Highway Safety Improvement Program

2013 Annual Report

Nevada Department of Transportation

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Drive Safe Nevada
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Program Structure

Administration

This annual Highway Safety Improvement Program (HSIP) report for 2013 summarizes the activities of the Nevada Department of Transportation’s HSIP as required by Title 23 USC (Section 148). Available program funds for the purpose of this report are considered to be those funds obligated during the 2013 federal fiscal year. The activities of the Nevada Department of Transportation (NDOT) are primarily designed to develop safety improvement projects for the following areas:

- Systemic roadway improvements
  - Rural lane departure crash mitigation
  - Rural intersection low cost safety improvements
  - Urban intersection related crash mitigation
  - Safety management plans
- Pedestrian related crash mitigation
- High crash locations (intersections and roadway segments)

The crash data on all public roadways contained in this report is extracted from the Nevada Citation and Accident Tracking System (NCATS) and Brazos crash databases, and prepared for Safety Engineering’s analysis as a normalized view. After the crash data is downloaded from the NCATS and Brazos databases, it is processed through our geo-location software and is linearly referenced to the statewide street centerline data. The geo-location software tools automate the cleanup of location attributes and assign a spatial location to the crash data through a series of database procedures.

The HSIP program is administered by the Safety Engineering section a centrally located component of the NDOT. The methods used by the Safety Engineering
section to identify, select, implement, and evaluate safety improvement projects have been compiled in the NDOT’s “Safety Procedural Manual,” implemented in 1980, amended in 1990, and 2010.

**Methodology**

The NDOT’s “Safety Procedural Manual” and subsequent modifications to our Hazard Elimination Program details the method for identifying and addressing High Crash Locations (HCL’s) including locations on locally owned and maintained roadways. Each crash study of a problem area compares crashes using all crash types and all severities (fatal, injury and property damage only) with intersection or roadway geometrics. Detailed crash data is stored in NCATS derived databases.

Safety Engineering’s Safety Management System (SMS) uses both commercial off the shelf (COTS) and custom GIS applications to spatially locate HCL’s.

Under NDOT’s Hazard Elimination Program, safety improvements are eligible for federal funding if they meet the following criteria:

- On a public roadway
- Tied to the Nevada Strategic Highway Safety Plan (SHSP)
- At identified HCL’s
- Improvements meet a positive Benefit Cost
- One of the nine proven FHWA countermeasures systemically applied

All Safety Projects identified that meet the above criteria are then evaluated and prioritized. The HCL’s are prioritized by benefit/cost analysis and the systemic improvements are prioritized by roadway function class and crash history. When safety funds are not available for an identified hazard, i.e. those projects with lower priorities or do not meet one of the criteria above; the project is often incorporated into a large state or local project using funds appropriated for the
larger project whenever possible. Minor improvements are scheduled with maintenance forces when feasible.

Other activities include involvement in NCATS, a statewide system for electronic collection and dissemination of citation and crash data; exploring further analytic techniques of our GIS based SMS, implementation and enhancement of the NDOT Road Safety Audit (RSA) program and revision and implementation of Nevada’s SHSP. Nevada’s Strategic Highway Safety Plan (SHSP) has identified the following five critical emphasis areas:

1. Pedestrians
2. Impaired Driving
3. Seat Belts
4. Intersections
5. Lane Departures

Table 1 provides information on the extent that Highway Safety Improvement projects align with the States SHSP.

**Innovative Practices**

**Nevada Strategic Highway Safety Plan**

During FY2013, five key activities were conducted for the implementation of the Nevada SHSP. These included the adoption of performance measures to track the impact of strategies contained in the SHSP, the hosting of the Nevada Safety Summit in November 2012, the development of the first annual Nevada SHSP Annual Report, the involvement in a Federal Highway Administration (FHWA) SHSP Peer to Peer Exchange, and the hosting of the 2013 Nevada SHSP Road Show. Brief descriptions of these five key activities are provided below.

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, five SHSP Critical Emphasis Area (CEA)
teams, and the Data Team. The Strategic Communications Alliance (SCA) re-organized its format to become a provider of monthly messages.

