



# Traffic Safety Engineering Project Selection Process



# Strategic Highway Safety Plan (SHSP) Goals

- Reduce fatal crashes
- Reduce serious injury crashes

*On all public roadways*

**zero Fatalities<sup>®</sup>**

*Drive Safe Nevada*

## NEVADA STRATEGIC HIGHWAY SAFETY PLAN

The Nevada Strategic Highway Safety Plan identifies five critical emphasis areas where there are a relatively high number of traffic crashes:





# Our Project Selection Process is Data Driven.....

Starts with Analysis of Crash Data and Traffic Volumes,

Followed by Field Reviews,

And Interviews with District Staff and Local Agency Staff





# Most Traffic Safety Engineering Efforts Cover These Fatal/Serious Injury Crash Categories:

- Lane Departure
- Intersections
- Pedestrians





# Lane Departure Projects

- Identify Locations by density of crashes on State Highways, U.S. Routes, NHS Routes and Interstate
- Locations are ranked by crash severity/frequency for fatal and serious injury crashes
- When possible countermeasures are added to 3R or other roadway projects
- Some are stand alone projects with highest ranking



# LANE DEPARTURE CRASHES

Addressed by the following countermeasures:

- Rumble Strips and Stripes
- Barrier – Cable, Guardrail, Concrete
- Shoulder Widening/Slope Flattening
- Curves



# Rumble Strips and Stripes





## Rumble Strips and Stripes

- Since 2007, over 3000 miles of centerline and edge line rumble strips and stripes
- Now a current design standard on all rural contracts



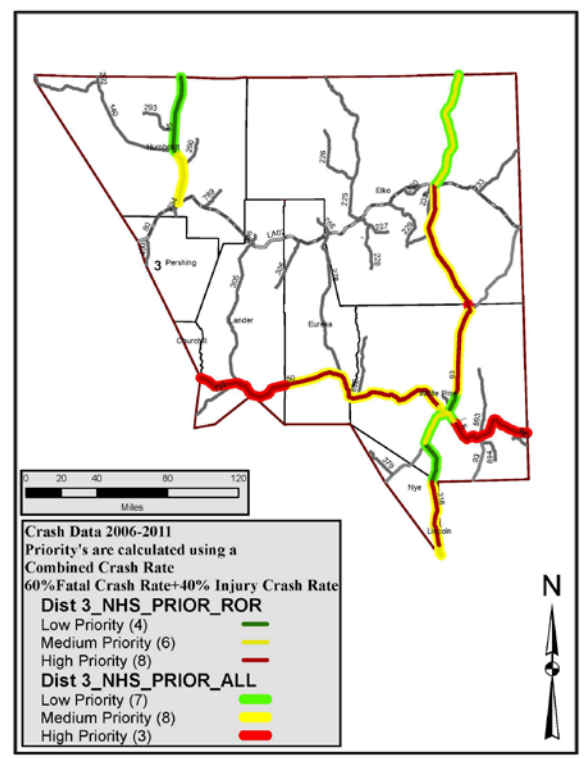
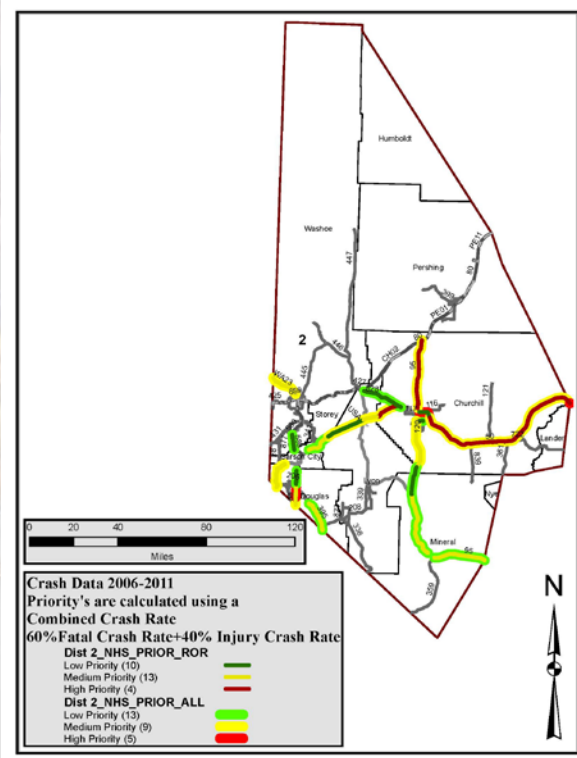
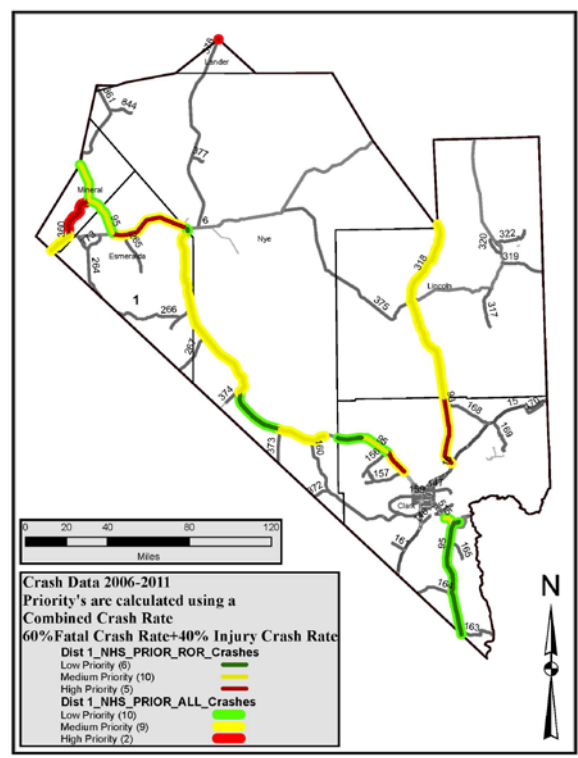


