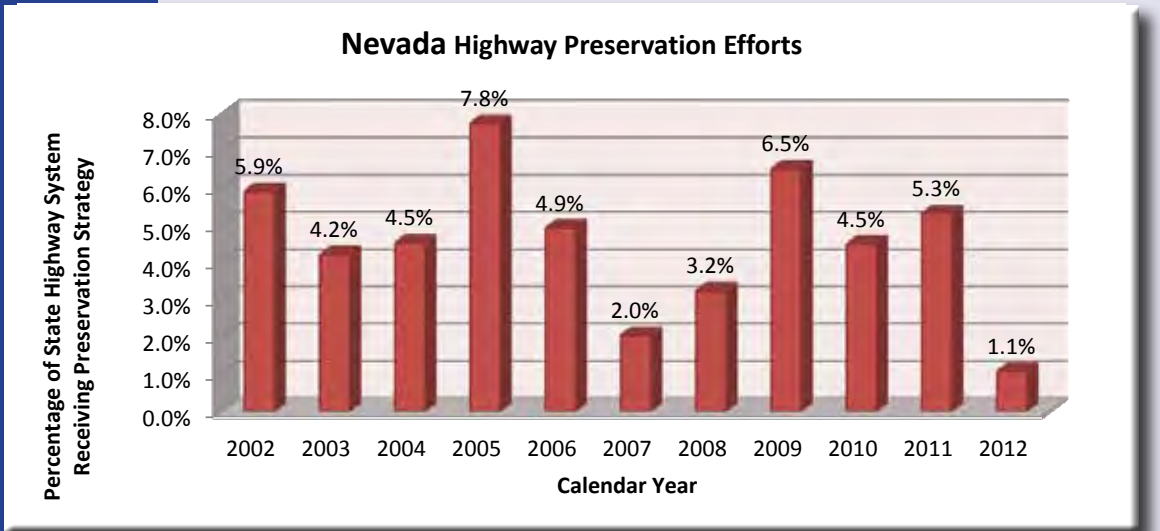
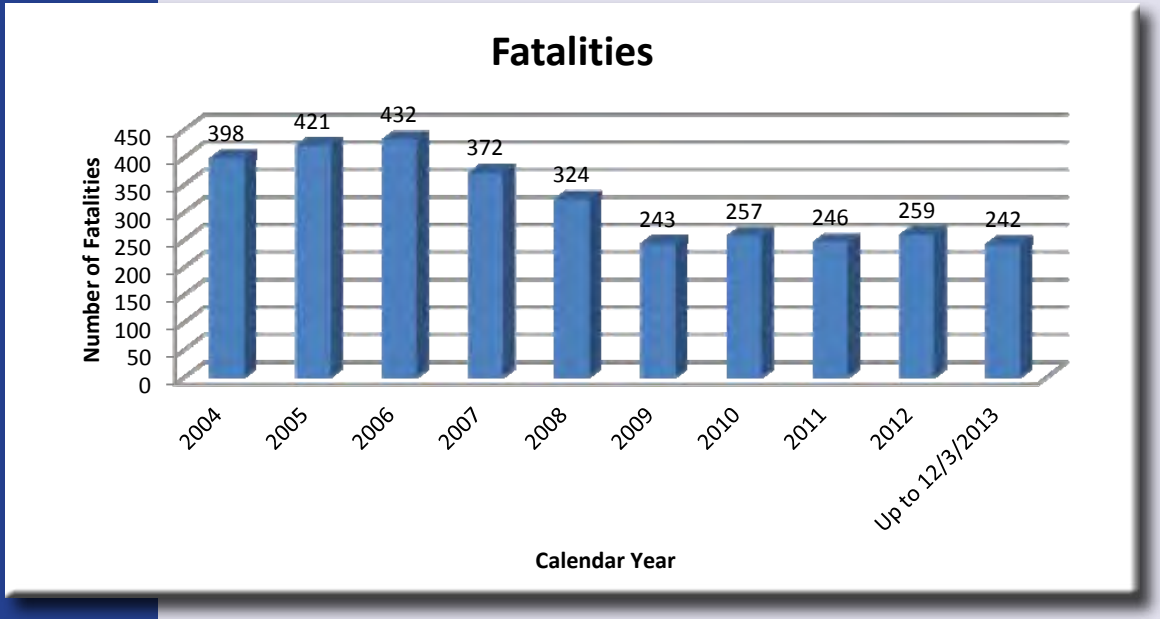
NEVADA DEPARTMENT OF TRANSPORTATION

2013 PERFORMANCE MANAGEMENT REPORT





December 2013

Rudy Malfabon, P.E.
Director

Brian Sandoval
Governor

2013 PERFORMANCE MANAGEMENT REPORT

Prepared by the
Performance Analysis Division
NEVADA DEPARTMENT OF TRANSPORTATION
1263 SOUTH STEWART STREET
CARSON CITY, NV 89712
www.nevadadot.com

TABLE OF CONTENTS

DEPARTMENT VISION, MISSION, AND GOALS.....1
INTRODUCTION.....2
PERFORMANCE MANAGEMENT DASHBOARD (EXECUTIVE SUMMARIES).....3
EXECUTIVE SUMMARY.....5
PERFORMANCE MEASURES.....7
PERFORMANCE DASHBOARD.....8
DETAILED PERFORMANCE MANAGEMENT DATA.....17
STATE HIGHWAY FUND ANNUAL REVENUE AND EXPENDITURES.....79
MAJOR PROJECTS ANNUAL STATUS REPORT.....85
TYPICAL PROJECT DEVELOPMENT PROCESS.....87
PROJECT STATUS SHEET EXPLANATION.....88
MAJOR PROJECTS SUMMARY SHEETS.....89
APPENDICES.....125
APPENDIX A.....127
BENEFIT-COST ANALYSIS OF CAPACITY PROJECTS.....129
DISCUSSION OF THE CALCULATIONS OF COSTS AND BENEFITS.....131
APPENDIX B.....135
PROJECT PRIORITY RATIONALE.....137
APPENDIX C.....141
PERFORMANCE MANAGEMENT PLAN.....143
APPENDIX D.....155
LAS VEGAS CONVENTION AND VISITORS AUTHORITY FUNDED PROJECTS.....157

State of Nevada Transportation Board Members

Brian Sandoval	Chairman/Governor
Brian Krolicki	Vice Chairman/Lt. Governor
Catherine Cortez Masto	Attorney General
Kim Wallin	State Controller
Frank Martin	Member - District 1
Len Savage	Member - District 2
Tom Fransway	Member - District 3

NDOT Administration

Rudy Malfabon	Director
Bill Hoffman	Deputy Director
Tracy Larkin-Thomason	Deputy Director Southern Nevada
John Terry	Assistant Director Engineering
Rick Nelson	Assistant Director Operations
Tom Greco	Assistant Director Planning
Robert Nellis	Assistant Director Administration

NDOT Staff Involved

Alauddin Khan –Chief Performance Analysis Engineer
Amir Soltani – Chief of Project Management
Anita Bush – Chief Maintenance and Operations Engineer
Jennifer Eyerly – Chief of Administrative Services
Chuck Reider – Chief Traffic/Safety Engineer
Jeff Shapiro – Chief Construction Engineer
Kimberley King –Human Resources Manager
Manuel Correa – Safety and Loss Control Manager
Mark Elicegui – Chief Bridge Engineer
Mike Stair – Equipment Superintendent
Paul Saucedo – Chief of Right-Of-Way
Randy Travis – Chief Traffic Information System
Reid Kaiser – Chief Materials Engineer
Sean Sever – Chief of the Communications Office

DEPARTMENT VISION, MISSION, AND GOALS

MISSION

Providing a better transportation system for Nevada through our unified and dedicated efforts

VISION

The Department is the nation's leader in delivering transportation solutions, improving Nevada's quality of life.

MISSION, VISION GOALS, and VALUES

STRATEGIC PLAN GOALS

Optimize safety

Be in touch with & responsive to customers

Innovate

Be the employer of choice

Deliver timely & beneficial projects & programs

Effectively preserve & manage our assets

Efficiently operate the transportation system

CORE VALUES

Integrity – Doing the right thing

Honesty – Being truthful in our actions and our words

Respect – Treating others with dignity

Commitment – Putting the needs of the Department first

Accountability – Being responsible for our actions

INTRODUCTION

NDOT's Performance Management is a collaborative process in which all major divisions of the department are involved in monitoring their annual and ultimate performance targets resulting in a customer-oriented, balanced, effective, efficient, transparent and performance-based decision making process. It is a dynamic process and improvements are incorporated into the performance management process as needed. NDOT's performance management plays a vital role in the performance-based decision making process. It: 1) ensures investment accountability and transparency, 2) tracks and monitors system performance, 3) helps identify and implement efficient and cost effective performance-based programs, 4) links projects to the vision, mission, and goals of the department, 5) helps align performance targets with customer expectations, and 6) helps in delivering high quality projects. The Nevada 2007 Legislative Assembly Bill 595 requires the Department to develop a performance management plan for measuring its performance, which must include performance measures approved by the Board of Directors of the Department. The specific requirements of the Assembly Bill 595 are as follows:

1. **Section 47.2 – Annual Report on Performance Measures and General Project Information**

Prior to December 31 of each year, the Director of the Department of Transportation shall prepare a report as follows:

- Goals and objectives of the department and current status of meeting those goals
- Schedule, scope, cost and progress of any current or proposed highway project
- Funding sources, amount and expenditures of the department
- The rationale used to establish priorities
- Transportation Board and Legislative Directives
- Recommended Plan Amendments

2. **Section 47.3 – Annual Report on Cost-Benefit Analysis for capacity projects that cost at least $25 million (NRS 408.3195).**

The annual report will include the criteria used in the cost-benefit analysis. The resulting benefit/cost ratios will be reported to the Board. Additionally, a written description of the analysis for any project must be submitted to the Board before the Board approves funds for project construction.

3. **Section 55.3 – Annual Report on projects funded through the Las Vegas Convention and Visitors Authority funding.**

The report will include funding, descriptions, status, timelines, and information on the completed projects, if any (NRS 244A.638).

4. **Section 55.5 – Quarterly Report on General Project information for the Blue Ribbon Task Force projects and any proposed super and mega (major) highway projects.**

The report will include funding, descriptions, status, timelines, and information on the completed projects, if any. Submit report to the Governor and the Director of the Legislative Counsel Bureau for transmittal to the Interim Finance Committee.

PERFORMANCE MANAGEMENT DASHBOARD (EXECUTIVE SUMMARIES)

EXECUTIVE SUMMARY

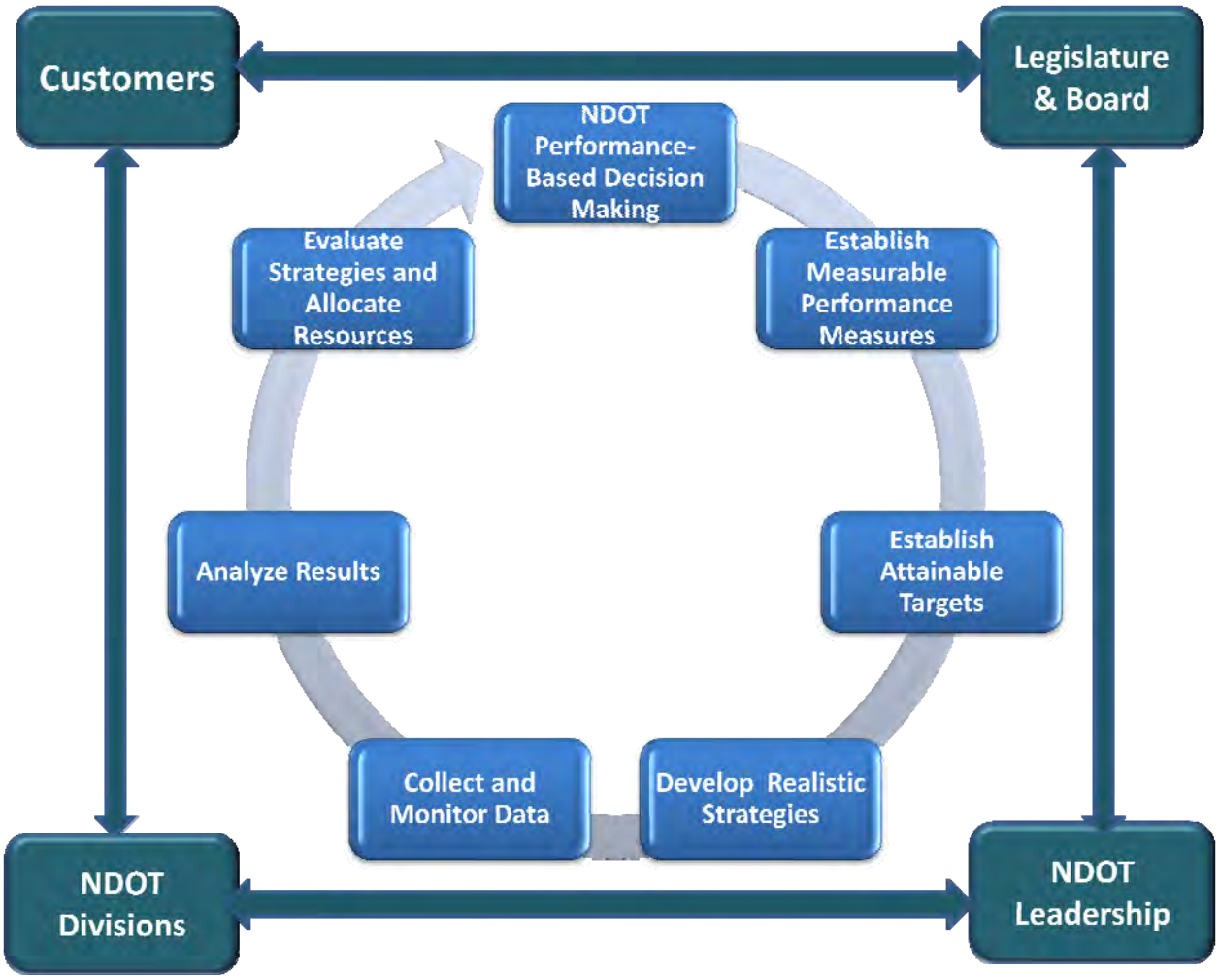
NDOT's Performance Management is a collaborative process in which all the major divisions of the department are involved in monitoring their annual and ultimate performance targets resulting in a customer-oriented, balanced, effective, efficient, transparent and performance-based decision making process. It is a dynamic process and improvements are incorporated into the performance management process as needed. NDOT's performance management plays a vital role in the performance-based decision making process. It 1) ensures investment accountability and transparency, 2) tracks and monitors system performance, 3) helps identify and implement efficient and cost effective performance-based programs, 4) links projects to the vision, mission, and goals and objectives of the department, 5) helps align performance targets with customer expectations, and 6) helps in delivering high quality projects.

NDOT has established 15 performance measures to track, monitor, and report performance of the major divisions and program areas. NDOT's performance management system focuses on the critical aspects of a cohesive, integrated, and performance-driven approach. NDOT's senior management is actively involved in the performance management process and supports the performance management process by conducting quarterly performance management updates to help guide the various program areas in meeting their targets. NDOT's performance management system empowers staff to take ownership of the program, holds staff responsible for their division's performance, helps diagnose and address problems faced by the divisions in meeting their targets, and effectively communicates its performance-based decision making process to the public and the legislature.

In Fiscal year 2013, NDOT continued to monitor its performance-based management process. The performance management dashboard, and the detailed data trends sections of this report provides further information regarding NDOT's performance in Fiscal Year 2013.

NDOT STRATEGIC PERFORMANCE MANAGEMENT PROCESS

NDOTs Strategic Performance Management process is guided by comprehensive input from 1) our customers in the form of surveys and direct two-way communications, 2) the State Legislature and decision makers, 3) leadership, commitment, and support from NDOT top management, and 4) collaborative team support from the major divisions and program areas of NDOT. The process is part of the performance-based decision making process that includes identifying realistic and specific performance measures, establishing measurable and attainable targets, developing comprehensive and effective strategies to help achieve the targets, quarterly data collection and monitoring, and evaluating strategies to help allocate our resources most effectively and efficiently. The following graph shows the performance management process,



PERFORMANCE MEASURES

1.Reduce Work Place Accidents

2.Provide Employee Training

3.Improve Employee Satisfaction

4.Streamline Agreement Process

5.Improve Customer and Public Outreach

6.Reduce and Maintain Traffic Congestion

7.Streamline Project Delivery- Bidding to Construction

8.Maintain State Highway Pavement

9.Maintain NDOT Fleet

10.Maintain NDOT Facilities

11. Emergency Management, Security and Continuity of Operations

12.Reduce Fatal Crashes

13.Project Delivery- Schedule and Estimate for Bid Advertisement

14.Maintain State Bridges

15.Streamline Permitting Process

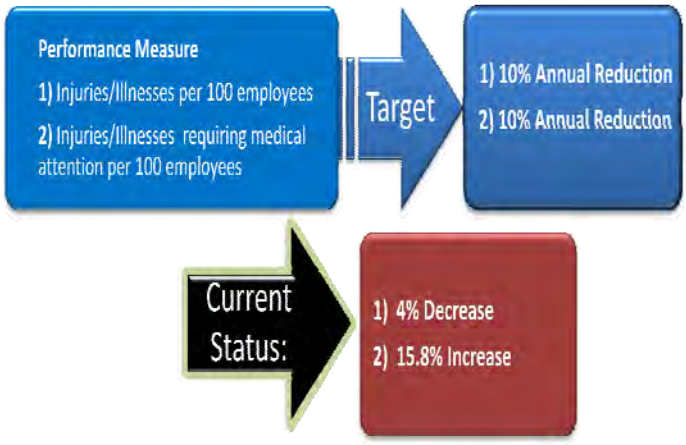
PERFORMANCE DASHBOARD

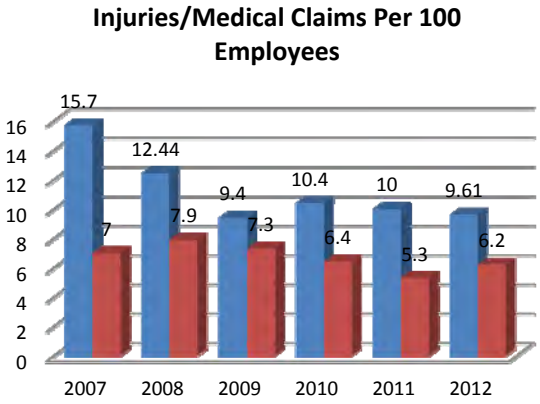
The following Performance Management Dashboard provides an executive summary of each of the 15 performance measures and shows the status of the performance measure in Fiscal Year 2013. Detailed information regarding each performance measure is provided in the "Performance Management Detailed Data Trends" section of this report.

1. Reduce Work Place Accidents

Executive Summary: This Performance Measure has two parts to measure both the rate of work place injuries/illnesses and the severity of employee workplace injuries/illnesses. Comparing Calendar Year 2012 to Calendar Year 2011, work place accidents decreased by 4 % and medical claims increased by 15.8%. The total number of work place injuries decreased by 8.

For detailed information about performance measure 1, please refer to page 19.





2. Provide Employee Training

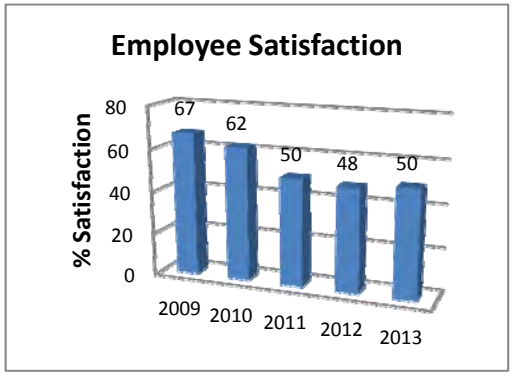
Executive Summary: During FY 2013, 3,432 employees attended required training sessions. The target is 100% compliance overall and the FY13 target was 75%. The average for the 11 required classes was 69.9% which shows an increase of 6.4% from last fiscal year's average of 63.5%. For detailed information about performance measure 2, please refer to page 23.

3. Improve Employee Satisfaction

Executive Summary: Percentage of Employees Satisfied with the NDOT work environment.

The percentage of employees surveyed who are extremely or somewhat satisfied with NDOT is currently 50%.

For detailed information about performance measure 3, please refer to page 27.

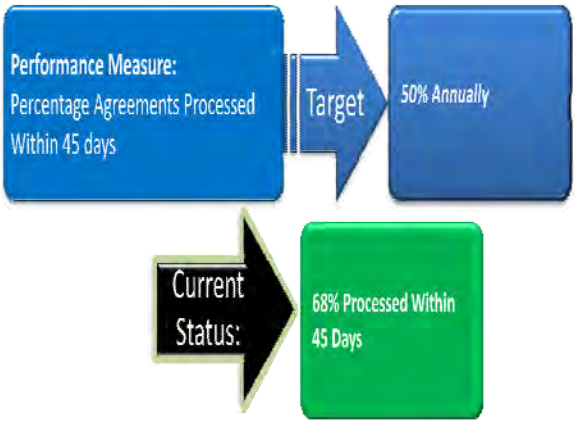


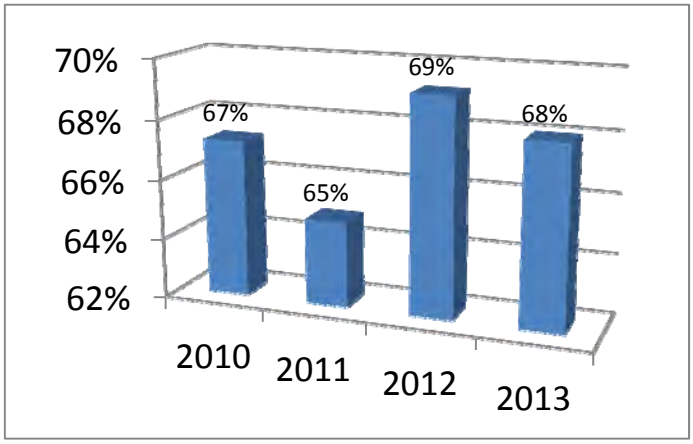
4. Streamline Agreement Process

Executive Summary: During FY 2013, NDOT processed 68% of all agreements within 45 days.