**Performance Measures**
Each of the five SHSP CEA teams developed a series of performance measures to track the impact of strategies adopted by each CEA, which tie to the number of fatalities and serious injuries. In addition, the teams refined internal performance metrics to ensure activities, or outputs, associated with CEA strategies can be measured.

**2012 Nevada Safety Summit**
The 2012 Nevada Safety Summit was held on November 7-8, 2012 at Texas Station in North Las Vegas, Nevada. Over 200 attendees attended the two day event which was comprised of sessions covering 20 traffic safety topics, with spotlight on the five emphasis areas of the Nevada Strategic Highway Safety Plan (SHSP) and the overall theme of involving “Everyone” in statewide traffic safety. The SHSP Annual Awards were held during the Summit with eight awards handed out, reflecting the five emphasis areas, data analysis, communications, and leadership. A special leadership award was also presented to recognize significant achievements in Nevadan traffic safety.

**Nevada Strategic Highway Safety Plan Annual Report**
In 2012, the CEA teams adopted a series of performance measures to track the impact of the strategies adopted by each CEA, all of which tie to the number of fatalities and serious injuries. This report shows these performance measures and supporting data through 2011, the latest year for which data was available.

**SHSP Peer Exchange**
Nevada participated in a FHWA-sponsored SHSP Peer-to-Peer Exchange on May 22-23, 2013 in New Orleans, Louisiana. The purpose of the peer exchange was to identify strategies, tools, and techniques for engaging Metropolitan Planning Organizations (MPO) in the process of implementing and evaluating the SHSP and the national strategy of Toward Zero Deaths (TZD). Nevada was joined by
Louisiana and Utah with each state contributing lesson learned from their implementation and evaluation approaches.

**2013 Nevada SHSP Road Show**
During calendar years without a Nevada Safety Summit, a SHSP Road Show is held to inform the public about the activities of the SHSP and to recruit new participants for the SHSP. The Road Show is comprised of several meetings across the state. The September 9-13, 2013 edition of the Road Show reached out to safety stakeholders in Henderson, Las Vegas, Reno, and Elko. The SHSP Annual Awards were presented to winners during the Road Show.

**Safety Management Plans**
In early 2012 the NDOT’s Safety Engineering section started working on a Safety Management Plan (SMP). This management plan was established for evaluating critical roadway corridors and is an effective way to address safety issues that can be identified and mitigated as a statewide safety improvement plan. Although the SMP has a similar process to a Road Safety Audit (RSA), it is a more in-depth review of the roadway corridor with public and stakeholders’ input that include observation of all road users such as pedestrian, bicycle, transit, and vehicular interactions; and the safety issues associated with those interactions are recorded for mitigation.

**Zero Fatalities Traffic Safety Campaign**
The state of Nevada’s Zero Fatalities public outreach campaign was launched in early 2011 to engage motorists in saving lives by following five fundamental driving safety tips. The campaign is a joint effort, leveraging and coordinating NDOT and Office of Traffic Safety (OTS) resources to save lives by providing a powerful, cohesive and instantly-recognizable traffic safety campaign focusing on the five core driving safety messages defined by the state’s SHSP.

**Campaign Elements**
Some of the public outreach channels the campaign utilized include:

TV ads
Radio ads
Billboards
On-line and Interactive Advertising (Google, social media, HULU and more)
Advertising in Select Gas Stations
Advertising at UNLV/UNR/Las Vegas 51s/Reno Aces and other sporting events
Community and Safety Events
Presentations to Driver’s Education Classes
Public Relations (media interviews, etc.)

**Campaign Updates**
While continuing to heavily utilize the public outreach methods noted above, the campaign greatly expanded its reach in fiscal year 2013 in large part due to partnerships. Two ambassador training sessions were held to further educate and incorporate agencies, organizations and individuals into Zero Fatalities activities. The sessions resulted in further collaboration, such as Zero Fatalities pedestrian safety messages displayed for Regional Transportation Commission (RTC) of Washoe County transit riders.