# Median Barrier





# Shoulder Widening/Slope Flattening Selection Process





# Shoulder Widening/Slope Flattening - Before





# Shoulder Widening/Slope Flattening - After





# Shoulder Widening/Slope Flattening - Before





# Shoulder Widening/Slope Flattening – In Progress





# Intersection Projects

- Typically intersection countermeasures are done systemically
- Systemic means countermeasures are applied system wide and don't rely only on high crash locations
- Location input is required from District and local agency staff
- Most locations are on higher volume streets in urban areas and U.S. routes in rural areas



# INTERSECTION CRASHES

Addressed by the following countermeasures:

- Flashing Yellow Arrow (Urban)
- Flashing Stop Beacons (Rural)
- Roundabouts





# Flashing Yellow Arrow





# Flashing Stop Beacons





# Roundabouts



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# Pedestrian Projects (State Funds)

- Improvement locations are limited to State roads
- Pedestrian Crash Data is analyzed for location, driver and pedestrian action
- Locations are field reviewed and evaluated per the NDOT Process for the Evaluation of Uncontrolled Crosswalk Locations
- Location input is required from District and local agency staff



# Pedestrian Projects (State Funds) continued

- Locations are ranked using the NDOT Potential Pedestrian Safety Improvement Project Selection Matrix
- Most locations are on higher volume streets in urban areas and U.S. routes in rural areas



# PEDESTRIAN CRASHES

Addressed by the following countermeasures:

- Pedestrian Activated Rapid Rectangular Flashing Beacons (RRFB)
- Enhanced LED Street Lighting
- Pedestrian Refuge Islands
- Pedestrian Bulb Outs
- Danish Off-sets



# Pedestrian Safety Countermeasures





# Pedestrian Safety Countermeasures







# NEVADA DOT



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