The average number of calendar days to process an agreement was 37 days. The total number of agreements processed was 316.

For detailed information about performance measure 4, please refer to page 31.





5. Improve Customer and Public Outreach

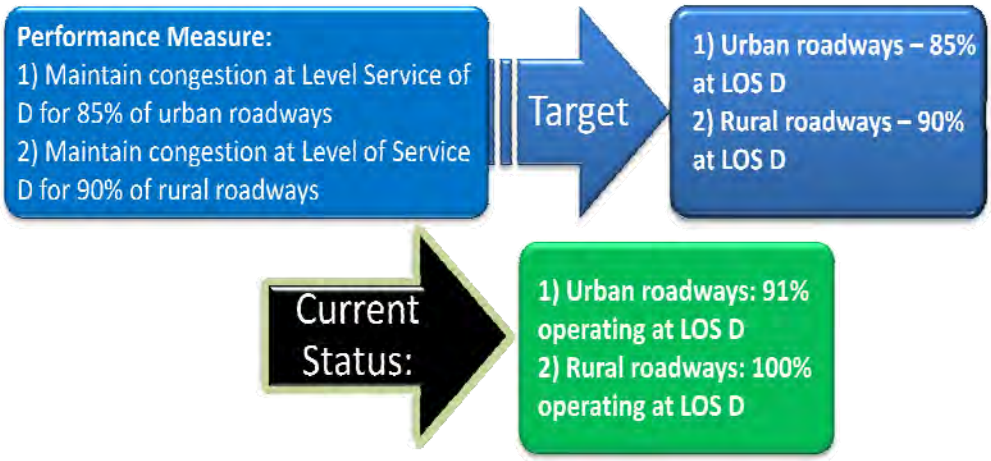
Executive Summary: An updated customer satisfaction survey is currently being conducted and will be made available by March-April 2014 time frame. The data shown is the most recent available from a customer satisfaction survey which took place between October 2008 and August 2009. For detailed information about last customer satisfaction survey, please refer to page 35.

6. Reduce and Maintain Congestion Levels on the State Maintained Roadway System

Executive Summary: Based on data from FY 2012, NDOT met its goals for our system-wide Congestion Monitoring and Tracking System that is used in determining the congestion on the state maintained roadways in the core urban and rural areas.

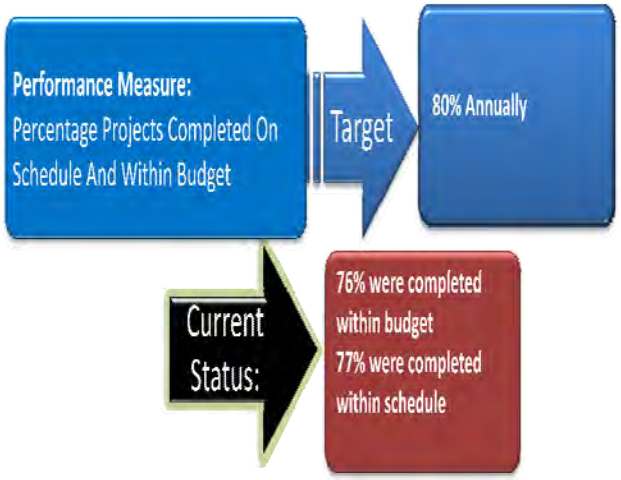
For detailed information about performance measure 6, please refer to page 38.

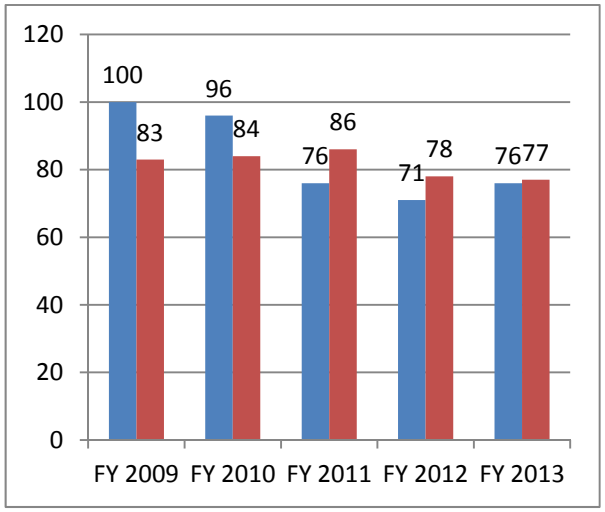
Definition of Level of Service D – Roadways operating at up to 8 miles per hour less than the Free Flow Speed or Posted Speed Limit, and the traffic carrying capacity of the roadway is less than 0.9.



7. Streamline Project Delivery – Bid Opening to Construction Completion

Executive Summary: During FY 2013, NDOT managed to keep 77% of its projects on schedule and 76% of the projects within budget on average. For detailed information about performance measure 7, please refer to page 40.

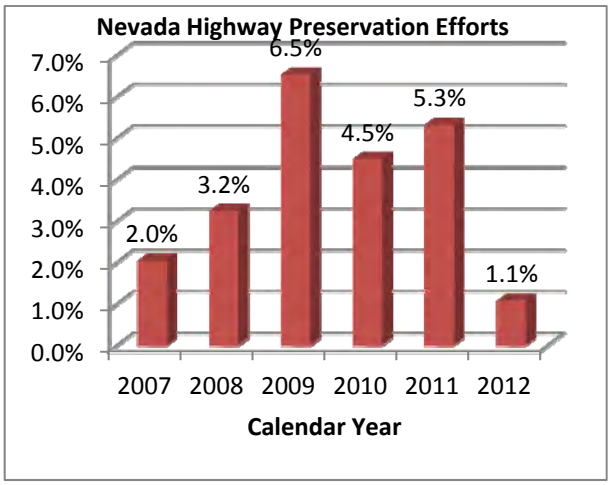




8. Maintain State Highway Pavement

Executive Summary: This Performance Measure is reported by calendar year. During Calendar Year 2012, NDOT was unable to address the need of categories 1-5 highways.

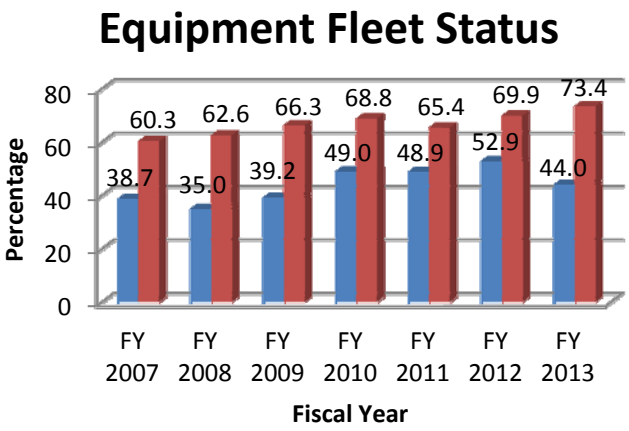
For detailed information about performance measure 8, please refer to page 43.



9. Maintain NDOT Fleet

Executive Summary: During FY 2013, the percentage of the NDOT mobile equipment fleet requiring replacement increased by 3.98% over the prior year. The percentage of the fleet in compliance with preventive maintenance requirements to ensure that the expected life of our vehicles is not compromised increased by 4.44% over the prior year.

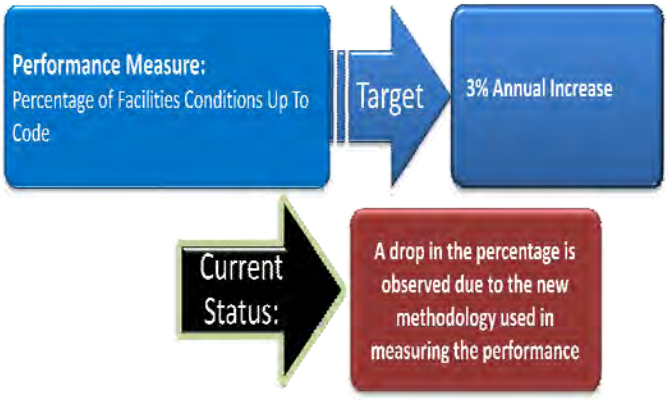
For detailed information about performance measure 9, please refer page 48.

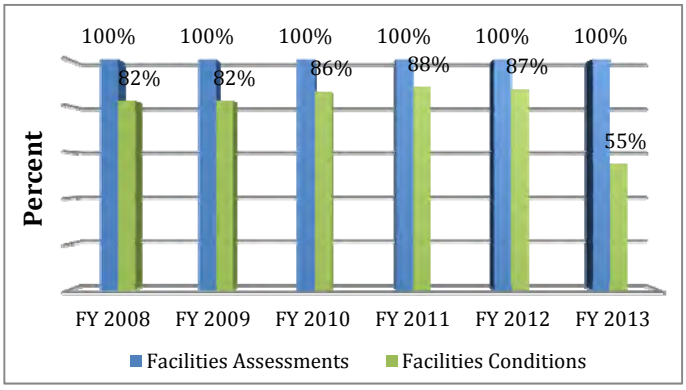


10. Maintain NDOT Facilities

Executive Summary: During FY 2013, NDOT incorporated a New Method to measure the performance of the facility conditions that included finer details that did not exist before.

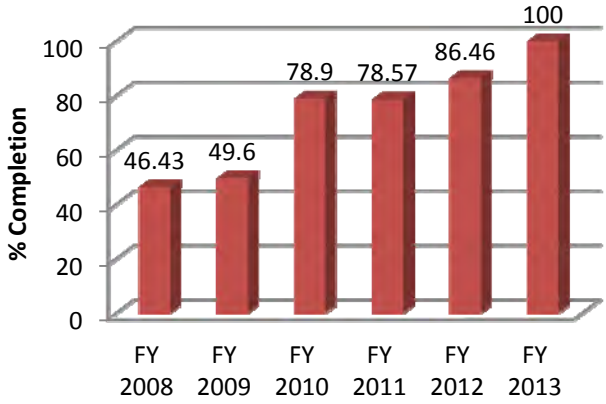
For detailed information about performance measure 10, please refer to page 51.





11. Emergency Management, Security, and Continuity of Operations

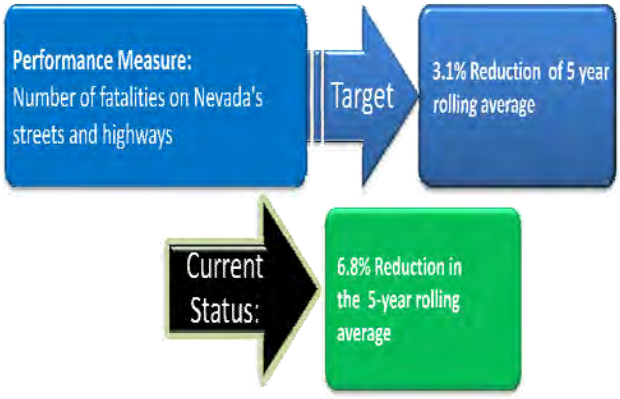
Executive Summary: During FY 2013, we focused on exercising and updating our Emergency Operations and Security Plans. We have combined several plans into two. This will make it easier for Department personnel to locate, use and understand the plans. Our performance measures require us to train, exercise and update our Emergency Operations and Security Plans on a two year cycle. We are at a 100% compliance level, which did meet our goal for the year of 100% compliance. For detailed information about performance measure 11, please refer to page 55.

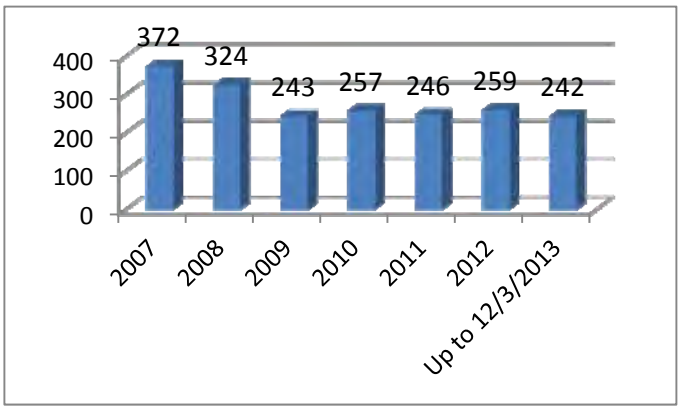


12. Reduce Fatal Accidents

Executive Summary: During FY 2013, NDOT continued to work with our partners to implement the strategies of the Strategic Highway Safety Plan. There were 242 fatalities in 2013 in Nevada as of December 3, 2013.

For detailed information about performance measure 12, please refer to page 62.





13. Streamline Project Delivery - Schedule and Estimate for Bid Advertisement

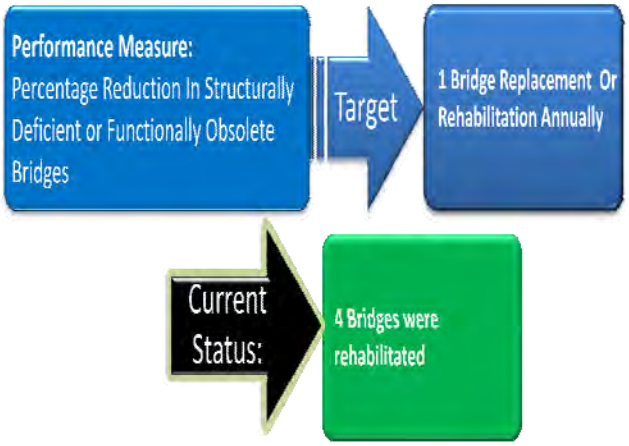
Executive Summary: This performance measure has been established as the percentage of scheduled projects advertised within the reporting year and the percentage of scheduled projects within the established construction cost estimate range.

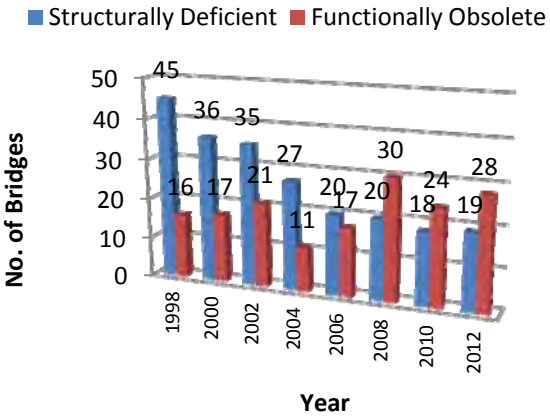
For detailed information about performance measure 13, please refer to page 66.

14. Maintain State Bridges

Executive Summary: During 2012, NDOT rehabilitated 4 bridges which were structurally deficient.

For detailed information about performance measure 14, please refer to page 71.

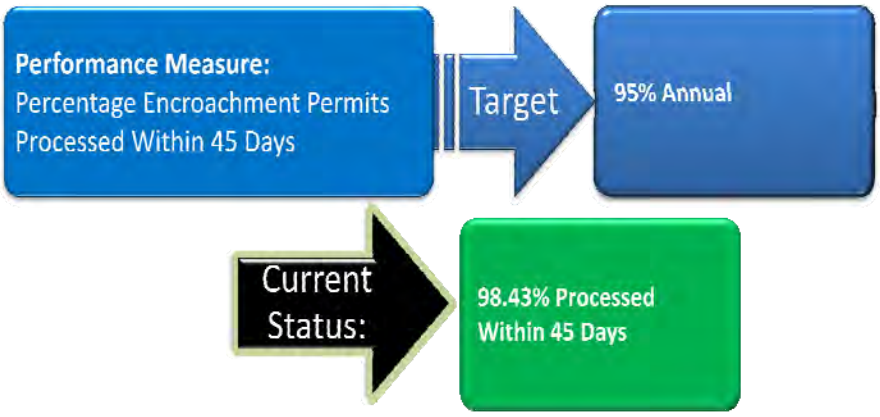




15. Streamline Permitting Process

Executive Summary: During FY 2013, NDOT Right-Of-Way Division processed 98.43% of encroachment permits within 45 days. Transportation Policy (TP) 10-1-3 ENCROACHMENT PROCESSING TIME SCHEDULE is to ensure timely and quality service for NDOT encroachment permit customers.

For detailed information about performance measure 15, please refer to page 77.



DETAILED PERFORMANCE MANAGEMENT DATA

1. REDUCE WORK PLACE ACCIDENTS

Performance Measure:

The rate of injuries is reported as the number of work place injuries and illnesses (i.e. number of C-1 forms filed) per 100 employees and number of injuries and illnesses requiring medical attention (i.e. number of C-3 forms filed) per 100 employees as documented through annual OSHA 300 Log Reporting data. Data is based on calendar year per federal reporting requirements.

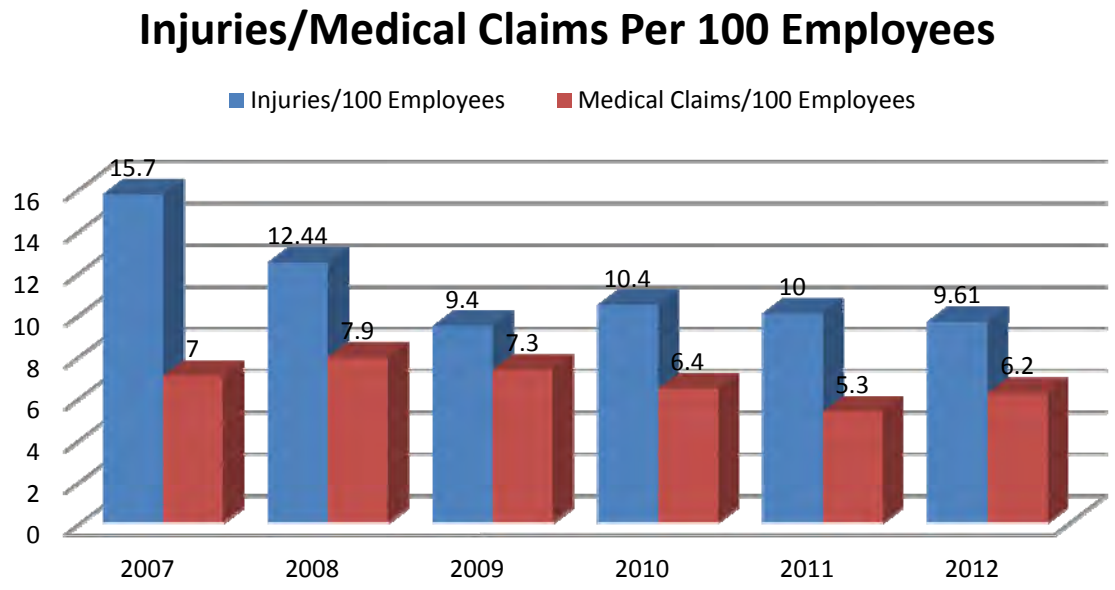
Annual Target: 10 % Reduction **Ultimate Target:** Zero

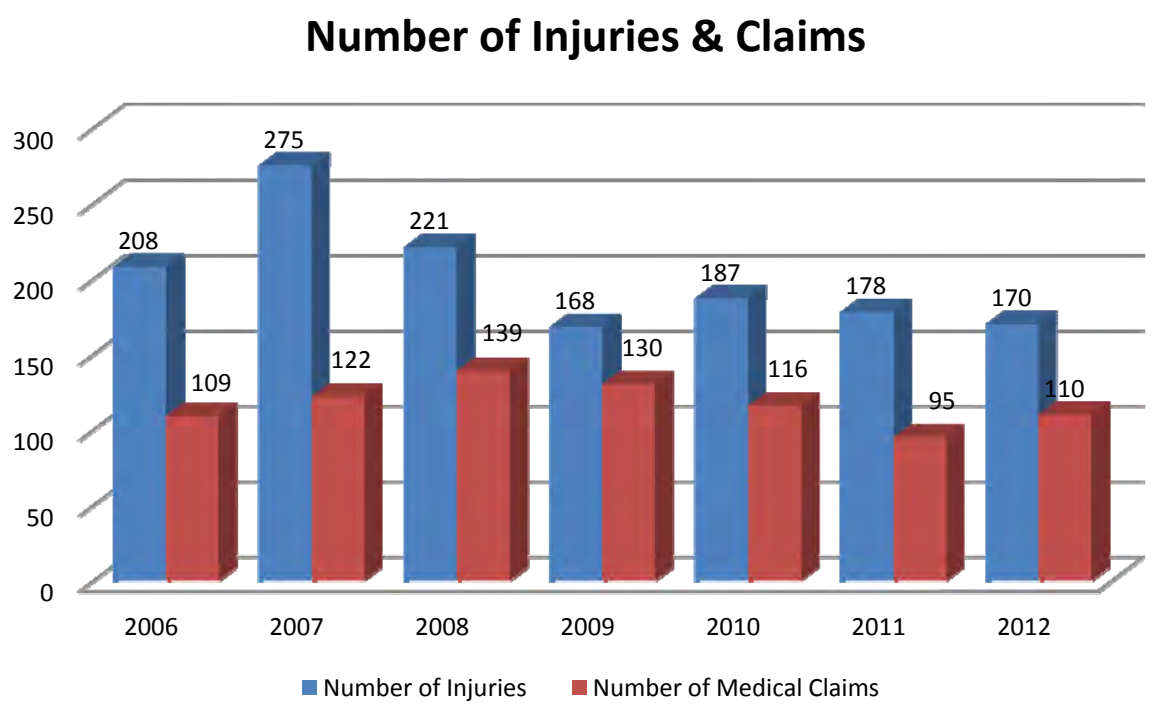
Strategy Plan Support:

Safety extends to all aspects of the Department from the roadways to the office. Identifying and reducing risk to the Department, our employees and the public is continuous. This performance measure works towards meeting the Department of Transportation Strategic Plan goals to: Optimize Safety and Be the Employer of Choice.