Many other entities such as renowned Las Vegas performing artists Blue Man Group also joined the Zero Fatalities campaign. The group produced television and radio public service announcements, traffic safety flyers for rental cars and much more reminding motorists to not drive distracted.

As a further component of the state’s traffic safety outreach efforts, year-to-date traffic fatality counts also began being periodically displayed on freeway digital message signs to raise traffic safety awareness.

**Campaign Results**
By late 2012, the campaign had made 146 million impressions. Also by late 2012, 95% of Nevadans were exposed to the Zero Fatalities message, and approximately half of all Nevadans report being directly aware of and specifically remembering the campaign. Public opinion polling shows that 70% of Nevadans polled state that the campaign helped influence them to focus on the road. In addition, other
states continue to approach NDOT to use our Zero Fatalities “Man on the Street” video as a template to help kick off and get buy-in for their state’s zero fatalities campaigns.

**Coordination with Office of Traffic Safety**

The NDOT Safety Engineering team continues to coordinate with the Office of Traffic Safety (OTS). This coordination has been ongoing since the inception of the Strategic Highway Safety Plan (SHSP). NDOT has funded behavioral components of OTS programs for several years now with Flex Funding from the Highway Safety Improvement Funds.

For Federal Fiscal Year 2013 (FY13), NDOT collaborated with OTS to support both the paid media/outreach and the data-driven high visibility enforcement (HVE) components of the OTS traffic safety and public education programs. These efforts focused on seat belt safety, impaired driving prevention, distracted driving prevention, and pedestrian safety. Paid media is a large part of the OTS marketing strategy. The positive effect of these safety initiatives is amplified by syncing the state’s Joining Forces enforcement timing and the OTS paid media schedule with the national enforcement and media calendars. The state unifies the public messaging by reinforcing the Zero Fatalities goal as a part of all these programs.

In particular, the high visibility enforcement focusing on intersection safety was highly successful. The state’s 22 law enforcement agencies came together and collaborated during three separate events in FY13. In total, officers issued 17,556 citations. From those citations, 35 were DUI arrests; 3,587 for speeding; 2,451 for cell phone use; 2,337 for red light running, and making contact (stops) with 13,734 drivers.

The impaired driving prevention paid media campaigns were also particularly successful in FY13. NDOT and OTS ran three campaigns in support of core messages such as “Buzzed Driving is Drunk Driving” and “Plan Ahead and
Designate a Sober Driver.” The campaigns spanned six calendar months and grossed nearly a hundred million audience impressions across TV ads, radio ads, online ads, billboards and bus ads, event participation, sponsorship support and earned media coverage.

**Transportation Safety Planning Framework**
The NDOT along with the following four states DOTs’, Arkansas, Florida, Maine and Louisiana, are lead states in a national effort to improve transportation safety planning efforts. This initiative is part of an NCHRP Project 08-76 and is being compiled by Cambridge Systematics and is being evaluated in three steps, Implementation, Testing and Evaluation. This project is in the Implementation stage and all of the lead states are in the process of discussing their progress in implementing the seven steps of the transportation safety planning framework that has been developed.

**I 80 Corridor System Master Plan (CSMP)**
Safety Engineering is Co-Chairing the Safety Section of the CSMP. This CSMP is a multi state, (Nevada, California, Utah and Wyoming) partnership to provide mobility and transportation solutions throughout the I-80 corridor, now and in the future. This partnership has fourteen working groups and all of them are looking at the Livability Principles that have been embraced by the Partnership for Sustainable Communities, an interagency partnership between Housing and Urban Development (HUD), Department of Transportation (DOT) and Environmental Protection Agency (EPA).

**Proven Safety Countermeasures**
As identified in the “Guidance Memorandum on Promoting the Implementation of Proven Safety Countermeasures” the NDOT Safety Engineering Division utilized many of these countermeasures in their systematic planning approach to safety improvements throughout the state. The following Proven Safety Countermeasures have been considered and incorporated into NDOT’s safety program:
Corridor Access Management
This proven counter measure is being evaluated and included into the analysis of our Safety Management Plans. See Safety Management Plans.

Road Safety Audits
The RSA program is very active in Nevada and has been incorporated as a standard for all new projects. See RSA section below.

