada Health District

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# 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 critical emphasis areas focusing on the 4 E's of traffic safety: Engineering, Education, Enforcement and Emergency Medical Services/Emergency Response/Incident Management. Goals and strategies are developed in consultation with federal, tribal, state, local, and private-sector safety stakeholders.

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 state, local, tribal, and federal agencies; institutions; private-sector firms; and concerned citizens to help solve this problem.

## BACKGROUND

Nevada's efforts to develop the SHSP began when the Nevada Department of Transportation (NDOT) Traffic Safety Engineering office formed a Technical Working Group (TWG) in 2004. The TWG is a multi-agency group comprised of traffic safety representatives that initiated coordination and later supported the activities of the Nevada Executive Committee on Traffic Safety (NECTS), which followed in late 2005. The role of the NECTS in the development of the Nevada SHSP is to provide guidance, approve the document, and help gain consensus at a high level among the many local, state, and federal agencies with a stake in traffic safety.

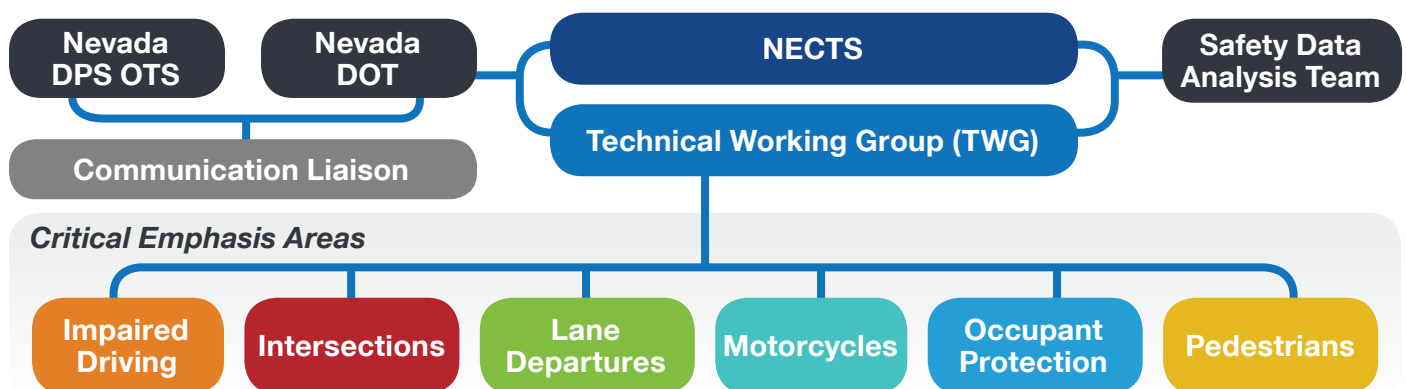
To help the state focus its highway safety efforts in areas where they can be the most effective, Nevada identified the emphasis areas where there was a relatively high number of fatalities. The five Critical Emphasis Areas (CEAs) were identified at the 2004 Safety Summit, the first to be held in Nevada. The original CEAs included: making walking and street crossing safer (Pedestrians); reducing impaired driving (Impaired Driving); increasing seat belt usage (Seat Belts); improving the design and operation of highway intersections (Intersections); and keeping vehicles on the roadway (Lane Departures).

In 2010, Nevada adopted the "Zero Fatalities" goal, 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). To reach zero fatalities, Nevada established an interim goal of one-half of 2008 levels by 2030. At the time of the 2011-2015 SHSP Update, analysis of statewide crash data indicated that the CEAs should remain the same: Impaired Driving, Intersections, Lane Departures, Pedestrians, and Seat Belts (now Occupant Protection).

In 2014, the SHSP was amended to incorporate the Special User Groups of bicyclists, pedestrians, motorcyclists, younger road users and older road users into all CEAs and add Emergency Responders and Traffic Incident Management to Emergency Medical Services. In addition, the NECTS approved the sixth CEA - Motorcycles - due to the increasing trends in motorcycle fatalities and serious injuries both in Nevada and on a national level.

## SHSP ORGANIZATIONAL STRUCTURE

Supporting the efforts of the NECTS are the TWG and the CEA teams.



# ROLES AND RESPONSIBILITIES

To keep the SHSP process moving forward, Nevada established specific 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

## TECHNICAL WORKING GROUP

- Reviews progress in each of the CEAs
- Provides assistance, when appropriate, to overcome barriers or solve problems
- Provides recommendations to the NECTS on all major SHSP initiatives, such as the Highway Safety Improvement Program (HSIP) and flex projects, updating of the plan, new or revised goals, changes in CEA leadership, etc.
- Receives updates on SHSP-related campaigns, trainings, or other programs
- Leads the SHSP revision

## CRITICAL EMPHASIS AREA TEAMS

- Ensures team membership is multidisciplinary and includes representatives from at least three of the 4Es of safety (engineering, enforcement, education, and emergency medical services/emergency response/incident management) and follows up with State SHSP coordinators if assistance is needed on team composition
- Schedules meetings of the group, when necessary, notifies participants, and prepares meeting reports including action items after each meeting
- Tracks progress on implementation of the CEA plan with assistance from the various action step leaders and notifies the state SHSP coordinators if assistance is needed on implementation of any action step
- Prepares quarterly progress reports describing what has occurred in each of the action steps
- Reviews the CEA strategies and determines if any should be revised or deleted; identifies new strategies, where appropriate; and develops action plans for each of the CEA strategies
- Applies the SHSP to help implement a task or project or overcome a barrier

## COMMUNICATIONS LIAISON

- Facilitates the coordination and tracking of public media and marketing initiatives
- Tracks Zero Fatalities outreach activities
- Assists with the coordination and reporting of Zero Fatalities campaigns

## SAFETY DATA ANALYSIS TEAM

- Facilitates the Nevada Traffic Records Coordinating Committee (TRCC) and supports the continued improvement of data in the Nevada Citation and Accident Tracking System (NCATS)
- Supports efforts to ensure that NCATS meets the standards of the Model Minimum Uniform Crash Criteria (MMUCC)
- Assist with the distribution of NCATS data to government and non-government agencies
- Coordinates the data analysis to support effective SHSP implementation



# UPDATING THE NEVADA STRATEGIC HIGHWAY SAFETY PLAN

An initial update task involved reviewing fatality and serious injury data to determine the necessity of changing the current CEAs. After reviewing the historical crash data for the original 22 emphasis areas in the AASHTO strategic plan, the TWG determined that the same six emphasis areas from the previous SHSP continue to be areas of concern. The table to the right summarizes the average annual fatalities from 2009-2013 for the AASHTO emphasis areas where data was available.

The update process for the Nevada SHSP kicked off in March 2015 when Nevada hosted a 2-day peer exchange in Carson City with support from FHWA. Safety professionals from Nevada as well as five other states exchanged noteworthy practices and share successes and challenges for Nevada to incorporate into the update. Shortly after the peer exchange, NDOT and Office of Traffic Study (OTS) hosted the 2015 Nevada Traffic Safety Summit, March 24-25, in Reno, Nevada. Approximately 240 safety professionals representing the 4 “E’s” gathered together to develop strategies and action steps for each CEA. Attendees were assigned to CEA breakout teams. Each breakout team reviewed the crash data for the CEA, and then small teams brainstormed the top strategies and actions.

After the Traffic Safety Summit, the CEA facilitators, chairs, and vice-chairs summarized the results of each CEA breakout session. Over the following months, CEA teams met to determine strategies and actions steps for the update. In selecting the final strategies for the plan, the CEA teams:

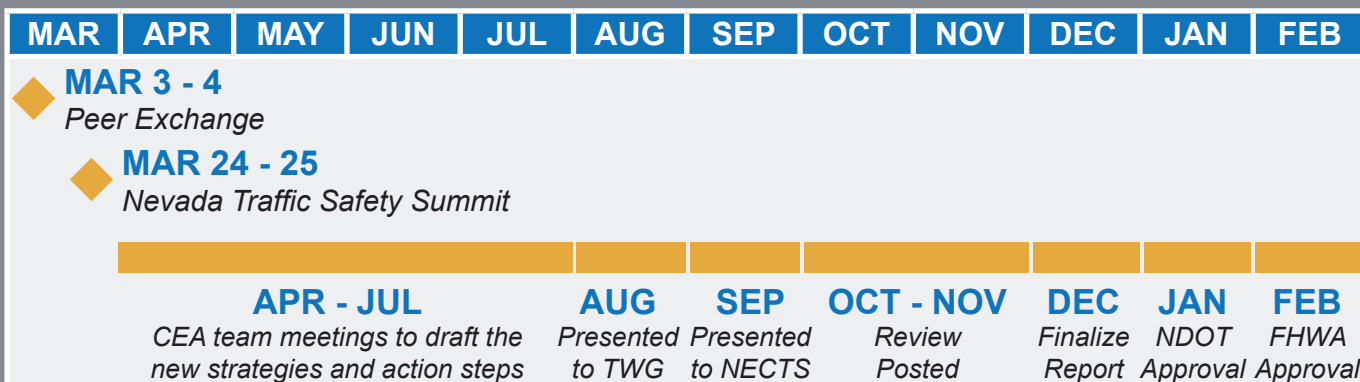
- Reviewed current strategies and action steps and determined if any should be carried over to the updated plan
- Reviewed results and recommendations from the Traffic Safety Summit
- Reviewed proven strategies and countermeasures from the National Cooperative Highway Research Program (NCHRP) Report 500.

The final strategies and action steps were presented to the TWG in August, 2015.

Documented in this update are 22 strategies and accompanying actions to continue to reduce crashes, and fatal and serious injury crashes. This plan also includes measurable objectives to track the progress of each strategy and action step. This document provides a summary of the emphasis areas and strategies that will guide Nevada’s traffic safety efforts over the next five years.

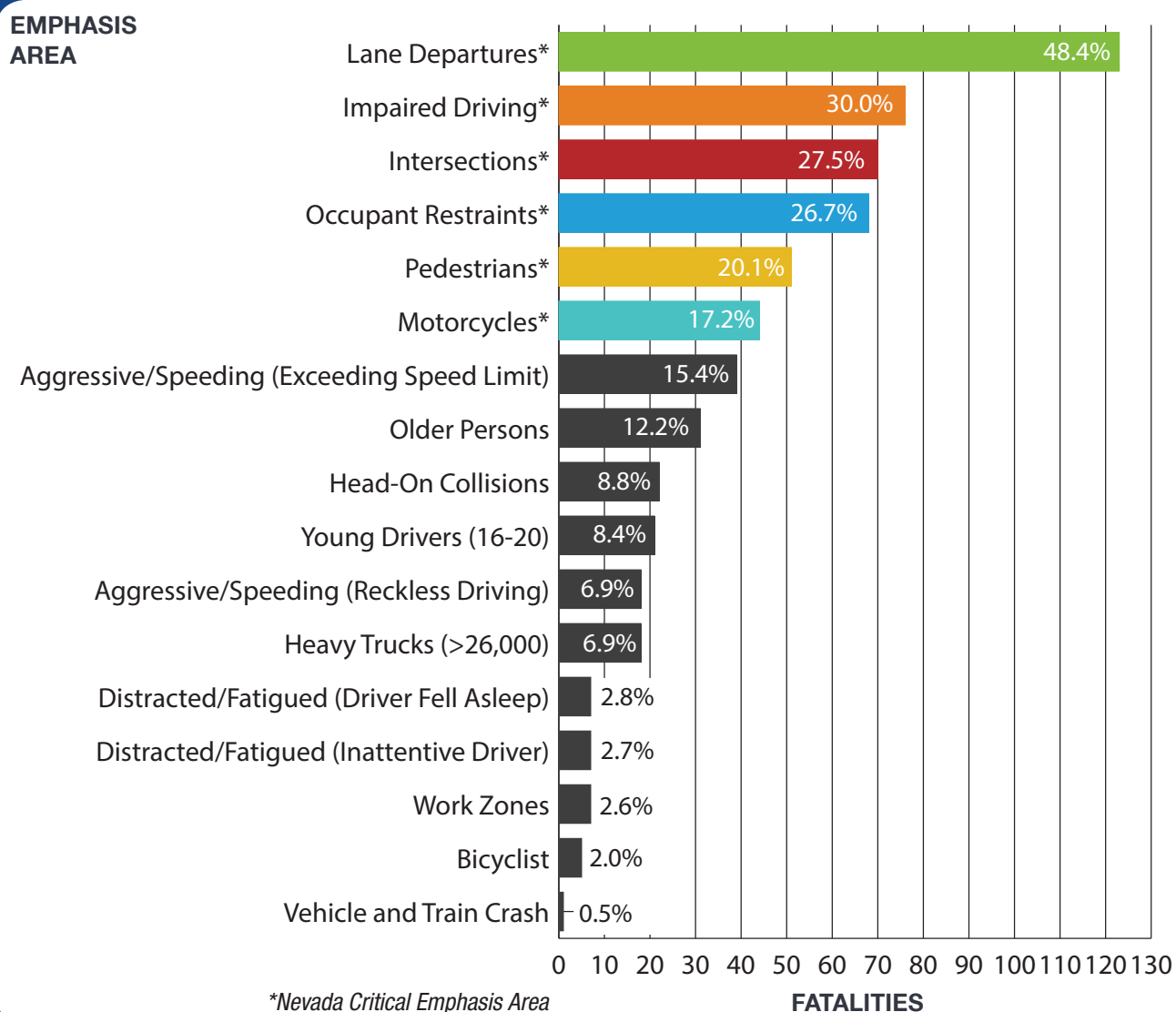
## 2016 - 2020 SHSP UPDATE TIMELINE

2015 - 2016



## COMPARISON OF AASHTO EMPHASIS AREAS

Average Annual Fatalities 2009-2013



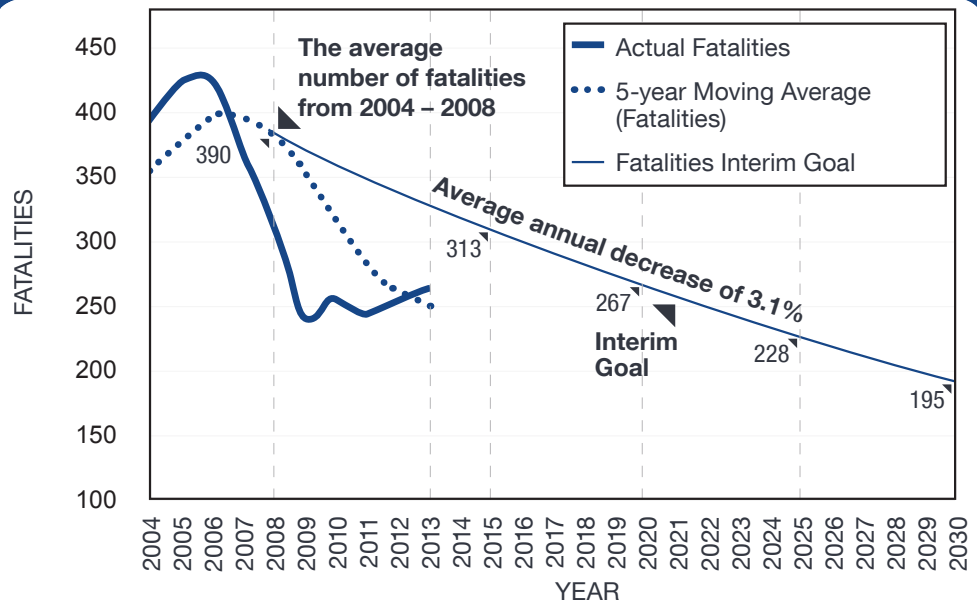
Note: Includes 2009-2013 Nevada Crash Data

# SHSP GOALS

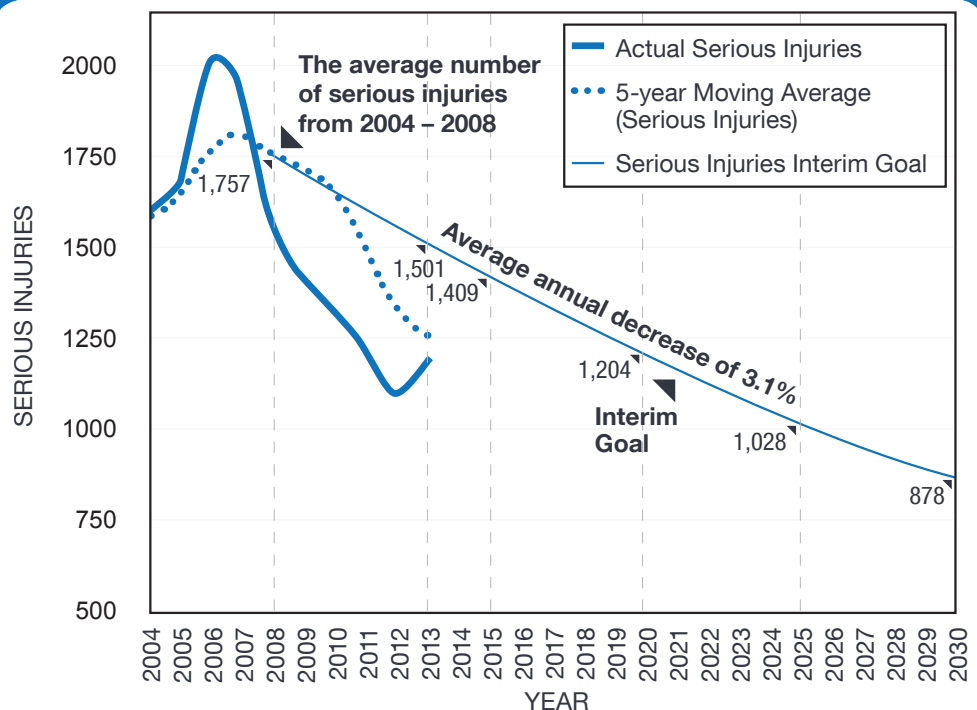
The overall goal for Nevada is Zero Fatalities. As we continuously strive to meet that goal, annual targets will be set based on the reduction of 2008 traffic-related fatalities and serious injuries by 50% by the year 2030. Specifically, Nevada will need to:

- Reduce annual fatalities from the baseline five-year (2004-2008) average of 390 to 195 by 2030.
- Reduce annual serious injuries from the baseline five-year (2004 to 2008) average of 1,757 to 878 by 2030.