Measurement and Supporting Data:

Calendar Year	2005	2006	2007	2008	2009	2010	2011	2012
Number of Injuries	390	208	275	221	168	187	178	170
Injuries/100 Employees	22.6	12	15.7	12.44	9.4	10.4	10.0	9.61
Number of Medical Claims	159	109	122	139	130	116	95	110
Medical Claims/100 Employees	9.2	6.3	7	7.9	7.3	6.4	5.3	6.2





The annual Baseline is the average of 2007 through 2012. Data is reported on a calendar year pursuant to federal OSHA reporting and State total is the average number of employees during any given quarter or year. Claim costs include all medical expenses and any reserves. The number of injuries reported by the end of CY2012 indicates that the injury rate is 96%of CY2011. The target to reduce injuries by 10% was not met by the end of the year for total injuries, but injuries were reduced by 4%.

The majority of injuries sustained in CY2012 were due to motor vehicle accidents, heavy equipment accidents, lifting; struck by; back and neck which are two of the top four causes of injuries per federal OSHA. The number of motor vehicle accidents went from one (1) in CY 2011 to eleven (11) in CY 2012. The number of struck by went from ten (10) in CY 2011 to fourteen (14) in CY 2012. The lifting claims of fourteen (14) remained the same for 2011 and 2012.

Strategies for Improvement in Calendar 2013:

Short range to next reporting:

1) Continue efforts to increase outreach in order to keep safety in the forefront and on employees minds; 2) Conduct refresher defensive driving training for employees involved in motor vehicle accidents; 3) Continue to use ProLift program where highest injuries occur. 4) Continue cooperative efforts with the Training Section to increase use of the NDOT Learning Portal for safety training, including learning to develop webinars and online training specific to NDOT safety and insuring implementation and delivery to staff is initiated; and 5) Increase construction worksite inspections and hazard recognition training to reduce employee exposure to serious hazards.

Long range:

1) Implement additional means to reach staff with increased safety messages in order to bring safety to the forefront of employee thoughts and actions, including but not limited to a quarterly or bi-monthly newsletter; brief communication to targeted work groups pertaining to safety issues specific to them; participating in NDOT academies and annual meetings as workload permits; and updating Safety/Loss Control SharePoint site. 2) Increase ratio of staff in the Safety and Loss Control Section to total number of NDOT employees, which has had three staff since 1969. This will provide improved support and consultation services to the Divisions and Districts on a consistent and continued basis and aid in maintaining agency compliance with State and federal safety regulations. This is requisite if the department's safety program is to perform at optimum and to attain compliance with State and federal safety requirements. 3) Evaluate the benefit of an Employee Safety Survey in order to assess the agency's culture or attitude as it pertains to safety; and to develop and distribute an Employee Safety Survey and to evaluate the responses to determine areas of need within the safety program.

ANNUAL EVALUATION OF PERFORMANCE MEASURE

Were the targets met? No

What 'Strategies for Improvement' were successful?

Increased communications such as a safety calendar and bi-monthly safety e-mails have increased safety awareness and have prompted unsolicited input from workers which may help to improve the safety program. Since filling the vacant Safety Specialist position in 2009 increased the safety presence in the field and the increased communications have been received well by District maintenance staff.

Analysis of 2011 and 2012 injury data was conducted and the results indicated a continued high incidence of back injuries. We continue to use the PowerLift™ program to assist in reducing back injuries. Implementation and course effectiveness of the training continued into FY2012.

The Safety Specialist conducted the majority of CPR/First Aid and AED training. This was completed and all of the Districts have safety staff certified to teach CPR/First Aid and AED use to their employees. AED trainer u nits were also purchased by and for District safety staff in those locations that have AEDs.

The vehicle database was updated and maintained by the Equipment Division.

Cooperative efforts between the Training Section and Safety and Loss Control to implement a learning management system to track all training were successful. Several mandatory safety

courses were identified in the system, specifically targeting new hires or new supervisory staff. Instructor led safety training has increased but we are limited by staff with the experience to provide professional-level safety training on a frequency as required by OSHA and the resources to deliver the training as frequently as desired.

What 'Strategies for Improvement' were not successful? Why?

Implementation of a learning management system (NDOT Learning Portal) took longer than anticipated due to the lack of staff and support services and learning the new procedures and processes is challenging, as is any new process or procedure. Additionally, we are currently trying to get support from the Districts and Divisions to enter all Safety Training into the Learning Portal.

The worker compensation MicroNiche software was installed and operational, but data transfer was hindered by lack of staff, time and resources.

What new 'Strategies for Improvement' will be initiated in Calendar 2013?

Short range to next reporting: Continue outreach efforts and supporting the Training Section in implementation and use of the NDOT Learning Portal. Efforts include developing a Safety Training Matrix for all employees. To re-evaluate the reporting criteria for FY2012 in order to insure data presented is easily understood and of value to those reviewing the reporting. Claim costs has been added to the data but the agency has no control over the actual claim acceptance nor medical treatment as this is a third-party administration service overseen by the Division of Risk management for the State. Strategies may include analysis to determine whether leading indicators such as the impact of safety training could be used rather than lagging indicators such as injury data.

Long range: 1) To continue identifying specific safety training that can be conducted by existing staff and take cooperative steps to insure courses are conducted, including Global Harmonization System refresher, CPR/First Aid and New Employee Safety Orientation. 2) To take steps to update the worker compensation databases to insure accurate and consistent reporting. This may require IS support and MicroNiche services. 3) To continue efforts to increase safety staff and if necessary and fiscally possible, contract for services to assist with continued program implementation. 4) As time and resources permit, to continue efforts to develop and distribute an Employee Safety Survey in order to assess the agency's culture or attitude as it pertains to safety; and to evaluate the responses to determine areas of need within the safety program. 5) Increase travel budget for an effective safety presence at construction worksites, maintenance shops, yards and rural locations. Increase safety staff to manage the demands for inspections and OSHA mandated training.

Does this performance measure effectively measure what is desired? Yes.

Is there a better performance measure that should be considered? To be discussed.

Will meeting the next yearly target have a fiscal impact? If so, explain. There will be an increased cost to the Safety and Loss Control budget if additional travel is necessary to support department taught Safety Training.

2. PROVIDE EMPLOYEE TRAINING

Performance Measure:

Percentage of employees trained in accordance with prescribed training plans and State statute training requirements.

Ultimate Target: 100% compliance for all required training

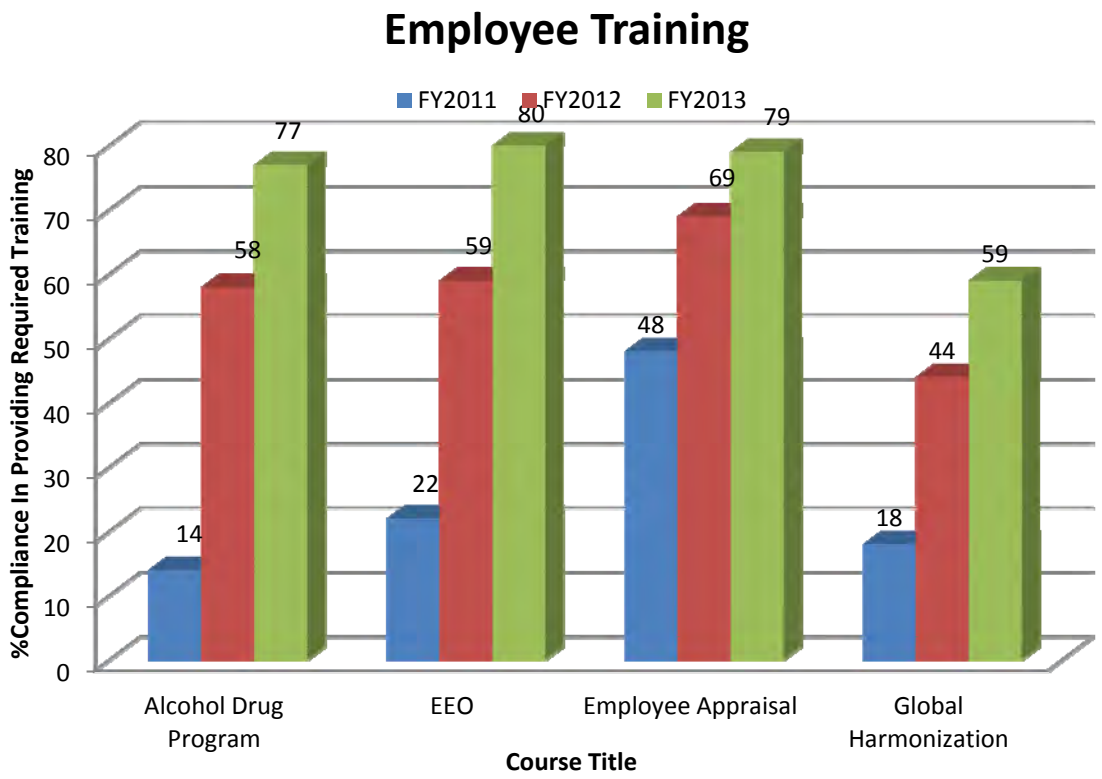
FY13 Target: 75% compliance for all required training

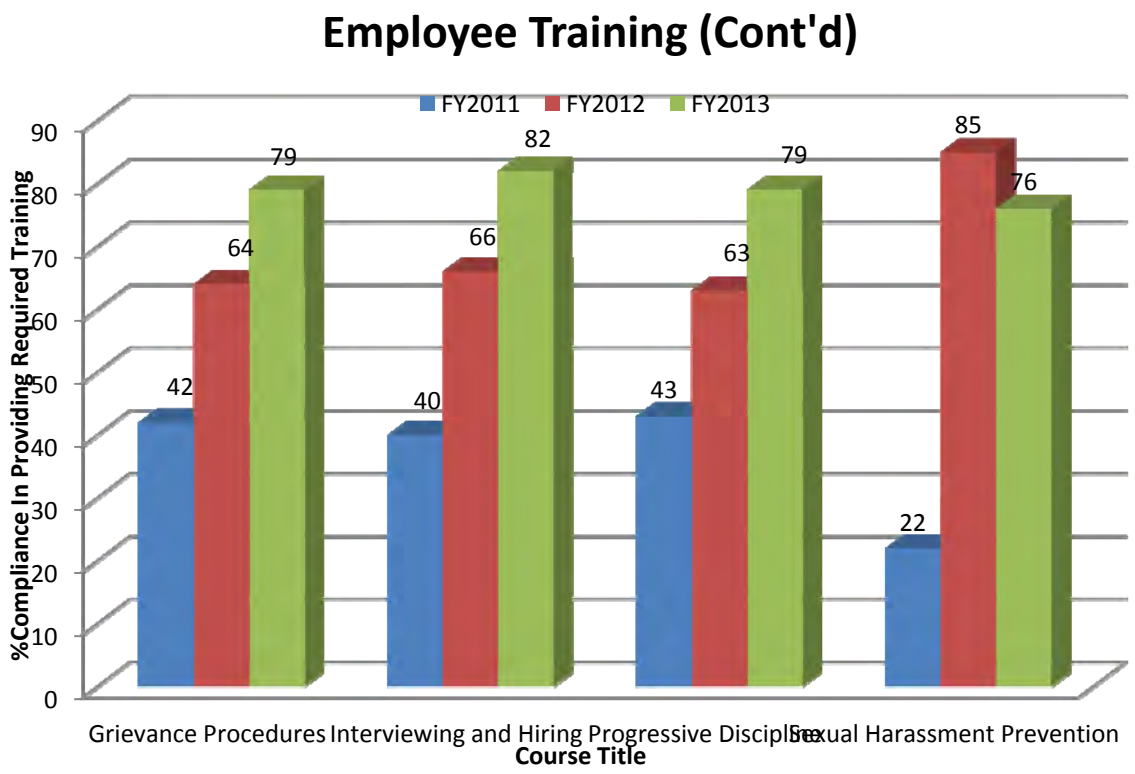
Measurement and Supporting Data:

Requirement	Total Employees Requiring Training*	% in compliance** for FY			# Trained in FY
		2011	2012	2013	2013
Alcohol & Drug Program	471	14	58	77	134
Defensive Driving	1652	-	-	67	770
EEO	471	22	59	80	125
EEO -Online	471	-	-	62	111
Employee Appraisal	1652	48	69	79	118
Global Harmonized System of Hazard Communication	1652	18	44	59	489
Grievance Procedures	471	42	64	79	149
Internet Security Awareness	1652	-	-	29	502
Interviewing & Hiring	471	40	66	82	126
Progressive Discipline	471	43	63	79	125
Sexual Harassment Prevention	1652	22	85	76	783

*Number of employees and supervisors on 6/30/13

**The frequency of required attendance ranges from one time only to once per year.





Overview:

The data collection process for this performance measure has been refined over the last three fiscal years and the information is a more accurate reflection of the number of employees in compliance with required training. Beginning in FY 2011 the Training Section has been able to check on the

compliance of each employee for each assigned training class. Prior to FY2011, this level of information was not available because the related regulations made it too complex to gather the information by individual through available databases. Therefore, the compliance statistic was calculated by coming up with an average of people that would theoretically need the training each fiscal year and then comparing it to the number of people trained. This resulted in the number being inflated, because some of the participants did not need the training (many people take the supervisory courses for developmental purposes) and some people took classes before they were out of compliance.

Now that the training section is able to track training for each individual employee, the number is more accurate and is a much more useful planning and measurement tool.

Were the targets met?

The target is 100% compliance overall and the FY13 target was 75%. The average for the 11 required classes was 69.9% which shows an increase of 6.4% from last fiscal year's average of 63.5%. It is important to note, however, that three additional classes were tracked for FY13. Compliance for the original eight classes averaged 76.4%, with only one of the classes failing to meet the target of 75%. The three classes that were tracked for the first time this fiscal year all failed to meet the target. Seven of the eight classes that were reported last fiscal year showed an increase in completion this fiscal year. The one exception was the Sexual Harassment Prevention class which had a decrease in compliance but exceeded the 75% target. This class had a significant amount of employee expire this fiscal year and over 783 people were trained and the class was offered enough times to allow for a 100% compliance rate.

Which "Strategies for Improvement were successful?

Sending out lists of employees who are out of compliance, including emails directly to the employees themselves, has been successful in getting more people to attend the required classes. Email notifications reminding employees they are scheduled for a class has also been helpful in reducing the number of "no shows."

Monitoring the rate of compliance more frequently and offering additional classes has been helpful in improving the compliance rate.

Sending out a quarterly "Supervisors Hall of Fame," listing supervisors that are in compliance for all supervisory classes, has been successful in helping to identify supervisors who are not coded correctly and has encouraged people to attend the classes.

Using the learning portal to provided links to the online Internet Security Awareness has helped promote the course and make it easier for employees to complete.

Which "Strategies for Improvement" were not successful?

Efforts to make the Learning Portal more functional for generating reports and reminders has not been successfully due to the time, staffing and budget constraints. Additionally, turnover of personnel within the vendor and NDOT's Information Technology division have also hampered these efforts.

What new "Strategies for Improvement" will be initiated in FY 2013?

Short range to next reporting:

- More analysis of employees who are out of compliance will be completed to determine the number of course offerings that should be scheduled. Analysis will be completed quarterly to determine if additional courses should be provided to meet the need.

- Division heads and District Engineers will be enlisted to promote higher compliance numbers.
- Additional follow-up will be completed with employees and divisional training coordinators to encourage attendance. This will include additional reminders to enrollees so that they don't miss a class.
- Continue to work with division and districts to correctly identify supervisors through the State's HR Data Warehouse system.
- Implement an online training option for the Global Harmonization class.
- Develop additional options to provide the content of online courses, specifically Internet Security Awareness and Global Harmonization, to Maintenance Crews with limited computer access.
- Promote the "Supervisors Hall of Fame" more widely and implement an "Employee Hall of Fame."

Long range:

- Continue to work with NDOT's Information Services Division as well as the State's Division of Human Resource Management and Enterprise IT Services to find improved automated reporting and reminders solutions.
- Network with other agencies to work toward automated reporting and reminders solutions.

Does this performance measure effectively measure what is desired? Yes.

Is there a better performance measure that should be considered?

As the process and related information systems for reporting this information are improved, additional courses from specific areas should be included. State regulations have also been revised to include an additional course for supervisors.

Will meeting the next yearly target have a fiscal impact? If so, explain.

Required training requires travel money, and budget limitations could have an impact of the availability of training in all locations.

Target for Next Three Fiscal Years:

In FY13, three additional classes were tracked and the overall rate of compliance increased by 6.4%. The overall compliance rate for classes that were tracked in FY12 increased by 12.9%. Assuming additional classes are added over the years, projected targets are:

FY14: 78%

FY15: 86%

FY16: 94%

3. IMPROVE EMPLOYEE SATISFACTION

Performance Measure:

Percentage rating obtained from employees' satisfaction surveys.

Annual Target: Overall rating 75% **Ultimate Target:** Overall rating of 80%.

Strategy Plan Support:

Positive employee morale is critical to the success of the workplace. It is the backbone of a skilled and dedicated workforce and essential in attracting and retaining a quality staff. A satisfied workforce will excel at their duties. This benefits the Department and our customers. This performance measure works towards meeting the Nevada Department of Transportation's Strategic Plan goals to: optimize safety, be in touch with and responsive to our customers, innovate, be the employer of choice, deliver timely and beneficial projects and programs, effectively preserve and manage our assets, and efficiently operate the transportation system.

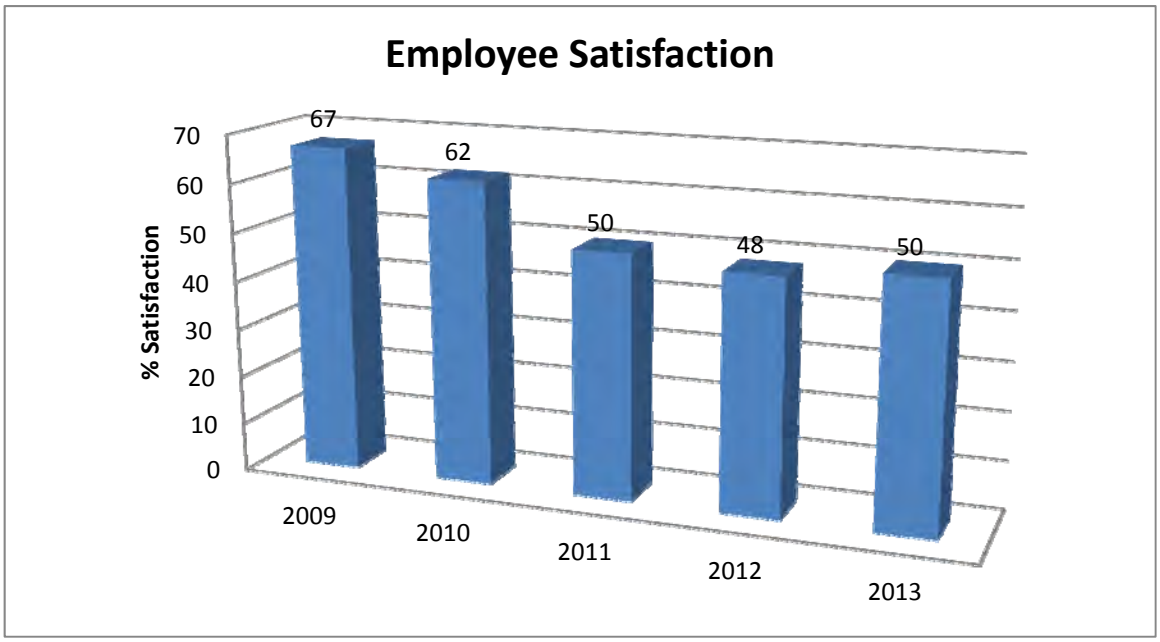
Measurement and Supporting Data:

Percentage of employees who are extremely or somewhat satisfied with NDOT	
FY 2008 (Base Number)	70%
FY 2009	67%
FY 20010	62%
FY 2011	50%
FY 2012	48%
FY 2013	50%

Was the annual target met?

No. Fifty percent (50%) of employees are extremely or somewhat satisfied with the Nevada Department of Transportation as an employer as compared to seventy percent (70%) the base year. The percentage did increase from forty-eight (48%) last year.