Longitudinal Rumble Strips and Rumble Stripes on 2-lane roads
Both edge line and centerline rumble stripes are standard at NDOT. NDOT Safety Engineering is currently considering the use of 6 inch rumble stripes on roadways with narrower shoulders and using this 6 inch rumble strip with a, 48 foot rumble / 12 foot gap pattern, to accommodate bicycles.

Median Barriers
Median Barriers have been defined and incorporated into the NDOT Design Guidelines for Cable Median Barrier (CBR) systems and installed at various locations within the state. Future CBR installations are being included in projects along I-15 and I-80.

Safety Edge
Safety Edge has been accepted as a NDOT standard and several test locations have been installed as a safety improvement during this reporting timeframe.

Roundabouts
NDOT Safety Engineering continues to promote and program roundabouts in locations throughout the state.

Backplates with Retroflective Boarders
NDOT Safety has recently coordinated with the Traffic Management Division to program a project which will update the traffic light backplates with retroflective boarders.

Enhanced Delineation and Friction for Horizontal Curves
Horizontal curves have been identified throughout the state, mainly in rural locations, to provide enhanced delineations, friction surfaces, or additional
signage. These projects will be incorporated systematically into the rural roads programs.

**Highway Safety Manual (HSM)**

The NDOT Safety Engineering has been continuing their strategic deployment of the HSM. During fiscal year 2013, the following is a summary of the main accomplishments:

- Hosted quarterly HSM Implementation Task Force Meetings with representation from FHWA, NDOT Front Office, Roadway Design, Traffic Operations, Scoping, Safety and Districts 1, 2 and 3 as well as the four Metropolitan Planning Organizations (MPOs) in Nevada.
- Participated in the NCHRP Project 17-50 Lead States Initiative for Implementing the HSM as a Support State.
- Joined the FHWA Pooled Fund Study on HSM Implementation and participated in the face-to-face meeting in January 2013 as well as numerous conference calls and project document reviews.
- Purchased 30 copies of the HSM to be distributed to groups within NDOT and the MPOs that are actively involved in HSM Implementation.
- Hosted a two day HSM Practitioner’s Guide for Rural Two-Lane Roads and Rural Multilane Highways & Urban/Suburban Arterials in Carson City that was instructed by the FHWA Resource Center in April 2013.
- Hosted a one hour High Level Overview Training on the HSM in June 2013.
- Hosted a ½ day hands-on training on the Interactive Highway Safety Design Model (IHSDM) in Carson City that was instructed by FHWA Technical Assistance in June 2013.
- Established an agreement with the University of Nevada Reno Center for Advanced Transportation Education and Research to support HSM Implementation in Nevada. Tasks include Predictive Method Safety
Performance Function (SPF) calibration and independent SPF development, HSM before and after procedures and HSM application case studies.

- Used the University of Nevada Las Vegas to develop a Safety Analyst model for network screening and safety analysis for the Las Vegas Metropolitan Area.
- Developed the preliminary Nevada Project Safety Process, which describes the proposed process to estimate the safety impacts (impact to number and severity of crashes) for all transportation improvement projects.
- Applied the HSM predictive method to a roadway scoping project and a preliminary roundabout design and are in the process of applying the HSM to numerous additional ongoing projects.

**Road Safety Audits (RSA)**
The NDOT Safety Engineering regularly uses Road Safety Audits (RSA) on Nevada roadways particularly on ongoing design projects; an opportunity to include safety improvements for all road users. There were 20 RSAs performed in 2012 and there have been 15 RSAs in 2013 as of August 2013. The RSA program primarily focused on 3R preservation projects for NDOT, and projects/studies for the City of Las Vegas, and Washoe and Southern Nevada Regional Transportation Commission.

