



Nevada's Report on Safety – SCOHTS 2016

Nevada's Fatalities increased from 290 in 2014 to 322 in 2015 and for the first part of 2016, we are currently experiencing the same trend as 2015. Motorcycles, pedestrians and unbelted vehicle occupants numbers are all high already this year, hence we will be targeting these demographics with education, enforcement and outreach programs. Engineering strategies alone will not reverse these particular trends so we are coordinating with our Office of Traffic Safety and our Zero Fatalities outreach program. The FAST act has made this endeavor more challenging as it removed the state's ability to apply HSIP funds to the education & enforcement components of our Zero Fatalities campaign. To ensure that our behavioral campaigns would continue, NDOT Director Malfabon approved the use of state funds, which will allow the campaign to continue in full force.

NEVADA STRATEGIC HIGHWAY SAFETY PLAN:

The State participated in a FHWA peer to peer exchange with Idaho, Utah, California, Arizona and Maryland. This was held prior to and as a lead into our Safety Summit which was focused on updating our SHSP for 2016- 2020 time frame. The Safety Summit was held in Reno Nevada in March 2015 and we had around 250 participants. This proved to be a very good kick-off for the SHSP update.

The updated SHSP was approved by all parties and is now online at the zerofatilitiesnv.com homepage. It consists of two parts, the main body of the SHSP with background information and strategies for each of the six critical emphasis areas: Intersections, Impaired Driving, Occupant protection, Pedestrians, Lane departures and Motorcycle's. The second part is the "supplement". It is intended to be a living document and updated as needed. In the past, we had one document and had to go through a lengthy approval process to change or update the SHSP. With the new format, we will be able to update the supplemental as required with minimal effort.

Recurring activities for the SHSP included semi-annual meetings of the Nevada Executive Committee on Traffic Safety (NECTS), and quarterly meetings for the SHSP Technical Working Group, six SHSP Critical Emphasis Area (CEA) teams, and the Data Team. We elected to change the cycle of our Bi annual Safety Summits to be held annually, rotating from the north to the south each year.

ENGINEERING EFFORTS:

Pedestrians:

In February 2015, Governor Brian Sandoval took an interest in making sure the Nevada Department of Transportation (NDOT) is providing efficient funding to pedestrian safety improvements. As pedestrian fatalities rise, the importance for pedestrian safety has become a top priority. NDOT Planning Traffic Safety Engineering (PTSE) has since then been tasked with developing pedestrian safety improvement projects provided with state highway funding. NDOT PTSE has recently become aware of the limited guidance for evaluating potential pedestrian safety improvement locations. The division determined an evaluation process was needed to help provide a clear guidance to all divisions and transportation agencies. Having the task to determine which crossing locations will benefit from pedestrian safety improvements can be a complex process but can also be approached in a systematic manner to provide benefits to all roadway users. This evaluation guideline emphasizes the importance for engineering

judgement while allowing for design flexibility and therefore providing support for the decision making process.

The evaluation guideline primarily consists of four parts: Step 1) Identify, Step 2) Collect Data, Step 3) Field Visit, and Step 4) Project Selection. The potential outcome will then include recommendations for pedestrian safety improvements. In addition, available funding to design and maintain the pedestrian safety improvements leads to using engineering judgement to provide the best safety benefit for all pedestrians.

The full text of the Potential Pedestrian Safety Improvement Evaluation guide can be found on the Nevadadot.com website under the “Documents/ Safety “ tab.

Of particular note is part 4 which helps to guide Project Selection.

NDOT PTSE developed a system using a matrix point system. The matrix accounts for both the quality of the pedestrian environment and the potential pedestrian activity level, giving each factor a weighted point amount. The Potential Pedestrian Safety Improvement Project Selection Matrix is based on demographics and pedestrian high, medium, and low generators. This allows for all potential pedestrian safety improvement locations be weighted in a fair and equal manner.

POTENTIAL PEDESTRIAN SAFETY IMPROVEMENT PROJECT SELECTION MATRIX					
Category	Sub-Category	Examples/Notes	Weight	Weight	Weight
			1/8 Mile	1/4 Mile	1/2 Mile
High Generator	University or College		15	10	5
	Major Generator	Convention Center, Casino	15	10	5
	Multi-family Living	Condominiums, Apartments, Mobile Home Park	10	5	3
Medium Generator	School		5	3	1
	Major Retail	Grocery Store, Convenient Store, Banks, etc.	5	3	1
	Bars		5	3	1
	Hotels	Motels	5	3	1
	Food Services	Restaurants, Fast Food, etc.	5	3	1
	Hospital	Clinics	5	3	1
	Bus Stop		5	3	1
	Senior Living	Hospice Care	5	3	1
Low Generator	Community Services	Community Centers, Libraries, Post Offices, Social Services, Churches, etc.	5	3	1
	Minor Retail	General Retail, Offices, etc.	3	1	0
	Park		3	1	0
	Street Classification	Local		1	
	Collector			3	
	Minor Arterial			4	
	Principal Arterial			5	
Speed Limit	≤ 30			1	
	35+			3	
	40+			4	

	≥ 45		5
Sidewalk Status	Missing		20
	Narrow	< 4 feet	10
	Standard	4 - 6 feet	0
	Wide	> 6 feet	-10
Parking	Yes On-street parking		0
	No On-street parking		5
Curb	Yes		0
	No		2
Road Width	0 - 24 feet		0
	24 - 36 feet		2
	36 - 48 feet		4
	48 - 60 feet		6
	61+ feet		10
Distance Between Major Intersections	0 - 500 feet		0
	500 - 1000 feet		2
	1000 - 2000 feet		4
	2000+ feet		5
Stop Control	Signal		-3
	4-way Stop Sign		-2
	2-way Stop Sign		-1
TOTAL			145

With the increase in pedestrian fatalities, the Zero Fatalities program launched a new campaign titled “**ePEDEmic**. This campaigns focus is to raise awareness that more people are being killed or injured while crossing the street than by many other common diseases, including HIV, breast cancer and influenza. You can find more about this at: <http://epedemic.org/>

This effort is being bolstered by another new project, “Vulnerable Road Users” which emphasis safety for pedestrian, bicycles, motorcycles and has recently added extra emphasis for older pedestrians & drivers. You can find more about this effort at www.pedsafe.vegas

Wrong Way Drivers:

Nevada is following the states of Florida and Texas in the study of radar detection and driver feedback technology to help combat Wrong Way Drivers. Below is an excerpt from the request to FHWA for experimentation.

“The proposed device is a modification to the Rectangular Rapid Flashing Beacon (RRFB) device that has been approved for uncontrolled pedestrian crossings. The RRFB has proven to be a very successful traffic control device at uncontrolled pedestrian crossings due to the bright LED flash pattern that attracts the attention of the approaching motorist and warns them of the presence of pedestrians at the crossing location. For this wrong way application, we propose to use red LEDs rather than the yellow that are typical of a pedestrian application. The device will utilize the new WW+S flash pattern in accordance with *FHWA 4(09)-41(I), Additional Flash Pattern for RRFBs*. A vehicle that is proceeding up a limited access off ramp in the wrong direction would be detected by radar or other proven detection device and the Red RRFB Wrong Way Assembly flash pattern would initiate in an attempt to get the attention of the

wrong way driver before they enter the freeway mainline. To reduce driver discomfort and distraction from the intensity and frequency of the red RRFB during dark conditions, a dimming function will be implemented.”