.



The 2008 Performance Measure Survey was launched on July 14, 2008 and closed on August 15, 2008; 764 employees responded to the 2008 survey. The 2009 Performance Measure Survey was launched on July 13, 2009, and closed on August 2, 2009; 616 employees responded to the 2009 survey. The 2010 Performance Measure Survey was launched on May 18, 2010 and closed on June 25, 2010; 905 employees responded to the 2010 survey. The 2011 Performance Measure Survey was launched on June 23, 2011, and closed on July 15, 2011; 598 employees responded to the 2011 survey. The 2012 Performance Measure Survey was launched on May 29, 2012, and closed on July 1, 2012; 718 employees responded to the 2012 survey. The 2013 Performance Measure Survey was launched on June 13, 2013, and closed on July 19, 2013; 621 employees responded to the 2013 survey. Employee participation in the survey decreased this fiscal year.

What 'Strategies for Improvement' were successful?

The Nevada Department of Transportation implemented strategies to improve communication by management from the top down to keep our employees informed and to update our Transportation Policies and create new work manuals. These strategies appear to be working again this year. Employees who strongly or somewhat agree that management communicates the missions/goals of the Nevada Department of Transportation have increased six percent (6%) this year with a five percent (5%) increase from the baseline year. Employees who strongly agreed or somewhat agreed that management applies policy decisions consistently throughout the Nevada Department of Transportation has increased three percent (3%) from last year with an overall increase of six percent (6%) from the base year. Employees who strongly or somewhat agree that management set clear priorities has increased six percent (6%) from last year and three (3%) from the base year.

NDOT employees who strongly agreed or somewhat agreed that they can express any concern to management as increased six percent (6%) from last year with an overall increase of four percent (4%) from the base year.

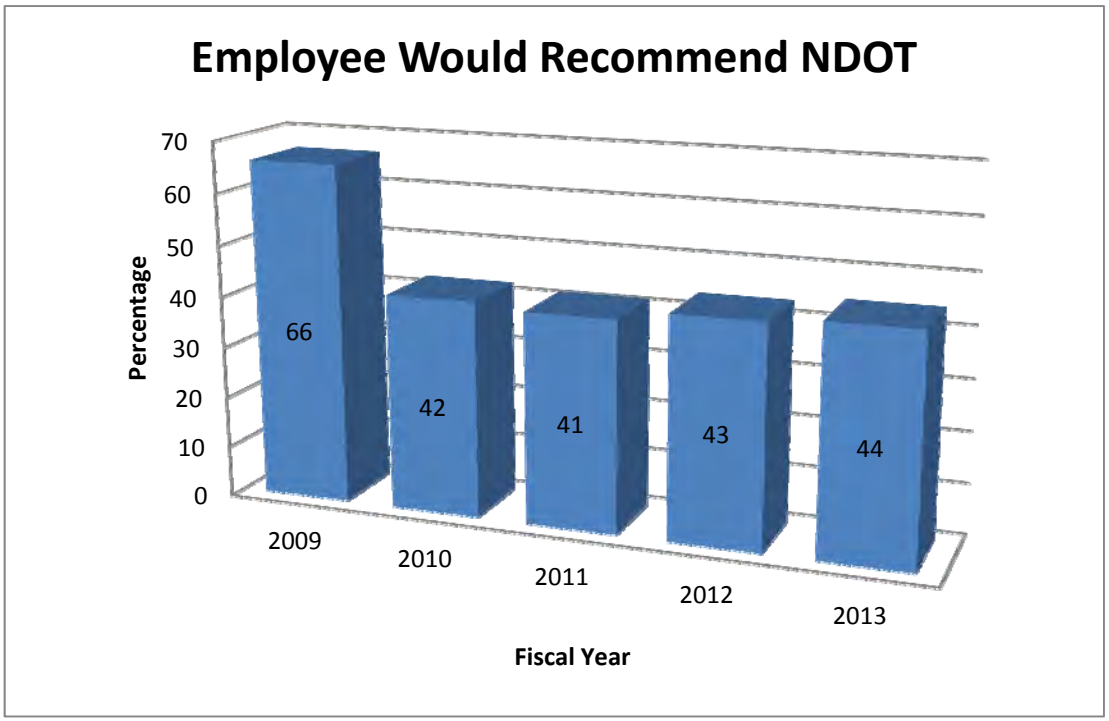
What 'Strategies for Improvement' were not successful? Why?

The overall target was to increase employee satisfaction to seventy-five percent (75%). Employees who would recommend the Nevada Department of Transportation to a friend as a good place to work was forty-four percent (44%) in 2013, which is a decreased from seventy-five percent (75%) in 2008 but an increase from forty-three percent (43%) in 2012.

The current economic environment and overall decrease in State pay and benefits are continuing to have a direct impact on the satisfaction of the Nevada Department of Transportation employees. Employees who are somewhat dissatisfied or extremely dissatisfied with salaries is sixty-six percent (66%) and benefits seventy-one percent (71%). Employees also continue to be upset about the rising costs of health care accompanied by reduced benefits and the increased cost of retirement benefits. These concerns are affecting employees and work place morale.

Employee survey comments continue to mention losing employees due to turnover and indicate that they are unhappy with the amount of work they are being required to pick up due to turnover and vacancies in the department. These complaints in some areas are due to the economic upturn in those areas due to the mines. The feedback also indicates that there are claims of inequity of pay for employees because of the restrictions on accelerated salaries for hiring due to recruitment difficulties, exceptional qualifications and inequities.

Comments regarding unsafe equipment and non operating vehicles were noted this year.



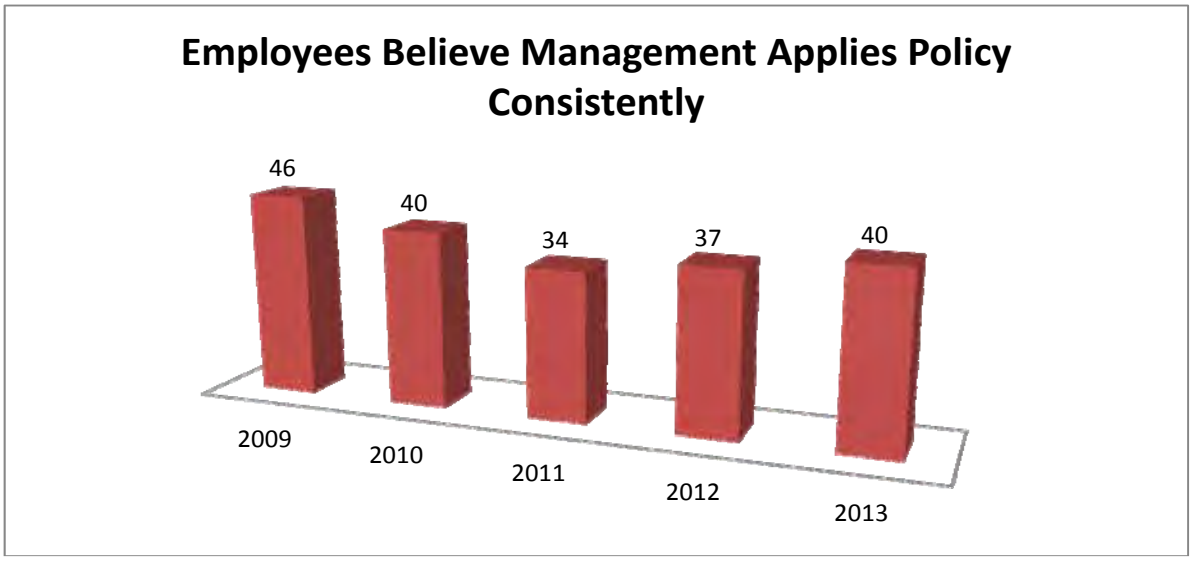
What 'Strategies for Improvement' will be initiated in FY2013?

Short range to next reporting:

1. The pay inequities will be included in the Nevada Department of Transportation's top five goals for the upcoming year.
2. Four million dollars has been identified for critical needs vehicles. The districts and divisions will work with their Assistant/Deputy Directors to identify critical needs vehicles.
3. Continue communications from management to employees including the Director's Report, "Muffins with Malfabon" and Division Head Staff Meetings. Reiterate the need for staff meetings within divisions.
4. Continue to update Transportation Policies and new work manuals.
5. Continue to encourage and require supervisory training in compliance with regulations that include communication, management styles, and coaching. This strategy directly correlates with Performance Measure #2.
6. Communicate to employees the survey was reviewed. Communicate throughout the year with employees tying back to the survey results.

Long range:

Continue conducting and analyzing annual satisfaction surveys and making appropriate recommendations to the Director's Office for addressing employee satisfaction.



Does this performance measure effectively measure what is desired?

This performance measure works towards meeting the Nevada Department of Transportation's Strategic Plan goals to: optimize safety, be in touch with and responsive to our customers, innovate, be the employer of choice, deliver timely and beneficial projects and programs, effectively preserve and manage our assets, and efficiently operate the transportation system.

Is there a better performance measure that should be considered? No; however, employee's job satisfaction hinges in part on pay and benefits. Until pay and benefits are restored we may not see improvement in the results of the survey.

4. STREAMLINE AGREEMENT EXECUTION PROCESS

Performance Measure:

Percentage of Agreements executed within 45 days from when division submits agreement to the date when it is fully executed.

Ultimate Target: 90% **Annual Target:** 50%

Strategy Plan Support:

An agreement is the instrument used to procure a variety of services for NDOT. The Agreement Services section ensures that NDOT procures these services in accordance with established laws, rules and regulations. Delays in executing agreements has a tremendous impact on the operations, delaying what can often be critical services, or services that impact the timely delivery of projects. Agreements for services over $300,000 require approval of the Transportation Board; agreements less than $300,000 and certain services exempt from Board approval (such as right of way acquisitions and interlocal agreements) can be executed with approval from the NDOT Director.

This performance measure helps meet the department's mission to provide a better transportation system for Nevada through our unified and dedicated efforts by helping to accomplish the goals of: delivering timely and beneficial projects and programs; being responsive to our customers; effectively preserving and managing our assets; and efficiently operating the transportation system.

Summary:

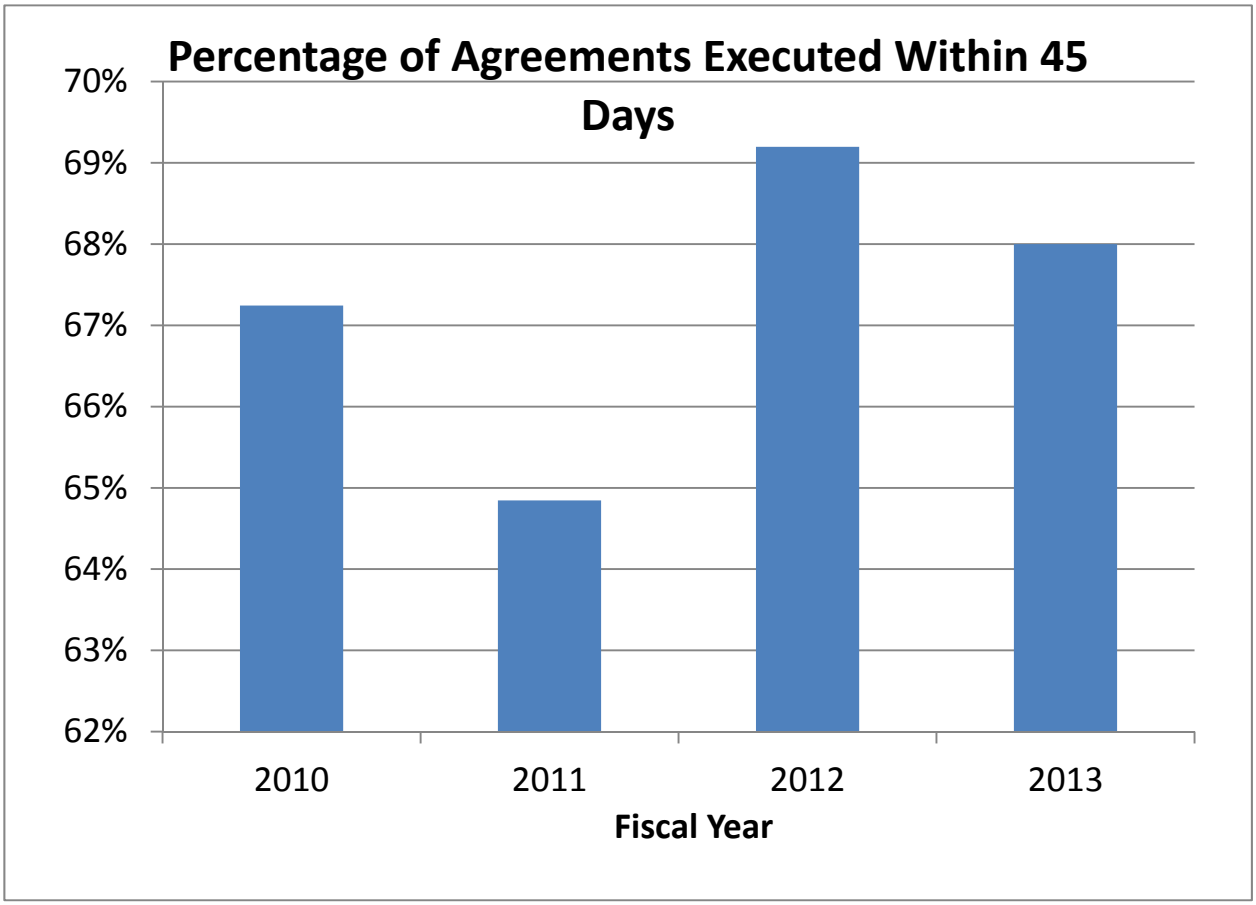
For the fiscal year 2013 the average number of calendar days for agreements (measured from the time they were submitted to Agreement Services until the time of agreement execution) was thirty seven (37) days. Sixty-eight (68) percent of all agreements were executed in forty-five (45) days or less. This exceeds the annual target of fifty (50) percent.

Analyzing agreements for the last quarter of 2013, agreements submitted on or after April 1, 2013 and executed before or on June 30, 2013 show an average of twenty-one (21) days for processing. Sixty-five (65) agreements were submitted and executed within the fourth quarter and ninety (90) percent of them were processed in 45 days. The fourth quarter had twenty-two (22) percent of Government and Transit Commissions agreements which took an average of seventy-four (74) days to process. Six (6) agreements went before the Transportation Board for approval and averaged sixty-five (65) days from submission to execution.

Seventy-five (75) percent of the one hundred and one (101) fourth quarter agreements were executed in forty-five (45) days or less.

Measurement and Supporting Data:

	Number of agreements submitted & executed in a quarter	Percent within 45 days	Gov't/ RTC % of total	Number executed	Percent within 45 days	Gov't/ RTC % of total
1st Qtr Sept 2012	108	83	22	150	69	29
2nd Qtr Dec 2012	87	83	32	133	67	38
3rd Qtr Mar 2013	56	72	28	86	58	46
4th Qtr June 2013	65	90	22	101	75	30
Totals	316			470		



Strategies for Improvement: As applicable

Short range to next reporting:

Train new staff and assign divisions to staff. Continue to monitor processing of agreements by tracking the progress on the agreement log. This includes following up if an agreement appears to be in one area for longer than the average time. Continue updating agreement manuals, agreement shells and forms. Conduct additional training for Department staff, consultants, contractors and local government agencies. Put training materials on SharePoint after they are updated for new changes.

Long range:

Formally assess the agreement process every three years. Continued training.

Were the targets met? Yes, the yearly target was met as the percentage of agreements processed in less than 45 days was over 50%.

What 'Strategies for Improvement' were successful?

Program Officers in Agreement Services have been assigned to specific divisions. This allows them to become procurement experts for the divisions assigned to them. New Agreement Services employees have been trained and now have a good understanding of the procurement process. Manuals are being updated to document procedures and provide standardized processes to follow.

What 'Strategies for Improvement' were not successful? Why?

Conducting additional training for local governmental agencies is an unsuccessful strategy. Processing agreements with entities that require Board, Commission, or higher executive approvals, such as counties, universities or regional transportation commissions, often takes a lot longer than the target 45 days (an average of 74 days in the fourth quarter). These entities are not held to NDOT's performance measure, and are subject to their own internal approval requirements that often take a significant length of time to complete. In general we find these agencies are familiar with the required process, so additional training is not helpful.

What new 'Strategies for Improvement' will be initiated in FY2014?

Short range to next reporting:

Train Agreement Services staff on the performance measure process, the goal and purpose of the measure, and how their work impacts the measures. Update agreement manuals, templates and forms. Provide instructional PowerPoint presentations, checklists, and information about the procurement process on SharePoint, and encourage all Department employees who procure services to view the material. Conduct agreement training for Department staff as needed, especially for project managers who do not regularly procure services. Continue to monitor processing of agreements by tracking the progress on the agreement log.

Long range strategy:

Thoroughly assess the current performance measure, data collected, it's relevance to reporting actual performance, and make revisions as applicable. Have all Agreement Services staff understand the performance measure, what is measured, and how each stage of processing an agreement affects the measure. Provide quarterly feedback to staff about the current processing time, and implement continuous improvements to decrease processing time without sacrificing accuracy and adherence to laws, rules & regulations.

Does this performance measure effectively measure what is desired?

No

Is there a better performance measure that should be considered?

Yes.

1) Currently the time it takes to get the agreement signed by the second party counts towards the total number of processing days, yet is generally outside the Department's control. Processing time should be measured from the time Agreement Services receives the Form 2A, Scope of Services, and DBE Memo until the agreement is executed, *excluding the time during which the agreement is awaiting second party signature or final approval by the Transportation Board*. This will allow all types of agreements (including those with local government agencies where the time to obtain second party signature is often lengthy) to be measured with the same criteria. It will accurately reflect NDOT agreement processing time, thus providing a better measure of performance.
2) The number of agreements submitted & executed in the same quarter (as opposed to the total number of agreements executed in a quarter) has no statistical relevance and should be eliminated from the report
3) The number of Government/RTC agreements would no longer need to be singled out, since implementation of Item #1) above would view all agreements alike.
4) The annual target and ultimate target percentages should be combined into one target: 90% of all agreements with NDOT processing time of 30 days or less.

Will meeting the next yearly target have a fiscal impact? If so, explain**.**

Yes. Procuring services more expediently will make Department operations more efficient, resulting in faster delivery of projects, more timely maintenance of facilities, and an overall higher standard of service provided. This will result in overall cost savings.

5. IMPROVE CUSTOMER SATISFACTION

Performance Measure:

Numerical ratings obtained from public opinion and customer/user surveys.

Annual Target: Annual increases in public opinion and customer/user ratings.

Ultimate Target: Increases in public opinion and customer/user ratings.

Overview of performance measure:

Public opinion, users (customers) as well as elected officials surveys will assess public information, outreach activities, and how well the Department is performing in the eyes of our customers. It is important to know that we are doing the right things to be transparent, accountable, and efficient. This performance measure works toward meeting the Department of Transportation Strategic Plan goals and to be in touch with our customers.