**Tribal Transportation Planning:**
In 2012 and 2013, NDOT Safety Engineering had performed several Road Safety Audits for Tribal Transportation Planning Department specifically those requested by Reno-Sparks Indian Colony, Confederated Tribes of the Goshute Reservation, Washoe Tribes of Nevada and California, and Shoshone Paiute Tribes Duck Valley Indian Reservation. Recently, the Duckwater Shoshone Tribe requested an RSA to be performed in September 2013 on 5 locations in Elko, Lander, and Nye Counties, Nevada.
**RSA Complements Human Factors Guidelines (HFG):**

Since December 2012, the NDOT Safety Engineering has been participating in a pilot study/evaluation of the HFG. The goal of this activity is to assess the value and efficacy of the HFG with actual end users who are applying the HFG to real day-to-day roadway design projects and issues. The HFG pilot study in Nevada began with detailed discussions between NDOT and Dr. John Campbell (Battelle), lead author of the HFG, to work out the details of the evaluation; i.e., how HFG would be used, who would be using it, and the schedule for the pilot test. NDOT decided to incorporate the HFG into their Road Safety Audit (RSA) program and to use the HFG as pilot RSA on Tropicana Avenue in Las Vegas. Battelle staff then conducted two training sessions with approximately 45 end-users in December, 2012 and February, 2013. The 2-hour training sessions covered the purpose, contents and applications of the HFG, and included a training module developed specifically for Nevada that reviewed how the HFG could be used during an RSA.

The “Tropicana” RSA (the first RSA conducted in Nevada using the HFG) examined a 7-mile corridor in Las Vegas, and was intended to look at safety issues from a different perspective and develop recommendations for potential safety enhancements.

**Work Zone RSA (WZRSA) Training:**

NDOT Safety engineering was a collaborating member on the technical working group (TWG) for the development of the FHWA WZRSA Guidelines and Prompt Lists, and subsequent training extent and materials. Nevada was one of the states that received Pilot WZRSA training; the training was conducted by Science Application International Corporation (SAIC) in coordination with FHWA on May 20 & 21, 2013 in Las Vegas, Nevada. It was attended by 30 participants from NDOT, RTC northern and southern Nevada, consultants, FHWA, and Las Vegas Metropolitan Police Department.
**Symposium on Traffic Safety**

On July 19, 2012 the Las Vegas Metropolitan Police Department (LVMPD) held a Symposium of Traffic Safety. This Symposium was held to bring together businesses, government and non-profit leaders to discuss and make every effort to improve safety for everyone in Southern Nevada. This group has continued to hold meetings and continues to move forward in making every effort to improve the safety for everyone in Southern Nevada.

**Systemic Safety Projects**

Safety Engineering is continuing the systemic approach for safety improvements such as centerline rumble strips, cable barrier rail, shoulder widening and slope flattening and installation of Flashing Yellow Arrows (FYA). This systemic implementation continues to tie the SHSP to the HSIP and allows Nevada to annually obligate its apportioned federal safety funds.
Progress in Implementing the HSIP projects

Funding

In FFY 2013 Nevada had approximately $30,132,100 in HSIP funds available. These funds were forwarded from 2012 plus the funds that were allocated for 2013 and penalty transfer funds from Title 23 CFR § 154-Open Container Law. Nevada obligated approximately $20,559,246 of the HSIP funds. The funding breakouts for FFY 2013 are located in Table 2.

To clarify the Section 154 penalty funds, $7,311,936 of the Federal Fiscal Year 2013 apportionments for the National Highway Performance Program and Surface Transportation Program was transferred to the Highway Safety Improvement Program (HSIP) and to the National Highway Traffic Administration’s (NHTSA’S) 402 Safety Program. The $7,311,936 was split 90% to the HSIP ($6,580,742.40) and 10% to the NHTSA ($731,194).

Nevada spent about 89% of the HSIP funding on the State Roadway System and 11% on Locally-Owned Roads. Approximately $1,569,000 of State Funds and $185,700 of Local Funds were used to complete the safety projects identified for 2013.

Table 1 provides a general listing of the types of projects obligated using HSIP funds for the 2013 reporting period. Table 1 also provides information such as the location of the project, whether the road was State or Locally owned, the type of mitigation, the improvement category as identified by Title 23 CFR § 924, and the relationship to the State’s Strategic Highway Safety Plan.
Safety Improvement Projects

This report provides the available data on the NDOT’s Safety Program. It is limited to those projects that used federal safety funds and does not identify NDOT improvement projects that used only State funds and not identified through the State’s SHSP. It also omits such ongoing programs such as resurfacing and bridge replacement unless safety funds are expended in the project.