## NEVADA FATALITY HISTORICAL TRENDS *Interim Goals to 2030*



## NEVADA SERIOUS INJURY HISTORICAL TRENDS *Interim Goals to 2030*





# MAP-21 PERFORMANCE MEASURES

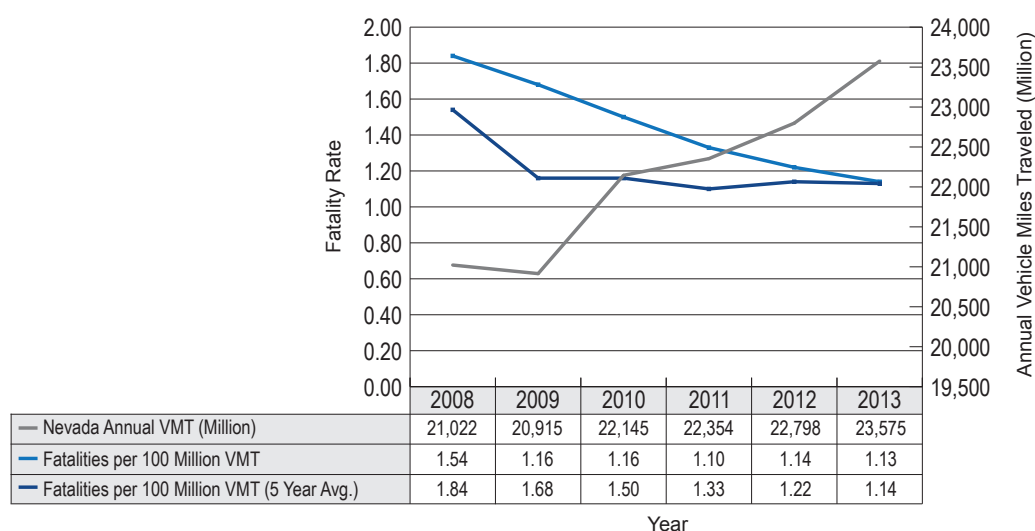
Map-21 has four performance measures:

1. Number of fatalities
2. Number of serious injuries
3. Fatality rate
4. Serious injury rate

The following figures show historical trends for the four MAP-21 performance measures. Specific annual targets will be determined annually and included in the Supplement. The 2016 targets are shown for reference in the figures below.

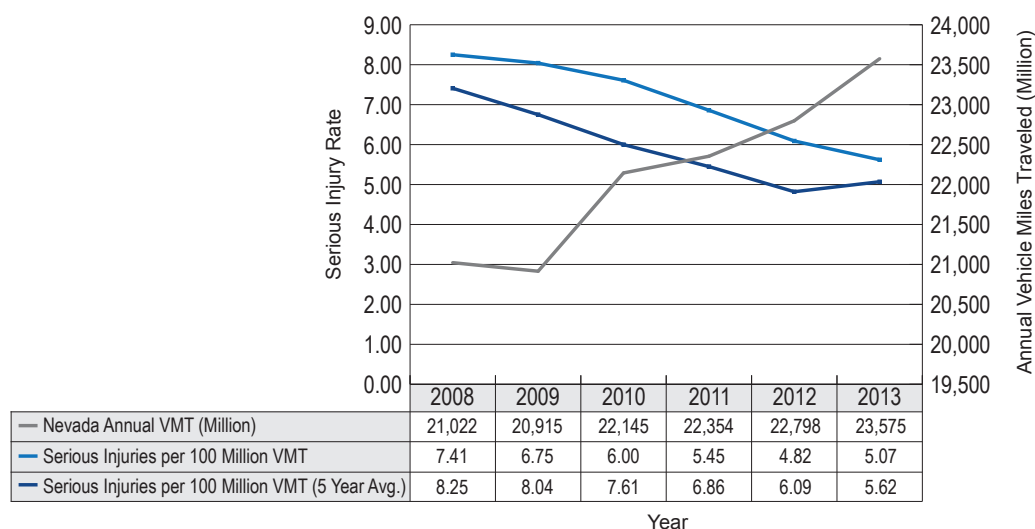
## NEVADA FATALITY RATE AND ANNUAL VEHICLE MILES TRAVELED

*VTM projected 2013 to 2016 based on 10 year average through 2013 of 1.69%.*



## NEVADA SERIOUS INJURY RATE AND ANNUAL VEHICLE MILES TRAVELED

*VTM projected 2013 to 2016 based on 10 year average through 2013 of 1.69%.*









# CRITICAL EMPHASIS AREAS

FHWA guidance suggests that emphasis areas should reflect “the greatest potential for reducing fatalities and injuries.” Based on the most recent analysis of statewide crash data, Nevada has identified six critical emphasis areas. These emphasis areas are a required component of any SHSP and help direct resources, focus implementation efforts and organize CEA teams.



## ***Impaired Driving***

*Don't Drive Impaired*



## ***Intersections***

*Stop on Red*



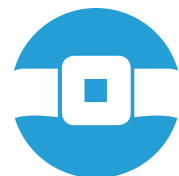
## ***Lane Departures***

*Focus on the Road*



## ***Motorcycles***

*Ride Safe*



## ***Occupant Protection***

*Always Buckle Up*



## ***Pedestrians***

*Be Pedestrian Safe*

The following specific road user groups are hereby incorporated into the strategies and action steps for all CEAs:

- Bicyclists
- Motorcycles (including mopeds and scooters)
- Older Road Users (65 and Over)
- Pedestrians
- Younger Road Users (Under 25)

In addition, strategies and action steps from different CEAs that overlap are being coordinated by the CEA Teams. Each CEA team and its strategies address the 4 E's of safety (Engineering, Education, Enforcement, Emergency Medical Services/Emergency Responders/Incident Management) plus the 5th E - Everyone.





## Critical Emphasis Area:

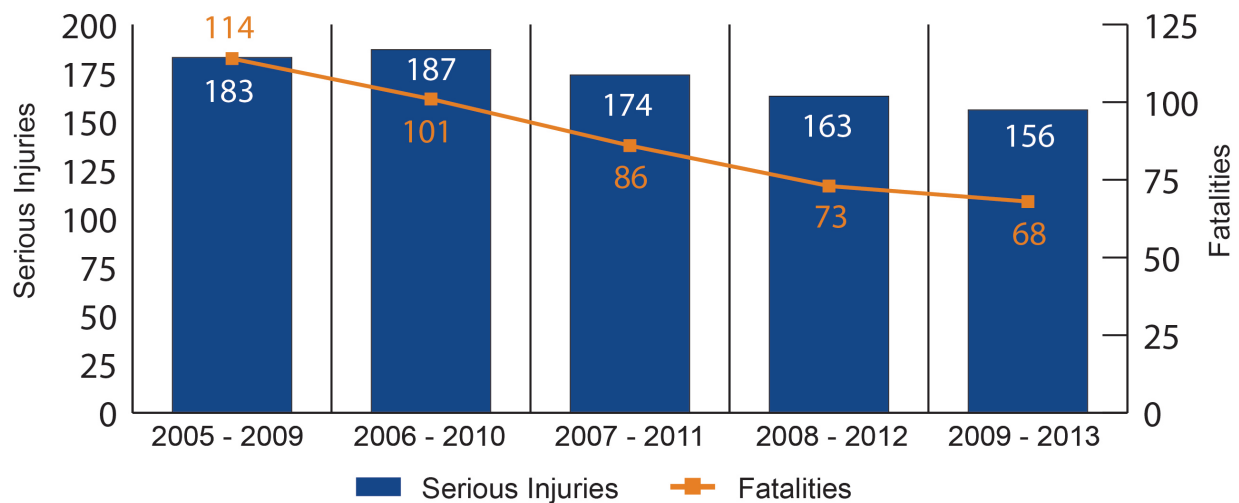
# IMPAIRED DRIVING



Alcohol-related crashes account for almost 20% of Nevada's traffic-related deaths and 39% of serious injuries each year. Between 2011 and 2015, 341 people lost their lives and 780 were seriously injured in impaired driving crashes on Nevada roadways.

### Annual crash trend for impaired driving fatalities

 **8%** 5-year rolling average  
from 2009 – 2013.





## **MOST COMMON COLLISION ATTRIBUTES**

- Day of Week, **SATURDAY/SUNDAY**
- **MALE DRIVERS**, age 26–35
- Occur in **URBAN AREAS**
- Most common crash types are **NON-COLLISION AND ANGLE CRASHES**

## **PERFORMANCE MEASURES**

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

## **STRATEGIES**

1. Maximize DUI enforcement through training, coordination, education, and funding
2. Aggressively reduce impaired driving through educational campaigns, training, and events
3. Eliminate repeat DUI offenses through successful existing programs and innovative new programs
4. Understand and address the increase in “under the influence of other substances” crashes

Impaired Driving CEA Fact Sheet, Action Plan and Team Roster are included in the Supplement and will be updated on an annual basis.




## Critical Emphasis Area:

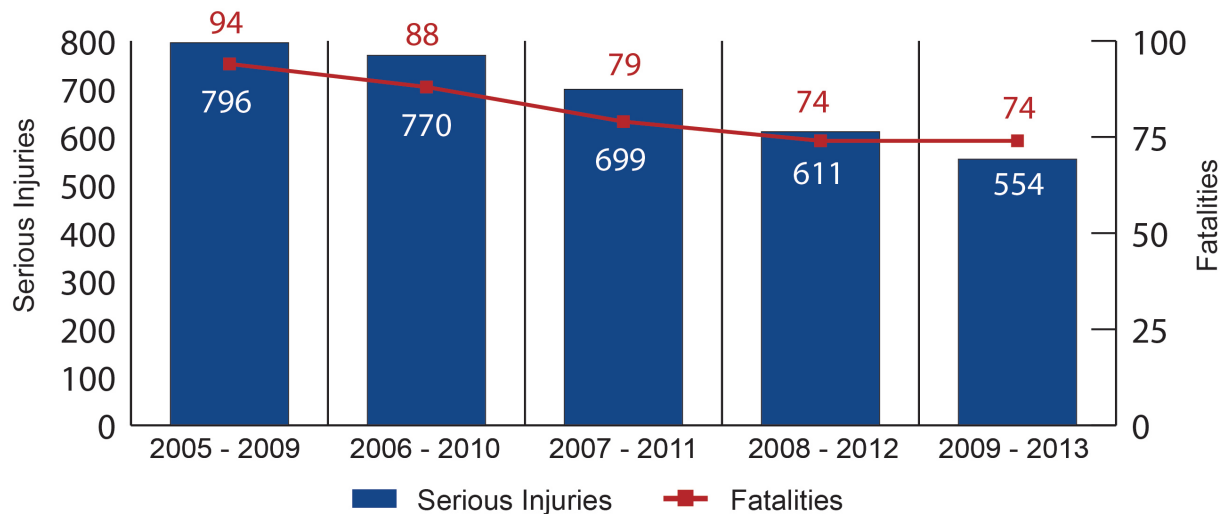
# INTERSECTIONS



Intersection fatalities have dropped from a high of 111 in 2006 to 50 in 2013; and serious injuries have decreased from 592 in 2009 to 460 in 2013. With different crossing and entering movements by both drivers and pedestrians, an intersection is one of the most complex traffic situations that motorists encounter. The Intersection CEA Team has developed objectives and new strategies to continue progress in eliminating fatalities and serious injuries at intersections.

### Annual crash trend for intersection fatalities

 **4%** 5-year rolling average  
from 2009 – 2013.







## **MOST COMMON COLLISION ATTRIBUTES**

- **MALE DRIVERS**, age 26–45
- Day of week, **FRIDAY**
- **61% DURING DAYLIGHT** and 32% in dark, but lighted locations
- **ANGLE, SINGLE VEHICLE, AND NON-COLLISION** are the most common crash types

## **PERFORMANCE MEASURES**

- Number of intersection-related fatalities
- Number of intersection-related serious injuries

## **STRATEGIES**

1. Implement geometric improvements
2. Use appropriate traffic controls to reduce conflicts
3. Improve sight distance and traffic control visibility
4. Improve access management to reduce conflicts
5. Improve behavior at intersections through the use of education and enforcement

Intersection CEA Fact Sheet, Action Plan and Team Roster are included in the Supplement and will be updated on an annual basis.




## Critical Emphasis Area:

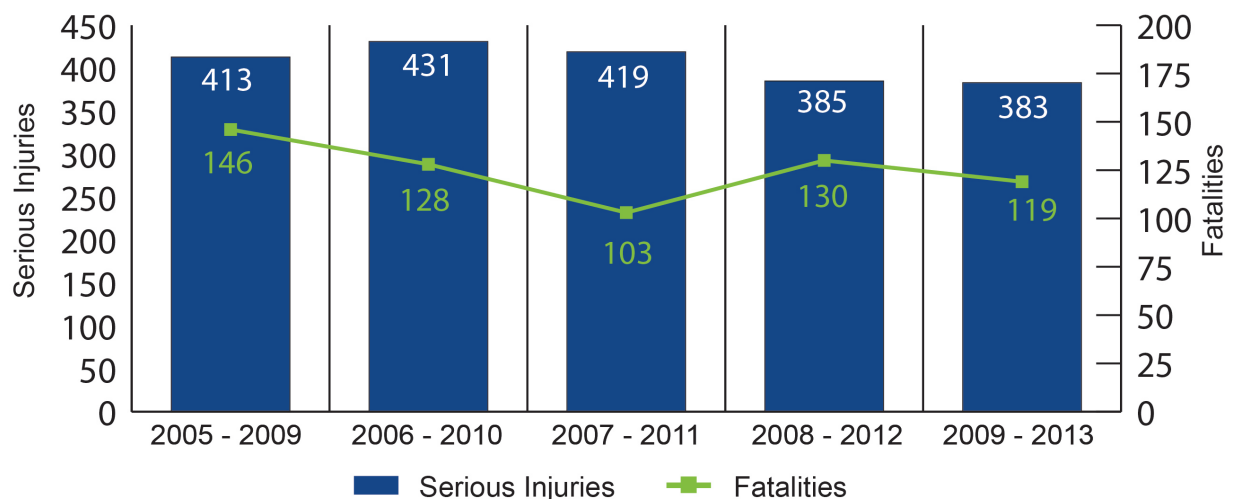
# LANE DEPARTURES



Lane departure crashes are a non-intersection crash in which typically a vehicle crosses an edge line, lane line and may leave the roadway or cross the centerline. Although lane departure countermeasures have historically been focused on High Risk Rural Roads (see definition on page 25), the focus of the Lane Departure CEA has been expanded to include urban and suburban areas. Lane departure crashes also include those caused by distracted driving. In Nevada, lane departure fatalities decreased from 2012 to 2013, while serious injuries related to lane departure crashes increased between 2012 and 2013.

### Annual crash trend for lane departure fatalities

 **4%** 5-year rolling average  
from 2009 – 2013.





## **MOST COMMON COLLISION ATTRIBUTES**

- Occur in **CLEAR, DAYLIGHT, OR LIGHTED CONDITIONS**
- Most common crash types are **NON-COLLISION AND ANGLE CRASHES**
- Drivers **AGE 26–35**
- About half involved a **FIXED OBJECT**

## **PERFORMANCE MEASURES**

- Number of fatalities due to leaving the roadway
- Number of serious injuries due to leaving the roadway

## **STRATEGIES**

1. Increase targeted enforcement and education programs on high risk behaviors, such as distracted driving, driving too fast for conditions and drowsy driving
2. Keep vehicles in their lanes through improvements/engineering, particularly on curves
3. Increase survivability in the event of a roadway departure

Lane Departures CEA Fact Sheet, Action Plan and Team Roster are included in the Supplement and will be updated on an annual basis.