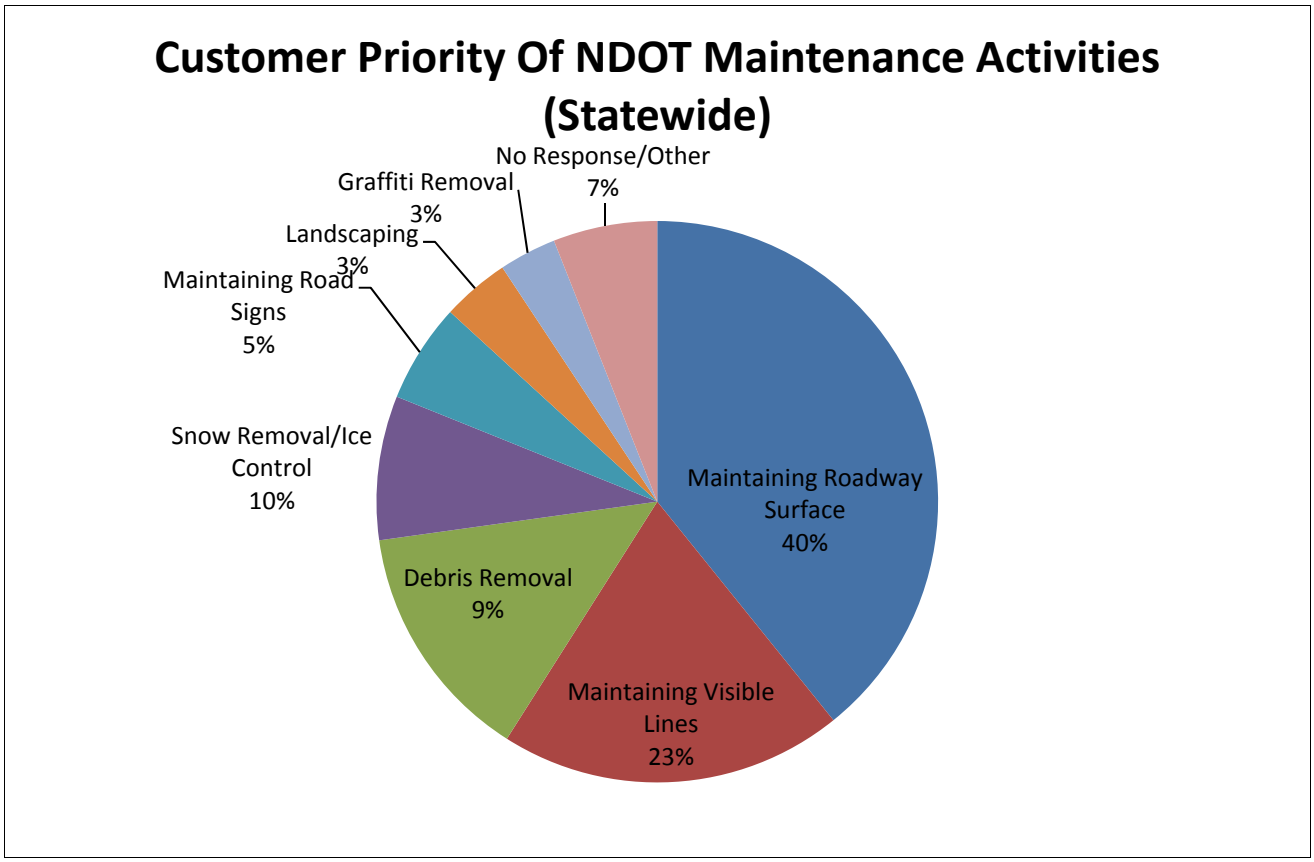
Measurement and Supporting Data:

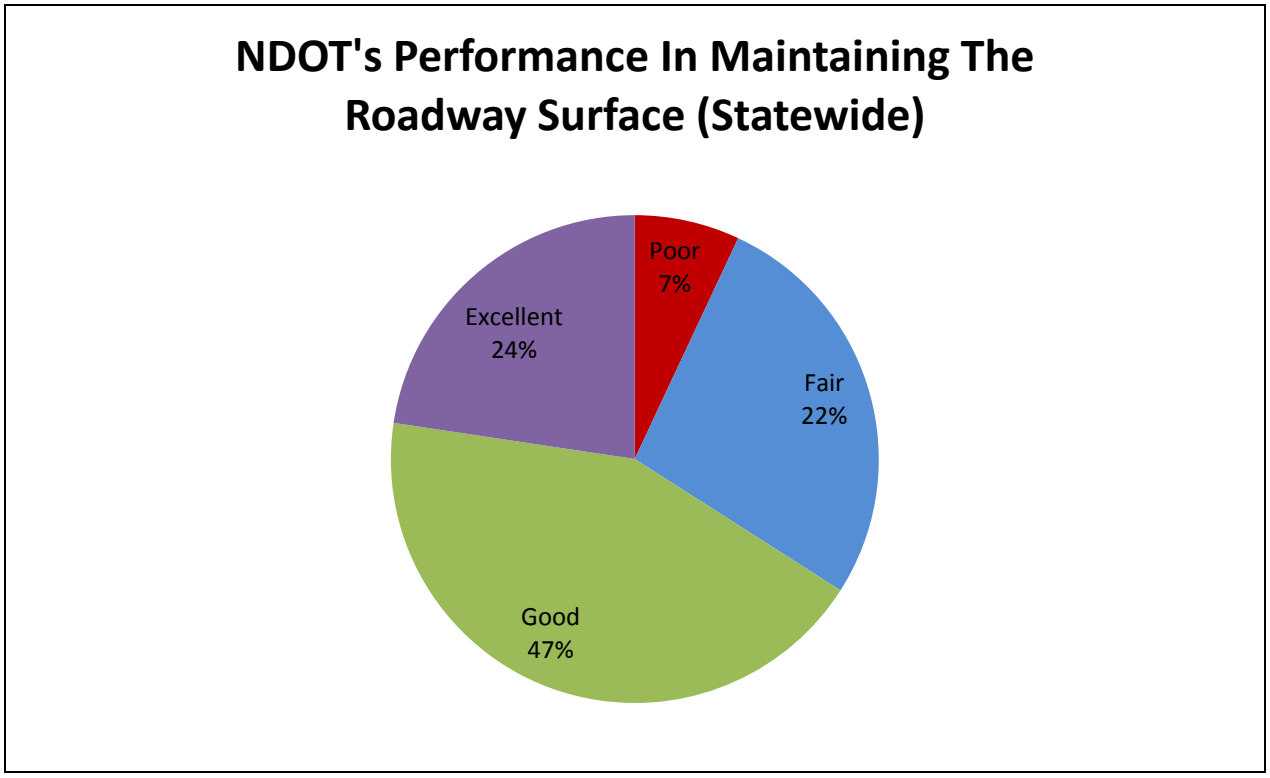
An updated comprehensive customer satisfaction survey is currently being conducted and the results will become available by March-April 2014 time frame.

The data presented below is based on 2011 maintenance customer satisfaction survey of Nevada residents conducted by the University of Nevada, Reno, in conjunction with Maintenance and Operations Division. Data collection (phone interviews) took place between February 2011 and January 2012, and the report was issued in June, 2012. Nevada household residents were randomly selected to participate in the survey and were screened to determine their eligibility to participate. All respondents were over the age of 18 and must have *driven* a motor vehicle in the past month. The results are deemed accurate to the 95% confidence level, which means that 95% of the time, the scores will fall within the range indicated. This is typical of most public opinion surveys. In all, there were 1,260 interviews that were completed. According to the weighted data, District 1 represents nearly 75% of Nevada adults in this survey, with smaller numbers 22% represented from District 2 and 3% represented from District 3. Additionally, Clark (70%) and Washoe counties (16) represent the majority of Nevada adults at the county level. Roughly equal number of men (50%) and women (50%) are represented in the study and the largest percentage of adults were between the ages of 45 and 64 (36%).

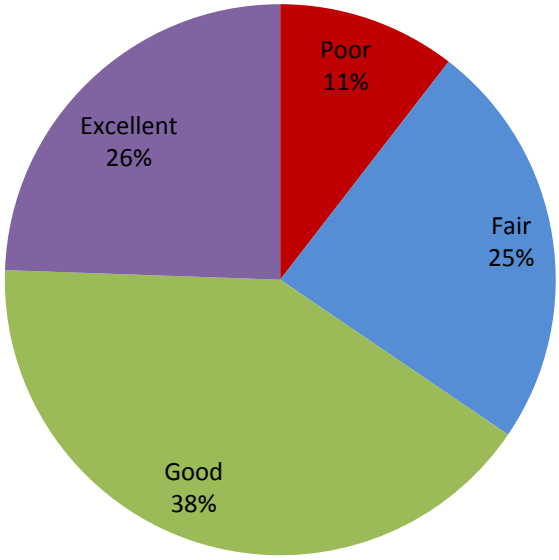
Summary of the survey results:

The following graphs start with a pie chart showing the customer priority of the activities performed by the Nevada Department of Transportation. The subsequent pie charts show how the public rated NDOT's performance on the top three priorities as seen by the public which are our customers. The data for the pie charts showing NDOT's performance came from 2011 Maintenance Customer Satisfaction Survey conducted by The Center for Research and Analysis at the University of Nevada, Reno.

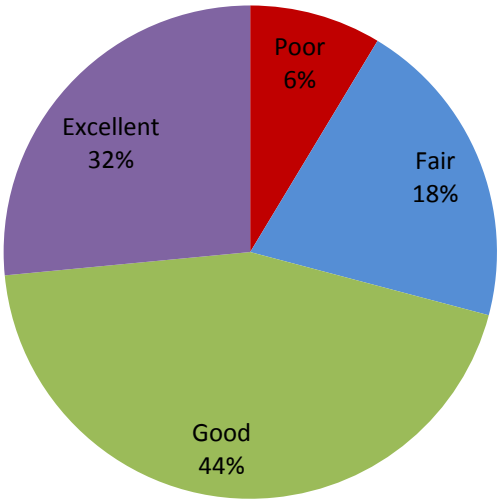

Customer Priority Of NDOT Maintenance Activities (Statewide)
No Response/Other 7%
Graffiti Removal 3%
Landscaping 3%
Maintaining Road Signs 5%
Snow Removal/Ice Control 10%
Debris Removal 9%
Maintaining Visible Lines 23%
Maintaining Roadway Surface 40%


NDOT's Performance In Maintaining The Roadway Surface (Statewide)
Poor 7%
Fair 22%
Good 47%
Excellent 24%

NDOT's Performance In Maintaining Visible Lines On The Roadway (Statewide)



NDOT's Performance In Removing Debris From The Roadway (Statewide)



6. Reduce and Maintain Congestion Levels on the State Maintained Roadway System

Performance Measure:

Urban roadways – Maintain congestion at Level of Service D for 85% of State urban roadways

Rural roadways – Maintain congestion at Level of Service D for 90% of State rural roadways

Definition of Level of Service D – Roadways operating at up to 8 miles per hour less than the Free Flow Speed or Posted Speed Limit, and the traffic carrying capacity of the roadway is less than 0.9.

Current Status: Based on data from FY 2012, for urban areas in Nevada, the percentage of roadway mileage with LOS D or better is 91%, with a total of 755 miles urban roads, and 687 miles with LOS D or better.

The percentage of rural roadways mileage with LOS D or better is 100%, with a total of 4,304 miles rural roads, and 4,304 miles with LOS D or better.

Ultimate Target: Reduce congestion by 1% per year to reach the ultimate target of 90% of State urban roadways at Level of Service D, and 95% of State rural roadways at Level of Service D.

Strategy Plan Support:

This performance measure is one of the most important performance indicators of the NDOT maintained roadway system. It integrates the outcome of our overall investments into one measure that is a direct result of the collaborative efforts of the various divisions of NDOT. It will help reduce congestion and will help identify bottleneck locations on the NDOT maintained roadway system, which will be prioritized for improvements depending upon the funding and resources availability. It works towards meeting the Department of Transportation Strategic Plan to efficiently operate the transportation system by reducing the level of congestion and increasing safety.

This Congestion Monitoring System will be an evolving process and will be updated regularly as more data is integrated into it from the Southern Nevada RTC's Freeways and Arterials System of Transportation, and the Washoe County's future Traffic Management Center, Synchro models, and other sources as needed.

Summary:

During FY 2010, NDOT developed its first system-wide Level of Service Monitoring and Tracking system that is used in determining the congestion on the state maintained roadways in urban and rural areas. This established the base conditions for the Level of Service monitoring system.

For the fiscal year 2012, 91% of 755 miles urban roads is LOS D or better and 100% of 4,304 miles rural roads is LOS D or better.

Supporting Documentation:

Highway Capacity Manual, AASHTO, Daily Traffic Volume Data, Peak Hourly Volume Data, Truck Percentages, Service Flow tables, Commuter and Non-Commuter Traffic, Roadway Terrain and Grades, Directional Factors, Hourly Factors, Functional Class, Number of Lanes, Free Flow Speed data, Peak Hour Factors, and Peak Service Flow Rates.

Were the targets met?

Yes. The congestion level was compared with the system-wide baseline performance standards and the established targets were met.

Does this performance measure effectively measure what is desired?

Yes.

Is there a better performance measure that should be considered?

This performance measure can be supplemented by other indicators such as travel time reliability and vehicle hours of delay saved in the core urban areas when more data becomes available.

Will meeting the next yearly target have a fiscal impact?

Yes. Improving congestion by 1% per year will require investments into the roadway system. The fiscal impact of such improvements will be determined accordingly.

7. STREAMLINE PROJECT DELIVERY: SCHEDULE AND ESTIMATE FROM BID OPENING TO CONSTRUCTION COMPLETION

Performance Measure:

Percentage of projects within established range of cost estimate and schedule to completion

Annual Target: 80% **Ultimate Target:** 80%

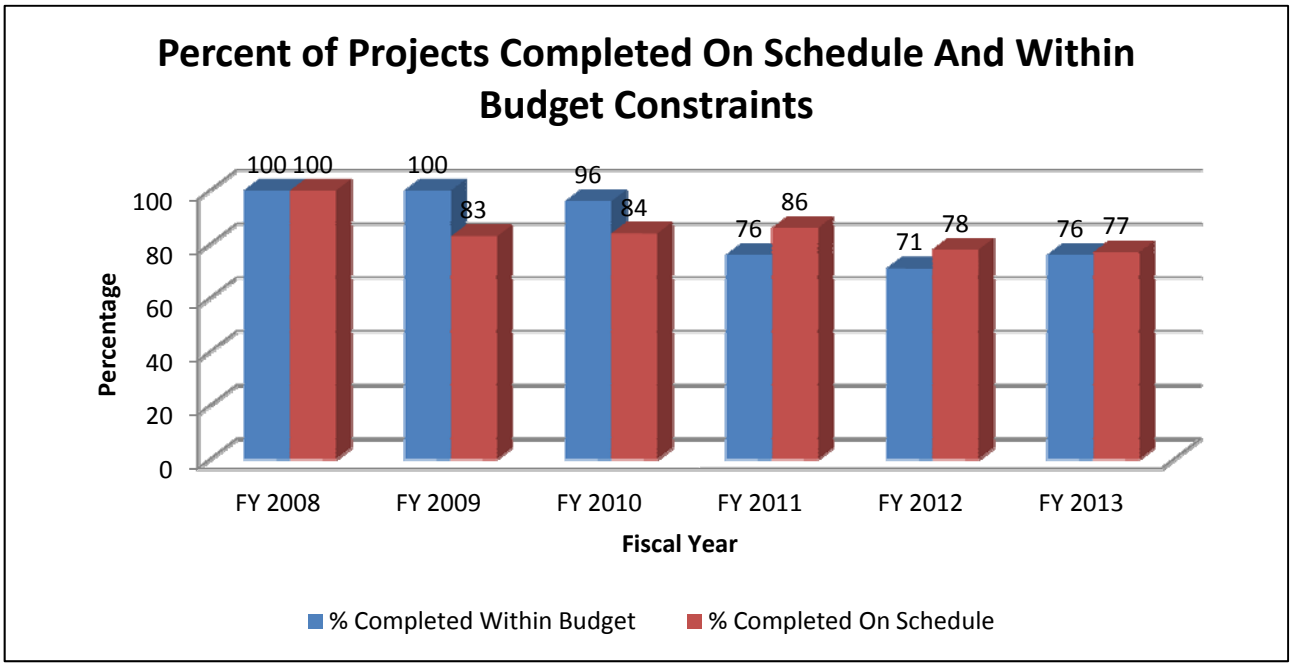
Strategy Plan Support:

This performance measure works towards meeting the Department of Transportation Strategic Plan goals by providing timely and beneficial construction projects. This measure helps to optimize safety for road users, be in touch with and responsive to our customers (road users), and efficiently operate the transportation system.

Measurement and Supporting Data:

FY 2013 ended with 76% projects reported complete within budget and 77% reported complete within schedule. Historical numbers are shown in the table below:

	% Completed Within Budget	% Completed On Schedule
FY 2008	100	100
FY 2009	100	83
FY 2010	96	84
FY 2011	76	86
FY 2012	71	78
FY 2013	76	77



FY 2013 Budget Performance: Performance is based on an average of quarterly reviews of all open construction contracts (72 – 87 depending on the time of year). This includes active projects where construction activities are ongoing and projects where construction is complete and the contract is being administratively closed out. For the fiscal year an average of 76% of projects were completed within budget. Of the projects that exceeded budget targets, 49% had change orders in excess of 3% of the bid price. The other projects (51%) resulted from actual pay quantities exceeding estimated pay quantities.

FY 2013 Schedule performance: Performance is based on an average of quarterly reviews of all contracts (22 - 26 depending on the time of year) actively under construction. For the fiscal year an average of 77% of projects were completed within the original scheduled timeframe. Reasons for exceeding schedule targets included encountering utility conflicts and drilled shaft issues.

Strategies for Improvement:

Short range to next reporting:

- Continue working with Design to improve the quality of designs
- Minimize change orders
- Improve project schedule development / management techniques
- Continue active participation of Bid Review and Analysis Team
- Continue NDOT's Partnering program
- Continue with annual RE Academy Training / RE Conferences.
- Refine and Continue Change Order Training (8 Hours)
    - Include basic negotiation skills.

Long range:

- Develop better methods for tracking and projecting construction costs
- Implement P6 Primavera scheduling software
- Develop and implement electronic documentation system

Were the targets met? Yes with exceptions. Strict interpretation of an ultimate goal of 80% may not be realistic. AASHTO's May 2007 report on *Comparing State DOT's Construction Project Costs and Schedule Performance* reviewed more than 26,500 projects in 20 states between 2001 and 2005. The study indicates states meeting budget performance measures on 46% - 81% of projects depending on how the goal is being measured. The study also indicates that an average of 53% of all projects were completed within the original schedule. Compared to the AASHTO study NDOT may be doing well in regards budget and schedule performance. NDOT's goal of 80% for both is being studied and will be maintained for the time being.

What 'Strategies for Improvement' were successful? It is difficult to identify a specific short term strategy that was "successful" because measuring budget and schedule performance on a construction project is a somewhat complex process involving many activities, personnel and other factors. Some factors are beyond the control of the NDOT and contractor personnel actively involved in the project (example: market fluctuations in material pricing). Department personnel are actively involved with improving the quality of design, minimizing change orders, enhancing scheduling techniques and partnering with stakeholders on a daily basis as part of our core mission.

What 'Strategies for Improvement' were not successful? Why? See above.

What new 'Strategies for Improvement' will be initiated in FY 2014?

- Staff Accountability: Procedures for upper management reviews of projects with significant cost and schedule overruns will be fine tuned. Methods will be developed to reward strong performers and to address deficiencies.

- Contract Closeouts: Efforts are continually ongoing to streamline contract closeouts. NDOT will solicit outside professional help to assist in reviewing our documentation systems and streamline the audit / closeout process.

Does this performance measure effectively measure what is desired?

This performance measure is not a direct measure of NDOT's performance on construction projects due to many factors beyond NDOT's control (increased / decreased competition, contractor bids, market forces, acts of god, contractor expertise, etc...). But time and money are important factors in any construction project and should be measured. We intend on monitoring similar performance measure research at a national level (AASHTO, FHWA, etc…) to refine NDOT's methods and improve performance.

Is there a better performance measure that should be considered? No

Will meeting the next yearly target have a fiscal impact? If so, explain.

Not monitoring schedule and budget performance can have fiscal impacts related to contractor payments, labor, equipment and material costs, administration costs, roadway maintenance costs, user delay costs, etc… Schedule and budget performance must be monitored to minimize those impacts and attempt to mitigate them.

8. MAINTAIN STATE HIGHWAY PAVEMENT

Performance Measure:

Percentage of state maintained roadways receiving annual preservation in accordance with the Department's pro-active pavement preservation program.

Annual Target:

Category 1:	10.0%	$99 million
Category 2:	8.3%	$79 million
Category 3:	8.3%	$71 million
Category 4:	6.7%	$26 million
Category 5:	5.0%	$20 million
		$295 million annually

Ultimate Target:

Perform annual rehabilitation as necessary to maintain the existing condition of the roadway network and perform rehabilitation necessary to eliminate the accumulated backlog.

Strategy Plan Support:

Proactive pavement rehabilitation is the most cost-effective way to use limited funding. Proactive pavement rehabilitation means working on the roads in a timely and economical manner to maintain the roadway network in a desired condition. Reactive pavement rehabilitation means waiting until the pavement has deteriorated past the acceptable level and then removing the failed roadway and reconstructing a new roadway in its place. Being proactive instead of reactive is 4 to 6 times more cost effective in utilizing transportation funding.

This performance measure works towards meeting the Department's Strategic Plan goal to effectively preserve and maintain NDOT's assets.

For the Department to maintain the roadway network in its current condition, a specific percentage of rehabilitation work must be performed on the roadways each year. This specific percentage is the Annual Target. A backlog of work accumulates when the Annual Target is not met each year. To reduce the backlog, rehabilitation work in excess of the annual target must be performed.

Measurement and Supporting Data:

The following tables illustrate the efforts of the Department to rehabilitate the network of roadways for which NDOT is responsible. Each table represents one calendar year of information. Rehabilitation needs are calculated on a 2-year cycle to allow time for efficient planning and design of projects. This 2-year cycle is broken down annually for the purpose of reporting this performance measure. Construction of the projects is performed on a yearly basis.