Current Safety Improvement Projects

Eight improvement projects included 74 miles of shoulder widening and slope flattening on rural highways as part of our continuing systemic improvements, construction of .2 mile median island for access management in Carson City, major improvements at two intersections in Clark County, two projects to convert 58 intersections in Clark County to Flashing Yellow Arrow phasing for left turns with upgraded pedestrian heads, and safety improvements to 103 intersections throughout District II that features solar powered warning lights on stop signs, advanced warning signs, and transverse rumble strips were obligated in FY 2013. These projects are listed in Table 2.
Assessment of the Improvements (Program Evaluation)

Statewide Crash Trends

Nevada currently averages about 52,750 crashes per year. The crash statistics for calendar year 2012 showed a slight increase in fatalities from those that occurred in calendar year 2011. The charts listed on Figures 1 through Figure 4 show the trends of statewide fatalities, statewide fatality rate, statewide injuries, and statewide injury rate all from 2003-2012. Figures 1 thru Figure 4 also show the statewide five-year average fatality and injury rates. These figures indicate that Nevada, over the last few years, is seeing crashes involving fatalities and injuries have been up and down over the past several years; however the crash trends for these types of crashes continue to decrease.

Program Effectiveness

As mentioned in “Innovative Practices” the NDOT has implemented the systemic approach to safety projects identifying specific crash types that tie directly to the critical emphasis areas that are identified in the states SHSP.

This year, in support of the Intersection Critical Emphasis Area as identified in the states SHSP, the NDOT in coordination with several MPO’s, counties and cities, completed the design and is continuing the installation of flashing yellow arrows to reduce the number of angle crashes involving left turns. This systemic installation has upgraded approximately eighty intersections in northern Nevada, over three hundred intersections in southern Nevada and has contracted out approximately another one hundred locations in southern Nevada. This effort will be continued in southern Nevada to contract out several hundred more intersections in the following several years. Also, NDOT will be coordinating with several MPO’s, counties and cities to install several more FYA locations using the LPA program.
There are fifteen projects/locations that are in need of a before and after study. NDOT will be working with our UNR to complete these study’s once UNR has completed them they will be included in the 2014 Highway Safety Improvement Program Annual report or an addendum will be generated for the 2013 Highway Safety Improvement Program Annual report.

The NDOT continues to work with our partners such as the State’s Office of Traffic Safety, the Federal Highway Administration, Local Law enforcement agencies, and Emergency Responders to target the critical emphasis areas identified in the State’s SHSP. Based on the downward trend in fatal and injury crash numbers it appears that our collective efforts continue to show positive results.

**Protection of Data**

Section 148(h)(4) stipulates that data compiled or collected for the preparation of the HSIP Report “…shall not be subject to discovery or admitted into evidence in a Federal or State court proceeding or considered for other purposes in any action for damages arising from any occurrence at a location identified or addressed in the reports…” This information is also protected by 23 USC 409 (discovery and admission as evidence of certain reports and surveys).
### Table 1: Current Safety Projects