## Critical Emphasis Area:

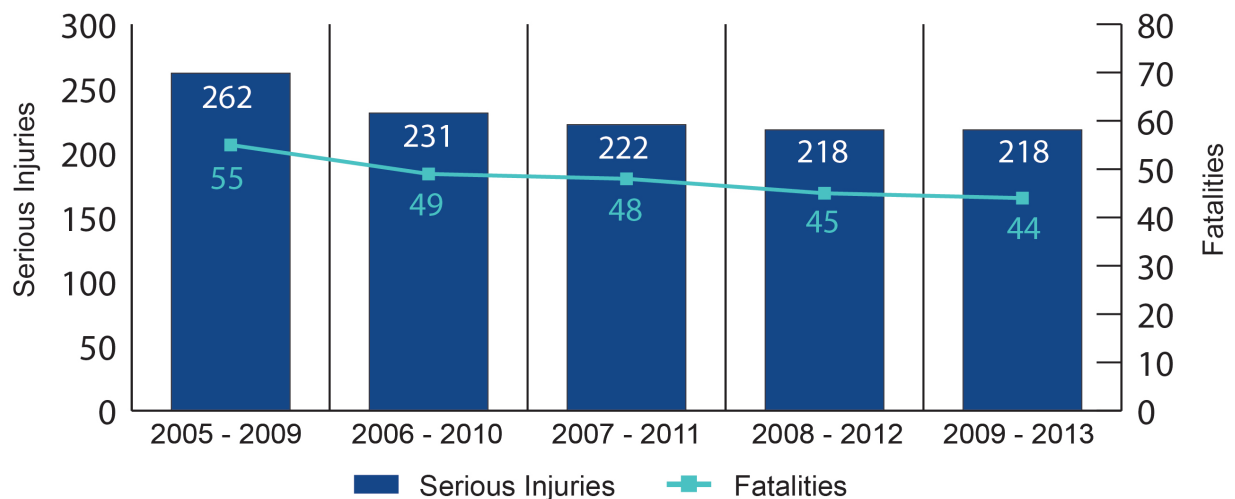
# MOTORCYCLES



Between 2011 and 2015, nearly 1,100 motorcyclists were seriously injured in Nevada and almost 250 riders lost their lives on our roadways. Motorcycle fatalities reached a low in 2011, and have been slightly increasing ever since. The Motorcycle CEA Team has developed key strategies to reverse the trend in motorcycle fatalities and serious injuries.

### Annual crash trend for motorcycle fatalities

 **4%** 5-year rolling average from 2009 – 2013.







## **MOST COMMON COLLISION ATTRIBUTES**

- **MALE DRIVERS**, age 26–55
- 64% during **DAYLIGHT**
- Most common crash types are **ANGLE AND NON-COLLISION CRASHES**
- **DRIVING STRAIGHT** is the most common vehicle action
- **IMPAIRED** riding
- Improper **LICENSE/TRAINING**

## **PERFORMANCE MEASURES**

- Number of fatalities due to motorcycle-related crashes leaving the roadway
- Number of serious injuries due to motorcycle-related crashes leaving the roadway

## **STRATEGIES**

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

Motorcycle CEA Fact Sheet, Action Plan and Team Roster are included in the Supplement and will be updated on an annual basis.




## Critical Emphasis Area:

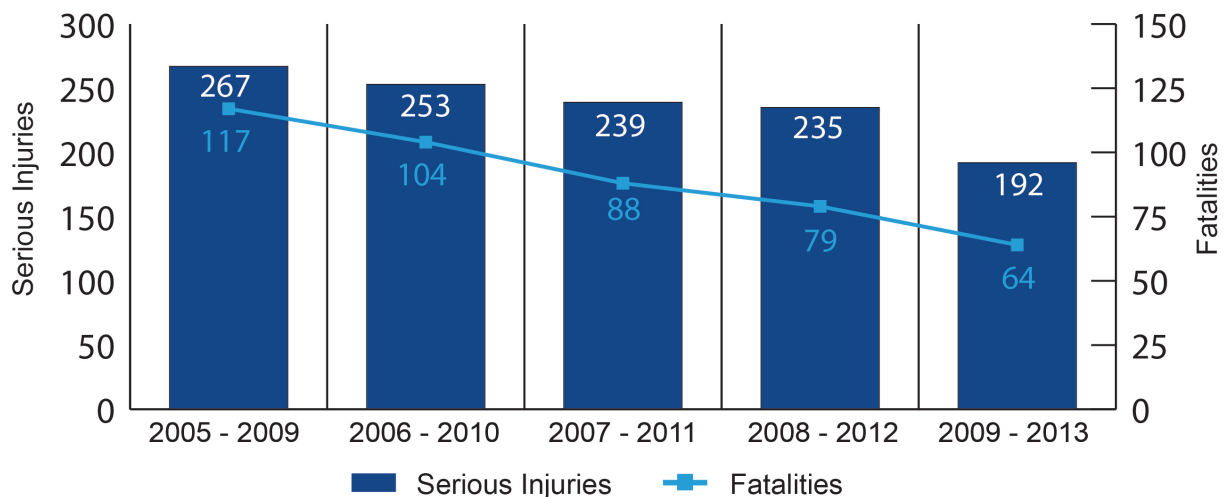
# OCCUPANT PROTECTION



The FHWA reported approximately 9,580 unrestrained vehicle occupants died in traffic crashes nationwide in 2013. While the restraint usage rate has reached an all-time high both nationally and in Nevada, the vulnerability of the population continues to be a top priority. For Nevada in 2013, there were 58 unbelted vehicle occupant fatalities and 169 serious injuries. Run-off road collisions represent the largest type of crash for unrestrained fatalities and serious injuries in Nevada, and ejection from the vehicle killed about 40% of the occupants. To address the issue, the Occupant Protection CEA Team established measurable objectives and developed new strategies for both fatalities and serious injuries.

### Annual crash trend for unprotected occupant fatalities

 **9%** 5-year rolling average  
from 2009 – 2013.





## **MOST COMMON COLLISION ATTRIBUTES**

- **MALE DRIVERS**, age 26–35
- 66% occur on **URBAN ROADWAYS**
- **SUNDAY** is the highest day
- **NON-COLLISION** and angle are the most prevalent crash types
- **HISPANIC CHILDREN** appear to be more at risk
- Strong correlation with **IMPAIRED DRIVING**

## **PERFORMANCE MEASURES**

- Number of fatalities related to unprotected occupants
- Number of serious injuries related to unprotected occupants

## **STRATEGIES**

1. Analyze data, prepare documents and disseminate information to support occupant protection use
2. Maximize proper restraint use with enforcement and public outreach campaigns
3. Analyze data and prepare documents to support occupant protection legislation

Occupant Protection CEA Fact Sheet, Action Plan and Team Roster are included in the Supplement and will be updated on an annual basis.




## Critical Emphasis Area:

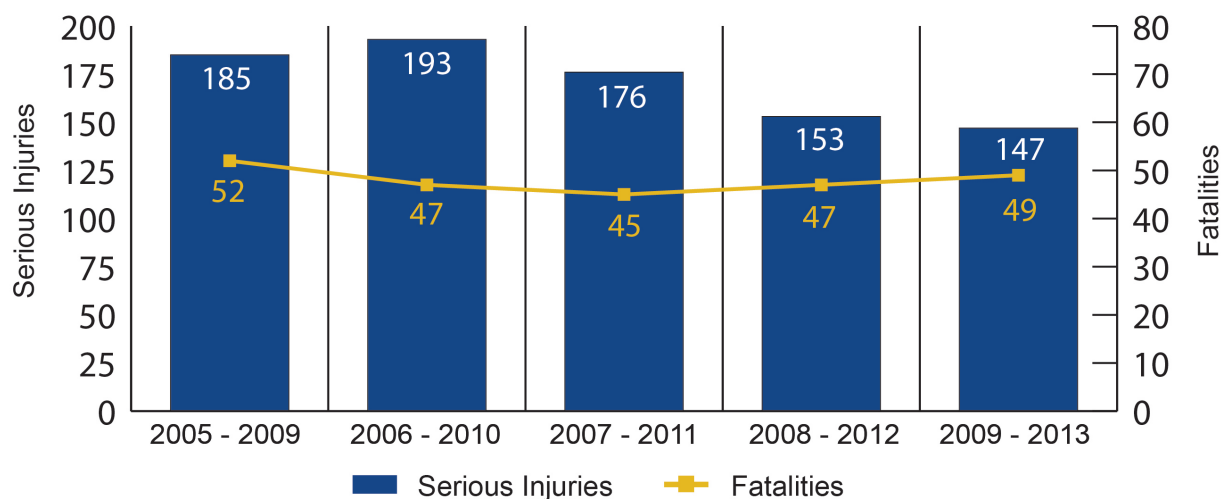
# PEDESTRIANS



The FHWA estimates that in 2013, 4,700 people died in pedestrian incidents and another 66,000 were injured. For Nevada in 2013, there were 69 pedestrian fatalities and 147 serious injuries. A majority of pedestrian fatalities occurred mid-block on a roadway, and a large percent occurred in marked crosswalks. The greatest proportion of pedestrian serious injuries and fatalities occurred at intersections. To address the issue, the Pedestrian Safety CEA Team established measurable objectives and developed new strategies for both fatalities and serious injuries.

### Annual crash trend for pedestrian fatalities

 **1%** 5-year rolling average from 2009 – 2013.







## **MOST COMMON COLLISION ATTRIBUTES**

- **MALE PEDESTRIANS**, age 46–55
- **FRIDAY** is the highest day
- Most occur in the **ROADWAY**, not at an intersection
- Most are due to **IMPROPER CROSSING** followed by failure to yield right-of-way

## **PERFORMANCE MEASURES**

- Number of pedestrian fatalities
- Number of pedestrian serious injuries

## **STRATEGIES**

1. Reduce pedestrian exposure through roadway modifications
2. Improve drivers' ability to see pedestrians
3. Improve driver and pedestrian awareness and behavior

Pedestrians CEA Fact Sheet, Action Plan and Team Roster are included in the Supplement and will be updated on an annual basis.

## SAFETY DATA ANALYSIS

The Nevada SHSP continues to be as data driven as possible. The original SHSP selected the top five CEAs based on percentage of fatalities so that efforts were focused on the most critical areas. The data has continued to be monitored and when the percentage of motorcycle fatality and serious injury crashes escalated, it was added as a sixth CEA. In addition, the results of the data analysis have guided the specific action steps for each CEA. Progress is being made on the electronic collection of data from law enforcement agencies and transfer into the Nevada Citation and Accident Tracking System (NCATS). The availability of data associated with the analysis of crashes and tools to analyze the data continues to grow significantly. Thus, it is critically important that SHSP implementation continues to emphasize the importance of collecting and analyzing crash data based on the Highway Safety Manual and focuses on the development of a robust database of crash data that is geospatially referenced to relevant traffic and roadway data.

The Nevada SHSP has had a Data Team that was primarily focused on streamlining the process of the transfer and cleaning of crash data from law enforcement agencies into the Nevada Citation and Accident Tracking System (NCATS) and providing crash data summaries to support the SHSP implementation actions. Moving forward, the Data Team will be transformed into the Safety Data Analysis Team and will focus on the following strategies:

1. Facilitates the Nevada Traffic Records Coordinating Committee (TRCC) and supports the continued improvement of data in the Nevada Citation and Accident Tracking System (NCATS)
2. Supports the development of the database and tools to support SHSP Implementation
3. Supports the incorporation of 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 data related to SHSP implementation to be correlated for safety analysis includes the correlation and analysis of data including but not limited to:

- Crash data
- Traffic volume data
- Roadway geometrics data
- Traffic control data
- Trauma data
- Citation data

The Safety Data Analysis Team 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.

## HIGH RISK RURAL ROADS (HRRR)

The Nevada SHSP Implementation includes an emphasis on High Risk Rural Roads (HRRR) within the Lane Departures CEA. HRRR 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 incapacitating injuries exceeds the statewide average for those functional classifications or roadways. For situations where there is not accurate data to determine the fatal or incapacity 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 roadway that share common characteristics of known features that contribute to serious injury and fatal crashes. This includes but is not limited to: narrow unpaved shoulders, steep slopes, roadside obstacles, substandard geometrics on curves, lack of signs on curves and lack of rumble stripes. The second method will be to utilize information gathered through means such as field reviews, road safety assessments, 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.

## NEXT STEPS – IMPLEMENTATION AND EVALUATION

The 2016-2020 Update to the Nevada Strategic Highway Safety Plan provides a renewed vision for safety professionals around the state through the identification of new strategies and action steps for each of the six CEAs. The NECTS and TWG will oversee the process and track implementation of the new strategies, and the CEA teams will communicate progress by:

- Tracking the implementation process for each CEA
- Identifying barriers or problems for implementation
- Providing regular updates on SHSP-related campaigns
- Modifying action steps as required (regularly on an annual basis)
- Providing input on future SHSP activities
- Working with the Data Team to provide data requests and input for data improvements

Evaluation is a critical part of the implementation process. The goals set for the SHSP will be tracked on an annual basis to ensure Nevada is on track to meet its targets for reducing fatalities and serious injuries.







# 2017 SUPPLEMENT TABLE OF CONTENTS

<b>OVERVIEW</b>	<b>17.3</b>
<b>SUCCESSSES</b>	<b>17.3</b>
<b>2015 SHSP PERFORMANCE MEASURE EVALUATION</b>	<b>17.3</b>
<b>2017 PERFORMANCE MEASURES</b>	<b>17.4</b>
<b>IMPAIRED DRIVING</b>	<b>17.7</b>
<i>FACT SHEET</i>	17.7
<i>ACTION PLAN</i>	17.9
<i>ROSTER</i>	17.11
<b>INTERSECTIONS</b>	<b>17.13</b>
<i>FACT SHEET</i>	17.13
<i>ACTION PLAN</i>	17.15
<i>ROSTER</i>	17.17
<b>LANE DEPARTURES</b>	<b>17.19</b>
<i>FACT SHEET</i>	17.19
<i>ACTION PLAN</i>	17.21
<i>ROSTER</i>	17.23
<b>MOTORCYCLES</b>	<b>17.25</b>
<i>FACT SHEET</i>	17.25
<i>ACTION PLAN</i>	17.27
<i>ROSTER</i>	17.29
<b>OCCUPANT PROTECTION</b>	<b>17.31</b>
<i>FACT SHEET</i>	17.31
<i>ACTION PLAN</i>	17.33
<i>ROSTER</i>	17.35
<b>PEDESTRIANS</b>	<b>17.37</b>
<i>FACT SHEET</i>	17.37
<i>ACTION PLAN</i>	17.39
<i>ROSTER</i>	17.41

## OVERVIEW

Representatives from the 5E's of Safety (Education, Enforcement, Engineering, Emergency Services, Everyone) are actively implementing Nevada's 2016 to 2020 SHSP. To be most effective in the actions taken toward Zero Fatalities, the specific successes and performance measures for the action steps and strategies are being evaluated and updated annually. This 2017 Supplement uses the most current five years of data (2011 to 2015) and the evaluation of performance measures to set the strategies, actions steps and targets for 2017.

## SUCCESSES

- Hosted an FHWA Peer Exchange on SHSP Best Practices in Carson City in 2015 in advance of the SHSP Update
- Hosted a successful Nevada Traffic Safety Summit for over 240 safety professionals in Reno. Critical Emphasis Area Team analyzed statewide crash data to determine top priorities and set strategies for the 2016-2020 Nevada Strategic Highway Safety Plan
- With input from the CEAs, the Technical Working Group (TWG) and the Nevada Executive Committee on Traffic Safety (NECTS), published the 2016-2020 Nevada Strategic Highway Safety Plan which was approved by NDOT and FHWA in December 2015
- Numerous outreach events to promote Zero Fatalities
- Formation of the Motorcycles Critical Emphasis Area Team, with consistent participation from all four "E's" of Safety
- Continued with successful events and outreach for the Zero Teen Fatalities program
- Participated in the Nevada Tribal Transportation Safety Summit in May 2015
- Involvement in Federal Highway Administration (FHWA) pooled fund studies on Highway Safety Manual (HSM) Implementation and Low Cost Safety Countermeasures, participated in two studies in 2015
- Initiated an *It Can Wait for 28* challenge focused on breaking the distracted-driving habit

## 2015 SHSP PERFORMANCE MEASURE EVALUATION

	Actual	5-Year Average (2009-2013)	Goal Trend Target
Fatalities	265	254	333
Serious Injuries	1,196	1,251	1,501

Fatality Rate (per 100 MVMT): 1.14

Serious Injury Rate (per 100 MVMT): 5.62





## Nevada Traffic Fatalities Compared to other Western States and National

2013 State Facility Comparison (from NHTSA 2013 Data Summary, dated Sept. 2015)

State	Traffic Fatalities	Population (thousands)	Licensed Drivers (thousands)	Registered Vehicles (thousands)	Vehicle Miles Traveled (millions)	Fatality Rates per			
						100,000 Population	100,000 Licensed Drivers	100,000 Registered Vehicles	100 Million Vehicle Miles Traveled
Arizona	849	6,627	4,791	5,381	60,586	12.81	17.72	15.78	1.40
Idaho	214	1,612	1,111	1,692	15,980	13.27	19.25	12.64	1.34
Nevada	262	2,790	1,756	2,203	24,649	9.39	14.92	11.89	1.06
Utah	220	2,901	1,661	2,061	27,005	7.58	13.24	10.68	0.81
National	32,719	316,129	212,160	269,294	2,988,323	10.35	15.42	12.15	1.09

State	Person Type					
	Drivers	Passengers	Motorcycles	Pedestrians	Bicyclists	Other
Arizona	38.6%	19.8%	17.8%	17.8%	3.7%	2.4%
Idaho	58.4%	21.0%	11.7%	6.5%	1.4%	0.9%
Nevada	33.2%	16.0%	21.8%	24.8%	2.7%	1.5%
Utah	48.2%	20.9%	14.1%	12.7%	2.7%	1.4%
National	50.3%	17.9%	14.3%	14.5%	2.3%	0.8%

2015 crash data was not available at the time this supplement was completed

## 2017 PERFORMANCE MEASURES

### Targets to be met by December 31, 2017

- Considering the 2011-2015 five-year moving average of 278 traffic fatalities, decrease the upward trend and reduce the five-year moving average from a projected 327 to 325 traffic fatalities.
- Considering the 2011-2015 five-year moving average of 1,211 serious injuries, decrease the upward trend and reduce the five-year moving average from a projected 1,319 to 1,304 serious injuries.
- Considering the 2011-2015 five-year moving average of 1.13 fatalities per 100 Million VMT, decrease the upward trend and reduce the five-year moving average from a projected 1.27 to 1.26 fatalities per 100 Million VMT.
- Considering the 2011-2015 five-year moving average of 5.08 serious injuries per 100 Million VMT, decrease the upward trend and reduce the five-year moving average from a projected 5.17 to 5.14 serious injuries per 100 Million VMT.