2012 PERFORMANCE (January 1 – December 31)									
REPORTED JANUARY 1, 2013									
Road Prioritization Category	Centerline Miles	Annual Need	Backlog of Need	Total Need	Annual Target		Amount Budgeted/ Planned [1]	Actual Annual Rehabilitation	Was Target met?
					%	Cost in millions			
1	647	4.3%	14.6%	18.9%	10.0%	$99	7.0%	7.4%[3]	no
2	939	15.2%	15.3%	30.5%	8.3%	$79	6.4%	0.3%	no
3	1,208	25.6%	32.5%	58.1%	8.3%	$71	2.0%	0.6%	no
4	865	5.5%	40.3%	45.8%	6.7%	$26	0.0%	0%	no
5	1,732	15.5%[2]	-----	15.5%	5.0%	$20	0.0%	0%	no

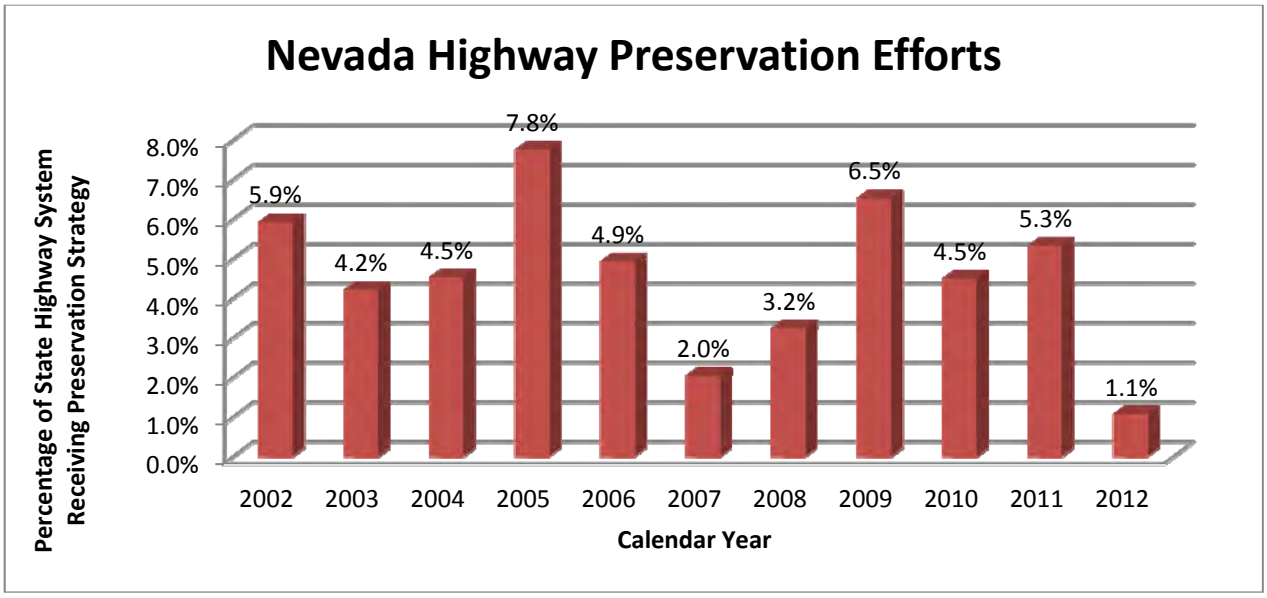
All percentages are based on the amount of miles in each Roadway Prioritization Category.

[1] *"Amount Budgeted" does not include "Additional $100 Million Project List" and other stimulus funding.*

[2] *Annual need in "Category" 5 is re-evaluated on a two-year basis and is based on actual PMS rating points. This number may increase or decrease from one two-year cycle to the next due to further deterioration of roads or enhancement of roads due to maintenance treatments in this category.*

[3.] *2.3% of Work performed in Category 1 was not included in the "Total Need". This work does* ***not reduce*** *the "Backlog of Need" for this Category. Project is as follows:*

- *IR015, Clark County from 1.717 – 16.352 NB Lanes. These lanes were not due for rehabilitation until 2014*



Note: The 2012 Performance Management Report erroneously showed an estimated fiscal year 2012 percentage for the pavement preservation effort. This performance measure is reported by calendar year unlike most other performance measures which are reported by fiscal year. The 2011 calendar year data should have been the latest available data shown at the time of that report.

Column 1"Road Prioritization Category": This is the category that each road has been assigned to based on the amount of traffic and the number of trucks that the road carries. The following table shows examples of roads in each category:

Road Prioritization Category	Description	Roadway Examples
1	Controlled Access Roads	I-15 in southern Nevada and I-80 across northern Nevada
2	ESAL > 540 or ADT > 10,000	US 50 in western Nevada and US 93 in northern Nevada
3	540 ≥ ESAL > 405 or 1,600 < ADT ≤ 10,000 + NHS	Snyder Avenue in Carson City and Industrial Way in Clark County
4	405 ≥ ESAL > 270 or 400 < ADT ≤ 1,600	Franktown Road in Washoe County and Deer Creek Road near Mt. Charleston.
5	ADT ≤ 400	Gabbs Valley Road in Mineral County and Lee Canyon Road in Clark County

ESAL: Equivalent Single Axle Load
ADT: Average Daily Traffic

Column 2 "Total Centerline Miles": This is the total number of miles that has been assigned to each category. This number may change on a year to year basis when new roads are constructed or if sections of state roads are exchanged with local public agencies. Total centerline miles for 2012 and 2013 are based on 2009 data.

Column 3 "Annual Need": This describes the percentage of roadways in the individual Categories that become due for rehabilitation each year. In Categories 1 through 4 the Annual Need is based on projects that have reached the critical age for rehabilitation or projects that have reached the critical condition for rehabilitation. In Category 5, the Annual Need is based on projects that have reached the critical condition for rehabilitation. This need is recalculated each 2-year period and therefore no amount is shown in the Category 5 Annual Need column in the table for 2013.

Column 4 "Backlog of Need": This column represents the percentage of the roadways that were not rehabilitated at the appropriate age. Each year that the Annual Needs are not fully funded, the unfunded rehabilitation rolls over into the Backlog of Need column for the following year. In Categories 1 through 4 the Backlog of Need is based on projects that have reached the critical age for rehabilitation, and projects that have reached the critical condition for rehabilitation. In the 2013 table, Category 5, the Backlog of Need will be based on the Annual Need for 2012 minus the amount of work that was performed in 2012. Work performed on this Category in 2012 will be reflected in the 2013 table.

Column 5 "Total Need": This is the percentage of work that could be done to bring the entire Roadway Prioritization Category up to optimum condition. Optimum condition is the condition that would cost the least amount of funding to rehabilitate on a predetermined cycle.

Column 6 "Annual Target": This column is a standard percentage for each Category based on necessary rehabilitation cycles. The percentages are 10% for Category 1, 8.3% for Category 2, 8.3% for Category 3, 6.7% for Category 4 and 5% for Category 5. These percentages are established by the following method:

100% ÷ the Category rehabilitation cycle in years = Annual % of Category needing rehabilitation

Example: Category 2 roads have a rehabilitation cycle of 12 years. Therefore:

100% ÷ 12 years = 8.3% annual rehabilitation needs for Category 2

In other words, 8.3 percent of Category 2 roads must be rehabilitated each year to maintain all of the Category 1 roadways in their current condition. To improve the system, additional work must be done in excess of 8.3%. A lack of funding in any Category will cause the overall condition of the Category to decline.

However, based on the anticipation of limited funding, the Department may decide to perform a higher percentage of work on Category 1 and 2 roads than on Category 3, 4 and 5 roads. This is due to the higher cost of replacing the more heavily travelled roads if they are neglected. Higher cost includes the cost of raw materials and the impacts to interstate travel and commerce.

Column 7 "Amount Budgeted/Planned": This is the percentage of roadways that is approved for rehabilitation per roadway prioritization category. This amount may be less than the Annual Need due to funding restrictions, priorities or other decisions.

Column 8 "Actual Annual Rehabilitation": This number is used to track the actual percentage of structural 3R rehabilitation that is performed on the system. This information is updated quarterly and is based on the advertised date of each contract. Additional work may be performed in a category based on additional funding that becomes available after the "Amount Budgeted/Planned" is established.

Column 9 "Was Target Met?": This column indicates whether the annual target was met.

Strategies for Improvement:

Short Range to next reporting:

1. Maintain Category 1 and 2 roadways at a high level of service by applying timely rehabilitation treatments.
2. Maintain Category 3, 4 and 5 roadways at a lower but acceptable level of service by applying rehabilitation treatments as funding allows.

Long Range:

1. Maintain Category 1 and 2 roadways at a high level of service by applying timely rehabilitation treatments.
2. Maintain Category 3, 4 and 5 roadways at a good level of service by applying rehabilitation treatments.
3. Monitor the effects of rehabilitation and preservation versus the actual needs of the system and make any necessary updates and adjustments to the rehabilitation program.
4. Work to provide sufficient funding to reach the ultimate target.

Annual Evaluation of Performance Measure

Was the annual target met?

The annual target was not met in any Categories. Current funding levels do not allow for meeting the annual target in each Category.

What 'Strategies for Improvement' were successful?

Realizing that current funding does not allow for meeting all of the annual targets, Category 1 roadways were made a priority, preserving the infrastructure that has the highest cost of replacement. Categories 2 through 5 roadways were addressed according to allowable funding.

Long range strategies are currently in the implementation stage and are expected to be successful.

What 'Strategies for Improvement' were not successful? None

What new 'Strategies for Improvement' will be implemented in 2013?

Short range to next reporting:

No additional strategies are planned.

Long Range:

No additional strategies are planned.

Does this performance measure effectively measure what is desired?

Based on the deterioration rates of State maintained roadways, the annual and ultimate targets represent what work is needed for each year. The amount of backlog represents the amount of work needed to restore the roadway network to exceptional levels.

Is there a better performance measure that should be considered?

Other performance measures exist and have been investigated by the Department. This measure closely relates to the system that the Department has established for rehabilitating its roadways.

Will meeting the next yearly target have a fiscal impact? If so, explain.

Yes, the impact of under-funding the annual needs of the system will lead to an increased backlog and deterioration of the entire roadway network. Proactively applying rehabilitation and preservation to the State maintained roadway network can extend life and reduce costly reconstruction projects by 4 to 6 times. Costly reconstruction projects not only impact the Department's budget, but impact the travelling public for longer periods of time due to longer construction projects.

9. MAINTAIN NDOT FLEET

Performance Measures:

There are two performance measures for the maintenance of the Department's fleet of mobile equipment:

(A) **Percentage of fleet requiring replacement** – this measure is the percentage of the fleet that have reached the age or mileage that requires replacement.

(B) **Percentage of fleet in compliance with condition criteria** – this measure is the percentage of the fleet that is maintained as per Department preventive maintenance requirements so that the expected life span of our vehicles is not compromised. As the fleet is maintained on the mileage and/or hourly requirements, compliance has been met.

Annual Target:

(A) Declining Rate of 1% per year

(B) Increasing Rate of 1% per year.

Ultimate Target:

(A) 10%

(B) 95% rate of compliance for mileage/hourly requirements

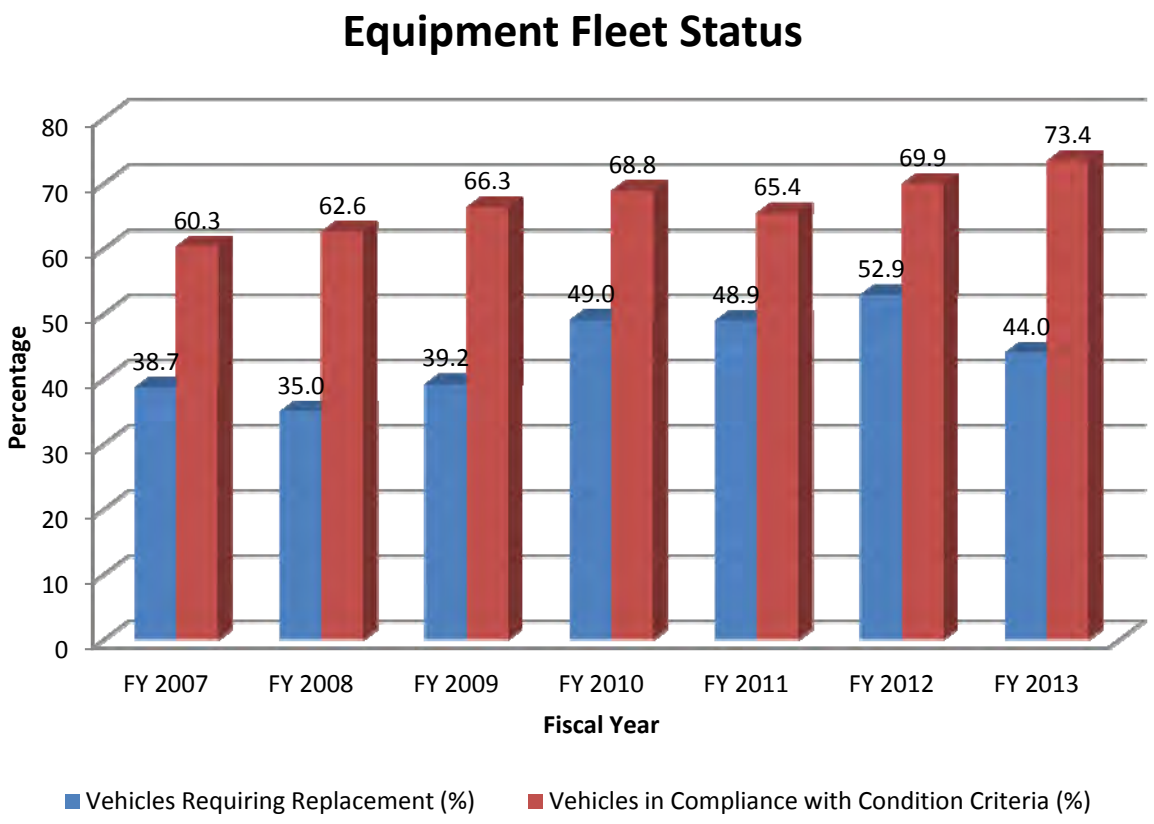
Measurement and Supporting Data:

	Replacement Criteria Measured Annually	Change (with respect to 2007)	Condition Criteria Measured Annually	Change (with respect to 2007)
FY 2007	38.65%		60.30%	
FY 2008	34.96%	-3.69%	62.55%	+2.25%
FY 2009	39.18%	+0.53%	66.30%	+6.00%
FY 2010	49.01%	+10.36%	68.84%	+8.84%
FY 2011	48.88%	+10.23%	65.42%	+5.12%
FY 2012	52.86%	+14.21%	69.86%	+9.56%
FY 2013	44.00%	+5.35%	73.41%	+13.11%

Strategy Plan Support

In Fiscal Year 2010 the Equipment Division initiated a Rebuild Program that extends the life of equipment for an additional life span. Equipment that has reached or exceeded replacement criteria is rebuilt to like-new condition for considerably less than the cost of purchasing new equipment. The Rebuild Program also assists in assuring that NDOT is adequately equipped for its work effort in maintaining public safety.

The vehicles in the fleet are important to deliver projects and maintain a safe highway system. Equipment in good condition ensures the ability to perform NDOT's business practices and provides a safe and secure tool for staff. These performance measures work towards meeting the Department of Transportation Strategic Plan goals to: Optimize safety, Be in touch with and responsive to our customers, Innovate, Be the employer of choice, Deliver timely and beneficial projects and programs, Effectively preserve and manage our assets, and Efficiently operate the transportation system.



Strategies for Improvement:

Short range to next reporting:

(A)

1. Revise replacement criteria by increasing usage criteria in selected class codes
2. Removing age criteria in other specified class codes.
3. Implement policy controls for equipment replacement.

(B)

1. Analyze quarterly Preventive Maintenance (PM) due and accomplished on core fleet.
2. Develop enforceable policy for non-compliance of PM standards.

Long range:

(A)

1. Reduce fleet size by usage assessments.
2. Minimize retention of replaced vehicles.

(B)

1. Perform annual fleet condition audit.
2. Develop Predictive Maintenance Program

ANNUAL EVALUATION OF PERFORMANCE MEASURE

Was the annual target met?

No on 1. Yes on 2.

What 'Strategies for Improvement' were successful?

(A) We were successful in minimizing the number of vehicles retained.

(B) We were successful in performing a condition audit of the fleet which identified vehicles that needed further attention.

What 'Strategies for Improvement' were not successful? Why?

(A) Strategies to reduce replacement deficit were detrimentally effected from a loss of funds.

(B) Unable to develop a Predictive Maintenance Program due to lack of available personnel.

What new 'Strategies for Improvement' will be initiated in FY 2013?

Short range to next reporting:

(A) Attempt to rebuild more units.

(B) Improve notification process for timely preventive maintenance.

Long range:

(A) Reduce fleet size through utilization assessments.

(B) Develop Predictive Maintenance Program.

Does this performance measure effectively measure what is desired?

Yes.

Is there a better performance measure that should be considered?

No.

Will meeting the next yearly target have a fiscal impact? If so, explain.

(A) Yes – Meeting the target will require substantial use of funds.

(B) Yes – Meeting the target extends the life of the vehicle while ensuring the safety and reliability of the fleet, thus reducing the need to utilize funds for repairs and replacements.

10. MAINTAIN NDOT FACILITIES

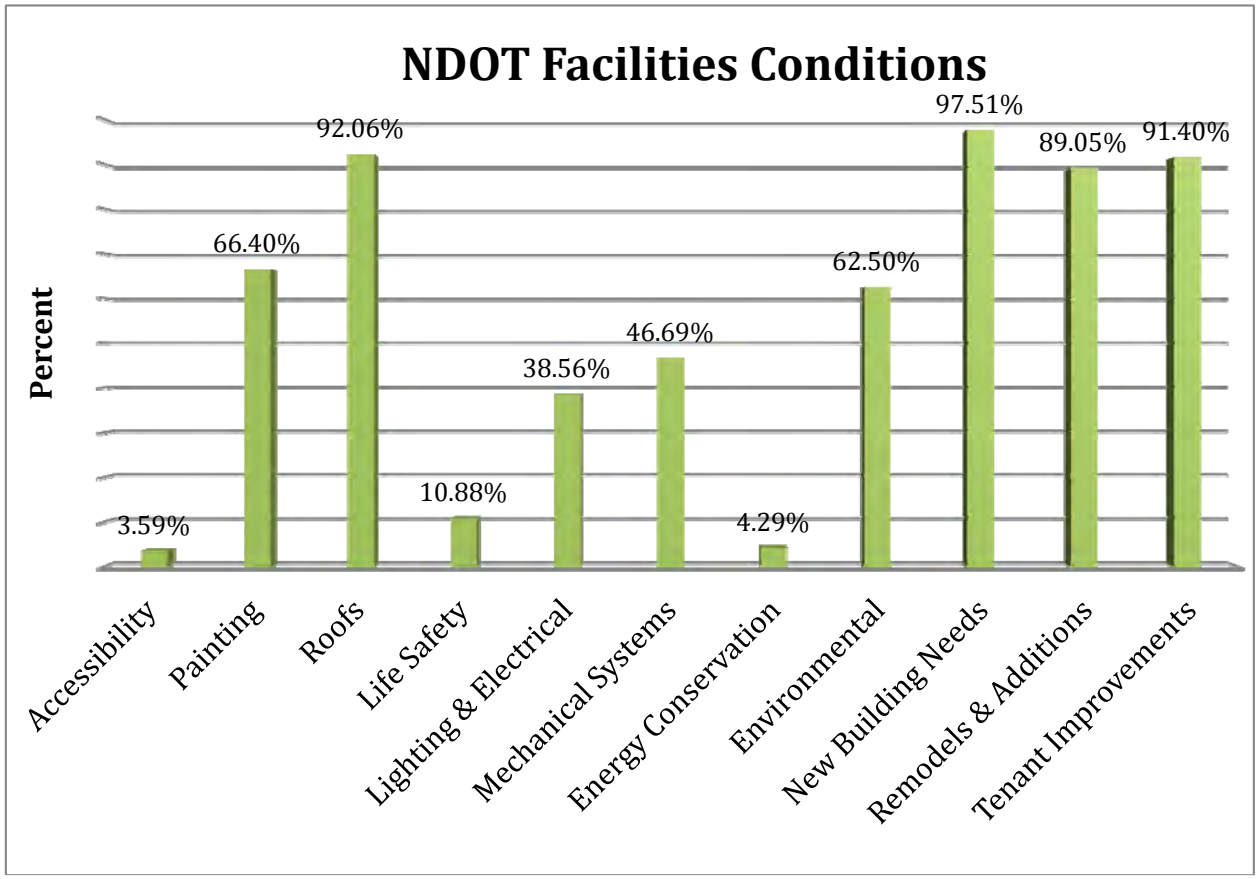
Performance Measure:

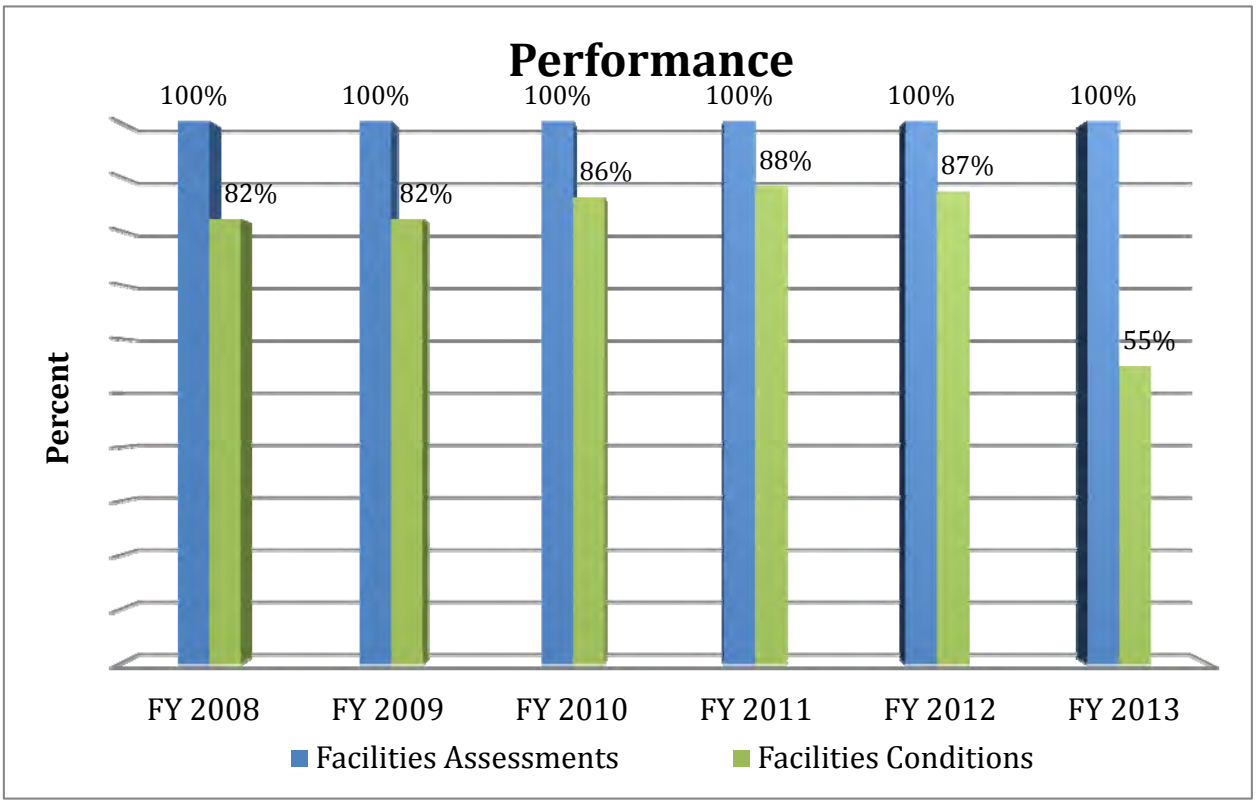
Percent of facilities assessments completed and percent of facilities conditions and priority needs.