#### Federal Fiscal Year 2013 Implemented Safety Projects

<table>
<thead>
<tr>
<th>Contract/LA No.</th>
<th>Description</th>
<th>Location</th>
<th>Output</th>
<th>County</th>
<th>Project No.</th>
<th>Cost (CEA)</th>
<th>SHSP (CEA)</th>
<th>Strategy</th>
<th>HSIP Imp.</th>
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<tbody>
<tr>
<td>73751</td>
<td>Install Safety Improvement Package at rural T-intersections</td>
<td>Dist. II (Various Intersections) HRRR</td>
<td>103 intersections</td>
<td>Dist. II</td>
<td>Si-0032(117)</td>
<td>$520,000.00</td>
<td>5</td>
<td>10</td>
<td>1, 20</td>
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<tr>
<td>73502</td>
<td>Signal Modifications, Median Island work, additional turn lanes, etc.</td>
<td>Charleston @ Rancho &amp; Durango</td>
<td>2 intersections</td>
<td>Clark</td>
<td>Si-0159(010)</td>
<td>$3,000,000.00</td>
<td>4</td>
<td>14, 16</td>
<td>1</td>
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<tr>
<td>60571</td>
<td>Shoulder widening and slope flattening</td>
<td>US 93 MP WP112.76 To EL 11.79</td>
<td>14.74 miles</td>
<td>Elko/WP</td>
<td>Si-095-4(016)</td>
<td>$9,500,000.00</td>
<td>5</td>
<td>-</td>
<td>-</td>
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<td>73719</td>
<td>Signal Head modification. Systemic replacement of 5 section P/P heads to 4 section P/P heads (utilizing flashing yellow arrow) &amp; remove and replace existing Ped heads to Ped count down timers.</td>
<td>Multiple Intersections in Dist. I (Package 1)</td>
<td>36 intersections</td>
<td>Clark</td>
<td>Si-0032(103)</td>
<td>$1,250,000.00</td>
<td>4</td>
<td>-</td>
<td>1</td>
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<td>73607</td>
<td>Shoulder widening and slope flattening</td>
<td>US 95 MP HU 1.50 To HU 33.00</td>
<td>31.5 miles</td>
<td>Humboldt</td>
<td>Si-095-6(009)</td>
<td>$10,000,000.00</td>
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<td>73808</td>
<td>Construct Median Island</td>
<td>Fairview Drive Safety Improvement Project</td>
<td>.2 miles</td>
<td>Carson City</td>
<td>Si-0025(024)</td>
<td>$139,000.00</td>
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<td>60584</td>
<td>Shoulder widening and slope flattening</td>
<td>US 93 MP EL11.79 to EL 15.50 MP EL30.90 To EL 54.56 Package 2</td>
<td>27.37 miles</td>
<td>Elko</td>
<td>Si-093-4(019)</td>
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#### Federal Fiscal Year 2013 Implemented SHSP Administrative

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<th>Contract/LA No.</th>
<th>Description</th>
<th>Location</th>
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<th>Cost (CEA)</th>
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<th>Strategy</th>
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<td>LS30R</td>
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<td>0</td>
<td>230,869</td>
<td>230,870</td>
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<td>MAP-21</td>
<td>MS30</td>
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<td>20,128,959</td>
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<td>SECTION 154 PENALTY FUNDS</td>
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<td>6,580,742</td>
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<td></td>
<td>430,287</td>
<td>26,709,701</td>
<td>230,869</td>
<td>27,370,858</td>
<td>20,559,246</td>
<td>6,811,612</td>
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<tr>
<td>SAFETEA-LU HIGH RISK ROAD</td>
<td>LS20</td>
<td>572,745</td>
<td>0</td>
<td>15,868</td>
<td>588,614</td>
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<tr>
<td>SAFETEA-LU HIGH RISK ROAD Ext.</td>
<td>LS20E</td>
<td>1,742,118</td>
<td>0</td>
<td>250,667</td>
<td>1,992,785</td>
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<td>SAFETEA-LU HIGH RISK ROAD Re.</td>
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<td>156,160</td>
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<td>23,684</td>
<td>179,844</td>
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<td><strong>Total HRRR Safety Funds</strong></td>
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<td>290,219</td>
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<td>2,901,311</td>
<td>26,709,701</td>
<td>521,089</td>
<td>30,132,101</td>
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<td>9,572,854</td>
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<td>131,443</td>
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<td><strong>Total Railroad Safety Funds</strong></td>
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Figure 1: Fatality Trend
Figure 2: Fatality Rate Trend
Figure 3: Injury Trend
Figure 4: Injury Rate Trend

Combined A & B Injuries with Injury Rate for A & B Injuries

Number of Injuries

7,674 7,900 8,233 46.90 46.00 8,444 7,994 7,834 7,405 7,522

Injury Rate

40.43 38.58 39.52 40.17 37.60 37.27 35.23 35.79

Total A & B Injuries  Injury Rate