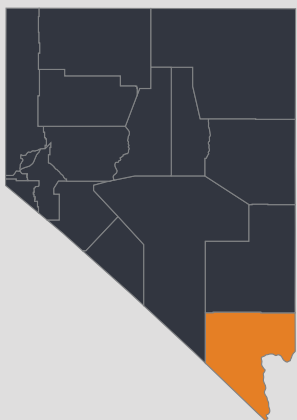
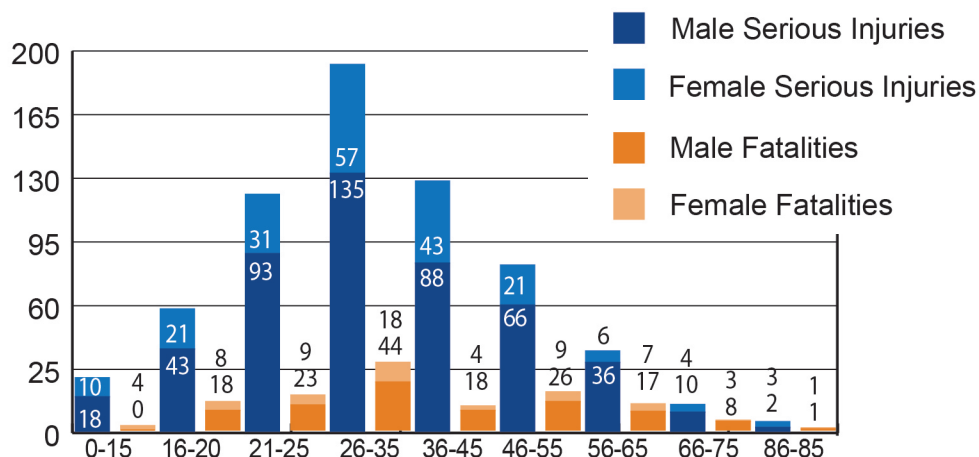
## IMPAIRED DRIVING

Between 2011 and 2015, 369 people lost their lives and 708 were seriously injured in impaired driving crashes on Nevada roadways.

The goal of the Nevada Strategic Highway Safety Plan (SHSP) is to reach zero fatalities. This fact sheet provides information on who is involved in impaired driving fatal and serious injury crashes, where and when these crashes occurred, and why they happened. It also outlines how the State plans to reduce impaired driving fatalities and serious injuries.

### Who?

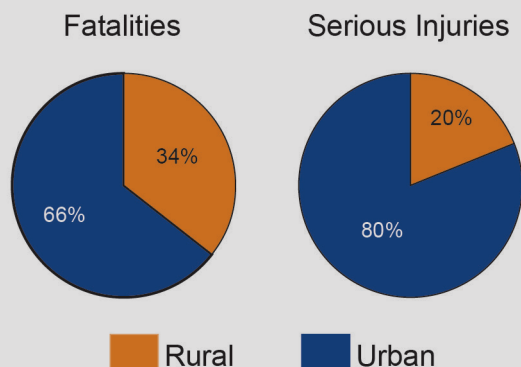
Male drivers aged 26 to 35 years old are involved in most impaired driving fatalities and serious injuries, followed by young male drivers aged 21 to 25 years old.



### Where?

Between 2011 and 2015, 65% of impaired driving fatalities and serious injuries occurred in Clark County.

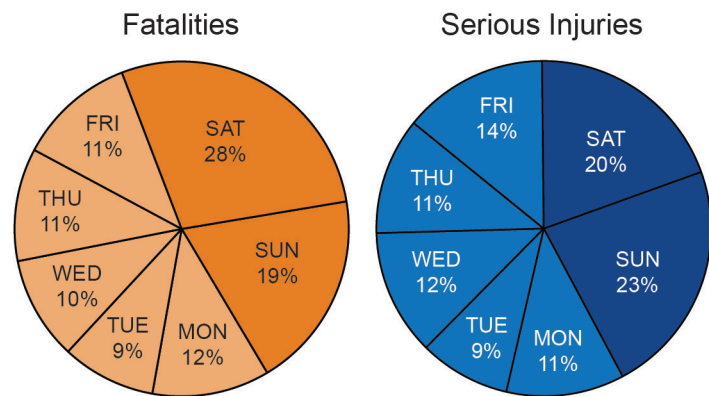
Sixty-eight percent of fatalities and 80 percent of serious injuries occurred on urban roadways.





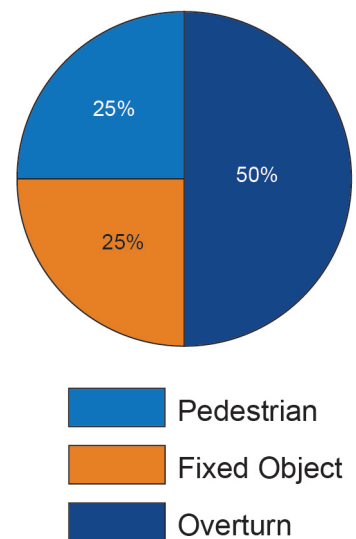
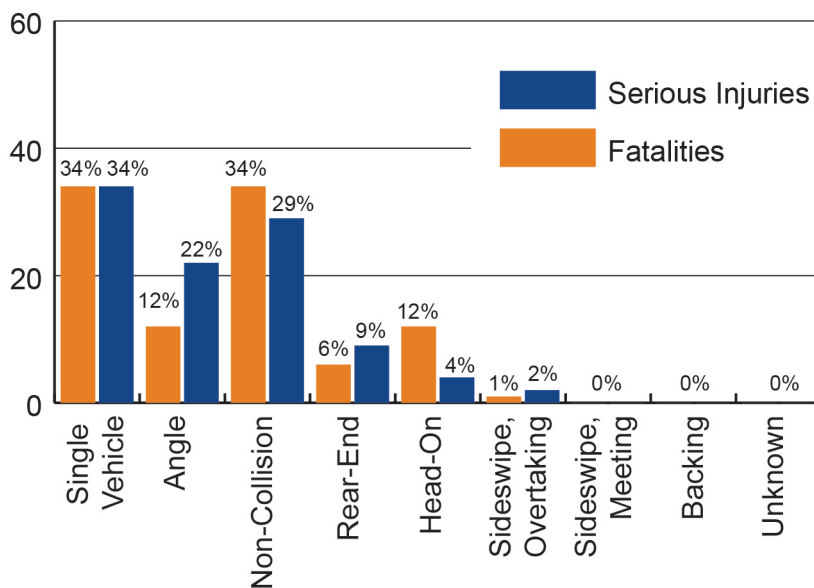
## When?

The highest proportion of impaired driving fatalities and serious injuries occurred during weekends.



## Why?

About half of the impaired fatalities occurred as overturn of single vehicle crashes. A large portion of the impaired driving serious injuries occurred in single vehicle crashes followed closely by angle crashes.



Source: Nevada DOT, 2016.



### Targets to be met by December 31, 2017

- 🎯 Considering the 2011-2015 five-year moving average of 78 impaired traffic fatalities, decrease the five-year moving average to 71 impaired traffic fatalities.
- 🎯 Considering the 2011-2015 five-year moving average of 136 impaired serious injuries, decrease the five-year moving average to 135 impaired serious injuries.
- 🎯 Considering the 2011-2015 five-year moving average of 0.33 impaired fatalities per 100 Million VMT, decrease the five-year moving average to 0.28 impaired fatalities per 100 Million VMT.
- 🎯 Considering the 2011-2015 five-year moving average of 0.57 impaired serious injuries per 100 Million VMT, decrease the five-year moving average to 0.53 impaired serious injuries per 100 Million VMT.

**CEA Chair:** Kevin Honea, Department of Public Safety/Nevada Highway Patrol

**CEA Vice Chair:** Laura Oslund, PACE Coalition

### Strategy #1

Maximize DUI enforcement through training, coordination, education, and funding.

Action Step #	Action Step Leader	Description	Output Measure
1.1	Kevin Honea (Nevada Highway Patrol)	Increase support among law enforcement agencies for high visibility DUI enforcement programs. #1: Multi-agency saturation patrols #2: DUI targeted enforcement #3: DUI education	Number of #1,#2,#3 actions and the number of agencies participating
1.2	Kevin Honea (Nevada Highway Patrol)	Conduct refresher training programs on sobriety testing through SFST/ARIDE/DRE programs.	Number of training programs conducted, number of officers trained
1.3	Kimberly O'Kelley (NDOT Safety Data Analysis Team)	Determine high crash locations/corridors for impaired driving and target unsafe driving behaviors with engineering, enforcement, and public awareness.	Completion of analysis and development of strategies
1.4	TBD	Improve the current cumbersome DUI reporting process by reducing the time required by officers to complete the report.	Time from stop to incarceration



### Strategy #2

Aggressively reduce impaired driving through educational campaigns, training, and events.

Action Step #	Action Step Leader	Description	Output Measure
2.1	Laura Oslund (PACE Coalition)	Enhance DUI education within existing safe driving programs through outreach events to communities, schools, and associations.	Number of outreach events and proven training sessions
2.2	Laura Oslund (PACE Coalition)	Monitor and support (1) compliance check programs to reduce youth access to alcohol and (2) increase training opportunities for servers to recognize signs of intoxication and methods to reduce excessive drinking.	Number of citations/incidents
2.3	Kevin Honea (Nevada Highway Patrol)	Expand NHP's DRIVE youth program and the Zero Teen Fatalities program through additional funding and promotion.	Number of presentations and number of participating agencies

### Strategy #3

Eliminate repeat DUI offenses through successful existing programs and innovative new programs.

Action Step #	Action Step Leader	Description	Output Measure
3.1	Scott Swain, Victoria Hauan (Office of Traffic Safety)	Develop a sustained statewide recidivism program such as 24/7 through pilot programs, providing information and data showing effectiveness. Identify key people to discuss and provide information in an effort to recruit champions among law enforcement, judges, prosecutors, and legislators. Research the effectiveness of misdemeanor and felony diversion programs requiring ignition interlock installation.	Number of stakeholders who received informational packages and number of champions recruited
3.2	April Sanborn (Dept. of Motor Vehicles)	Coordinate with DMV to provide an annual repeat offender report and investigate the possibility of going back five to ten years to track historical progress to determine percentage of repeat offenders.	Data requested and received on a quarterly basis

### Strategy #4

Understand and address the increase in "under the influence of other substances" crashes.

Action Step #	Action Step Leader	Description	Output Measure
4.1	Laura Oslund (PACE Coalition)	Continue research on the effects of legalized marijuana use on impaired driving crashes and identify methods to capture Nevada specific marijuana impaired driving data.	Acquire data from other states, review, and disseminate selected documents to the TWG on a quarterly basis
4.2	Kevin Honea (Nevada Highway Patrol)	Research the severity and number of other drug impaired crashes such as prescription drugs and heroin. Identify methods to capture Nevada specific data.	Annual or quarterly reports documenting other state's experiences, methods identified, and action steps created



# Roster

## IMPAIRED DRIVING

### Name

### Company

#### MEMBERS

Christine Adams	Northern Nevada DUI Task Force
Kathleen Bienenstein	MADD
Marsha Boam	Penna Powers
Mike Colety	Kimley-Horn
Scott Dugan	Reno Police Department
David Giacomini	Kimley-Horn
Laura Gryder	University of Nevada School of Medicine
April Sanborn	Nevada Department of Motor Vehicles
Jason Hymer	Indian Health Service
Katherine Jacobi	Nevada Restaurant Association
P.D. Kiser	Nevada Department of Transportation - Safety
Jerry Mager	Victim Advocate
Stephie Mager	Victim Advocate
Margaret McMillen	Nevada Restaurant Association
Joanna Needham	MSF Coach
Laura Oslund	Pace Coalition
Chuck Reider	CWR Solutions
Maggie Saunders	Penna Powers
Laurel Stadler	Northern Nevada DUI Task Force
Robert Stauffer	Las Vegas Metropolitan Police Department
Scott Swain	DPS Office of Traffic Safety
Peter Vander Aa	DPS Office of Traffic Safety

#### PARTICIPANTS

Diane Anderson	Victim Advocate
Arthur Aten	Nevada Highway Patrol
Andrew Bennett	DPS Office of Traffic Safety
Lori Campbell	Nevada Department of Transportation - Safety
Amy Davey	DPS Office of Traffic Safety
Kurt Davis	DPS Office of Traffic Safety
John Galicia	University of Nevada Reno Police
R.T. Germain	Caesars Entertainment
David Gibson	DPS Nevada Highway Patrol - Reno PIO
Victoria Hauan	DPS Office of Traffic Safety
Charlie Haycox	DPS Nevada Highway Patrol
Juan Hernandez	Nevada Department of Transportation
Loy Hixson	DPS Nevada Highway Patrol
Kevin Honea	DPS Nevada Highway Patrol
David Jacoby	Las Vegas Metropolitan Police Department
Tom Kissler	Smart Start
Natasha Koch	DPS Nevada Highway Patrol
Douglas Konersman	Nevada Safety & Diagnostics LLC
Michael Laythorpe	Las Vegas Metropolitan Police Department
Tia Linzsey	Nevada DMV
Rudy Malfabon	Nevada Department of Transportation
Ken Mammen	Nevada Department of Transportation Safety
Julie Masterpool	RTC Washoe County
Scott McDaniel	Carson City Sheriff's Office
Kaela Moldowan	Victim Advocate
Kevin Moore	DPS Office of Traffic Safety
Jorge Pierrott	DPS Division of Parole & Probation
Meg Ragonese	Nevada Department of Transportation PIO
Judy Reich	Nevada Broadcasters
John Silver	Reno Police Department
Jim Stewart	DPS Nevada Highway Patrol - Elko PIO
Richard Strader	Las Vegas Metropolitan Police Department



## Name

## Company

Chelsea Stuenkel	DPS Nevada Highway Patrol
Casey Sylvester	Nevada Department of Transportation
Kathleen Taylor	Taylor Made Solutions
July Thompson	Duckwater Shoshone Tribe
Kim Townsend	Duckwater Shoshone Tribe
Jaime Tuddao	Nevada Department of Transportation Safety
Robin Van Diest	Reno Police Department
Alex Wolfson	Nevada Department of Transportation
Fred Wurster	Nevada Department of Public Safety
Debbie Zelinski	MADD N. NV

## FRIENDS

Chuck Allen	Washoe County Sheriff's Office
Timothy Andrews	8th Judicial District Court
Juan Balbuena	Federal Highway Administration
Salome Barton	City of North Las Vegas
Bill Bensmiller	Federal Motor Carrier Safety Administration
Janey Bryan	Duckwater Tribal Police
Mike Edgell	DPS Nevada Highway Patrol
Richard "Buck" Fenlason	Nevada Department of Health and Human Services
Adam Garcia	University of Nevada Reno Police
Karen Garretson	Back up for Gibson
Sandy Heverly	STOP DUI
Susan Hohn	DPS Office of Traffic Safety
Diana Hollander	Nevada Department of Education - Transportation Safety
Deborah Huff	DPS Nevada Highway Patrol
Danny Jones	Statewide Traffic Safety & Signs
Bill Landon	Care Flight
Duane Meyer	Washoe County Sheriffs Office Patrol Captain
Barbara Mirman	
Anthony Munoz	DPS Nevada Highway Patrol
Davy Ann Noahr	Las Vegas Convention and Visitors Authority
Justine Patai	8th Judicial District Court
Jeff Payne	Driver's Edge
Alexander Paz	University of Nevada Las Vegas - Civil and Environmental Engineering
Kevin Quint	Substance Abuse Prevention and Treatment Agency (SAPTA)
Sherwin Racehorse	Te-Moak Tribe
Mario Ramos	National Highway Traffic Safety Administration
Richard Robinson	Las Vegas Metropolitan Police Department
Steve Roll	Clark County DUI Court
April Sanborn	Nevada Department of Motor Vehicles
Mark Schaible	Henderson Police Department
Christine Sylvester	Nevada Department of Transportation
John Tatro	Carson City Courts
Matthew Triplett	City of Las Vegas
Paul Villaluz	Slater Hanifan Group
Shirley Visger	Las Vegas Metropolitan Police Department
Sandy Watkins	Community Against Reckless Driving
Niguel Williams	Nevada Rider Motorcycle Safety



## Fact Sheet

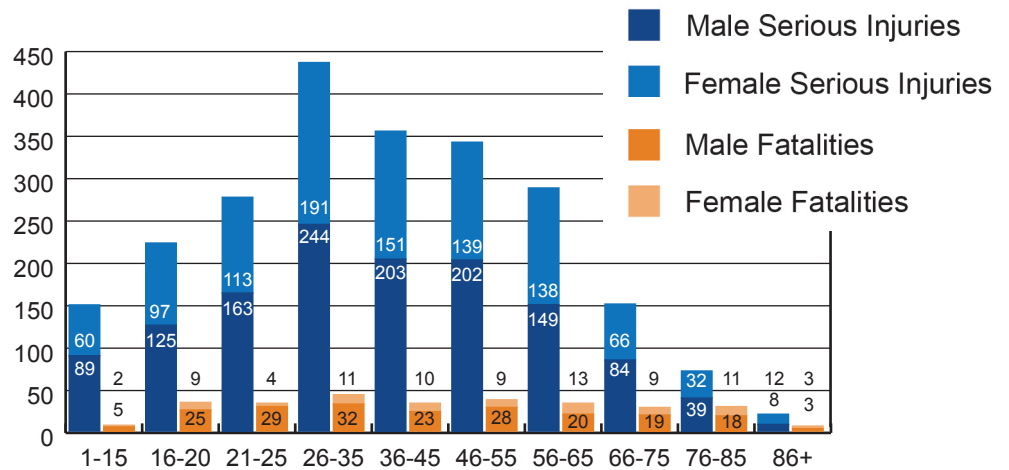
# INTERSECTIONS

Between 2011 and 2015, 309 people lost their lives and a staggering 2,377 were seriously injured in intersection-related crashes on Nevada roadways.