Annual Target: Increase by 3% **Ultimate Target:** 100%

Measurement and Supporting Data:

FY 2011	87%
FY 2012	87%
FY 2013 (New Method – Base Number)	53%
FY 2013	55%





Initial results from changing to the New Method of measuring Performance Measure #10:

Percentages have dropped overall due to including finer details in previous categories and adding categories that did not exist before. Added categories capture the entire Architecture workload. Data has been updated to include the results from the new 2012 Assessment Study by GML Architects. The report is a Statewide Summary of the buildings and other facilities in all 3 Districts. All the Department facilities are listed by District and District totals are available. Under the Accessibility category, the smallest ADA infraction was considered, therefore the % complete is very low. Under the Energy Conservation category, the % complete is very low because most buildings are very old and have many opportunities for energy conservation improvements.

Strategies for Improvement:

Short range to next reporting:

Work on improving the data in the following columns: Energy Conservation and Environmental as data become more complete.

Long range:

The expanded categories for calculating this performance measure will aid us to develop a defined work plan with prioritized projects, tied to Architecture's budget for successful accomplishment of goals and objectives.

ANNUAL EVALUATION OF PERFORMANCE MEASURE

Was the annual target met?

No. The percentage of performance was increased by 2% over the base number established last year. Facilities improvements for this fiscal year are listed below.

Life Safety Improvements included for this fiscal year:

- HQ Lab Building Fire Alarm Report
- HQ 2nd & 3rd floor sprinkler drawings
- Disconnect switch upgrades at fuel pumps
- Fire sprinkler the East Annex

Mechanical Improvements included:

- D3 Elko Progress Lab Ventilation and Controls Upgrade
- D2 HQ Boiler Upgrade at the Sparks Equipment Yard
- D1 LV HVAC Upgrades at the Lab Building and Equipment Shop Building

Lighting Improvements included:

District 1

- Tonopah – Admin., Crew, Fuel

District 2

- Cold Springs- Site, Shop, Storage
- Fallon- Admin., Safety
- Fernley- Admin., Salt, Admin., Fuel
- Hawthorne- Maint. Sta., Vehicle Storage
- Lovelock- Maint. Sta.
- Wellington- Fuel, Maint. Sta., Vehicle Storage,
- Yerington- Crew Office, Maint. Sta., Vehicle Storage

District 3

- Elko- Parts and Repair shop
- Ely- Shop, Admin., Maint. Sta., Cold Storage, Vehicle Storage, Crew office
- Winnemucca- Admin.

Painting Improvements to the facilities at the following locations:

- Alamo
- Glendale
- Goldfield
- Las Vegas South

One new building was constructed:

- Roop Street Annex Building

What 'Strategies for Improvement' were successful?

The development of a new method of calculating PM#10 which incorporates everything we do (the old method only included selected code elements such as the fire sprinklers and electrical items included in the 2005 Facility Assessment Report). The new method will utilize the 2012 Assessment Study that provides data on categories such as Accessibility, Painting, Roofs, Life Safety (Building Code related), Lighting and Electrical, Mechanical Systems, Energy Conservation, and Environmental (wash pads and storm water). Additional elements such as New Building Needs,

Remodels or Additions, and Tenant Improvements are also included. This data will be used to measure the facilities needs and the progress towards maintaining our facilities in an effective manner.

What 'Strategies for Improvement' were not successful? Why?

The old method of calculating this performance measure was limited in scope and the items were difficult to track. There were many items of work that were not captured when measuring our performance. It did not provide meaningful and easily identifiable elements that could be tracked to show improvement or lack of improvement.

The new method is set up to be a "living document" allowing staff to input data and monitor the progress of improving our facilities. Items will be easier to track and the data gives a better picture of our program.

What new 'Strategies for Improvement' will be initiated in FY2014?

Short range to next reporting:

Track our program and look at how we can make improvements.

Long range:

Defining a work plan with prioritized projects and tying the work plan to Architecture's budget. This will be used as a roadmap for successful accomplishment of goals and objectives.

Does this performance measure effectively measure what is desired? Yes.

Is there a better performance measure that should be considered? No.

Will meeting the next yearly target have a fiscal impact? If so, explain.

Yes. Since this is a new performance measure, we will evaluate and monitor the fiscal impacts and the performance levels before establishing any changes to our yearly target.

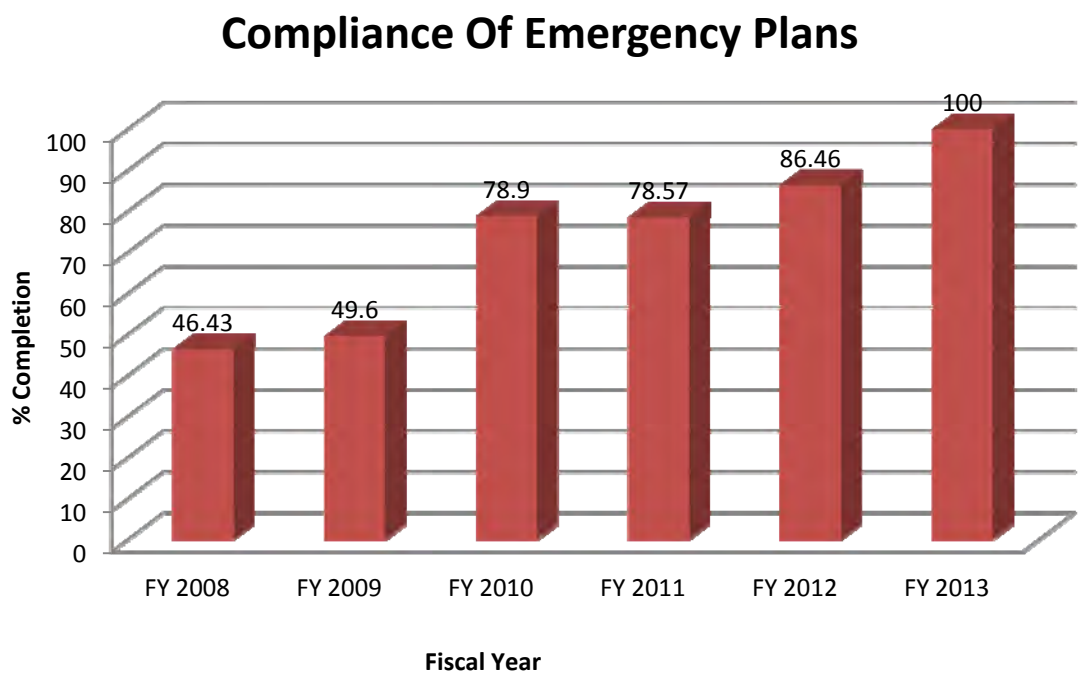
11. Emergency Management, Security and Continuity of Operations

Performance Measure:
Percent of emergency plans that have been completed, training and education have been provided to appropriate personnel, the plans have been tested and exercised and the plan has been updated to accommodate changes in departmental processes, federal guidelines, etc. Training and updates should be completed on a biennial basis. Plans include:

- Continuity of Operations Plan
- State Level Emergency Operations Plan
- District Level Emergency Operations Plan
- Southern Nevada Evacuation Plan
- Infrastructure Security Plan
- Mobile Fleet Security Plan

Ultimate Target: 100%

Annual Target: 100%



Strategy Plan Support:

NDOT's emergency plans provide clear guidance on how NDOT will continue to perform critical functions and operations in the event of an emergency or disaster. Being prepared and ready for an emergency is paramount for keeping systems operating during such times, as well as being in a position to respond to health and safety issues. This performance measure works towards meeting the Department of Transportation Strategic Plan goals to:

- Optimize Safety
- Be in touch with and responsive to our customers
- Innovate,
- Deliver timely and beneficial projects and programs,
- Effectively preserve and manage our assets
- Efficiently operate the transportation system.

Summary: July 2012 – June 2013:

The Continuity of Operations Plan (COOP) project has been completed with the Project Closeout Meeting being held on November 27, 2012. SAIC (Science Applications International Corporation), our contractor on this project, supplied NDOT with final copies of the plan, reports and documents.

The Continuity of Operations Plan (COOP), District Emergency Operations Plan, and Southern Nevada Evacuation Plan have all been integrated into the NDOT Emergency Operations Plan as annexes during the last quarter of this fiscal year. The NDOT Emergency Operations Plan, including these changes, was approved by the Department Director on April 8, 2013.

With the completion of the NDOT Continuity of Operation Plan, Performance Measure 11 reached its goal of 100% compliance during this fiscal year.

The Functional Exercise, Operation Rumble Strip, was conducted on February 27, 2013. This exercise was an 8 hour functional exercise which included a shift change. This exercise was conducted in conjunction with the Nevada Division of Emergency Management, the Nevada Division of Environmental Protection, the Nevada Department of Public Safety, the Nevada National Guard, NV Energy, and local emergency managers from within the state. The idea behind the exercises was to test the individual branches and units of the NDOT DEOC on the functionality of the NDOT Emergency Operations Plan. Following the Functional Exercise, an After Action Report and Improvement Plan (AAR/IP) was created that was used in the final update of the NDOT Emergency Operations Plan. Other areas of improvement in NDOT's emergency operations, not related to the NDOT Emergency Operations Plan, have been identified, and will be addressed.

The NDOT Emergency Operations Plan received a major update in December of 2012. The Emergency Operations Plan and it's annexes (Continuity of Operations, Southern Nevada Evacuation, and District Emergency Operations Plans) began final updates immediately following the exercise. The update to the NDOT Emergency Operations Plan was completed and approved by the Department Director in April 2013.

The NDOT Emergency Management/Homeland Security section is continuing to work with the NDOT Traffic Operations Division, IT Division, and the Locations Division (GIS) on developing a Emergency Operations Center (EOC) mapping program for use in the NDOT DEOC. Feedback is continuing to be provided to the developer to improve the program. NDOT GIS is developing a web application that will allow NDOT personnel to track road status during emergencies, and share that information with other agencies via the internet. The software for this application is still in development, and a date for completion has not been set yet.

The NDOT Emergency Management Section continues to work on a Lockdown Procedure and an Evacuation Procedure for the NDOT Headquarters Complex at the request of the Directors office. Coordination is taking place between several areas within NDOT, such as Safety, Buildings and Grounds, and Architecture to ensure a well rounded approach to security is being used.

Training:

During this fiscal year, the following training was provided or attended by NDOT personnel:

July 11, 2012 - Jim Walker attended a two hour training program hosted by the Nevada Division of Emergency Management on the expectations that Local Governments have of state agencies during disasters.

July 15, 2012 – Seven NDOT employees attended training session regarding awareness of Continuity of Operations for supervisory staff.

August 14, 2012 – Continuity of Operations (COOP) training was held for NDOT employees statewide to make them aware of the new NDOT Continuity of Operation Plan and their expectations during COOP events.

August 20-24, 2012 – Jim Walker and Chris Joncas attended a week long peer exchange in Irvine, CA for DOT emergency managers nationwide. Training was held on subjects such as debris management, evacuations and communications, transit as critical infrastructure, etc.

October 25, 2012 - Jim Walker attended a webinar focusing on evacuations and lessons learned from recent large scale evacuation around the country.

December 5, 2012 - Jim Walker attended an 8 hour suicide bomber training course provided by the Nevada Threat Analysis Center (Fusion Center).

December 10, 2012 - Jim Walker attended a training workshop to provide input to the Nevada Division of Emergency Management regarding the NDOT Emergency Operations Plan and how it integrated into statewide emergency planning.

December 17, 2012 – Personnel from several different areas within NDOT, as well as the Nevada Division of Emergency Management, met to learn from an FHWA representative about the new MAP-21 program as it relates to provisions regarding Emergency Response (i.e., debris removal, etc.) and accounting for Emergency Response activities, as these activities are associated with Emergency Management.

February 12, 2013 - Personnel from the Maintenance and Asset Management Division and the Traffic Operations Division attended training focusing conducted by the Division of Emergency Management on the processes of the State Emergency Operations Center and how NDOT works within that system.

February 19, 2013 - Personnel from the Maintenance and Asset Management Division and the Traffic Operations Division attended an class on how to use the new NDOT Emergency Mapping program.

Exercises:

During this fiscal year, the following exercises were provided or attended by NDOT personnel:

July12, 2012 – Operation Hot Seat, one of a series of Tabletop Exercises, was conducted by NDOT Emergency Management staff to assess the ability of the NDOT EOC Finance Branch primary staff during an EOC activation. A major fire scenario was used for this 1.5 hour exercise.

July18, 2012 – Operation Hot Seat, the next in a series of Tabletop Exercises, was conducted by NDOT Emergency Management staff to assess the ability of the NDOT EOC Finance Branch secondary and alternate staff during an EOC activation. A major fire scenario was used for this 1.5 hour exercise.

August 7, 2012 – NDOT participated in a Tabletop exercise conducted by the Nevada National Guard, Operation Joint Endeavor. This eight hour exercise used an earthquake scenario to activate the State Emergency Operations Center, involving NDOT as the Emergency Support Function 1 representatives.

August 8, 2012 – NDOT participated in a Functional Exercise as a continuation of the Operation Joint Endeavor scenario conducted by the Nevada National Guard,. This eight hour exercise used an earthquake scenario to activate the State Emergency Operations Center, involving NDOT as the Emergency Support Function 1 representatives.

August 22, 2012 – NDOT participated in a Tabletop exercise conducted by the American Association of State and Highway Transportation Officials (AASHTO) at an emergency management peer exchange held in Irvine, CA. A minimum of seven state DOT's participated in this exercise. This seven hour exercise used an terrorism scenario to compare the response plans and procedures of the different states involved.

September 13, 2012 – NDOT conducted a Tabletop exercise to test the new NDOT Continuity of Operations (COOP) Plan. This four hour exercise used an earthquake scenario to place NDOT in a position to activate the COOP plan, and was used to develop the final updates for the plan.

October 9-10, 2012 - The Department of Homeland Security conducted a terrorism exercise in Henderson, NV. The two day workshop incorporated a terrorist attack scenario which affected multiple areas requiring the securing of several public places in the Las Vegas valley. NDOT Emergency Management and Multi-Modal personnel attended.

October 19, 2012 - NDOT Emergency Management conducted a drill of the NDOT EOC Logistics section on setting up the NDOT Emergency Operations Center.

October 30, 2012 - The Nevada Division of Emergency Management hosted an eight hour tabletop exercise regarding bio-hazard response and recovery. NDOT Emergency Management personnel attended.

November 13, 2012 - District 3 personnel attended a three hour tabletop exercise hosted by Elko County with a Hazardous Materials scenario.

January 22, 2013 -Jim Walker from the NDOT Emergency Management Section attended a virtual tabletop exercise conducted by FEMA using a tornado scenario. FEMA is developing the process for conducting virtual tabletop exercises and NDOT participated along with several other state agencies.

February 11, 2013 -The Truckee Canal Irrigation District conducted a four hour tabletop exercise using a flood scenario in Fernley, based on the flooding that occurred in 2008. District 2 personnel attended to represent NDOT.

February 27, 2013 -The NDOT Emergency Management section conducted an eight hour functional exercise, activating the NDOT DEOC and including all three districts, NDEP, NDEM, DPS, Las Vegas Emergency Management, Henderson Emergency Management, and the Nevada National Guard. This exercise, for the first time, included a shift change for the NDOT DEOC. The exercise tested the NDOT Emergency Operation Plan and the new annexes (District Emergency Operations, Continuity of Operations, and Southern Nevada Evacuation).

May 23, 2013 - Washoe County and the Division of Emergency Management conducted a full scale exercise using a Northern Nevada earthquake scenario. NDOT participated with Maintenance and Asset Management Division and GIS personnel attending.

June 18, 2013 - NDOT Emergency Management staff attended a Full Scale exercise hosted by the Division of Emergency Management using a severe storm scenario. This was a Continuity of Operations exercise involving moving Emergency Operations Center personnel to an alternate location.

Updates:

The following plans/procedures received updates during this fiscal year:

November 27, 2012 - The Project Closeout Meeting was held with the contractors for the NDOT Continuity of Operations Plan. Final updated plan documents have been provided to NDOT.

December 31, 2012 - The NDOT Emergency Operations Plan, at the state level and the district level, was updated prior to the February 27, 2013 functional exercise being conducted by NDOT. The updated plan will be officially adopted following the exercise and updates based on the recommendations received from the exercise. The Southern Nevada Evacuation Plan was updated to be included in the Emergency Operations Plan as an annex.

April 8, 2013 - The update to the NDOT Emergency Operations Plan was completed and approved by the Department Director. This update included the addition of the Continuity of Operations Plan, District Emergency Operations Plan, and Southern Nevada Evacuation Plan as annexes to the NDOT Emergency Operations Plan. The update also included necessary changes to remain in compliance with Federal regulations and guidelines, and to address changes in emergency management procedures within the state.

Strategies for Improvement: As applicable

Short range:

Following the exercise held in February of 2013, functional exercises are being planned for Districts 2 and 3 to improve coordination between the District EOC's and the District Road Operations Centers. These exercises will also provide training and experience for the NDOT District personnel.

Long range:

Exercises will continue to be held at least twice each year, with the After Action Reports being used to update our Emergency Operations and Security plans. Training will be held in preparation for these exercises, as well as after the exercises to mitigate areas of improvement indentified in the exercises.

Were the targets met?

Yes

What 'Strategies for Improvement' were successful?

Conducting exercises successfully tests and provides training for NDOT personnel on disaster response activities. It also provides valuable feedback needed to update our plans and procedures. Regular exercises will remain a fundamental part of our strategy. Training is also being supplied to the Districts at an accelerated pace based on their requests and feedback received from the exercises.

Consolidation of the Emergency Operation Plans (State Level Emergency Operations Plan, District Emergency Operations Plan, Continuity of Operations Plan, and Southern Nevada Evacuation Plan) into one plan with multiple annexes has proven to be successful. All feedback from the personnel involved in emergency operation has been positive, indicating it is more efficient and easier to respond when there is only one plan to reference.

What 'Strategies for Improvement' were not successful? Why?

We have not been able to complete the update of the NDOT Homeland Security Plan in FY 2013 as planned due to additional requirements being added. The inclusion of Lockdown and Evacuation procedures for the HQ complex have added complexity to the planning process, and caused a delay in completing the update of the plan. The NDOT Homeland Security Plan update is now projected to be completed in FY 2014.

What new 'Strategies for Improvement' will be initiated in FY2013?

Short range:

The strategies implemented to date have been successful in achieving our performance measures. We will continue to combine Emergency Operations and Security plans as much as possible to reduce the number of plans to be exercised and updated.

Long range strategy:

Emergency Management and Homeland Security Plans have been consolidated in the latest update to simplify the planning process, and make it easier for NDOT staff to find information during actual events. This will move us forward toward our new FY13 goal of 100% compliance on our Performance Measures by March 31th, 2013.

Does this performance measure effectively measure what is desired?

Yes

Is there a better performance measure that should be considered?

This Performance Measure will be revised to reflect the merging of separate plans. The Mobile Fleet Security Plan has already been incorporated into the Facility and Infrastructure Security Plan. The Continuity of Operations Plan has been included into the NDOT State Level Emergency Operations Plan. The District Level Emergency Operations Plan and the Southern Nevada Evacuation Plan have also been merged into the State Level Emergency Operations Plan. Performance Measure 11 will be modified, beginning with the next reporting period, to reflect these changes.

Will meeting the next yearly target have a fiscal impact? If so, explain.

No fiscal impact is anticipated.

12. REDUCE FATAL CRASHES

Performance Measure:

Number of fatalities on Nevada's streets and highways.