The goal of the Nevada Strategic Highway Safety Plan (SHSP) is to reach zero fatalities. This fact sheet provides information on who is involved in intersection related fatal and serious injury crashes, where and when these crashes occurred, and why they happened. It also outlines how the State plans to reduce intersection-related fatalities and serious injuries.

### Who?

Male drivers aged 26 to 35 years old are involved in most intersection-related fatalities and serious injuries.

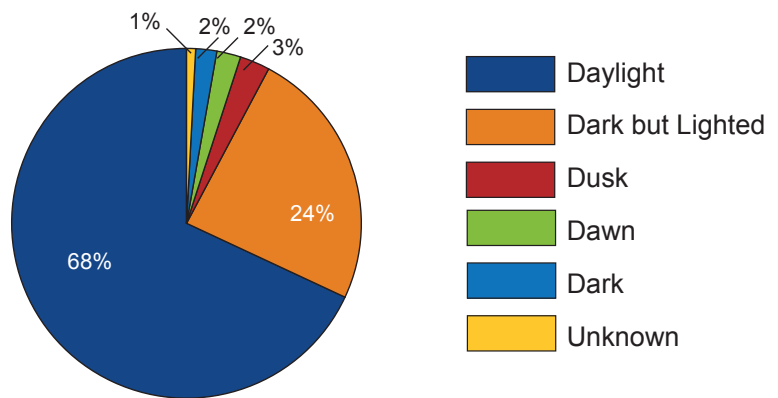


### Where?

Between 2011 and 2015, over three-quarters (75 percent) of the intersection-related fatalities and serious injuries occurred in Clark County.

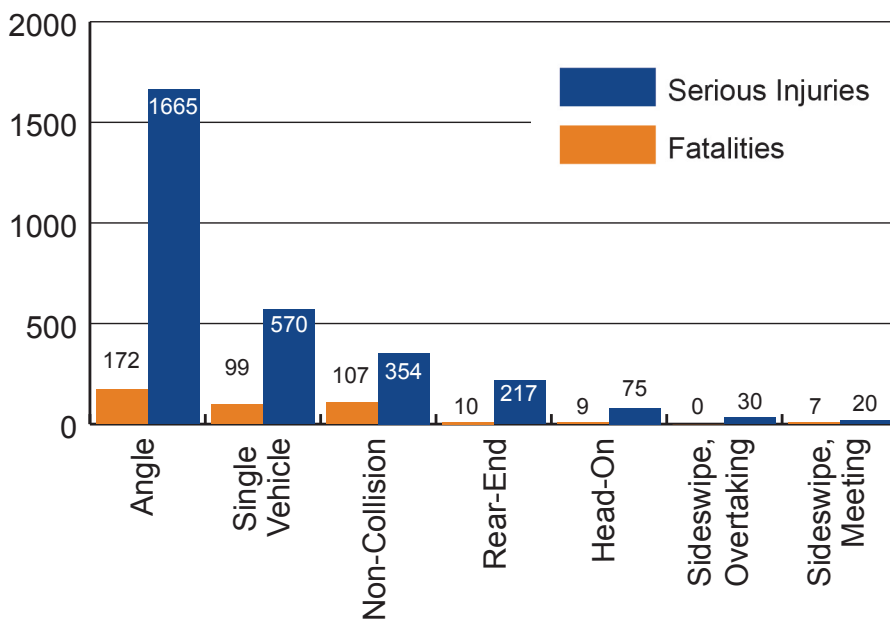
## When?

Most of the intersection-related fatalities and serious injuries occurred during daylight hours (68 percent) and 24 percent occurred in dark but lighted conditions.



## Why?

Most of the intersection-related fatalities and serious injuries involve angle crashes followed by single vehicle crashes.



Source: Nevada DOT, 2016.



### Targets to be met by December 31, 2017

- Considering the 2011-2015 five-year moving average of 62 intersection traffic fatalities, decrease the five-year moving average to 50 intersection traffic fatalities.
- Considering the 2011-2015 five-year moving average of 475 intersection serious injuries, decrease the five-year moving average to 406 serious injuries.
- Considering the 2011-2015 five-year moving average of 0.26 intersection fatalities per 100 Million VMT, decrease the five-year moving average to 0.20 intersection fatalities per 100 Million VMT.
- Considering the 2011-2015 five-year moving average of 2.01 intersection serious injuries per 100 Million VMT, decrease the five-year moving average to 1.60 intersection serious injuries per 100 Million VMT.

**CEA Chair:** P.D. Kiser, NDOT

**CEA Vice Chair:** Joanna Wadsworth, City of Las Vegas

#### Strategy #1

Implement geometric improvements.

Action Step #	Action Step Leader	Description	Output Measure
1.1	P.D. Kiser (NDOT)	Develop a systemic intersection safety improvement program.	Development of systemic intersection safety improvement program
1.2	John Penuelas (RTC SNV)	Improve safety through design standard improvements.	Number of design standards updated

#### Strategy #2

Use appropriate traffic controls to reduce conflicts.

Action Step #	Action Step Leader	Description	Output Measure
2.1	Joanna Wadsworth (CLV)	Use Intersection Control Evaluations (ICE) to determine appropriate traffic control at intersections.	Development of ICE guidelines and number of agencies that have adopted ICE guidelines
2.2	P.D. Kiser (NDOT)/Molly O'Brien (Kimley-Horn)	Educate other NDOT and local agency employees of the benefits of roundabouts.	Conducting a seminar on roundabout safety and operations for NDOT employees and local agencies (1 in the north and 1 in the south)
2.3	Lori Campbell (NDOT) and Jon Allen (NDOT)	Install Flashing Yellow Arrows (FYAs) at traffic signals with protected permissive phasing.	Number of signals with FYA conversions



### Strategy #3

Improve sight distance and traffic control visibility.

Action Step #	Action Step Leader	Description	Output Measure
3.1	Joanna Wadsworth (CLV)/Eric MacGill (NDOT)	Install retroreflective backplates at traffic signals.	Number of agencies that require retroreflective backplates for new signal installations; NDOT funding provided for retroreflective backplate replacement projects

### Strategy #4

Improve access management to reduce conflicts.

Action Step #	Action Step Leader	Description	Output Measure
4.1	Judy Tortelli (NDOT)	Update NDOT Access Management Manual.	Updated NDOT Access Management Manual
4.2	P.D. Kiser (NDOT)	Implement access management guidelines at the state and local level.	Number of agencies that have implemented access management guidelines and/or number of access management projects reported by local agencies

### Strategy #5

Improve behavior at intersections through the use of education and enforcement.

Action Step #	Action Step Leader	Description	Output Measure
5.1	Derrick Boyd (NV Barricade and Sign)/Marsha Boam (Penna Powers)	Educate the public on the benefits of roundabouts through a roundabout Public Relations (PR) campaign.	Reach of development and reach of campaign materials, post campaign materials to the SHSP website



# Roster

## INTERSECTIONS

### Name

### Company

#### MEMBERS

Woody Baker	Las Vegas Metropolitan Police Department
Marsha Boam	Penna Powers
Derrick Boyd	Nevada Barricade & Sign Co., Inc.
Lori Campbell	Nevada Department of Transportation - Safety
Michelle Castro	Nevada Department of Transportation District I
Mike Colety	Kimley-Horn
Amy Davey	DPS Office of Traffic Safety
Laura Gryder	University of Nevada School of Medicine
Pat Irwin	Nevada Department of Health and Human Services
P.D. Kiser	Nevada Department of Transportation - Safety
Joanna Needham	MSF Coach
Molly O'Brien	Kimley-Horn
Wesley Osmer	Nevada Department of Transportation
Shital Patel	RTC of Southern Nevada (FAST)
John Penuelas	RTC of Southern Nevada
Chuck Reider	CWR Solutions
Christina Richter	Slater Hanifan Group
Maggie Saunders	Penna Powers
Bill Story	Nevada Department of Transportation Bike/Ped
David Strawn	Quality Towing/Freeway Service Patrol
Walt Vodrazka	RTC of Southern Nevada (FAST)
Joanna Wadsworth	City of Las Vegas
Lonnie Wilborn	Clark County Public Works

#### PARTICIPANTS

Peter Aiyuk	Nevada Department of Transportation Performance Measures
Arthur Aten	Nevada Highway Patrol
Andrew Bennett	DPS Office of Traffic Safety
Lee Bonner	Nevada Department of Transportation
Steve Bunnell	City of Reno
Kurt Davis	DPS Office of Traffic Safety
Kurt Dietrich	City of Reno
D Dockendorf	Las Vegas Metropolitan Police Department
Eric Dornak	American Traffic Safety Services Association
Jon Erb	Douglas County
Mike Gamberg	Nevada Department of Public Safety
Eric Grimmesey	Las Vegas Metropolitan Police Department
Juan Hernandez	Nevada Department of Transportation
David Hutchinson	Nevada Department of Transportation Traffic Operations
David Jacoby	Las Vegas Metropolitan Police Department
John Karachepone	Jacobs Engineering
Peter Kisfalvi	Las Vegas Metropolitan Police Department
Irene Lam	Clark County
Michael Lardomita	Las Vegas Metropolitan Police Department
Clara Lawson	Washoe County
Tom Lightfoot	Nevada Department of Transportation Safety
Tia Linzey	Nevada DMV
Rudy Malfabon	Nevada Department of Transportation
Ken Mammen	Nevada Department of Transportation Safety
Julie Masterpool	RTC Washoe County
Terrence McAllister	City of North Las Vegas Police Department
Kevin Moore	DPS Office of Traffic Safety
Brendan Morris	University of Nevada Las Vegas
Alec Oltman	Nevada Barricade & Sign Co., Inc.
Blaine Petersen	RTC Washoe County
Judy Reich	Nevada Broadcasters

## Name

## Company

Alyssa Rodriguez	City of Henderson
Dan Solow	DPS Nevada Highway Patrol
Chelsea Stuenkel	DPS Nevada Highway Patrol
Casey Sylvester	Nevada Department of Transportation
Kathleen Taylor	Taylor Made Solutions
Jaime Tuddao	Nevada Department of Transportation Safety
Paul Villaluz	Slater Hanifan Group
Kris Wilson	DPS Nevada Highway Patrol
Alex Wolfson	Nevada Department of Transportation
Hao Xu	University of Nevada Reno
Kaizad Yazdani	Clark County Public Works

## FRIENDS

Juan Balbuena	Federal Highway Administration
Salome Barton	City of North Las Vegas
Jon Ericson	Sparks Public Works
Dirk Goering	Carson City
Susan Hohn	DPS Office of Traffic Safety
Diana Hollander	Nevada Department of Education - Transportation Safety
Mike Janssen	City of Las Vegas
Gena Kendall	City of Henderson
Eric MacGill	Nevada Department of Transportation
Sherie Moore	Clark County School District Safe Routes to School
Tom Moore	Nevada Department of Transportation Traffic Operations
Brian O'Callaghan	Las Vegas Metropolitan Police Department
Cole Peiffer	RTC Washoe County
Sherwin Racehorse	Te-Moak Tribe
Mario Ramos	National Highway Traffic Safety Administration
Steve Summers	Las Vegas Metropolitan Police Department
Christine Sylvester	Nevada Department of Transportation
Judy Tortelli	Nevada Department of Transportation Traffic Operations
Kim Townsend	Duckwater Shoshone Tribe
Niguel Williams	Nevada Rider Motorcycle Safety
Karim Yousuf	Nevada Department of Transportation District II





# Fact Sheet

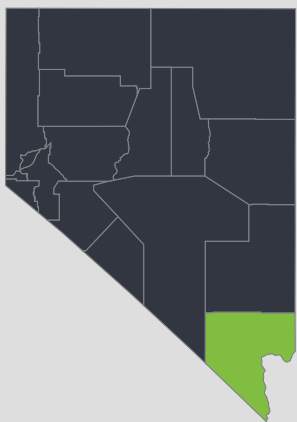
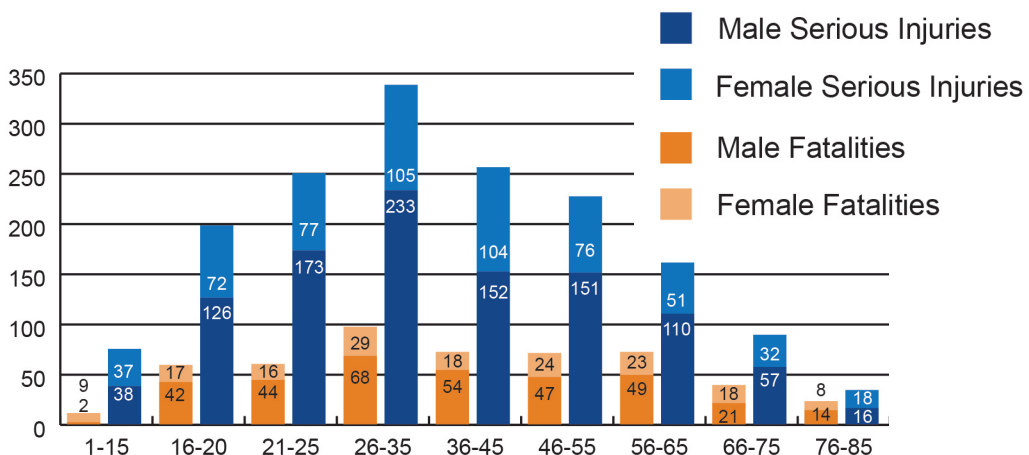
## LANE DEPARTURES

Between 2011 and 2015, 517 people lost their lives and a staggering 1,657 were seriously injured in lane departure crashes on Nevada roadways.

The goal of the Nevada Strategic Highway Safety Plan (SHSP) is to reach zero fatalities. This fact sheet provides information on who is involved in lane departure fatal and serious injury crashes, where and when these crashes occurred, and why they happened. It also outlines how the State plans to reduce lane departure fatalities and serious injuries.

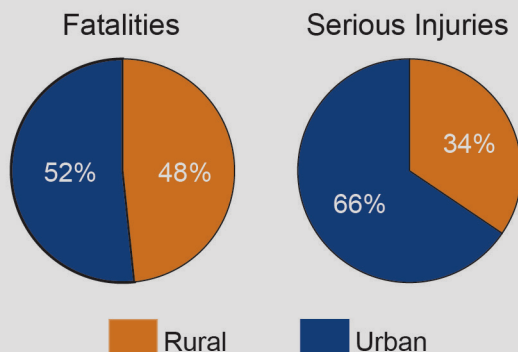
### Who?

Male drivers aged 26 to 35 years old, are involved in most lane departure fatalities and serious injuries, followed by male drivers aged 21 to 25 years old.



### Where?

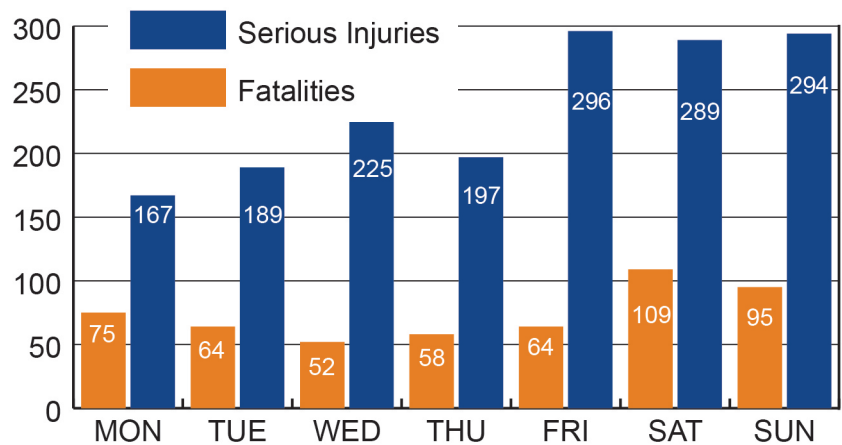
Between 2011 and 2015, nearly one-half (48 percent) of the lane departure fatalities and serious injuries occurred in Clark County. Over 66 percent of such fatalities and serious injuries occurred on urban roadways.





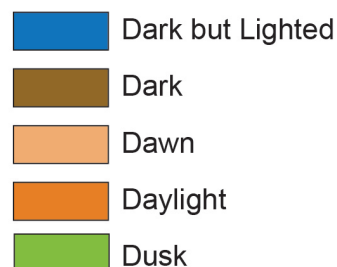
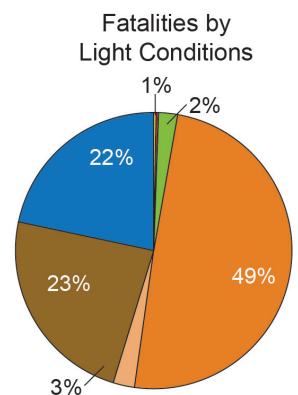
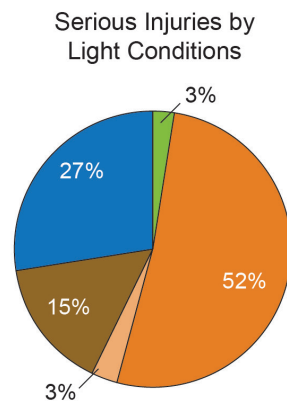
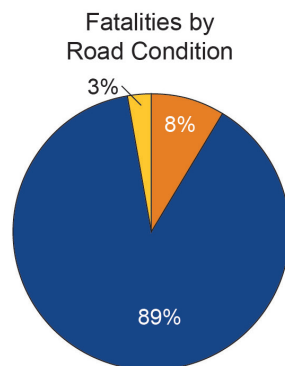
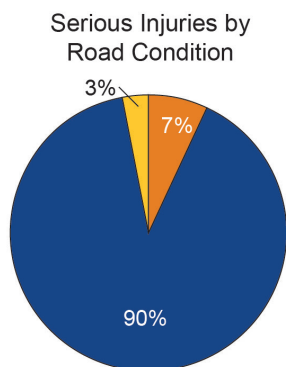
## When?

The highest number of lane departure fatalities and serious injuries occurred on Friday through Sunday. Most of the lane departure fatalities and serious injuries occurred during daylight hours compared to dark hours.



## Why?

Almost 9 out of 10 lane departure fatalities and serious injuries occur under dry road surface conditions.



Source: Nevada DOT, 2016.



# Action Plan

## LANE DEPARTURES

### Targets to be met by December 31, 2017

- Considering the 2011-2015 five-year moving average of 103 lane departure traffic fatalities, decrease the five-year moving average to 98 lane departure traffic fatalities.
- Considering the 2011-2015 five-year moving average of 331 lane departure serious injuries, decrease the five-year moving average to 325 lane departure serious injuries.
- Considering the 2011-2015 five-year moving average of 0.44 lane departure fatalities per 100 Million VMT, decrease the five-year moving average to 0.39 lane departure fatalities per 100 Million VMT.
- Considering the 2011-2015 five-year moving average of 1.40 lane departure serious injuries per 100 Million VMT, decrease the five-year moving average to 1.28 lane departure serious injuries per 100 Million VMT.

**CEA Chair:** Randy Hesterlee, NDOT District 3

**CEA Vice Chair:** Lori Campbell, NDOT Traffic Safety Engineering

### Strategy #1

Increase targeted enforcement and public education programs on high risk behaviors, such as distracted driving, driving too fast for conditions, and drowsy driving.

Action Step #	Action Step Leader	Description	Output Measure
1.1	Marsha Boam (Penna Powers)	Review data and determine target groups that are more likely to run off the road; develop programs to target those audiences (specifically distracted driving).	Number of programs designed and conducted. Annual review of most current data
1.2	Seth Daniels (NDOT)	Coordinate with all safety stakeholders (enforcement, EMS, fire department, etc.) to develop high visibility, well publicized enforcement campaigns statewide.	Number of enforcement campaigns
1.3	Meg Ragonese (NDOT), Adrienne Packer (NDOT)	Develop a milepost education program to decrease emergency response times to crashes.	Development of milepost education program, targeting rural areas

## Strategy #2

Keep vehicles in their lanes through improvements/engineering, particularly on curves.

Action Step #	Action Step Leader	Description	Output Measure
2.1	Lori Campbell (NDOT Safety Engineering)	Propagate the installation of shoulder and centerline rumble strips statewide where feasible/applicable.	Number of roadways with rumble strips, shoulder and centerline
2.2	Lori Campbell (NDOT Safety Engineering)	Improve high lane departure risk areas (curves) by evaluating existing curve crash data, coordinate with stakeholders, completing Road Safety Assessments if appropriate, and providing recommendations of surface friction treatments, reconstruction, signing and other methods.	Number of recommendations on surface friction treatments, reconstruction, and signing
2.3	Nova Simpson (NDOT)	Research animal migration patterns and implement strategies such as fencing and animal crossings to decrease animals on roadway.	Number of animal crossing mitigation projects
2.4	NDOT Safety	Develop standard and implementation for wider lane lines on rural roads.	Approval and Implementation of a new NDOT Standard

## Strategy #3

Increase survivability in the event of a roadway departure.

Action Step #	Action Step Leader	Description	Output Measure
3.1	Kent Steele (NDOT)	Conduct regional implementation of slope flattening/roadside object removal projects.	Number of slope flattening, shoulder widening, and roadside object removal projects
3.2	Lori Campbell (NDOT Safety Engineering)	Install median barrier systems statewide where appropriate.	Miles of median barriers or number of projects
3.3	Seth Daniels (NDOT)	Apply Traffic Incident Management (TIM) strategies to minimize disruption after incidents.	Number of training events, number of EMS personnel that have completed TIM training



# Roster

## LANE DEPARTURES

### Name

### Company

#### MEMBERS

Chuck Ayers	Mr. Chuck's Driving Academy
Marsha Boam	Penna Powers
Michelle Castro	Nevada Department of Transportation District I
Lori Campbell	Nevada Department of Transportation - Safety
Mike Colety	Kimley-Horn
Seth Daniels	Nevada Department of Transportation Traffic Operations
Sharan Dhanaraju	Jacobs Engineering
Laura Gryder	University of Nevada School of Medicine
Brandon Henning	Nevada Department of Transportation Safety
Randy Hesterlee	Nevada Department of Transportation District III
Harold Hughes	DPS Nevada Highway Patrol
Carl Johnson	DPS Nevada Highway Patrol
P.D. Kiser	Nevada Department of Transportation - Safety
Adrienne Packer	Nevada Department of Transportation
Lindsay Saner	Kimley-Horn
Maggie Saunders	Penna Powers
Rick Schroder	City of Las Vegas
Nova Simpson	Nevada Department of Transportation
Kent Steele	Nevada Department of Transportation
Christine Sylvester	Nevada Department of Transportation

#### PARTICIPANTS

Arthur Aten	Nevada Highway Patrol
Chulawudt "Woody" Baker	Las Vegas Metropolitan Police Department
Andrew Bennett	DPS Office of Traffic Safety
Loren "Jamie" Borino	State of Nevada, Division of Public and Behavioral Health
Amy Davey	DPS Office of Traffic Safety
Kurt Davis	DPS Office of Traffic Safety
Kim Edwards	Nevada Department of Transportation Safety Data
John Eiche	Nevada Department of Transportation
Juan Hernandez	Nevada Department of Transportation
Kevin Honea	DPS Nevada Highway Patrol
Shawn Howerton	Nevada Department of Transportation Roadway Design
David Jacoby	Las Vegas Metropolitan Police Department
Phil Kanisberg	Nevada Department of Transportation Roadway Design
Michael Lardomita	Las Vegas Metropolitan Police Department
Clara Lawson	Washoe County
Kevin Lee	Nevada Department of Transportation District III
Tia Linzsey	Nevada DMV
Keith Logan	Eureka County Sheriff's Office
Rudy Malfabon	Nevada Department of Transportation
Ken Mammen	Nevada Department of Transportation Safety
Julie Masterpool	RTC Washoe County
Kevin Moore	DPS Office of Traffic Safety
Alec Oltman	Nevada Barricade & Sign Co., Inc.
Adam Page	DPS Nevada Highway Patrol
Meg Ragonese	Nevada Department of Transportation PIO
Judy Reich	Nevada Broadcasters
Jeffrey Richter	Las Vegas Metropolitan Police Department
Jim Stewart	DPS Nevada Highway Patrol - Elko PIO
Chelsea Stuenkel	DPS Nevada Highway Patrol
Casey Sylvester	Nevada Department of Transportation
Kathleen Taylor	Taylor Made Solutions
Harry Teng	University of Nevada Las Vegas - Transportation Research Center
Jaime Tuddao	Nevada Department of Transportation Safety
Macie Tuell	Miss Reno 2016



## Name

## Company

Jeffrey Varner	DPS Nevada Highway Patrol
Paul Villaluz	Slater Hanifan Group
Brent Wilhite	Penna Powers
Kris Wilson	DPS Nevada Highway Patrol
Alex Wolfson	Nevada Department of Transportation

### FRIENDS

Juan Balbuena	Federal Highway Administration
Salome Barton	City of North Las Vegas
Bill Bensmiller	Federal Motor Carrier Safety Administration
Casey Connor	Nevada Department of Transportation Roadway Design
Derek Foremaster	Lincoln County Sheriff Department
Todd Hartline	DPS Nevada Highway Patrol
Susan Hohn	DPS Office of Traffic Safety
Diana Hollander	Nevada Department of Education - Transportation Safety
Danny Jones	Statewide Traffic Safety & Signs
Brook Keast	Washoe County Sheriff's Office
Steve Merrill	Nevada Department of Transportation
Jim Nichols	Nevada Local Technical Assistance Program
Steve Norkus	Professional Placement
Jeff Payne	Driver's Edge
Sherwin Racehorse	Te-Moak Tribe
Mario Ramos	National Highway Traffic Safety Administration
Boyd Ratliff	Nevada Department of Transportation District III
Christina Richter	Slater Hanifan Group
Kim Townsend	Duckwater Shoshone Tribe
Niguel Williams	Nevada Rider Motorcycle Safety
Michael Yates	Nevada Department of Transportation



# Fact Sheet

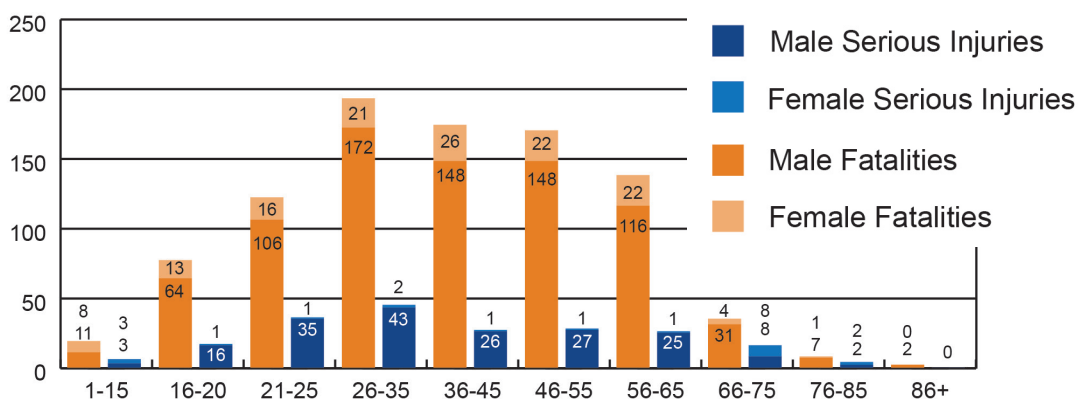
## MOTORCYCLES

Between 2011 and 2015, 238 motorcyclists lost their lives and 968 were seriously injured on Nevada roadways.

The goal of the Nevada Strategic Highway Safety Plan (SHSP) is to reach zero fatalities. This fact sheet provides information on who is involved in motorcycle fatal and serious injury crashes, where and when these crashes occur, and why they happen. It also outlines how the State plans to reduce motorcycle fatalities and serious injuries.

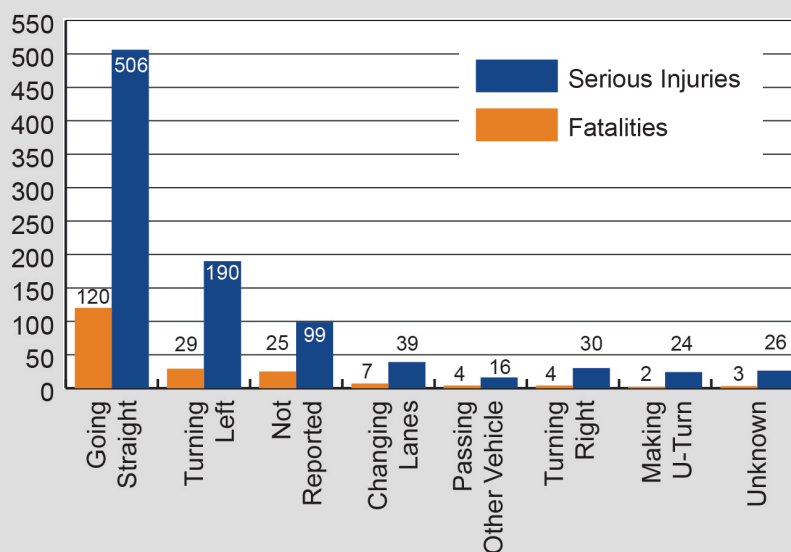
### Who?

Younger male drivers (26 to 35) are most likely to be involved in motorcycle fatalities and serious injuries.



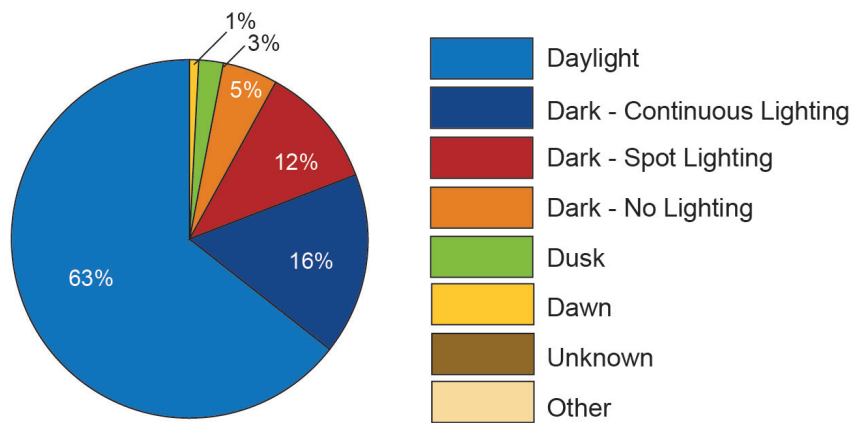
### Where?

The majority of motorcycle fatalities and serious injuries occurred when the vehicle was going straight, followed by turning left.



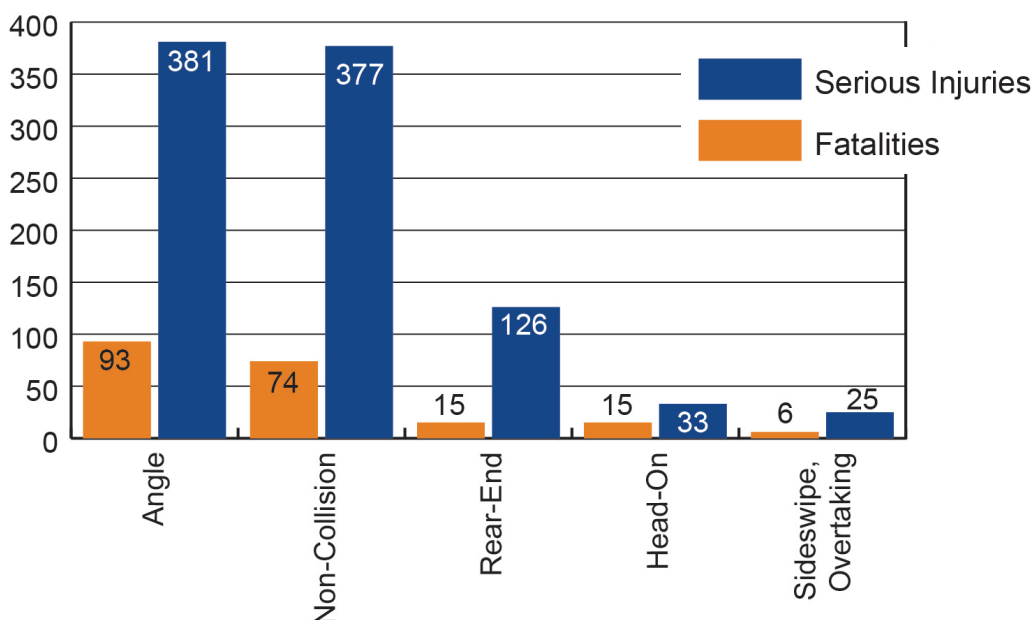
## When?

63% of fatalities and serious injuries occurred during daylight hours.



## Why?

The majority of motorcycle fatalities and serious injuries were angle crashes, followed by non-collision.



Source: Nevada DOT, 2016.



# Action Plan

## MOTORCYCLES

### Targets to be met by December 31, 2017

- Considering the 2011-2015 five-year moving average of 50 motorcycle traffic fatalities, decrease the upward trend and maintain the five-year moving average at the projected 63 motorcycle traffic fatalities.
- Considering the 2011-2015 five-year moving average of 194 motorcycle serious injuries, decrease the upward trend and reduce the five-year moving average from a projected 221 to 220 motorcycle serious injuries.
- Considering the 2011-2015 five-year moving average of 0.21 motorcycle fatalities per 100 Million VMT, decrease the upward trend and maintain the five-year moving average at the projected 0.25 motorcycle fatalities per 100 Million VMT.
- Considering the 2011-2015 five-year moving average of 0.81 motorcycle serious injuries per 100 Million VMT, decrease the upward trend and reduce the five-year moving average from a projected 0.87 to 0.86 motorcycle serious injuries per 100 Million VMT.

**CEA Chair:** Pete Vander Aa, Office of Traffic Safety, Nevada Rider

**CEA Vice Chair:** Joe Wingard, Harley-Davidson

#### Strategy #1

Increase targeted enforcement and public education programs for high risk behaviors (such as speeding, aggressive, reckless, and impaired riding) and yielding to motorcycles.

Action Step #	Action Step Leader	Description	Output Measure
1.1	Rob Honea (OTS)	Increase awareness through education and outreach specific to motorcycle safety. Enhance and distribute impaired riding informational material to State and local law enforcement, DMV offices, dealerships, rest areas, motorcycle rallies, etc.	Number of people reached through campaigns and/or events
1.2	PK Handley (MARS)	Form strategic alliances with motorcycle user community, state agencies (OTS and enforcement) and private business to foster and promote motorcycle safety.	Formation of strategic alliance
1.3	Pete Vander Aa (OTS)	Outreach to judges and prosecutors to educate state and local courts.	Development of outreach plan, number of outreach events
1.4	Pete Vander Aa (OTS)	Coordinate with the Impaired Driving CEA on enforcement strategies and education campaigns and make sure motorcycles are addressed appropriately.	Number of joint events and campaigns
1.5	Pete Vander Aa (OTS)	Evaluate the potential effectiveness of legislative approaches such as increased fines, license removal, 28-day program, impound law, lower BAC limit and develop a proposed legislative strategy.	Draft legislative strategy for 2017



## Strategy #2

Increase the percentage of motorcyclists that are trained and licensed.

Action Step #	Action Step Leader	Description	Output Measure
2.1	Pete Vander Aa (OTS)	Review legislative alternatives for training and education such as requiring insurance companies to mandate license verification, discounts for proven protective gear and proof of training, requiring training for repeat offenders, optional diversion program, mandatory training for licensing, and develop legislative strategy.	Draft legislative strategy for 2017
2.2	Pilot Nelson	Increase number of training instructors and facilities, and work with motorcycle dealers to provide safety awareness course information with all motorcycle purchases.	Number of instructors and facilities. Number of dealers providing information on training

## Strategy #3

Improve motorcycle-friendly roadway design, traffic control, construction, and maintenance policies and practices.

Action Step #	Action Step Leader	Description	Output Measure
3.1	Eric Glick (NDOT)	Create working group to recommend changes to highway standards for motorcycle needs. Revise design, construction, and maintenance standards to include motorcyclist needs. Incorporate motorcycle safety considerations into routine roadway inspections. Educate road design and maintenance staff about conditions hazardous to MCs.	List of standards to revise to incorporate motorcycle safety
3.2	Eric Glick (NDOT)	Develop two-way communication platform to allow riders to notify highway agencies of roadway conditions that present a potential problem to motorcyclists, and allow highway agencies to communicate construction and maintenance updates to riders.	Implementation of communication platform

## Strategy #4

Increase crash survivability through appropriate protective gear and improved emergency response.

Action Step #	Action Step Leader	Description	Output Measure
4.1	PK Handley (MARS), Laura Gryder (UNSOM)	Develop a strategy to support maintaining the helmet law and clarifying helmet standards (i.e., DOT sticker placement) to easily identify DOT approved helmets, and approved eye protection.	Development of draft strategy
4.2	TBD	Review the existing motorcycle crash severity treatment component in emergency medical personnel training and if necessary, develop a plan to expand the content and the number of EMS and enforcement personnel trained.	Assessment of EMS training, number of EMS trained



# Roster

## MOTORCYCLES

### Name

### Company

#### MEMBERS

Jon Allen	Nevada Department of Transportation - Safety
Steve Avalos	BMW Motorcycles of Las Vegas
Marsha Boam	Penna Powers
Mike Colety	Kimley-Horn
Jamie Crooks	Nellis AFB/NTTR MC Safety Rep
Eric Dimit	Nevada Department of Transportation Roadside Safety
Cleveland Dudley	Nevada Department of Transportation
Rick Eckhardt	Northern Nevada Confederation of Clubs
John Eiche	Nevada Department of Transportation
Vickie Fisher	
Eric Glick	Nevada Department of Transportation
Laura Gryder	University of Nevada School of Medicine
P.K. Handley	Motorcycle Awareness and Rider Safety
Wes Henderson	Nevada League of Cities and Municipalities
Rob Honea	DPS Office of Traffic Safety/Law Enforcement Liasion
George Jordy	Atkins Global (Roadway EGINEER, Public)
P.D. Kiser	Nevada Department of Transportation - Safety
Joanna Needham	MSF Coach
Mike "Pilot" Nelson	Motorcycle Safety Instructor
Lindsay Saner	Kimley-Horn
Maggie Saunders	Penna Powers
Damon Schuetze	Schuetze & McGaha, P.C.
Laurel Stadler	Northern Nevada DUI Task Force
David Strawn	Quality Towing/Freeway Service Patrol
Peter Vander Aa	DPS Office of Traffic Safety
Joseph Wingard	Harley-Davidson

#### PARTICIPANTS

Arthur Aten	Nevada Highway Patrol
Jason Buratczuk	DPS Nevada Highway Patrol
Allan Cruet	Accident Scene Management, Inc./Nevada Rider
Amy Davey	DPS Office of Traffic Safety
Kurt Davis	DPS Office of Traffic Safety
John Galicia	University of Nevada Reno Police
Steve Guderian	Motorcycle Safety Consulting
Juan Hernandez	Nevada Department of Transportation
David Hunnel	Nevada Department of Transportation
David Jacoby	Las Vegas Metropolitan Police Department
Joe Joseph	NTTR Ground Safety Manager Nellis AFB
Mark Kerber	Allstate
Tia Linzsey	Nevada DMV
Bob Madewell	Nevada Department of Transportation Roadway Systems
Ken Mammen	Nevada Department of Transportation Safety
Paul McCullough	Las Vegas Metropolitan Police Department
Debbie McIntosh	National Highway Traffic Safety Administration
Bryan Meyer	Las Vegas Metropolitan Police Department
Kevin Moore	DPS Office of Traffic Safety
Judy Reich	Nevada Broadcasters
Steve Ritchey	Las Vegas Metropolitan Police Department
Chelsea Stuenkel	DPS Nevada Highway Patrol
Casey Sylvester	Nevada Department of Transportation
Kathleen Taylor	Taylor Made Solutions
Kim Townsend	Duckwater Shoshone Tribe
Jaime Tuddao	Nevada Department of Transportation Safety
Kris Wilson	DPS Nevada Highway Patrol
Alex Wolfson	Nevada Department of Transportation

## Name

## Company

### FRIENDS

Salome Barton	City of North Las Vegas
Lori Campbell	Nevada Department of Transportation - Safety
Susan Hohn	DPS Office of Traffic Safety
Diana Hollander	Nevada Department of Education - Transportation Safety
Bill Landon	Care Flight
Rudy Malfabon	Nevada Department of Transportation
Julie Masterpool	RTC Washoe County
Mario Ramos	National Highway Traffic Safety Administration
Paul Villaluz	Slater Hanifan Group
Linda Whitehill	Western Nevada College MC Safety Program
Niguel Williams	Nevada Rider Motorcycle Safety



## Fact Sheet

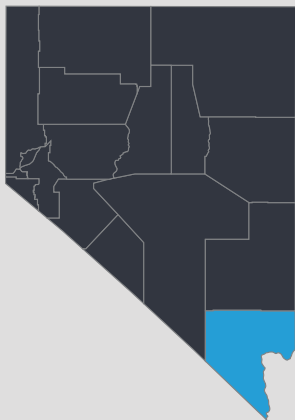
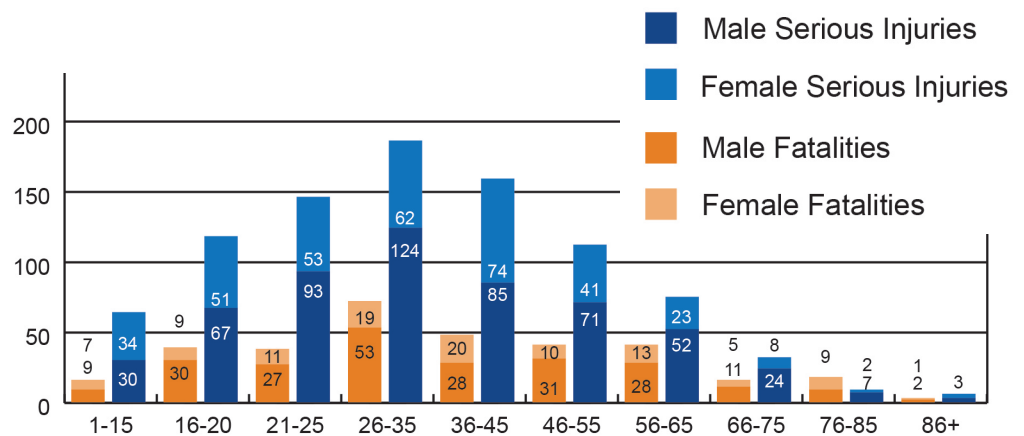
# OCCUPANT PROTECTION

Between 2011 and 2015, 371 unbelted vehicle occupants lost their lives and 942 were seriously injured in traffic crashes on Nevada Roadways.

The goal of the Nevada Strategic Highway Safety Plan (SHSP) is to reach zero fatalities. This fact sheet provides information on who is involved in unbelted fatal and serious injury crashes, where and when these crashes occurred, and why they happened. It also outlines how the State plans to reduce unbelted fatalities and serious injuries.

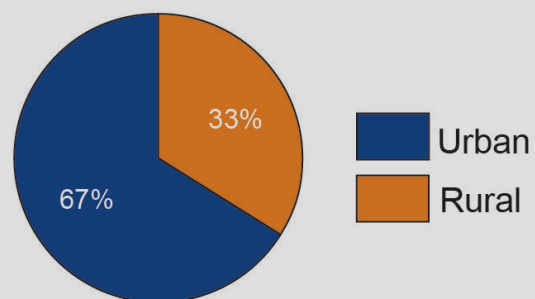
### Who?

Male drivers aged 26 to 35 years old are involved in most unbelted fatalities and serious injuries, followed by male drivers aged 36 to 45 years old.



### Where?

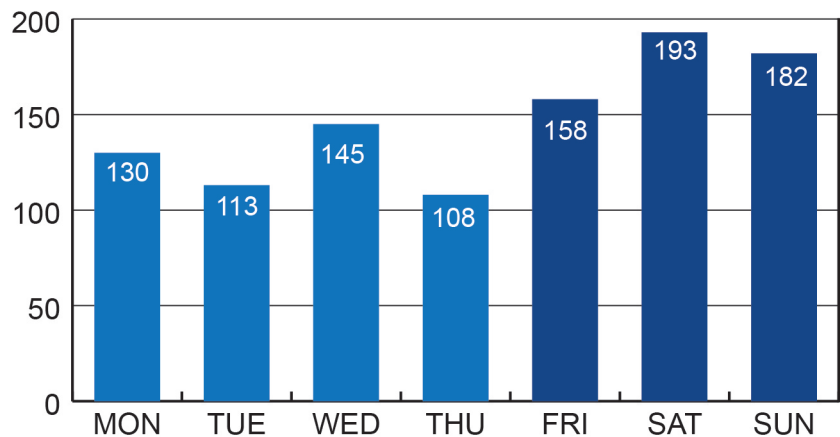
Between 2011 and 2015, almost two-thirds (63 percent) of the unbelted fatalities and serious injuries occurred in Clark County. Sixty-seven percent of such fatalities and serious injuries occurred on urban roadways.





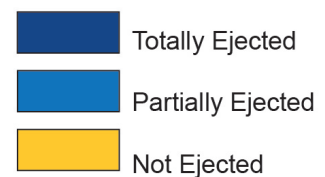
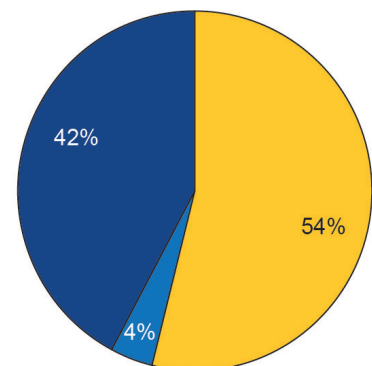
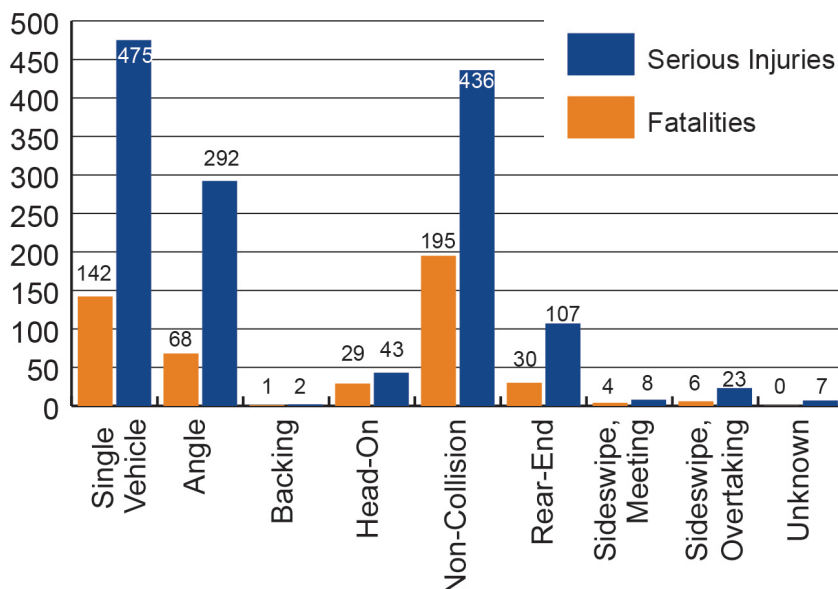
## When?

The highest number of unbelted fatalities and serious injuries occurred on Friday through Sunday.



## Why?

A large portion of the unbelted fatalities and serious injuries occurred in single vehicle crashes followed by non-collision crashes. Over half (54 percent) of the unbelted fatalities involved no ejection from the seat.



Source: Nevada DOT, 2016.



## Action Plan

# OCCUPANT PROTECTION

### Targets to be met by December 31, 2017

- Considering the 2011-2015 five-year moving average of 64 occupant protection traffic fatalities, decrease the upward trend and reduce the five-year moving average from a projected 69 to 68 occupant protection traffic fatalities.
- Considering the 2011-2015 five-year moving average of 188 occupant protection serious injuries, decrease the five-year moving average to 187 occupant protection serious injuries.
- Considering the 2011-2015 five-year moving average of 0.27 occupant protection fatalities per 100 Million VMT, decrease the upward trend and maintain the five-year moving average at the projected 0.27 occupant protection fatalities per 100 Million VMT.
- Considering the 2011-2015 five-year moving average of 0.79 occupant protection serious injuries per 100 Million VMT, decrease the five-year moving average to 0.74 occupant protection serious injuries per 100 Million VMT.

**CEA Chair:** Scott Swain, Office of Traffic Safety

**CEA Vice Chair:** Captain Dean Buell, Department of Public Safety - Nevada Highway Patrol

### Strategy #1

Analyze data, prepare documents and disseminate information to support occupant protection use.

Action Step #	Action Step Leader	Description	Output Measure
1.1	Laura Gryder (UNSOM)	Continue to improve the quality, availability, integration, and analysis of UNSOM seat belt related data.	Number of research publications and conference/posters. EMS data integrated into UNSOM data. The # of UNSOM trauma records linked to EMS presentations
1.2	Roni Dahir (UNR)	Involve UNLV and UNR seat belt use observation data and survey results in prepared documents for dissemination (on Zero Website, etc.). Analyze seat belt observation data and unbelted fatal crash characteristics of nonusers to identify local target groups, identify countermeasures that reach each target group and ensure those countermeasures are implemented within a given time.	Establish connection from UNLV and UNR data to publicized information on occupant protection. Establishment of target groups and countermeasures for each group. Implementation of countermeasures.
1.3	Scott Swain (OTS)	Recruit representatives from grassroots and diverse communities across the State and establish subcommittees with subject matter experts that focus on specific populations (e.g. teen driving, law enforcement, rural, business outreach subcommittees).	Number of representatives from grassroots communities and establishment of subcommittees on specific target groups.
1.4	Scott Swain (OTS)	Create clearinghouse of education and analysis; publicize to partners.	Establishment of clearinghouse on Zero Website, number of materials listed and number of groups notified of available materials.



## Strategy #2

Maximize proper restraint use with enforcement and public outreach campaigns.

Action Step #	Action Step Leader	Description	Output Measure
2.1	Kevin Moore (OTS)	Educate younger road users on safe behaviors through school education programs and teen safe driving messages through statewide zero teen safe driving program/competition (Zero Teen Fatalities).	Number of schools distributing traffic safety messages and number of teens in Zero Teen program
2.2	Marsha Boam (Penna Powers)	Conduct additional public outreach in English and Spanish throughout the year and use of additional non-traditional media venues, i.e. Facebook, MySpace, YouTube, Online Gaming, dynamic message signs (DMS), fast food establishment sponsorships (Wal-Mart in store displays, marquees), etc. (messaging focused on the law and that the seat belt law will be strictly enforced.	Number of occupant protection campaigns and number of non-traditional media venues.
2.3	Rose Gardner (UNSOM)	Use community-oriented policing strategies for the Hispanic community, with the goal of reducing the disproportionate number of Hispanic drivers and victims involved in traffic related collisions.	Number of community oriented policing events.

## Strategy #3

Analyze data and prepare documents to support occupant protection legislation.

Action Step #	Action Step Leader	Description	Output Measure
3.1	Erin Breen (UNLV)	Prepare a plan for legislation to pass in 2017 to upgrade Nevada's seat belt law (NRS 484D.495) to allow primary enforcement, consistent with all other traffic laws, as well as providing support to local primary seatbelt laws prior to a state primary law.	Completion of plan to pass legislation.
3.2	Erin Breen (UNLV)	Prepare a plan for legislation to pass in 2017 to Increase the age of children covered under Nevada's child passenger safety law up to at least age eight (or 80 pounds or 56") to be consistent with current best practices.	Completion of plan to pass legislation.
3.3	Erin Breen (UNLV)	Prepare plan for legislation to pass in 2017 to Require seat belt use for young drivers and their passengers as a condition for continued licensure within Nevada's graduated driver licensing system.	Completion of plan to pass legislation.



# Roster

## OCCUPANT PROTECTION

### Name

### Company

#### MEMBERS

Marsha Boam	Penna Powers
Erin Breen	University of Nevada Las Vegas - TRC Center for Safety Research
Dean Buell	DPS Nevada Highway Patrol
Mike Colety	Kimley-Horn
Veronica Dahir	University of Nevada Reno
Vickie Fisher	REMSA & Safe Kids Washoe Co
Rose Gardner	University of Nevada School of Medicine
Laura Gryder	University of Nevada School of Medicine
Jason Hymer	Indian Health Service
P.D. Kiser	Nevada Department of Transportation - Safety
Kevin Larsen	DPS Nevada Highway Patrol
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Kim Townsend	Duckwater Shoshone Tribe



## Name

## Company

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Harold Hughes	DPS Nevada Highway Patrol
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Brian LaVoie	
Andy McAfee	DPS Nevada Highway Patrol
Joanna Needham	MSF Coach
Davy Ann Noahr	Las Vegas Convention and Visitors Authority
Jeff Payne	Driver's Edge
Sherwin Racehorse	Te-Moak Tribe
Mario Ramos	National Highway Traffic Safety Administration
Christine Sylvester	Nevada Department of Transportation
Kelly Thomas-Boyers	Activist
Niguel Williams	Nevada Rider Motorcycle Safety



# Fact Sheet

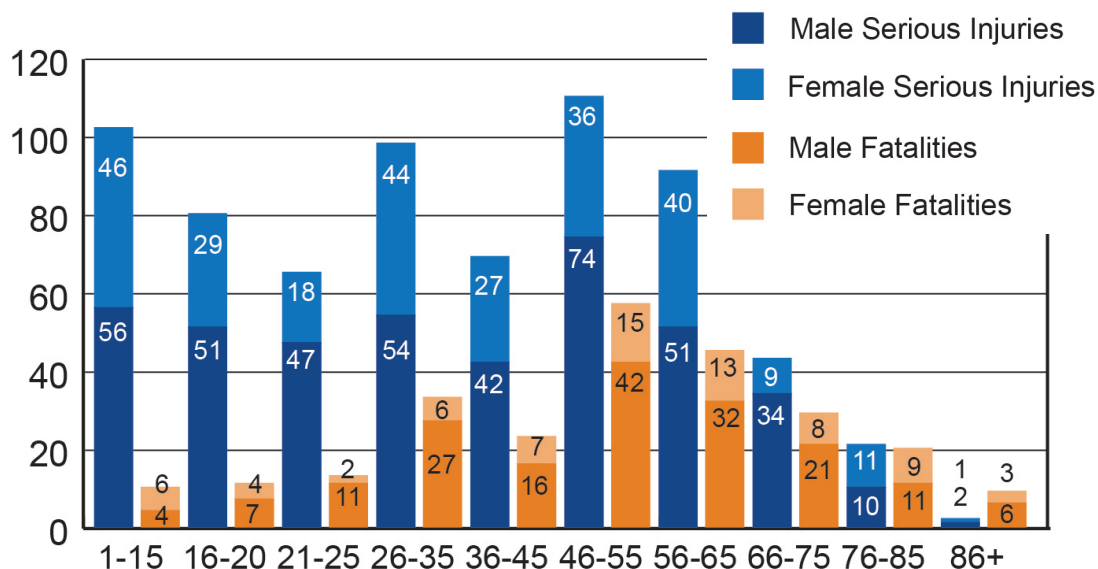
## PEDESTRIANS

Between 2011 and 2015, 336 pedestrians lost their lives and 688 were seriously injured on Nevada roadways.

The goal of the Nevada Strategic Highway Safety Plan (SHSP) is to reach zero fatalities. This fact sheet provides information on who is involved in pedestrian fatal and serious injury crashes, where and when these crashes occurred, and why they happened. It also outlines how the State plans to reduce pedestrian fatalities and serious injuries.

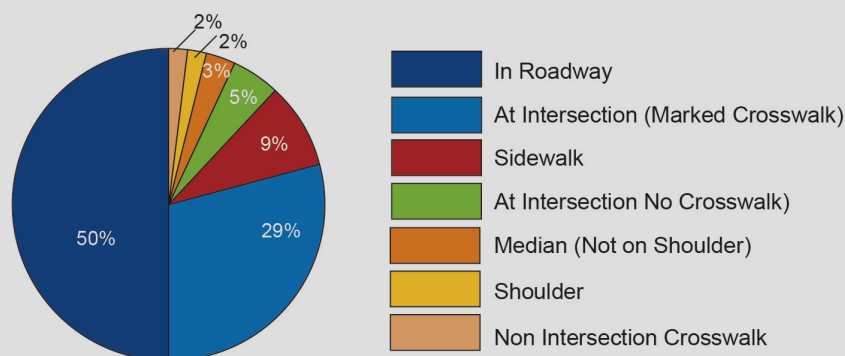
### Who?

Middle-aged (46 to 55 years old) male pedestrians are more likely than any other demographic to be fatally wounded or seriously injured. In general, males of any age have a higher likelihood to be a pedestrian fatality or serious injury.



### Where?

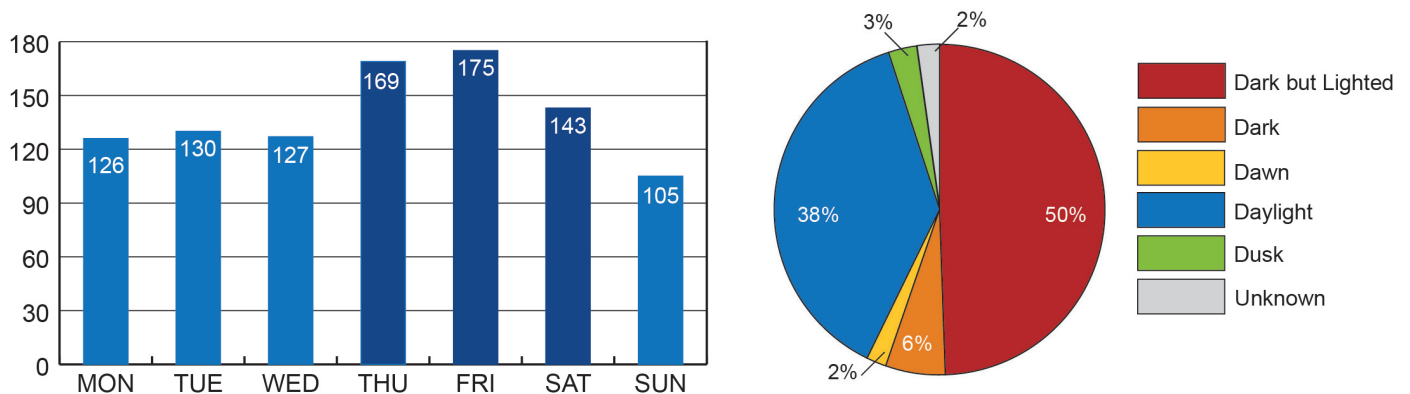
Half (50 percent) of the pedestrian fatalities and injuries occurred midblock on a roadway. Pedestrian fatalities and serious injuries on marked crosswalks were also substantial (14 percent).



## When?

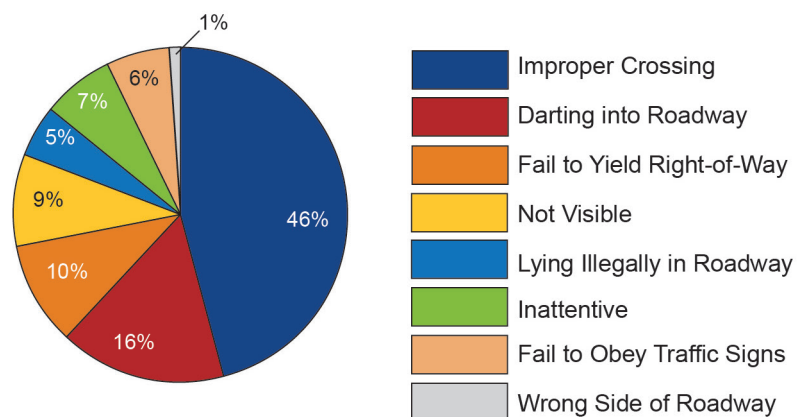
Friday was the most dangerous day for pedestrians with a combined 175 fatalities and serious injuries from 2011 to 2015. Thursday was the next most severe day with 169 fatalities and serious injuries.

About half of pedestrian fatalities and serious injuries (50 percent) occurred in dark but lighted conditions.



## Why?

Between 2011 and 2015, the pedestrian action, which contributed most to fatalities and serious injuries, was improper roadway crossing. Other significant contributing factors included darting into roadway, failure to yield right-of-way and obey traffic signs, and not visible.



Source: Nevada DOT, 2016.



# Action Plan

## PEDESTRIANS

### Targets to be met by December 31, 2017

- Considering the 2011-2015 five-year moving average of 62 pedestrian traffic fatalities, decrease the upward trend and maintain the five-year moving average at the projected 80 pedestrian traffic fatalities.
- Considering the 2011-2015 five-year moving average of 141 pedestrian serious injuries, decrease the upward trend and maintain the five-year moving average at the projected 172 pedestrian serious injuries.
- Considering the 2011-2015 five-year moving average of 0.26 pedestrian fatalities per 100 Million VMT, decrease the upward trend and maintain the five-year moving average at the projected 0.31 pedestrian fatalities per 100 Million VMT.
- Considering the 2011-2015 five-year moving average of 0.59 pedestrian serious injuries per 100 Million VMT, decrease the upward trend and maintain the five-year moving average at the projected 0.67 pedestrian serious injuries per 100 Million VMT.

**CEA Chair:** Erin Breen, UNLV Vulnerable Road Users Project

**CEA Vice Chair:** Bill Story, NDOT

### Strategy #1

Reduce pedestrian exposure through roadway modifications.

Action Step #	Action Step Leader	Description	Output Measure
1.1	Erin Breen (UNLV)	Reduce speeds along corridors with high pedestrian activity and/or potential for crashes.	Number of local agencies that are considering the FHWA new speed guidelines along their roadways
1.2	Bill Story (NDOT) with input from Rebecca Kapuler (RTC Washoe) and Mohammad Farhan (RTC SNV)	Implement complete street projects.	Track the number of complete streets projects in planning phase and completed per year (reported by agencies), Track the number of agencies with complete streets policies
1.3	Bill Story with input from Julie Masterpool (RTC Washoe) and Mohammad Farhan (RTC SNV)	Reduce pedestrian exposure by providing bulb-outs, median refuge, tighter radii at cross walks, narrowing the pavement width, off-set sidewalks, etc.	Track crossing improvement projects including RRFB installations (reported by agencies)
1.4	Walt Vodrazka (RTC SNV)	Modify signal timing to provide accommodations for pedestrians and bicyclists (advance green for pedestrian walk times at high pedestrian use locations).	Number of intersections with special consideration for pedestrians and bicyclists (reported by agencies)

## Strategy #2

Improve drivers' ability to see pedestrians.

Action Step #	Action Step Leader	Description	Output Measure
2.1	P.D. Kiser (NDOT)	Apply the NDOT Process for the Evaluation of Uncontrolled Crosswalk Locations at all legal uncontrolled crosswalk locations whether existing or proposed.	Present the NDOT Process for Evaluation of Uncontrolled Crosswalk Locations to agencies, Number of local agencies that have adopted the NDOT Process for the Evaluation of Uncontrolled Crosswalk Locations
2.2	P.D. Kiser (NDOT)	Provide lighting at pedestrian crossing locations.	Number of crosswalks where lighting was added (reported by agencies)

## Strategy #3

Improve driver and pedestrian awareness and behavior.

Action Step #	Action Step Leader	Description	Output Measure
3.1	Abby Swensen (Penna Powers)	Collaborate on and provide support for pedestrian safety awareness campaigns.	Provide information on website for safety campaigns
3.2	Julie Gallagher (DPS)	Target messages to impacted groups (based on data analysis).	Annually define the impacted group and confirm that message campaigns target the group
3.3	Tim Rowe (NDOT)	Collaborate on and provide support for programs that promote walking or biking to school and include safety education to school children and parents.	Number of schools that provide pedestrian and/or bicycle safety programs
3.4	Becky Barnett (DPS - Tentative)	Provide and publicize targeted law enforcement events so that law enforcement can educate/ticket noncompliant motorists and pedestrians.	Track funding received/spent on pedestrian enforcement initiatives; track citations issued during the events; track press releases for the events
3.5	Erin Breen (UNLV)	Prioritize and plan NRS language and key bill provisions.	Develop a strategy for passing key legislation





# Roster

## PEDESTRIANS

### Name

### Company

#### MEMBERS

Marsha Boam	Penna Powers
Derrick Boyd	Nevada Barricade & Sign Co., Inc.
Erin Breen	University of Nevada Las Vegas - TRC Center for Safety Research
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Amy Davey	DPS Office of Traffic Safety
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Mohammed Farhan	RTC of Southern Nevada
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Hailey Lang	Carcity City- CAMPO
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Bob Mayer	Clark County School District PD
Joanna Needham	MSF Coach
Molly O'Brien	Kimley-Horn
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Walt Vodrazka	RTC of Southern Nevada (FAST)

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Tia Linzsey	Nevada DMV
Rudy Malfabon	Nevada Department of Transportation
Ken Mammen	Nevada Department of Transportation Safety
Mark Manendo	Nevada State Legislature
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## Name

## Company

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Casey Sylvester	Nevada Department of Transportation
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Kim Townsend	Duckwater Shoshone Tribe
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Evan Gunderson	
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Shirley Visger	Las Vegas Metropolitan Police Department
Linda Weyl	Trench Plate Rental Co
Niguel Williams	Nevada Rider Motorcycle Safety



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