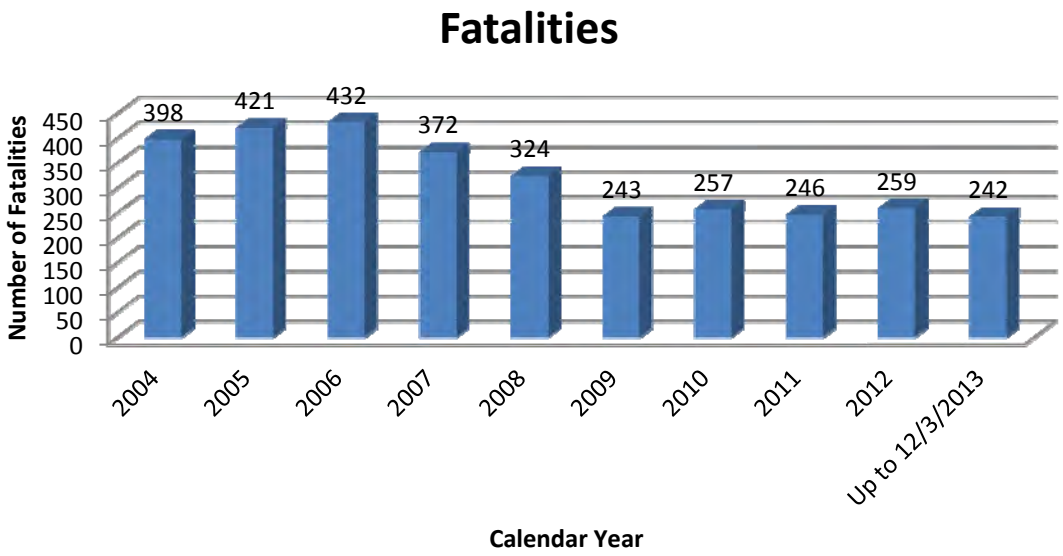
Annual Target: Average annual decrease of the five-year rolling average by 3.1% resulting in halving traffic fatalities and serious injuries by 2030

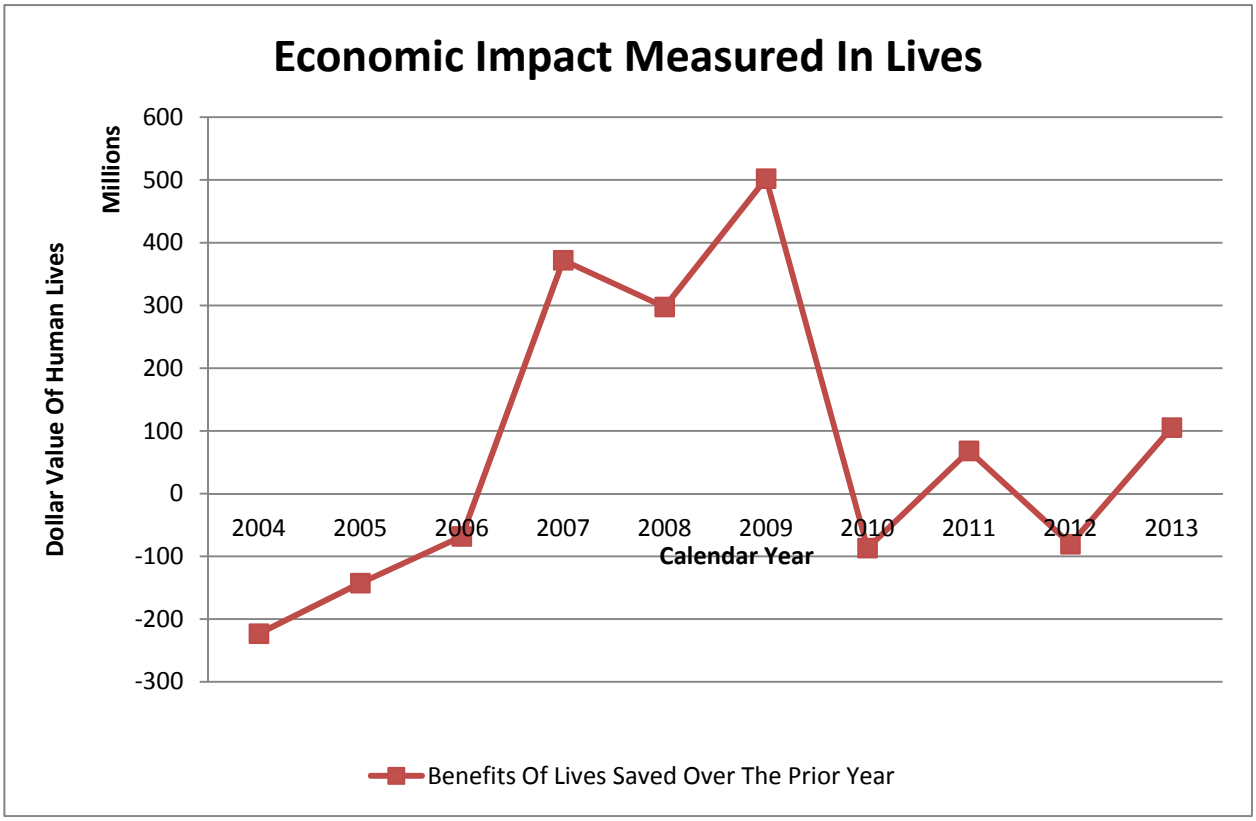
Ultimate Target: Zero

- **Measurement and Supporting Data:**

Calendar Year	Number of Fatalities	Benefits Of Lives Saved Over The Prior Year (Millions of Dollars)	Actual Five-Year Rolling Average Number of Fatalities	Pre-Set Target Five-Year Rolling Average
2009	243	$502.2	360	
2010	257	-$86.8	326	
2011	246	$68.2	288	288
2012	259	-$80.6	266	279
2013	242	$105.4	249	270
2014				262
2015				254
2016				246

2013 Fatalities are to date as of 12/3/2013.





Based on USDOT guidance memorandum "Treatment of Value of Life and Injuries in Preparing Economic Evaluations" with numbers adjusted by GDP to a 2011 value of $6.2 million per fatal accident avoided.

Strategies for Improvement:

Short range to next reporting:

- Continue the State's five-year Strategic Highway Safety Plan (SHSP) implementation.
  - Promote Zero Fatalities to the public (the fifth E of safety, everyone)
    - www.zerofatalitiesnv.com website
    - Media
    - Grassroots Marketing
  - Safety Summit to be held in Reno in 2014
  - Expand the Road Safety Audit (RSA)program by completing the mitigations database and tracking tools associated with the RSA program.
  - Continue to invest NDOT's safety funds on strategies identified in the SHSP
    - Implement cost effective improvements to keep vehicles in their lane
    - Analyze crash data to locate sites with a high number of run-off-road crashes and install shoulder and centerline rumble strips
    - Expand the systemic safety program beyond centerline rumble strips
      - Flashing Yellow Arrows, Roundabouts, median cable rail projects
    - Perform pedestrian corridor studies to identify engineering improvements for inclusion in future projects.
    - Follow the principles of access management
    - Implement geometric intersection improvements

- Cooperate with and support the Office of Traffic Safety's efforts with public education programs for TV/radio 'spots' to increase safer behavior by the public and their "Joining Forces" campaign with Law Enforcement.

- Continuing the safety capacity building initiative to grow the safety discipline throughout Nevada by (a) developing stronger ties to our universities and (b) rolling out the Highway Safety Manual to transportation safety professionals throughout the state

Long range:

- Introduce new safety mitigations to Nevada for assessment and adoption into policy.
- Participate in the development and expansion of the Traffic Incident Management program in order to efficiently manage traffic crashes.
- Bring safety to the planning process as a quantitative measure.

Was the annual target met? Yes.

What 'Strategies for Improvement' were successful?

NDOT has been targeting run-off-the-road crashes and has found success by coordinating safety improvements with NDOT roadway projects by (a) incorporating median cable barrier into NDOT projects currently under design (b) identifying safety improvements in the planning process through NDOT's Road Safety Audit program and (c) identifying slope flattening locations for future projects (d) the Department adopting the use of the "safety edge" as a standard practice. The Department has established a Traffic Incident Management (TIM) program in cooperation with Southern Nevada RTC, Nevada Highway Patrol and emergency responders to efficiently manage traffic crashes in the Las Vegas area. The TIM program is now underway in northern Nevada. Safety messages are now being coordinated statewide through the SHSP Strategic Communications Alliance (SCA). Safety partners throughout the state now have a messaging calendar so each partner will be speaking about the same issue at the same time, thereby amplifying the message.

What 'Strategies for Improvement' were not successful? Why?

In general, strategies implemented by NDOT and our safety partners appear to be effective in reducing the number of fatalities. Two strategies, primary seatbelts and automated enforcement were not approved by the legislature in 2011 and were not even considered in the 2013 legislature, therefore cannot be implemented as identified in the SHSP. The primary seat belt law may come back up in the next legislative cycle. Staffing resources at all agencies are always a challenge, with more staffing resources available, strategies for improvement would be more quickly, comprehensively, and effectively implemented.

What new 'Strategies for Improvement' will be initiated in FY2014?

Short range to next reporting:

Given the relatively short duration for implementation of our low cost engineering strategies, the Safety Division does not contemplate revising our short term strategies. We will continue to implement strategies identified in the Strategic Highway Safety Plan and work closely with our safety partners to continue to reduce the frequency of fatal crashes.

Long range:

Implement the updated Nevada Strategic Highway Safety plan's strategies, many of which may be short term for specific locations, but long term for their aggregate effect of implementing them in enough locations to drive down the fatal and injury numbers. Those improvements as noted above that are provided to NDOT Planning and those for our five-year project list (such as slope flattening) will take a longer timeframe for realization. The States Zero Fatalities campaign has gained momentum and has reached 50% of the States residence in one form or another in the initial two years. We will be seeking a goal of 75% in market reach in the next 4 years. Safety Engineering is also planning on conducting up to three corridor "Safety Management Plans" each year statewide for the next four years.

Does this performance measure effectively measure what is desired?

No. This measure is an indicator of how the entire State is performing in regards to reducing traffic fatalities. Approximately half of traffic fatalities do not occur on NDOT maintained roadways. The Department cannot achieve the goal without the cooperation and assistance of our partners in the areas of law enforcement, education, emergency medical response and all of the Local Public agencies.

Is there a better performance measure that should be considered?

Yes. If the desire is to measure the NDOT performance then a measure more closely aligned to our program and that can be directly influenced by this Department should be considered.

Will meeting the next yearly target have a fiscal impact? If so, explain.

Yes. The Department will continue to spend funds for improving the safety of the State's transportation system. We will also continue working with our partners to take advantage of opportunities to reduce the severity and frequency of motor vehicle crashes throughout the State. Every life saved and serious injury avoided lessens or eliminates the cost to the families whose lives would have been affected as well as reduces the need for response by law enforcement, emergency medical services, and trauma centers.

13. STREAMLINE PROJECT DELIVERY: SCHEDULE AND ESTIMATE FOR BID ADVERTISEMENT

Performance Measure:

This performance measure has been established as the percentage of scheduled projects advertised within the reporting year and the percentage of scheduled projects within the established construction cost estimate range. The established construction cost estimate range was established at the same time and is +/- 15% of the engineer's estimate of construction costs.

The performance measure incorporates the majority of projects advertised by the Department. Contracts handled through the districts and maintenance sections were not included as they are developed through a separate process than then typical transportation project. Capital improvement projects completed by the Architecture Division were also excluded from this performance measure.

The list of scheduled projects was established early during the yearly reporting period of October 1 – September 30. This reporting period for the performance measure was established to match the federal fiscal year. A large percentage of the Department's program is delivered using federal funds. The Department strives to use all available federal funds every year. Being able to meet the federal obligation authority limits every year is a goal of the Department. Doing so, enables the Department to request and in most cases receive additional obligation authority, allowing us to spend more federal funds and therefore produce more projects for the state.

Annual Target: 70% **Ultimate Target:** 80%

Strategy Plan Support:

This performance measure works towards meeting the Department of Transportation Strategic Plan goals by providing timely and beneficial construction projects. This measure helps to optimize safety for road users, be in touch with and responsive to our customers, and efficiently operate the transportation system.

Project Delivery Data:

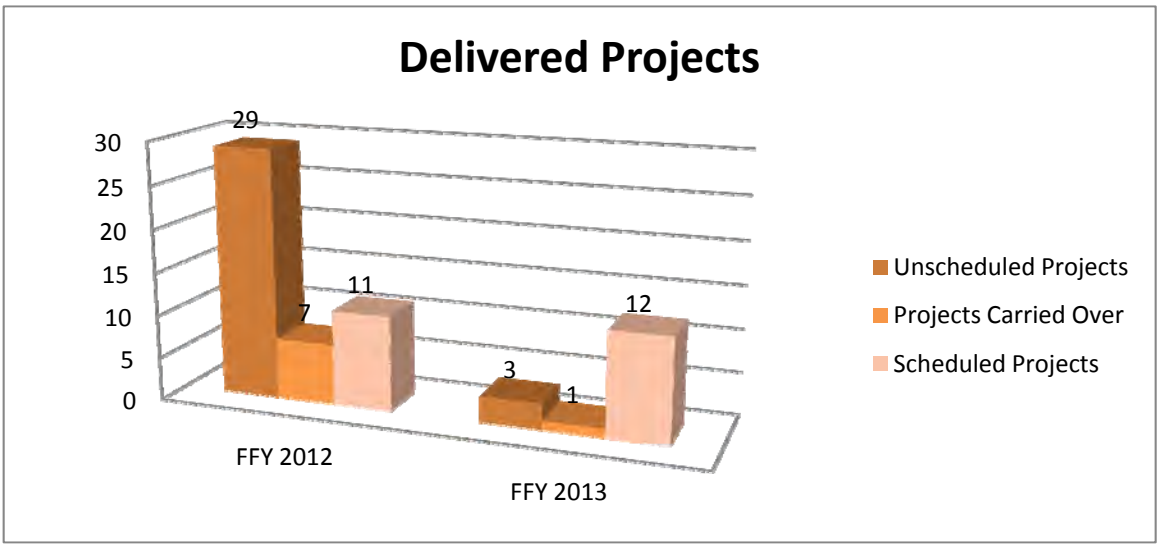
At the beginning of the reporting period, 17 projects were planned/scheduled for delivery, of which 12 were delivered.

Over the course of the reporting period a total of 15 projects were delivered.

- 12 were planned for delivery at the beginning of the reporting period
- 3 were not planned
  - 1 was a project carried forward from the previous reporting period. It was obligated in FFY2012 but did not Advertise until FFY 2013
  - 1 was a contingency project that was delivered once funding was identified
  - 1 was an emergency project to repair a damaged road

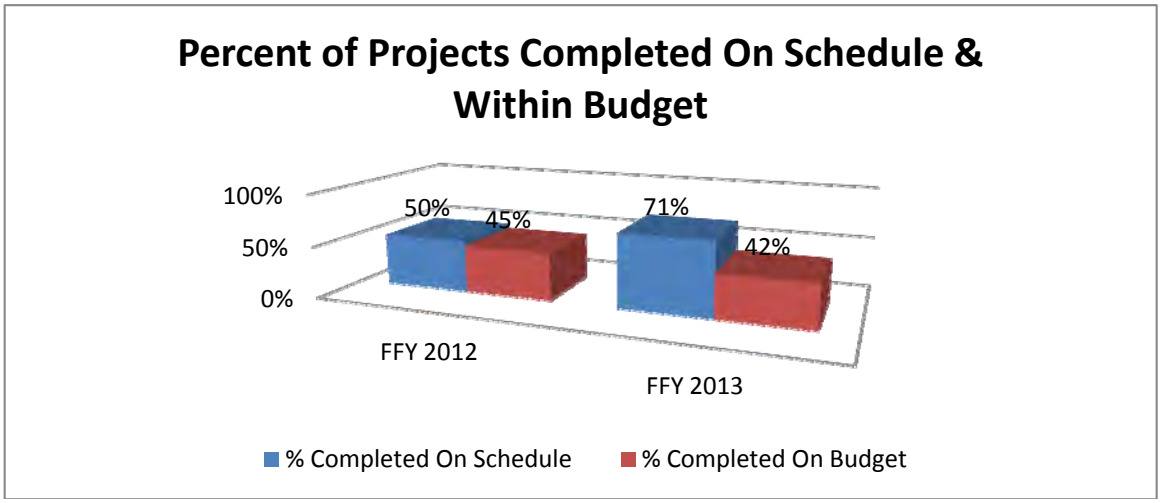
Over the course of the reporting period, 12 planned and delivered projects were measured for performance within the established construction cost estimate range, of which;

- 5 projects were within the range of +/- 15% of the engineer's estimate of construction costs.
- 7 projects were not within the range of +/- 15% of the engineer's estimate of construction costs.
  - 3 of the 7 projects included work that was planned under a scheduled project but was broken out to better accommodate the construction activities of the scheduled project or because of the alternative delivery method, CMAR.



Measurement and Supporting Data:

The established list of scheduled projects included 17 projects. Of the 17 projects, 12 projects (71%) were advertised within the reporting year. Of the 12 projects that were scheduled and delivered for this reporting year, 5 projects (42%) were delivered within the established construction cost estimate range.



Were the annual targets met?

The delivery target of 70% of scheduled projects was met this year with a performance of 71%.

The cost estimate target of 70% of delivered projects within +/- 15% of the engineer's estimate was not met this year with a performance of 42%.

Although we met our performance for project delivery, the projects that did fail were delayed due to either right of way or environmental impacts.

There are a couple apparent factors contributing to the failure of meeting our cost estimate target. One cause was the re-packaging of the Carlin Tunnels project once a CMAR delivery was identified. The project estimated construction cost at the time the performance list was established was not available for each package and therefore the full package estimate was entered for both packages.

Another reason that the cost estimate target was not met is that several of the projects estimates were not updated in PSAMS. Or bid item costs were revised to reflect the effects of quantities, location or difficulty on the prices much later in the project development.

What new "Strategies for Improvement" will be initiated?

Short range for next reporting period:

- Continue to document reporting criteria and establish clear definitions for the criteria
    - Document if cost estimates are risk based
- Establish consistent construction project cost estimate elements for cost comparison
- Establish a second measurement data point for the construction project cost estimate at time of bid for cost comparison to the award price.
    - Establish standard cost estimate milestones for alternative delivery (i.e., CMAR & DB)
- Continue to coordinate with all impacted divisions to establish list early
- Continue working with impacted divisions on establishing the 5 year plan
    - Identify projects earlier
    - Prioritize projects for resource management
    - Prioritize projects to meet funding levels
- Continue to monitor project progress through monthly status meetings to identify and address risks to schedule
- Continue to coordinate with all impacted divisions to verify project cost estimates early
- Continue to coordinate with all impacted divisions to have PSAMS data updated
- Evaluate the performance measure target levels for both the construction cost estimate and project delivery schedule performance

Long range:

- Review contingency and risk factors and evaluate impacts to project schedule and cost estimates
- Standardize contingency and risk factors
- Establish process for early price checks of project cost estimates
- Use Scoping effort to improve scope of work, estimate and schedule of projects
- Incorporate planning and environmental efforts into project development
- Incorporate Betterment projects into the performance measurement
- Use the 5 year plan to
    - Identify projects earlier
    - Prioritize projects for resource management
    - Prioritize projects to meet funding levels

Does this performance measure effectively measure what is desired?

The performance measure provides a measure of how well we are doing at producing projects within the year. It does not identify where the issues are. However, the documentation done during the tracking of the performance measure should help identify where there are issues in the process. For next year's performance measurement we are adding construction cost estimate at time of bid to compare to the awarded estimate. From there, the Department can develop and/or modify processes or procedures to improve those areas. The performance measure can then be used to evaluate the effectiveness of the changes.

Is there a better performance measure that should be considered?

There does not appear to be a better performance measure at this time but we feel there are some adjustments to the tracking data that can be made to add value to the performance measure.

The initial construction cost estimates established at the beginning of the reporting period are at various levels (i.e., planning, 30%, 60%, 90% and final engineers estimate) and therefore it is difficult to make an "apples to apples" comparison with the award estimate and determine the true performance issues. We are introducing the construction cost estimate at time of bid as a second performance measurement criterion. This second data point will help give us a consistent comparison to the award price and a measurement of our cost estimate development performance during the design of a project.

For the FFY 2014 reporting period we have established separate performance measure criteria for the construction cost estimate documented at the beginning of the reporting period and for the engineers estimate at bid. The construction cost estimate at the beginning of the reporting period will have a measurement criterion of +/- 25% of the award estimate. The engineers estimate at bid will have a measurement criterion of +/- 15% of the award estimate. The FFY 2014 annual and ultimate targets of 70% and 80% respectively will apply to both of the cost estimate targets as well as the scheduled advertised projects.

Will meeting the next yearly target have a fiscal impact? If so, explain.

Yes. We can produce more projects than can be funded.

14. MAINTAIN STATE BRIDGES

Performance Measure:

Number of Department owned bridges which are eligible for federal funding and are categorized as Structurally Deficient (SD) or Functionally Obsolete (FO).

Summary:

Base figure is 37 of 1045 bridges (*State Highway Preservation Report – 2007)*. Prior to MAP 21, eligibility and priority for funding projects under the Federal Highway Bridge Program (HBP) was based on a bridge's Sufficiency Rating. The Sufficiency Rating is a numerical assessment of a bridge's serviceability and is based on condition assessment inspection and inventory data. Its value varies from 0 to 100, with 100 representing no deficiencies. Previously, under the HBP, a bridge was eligible for replacement when its Sufficiency Rating was less than 50 and was eligible for rehabilitation when its Sufficiency Rating was less than or equal to 80. In addition to meeting the Sufficiency Rating requirement, a bridge also had to be classified as either Structurally Deficient or Functionally Obsolete. (A bridge is considered Structurally Deficient when key elements reach an established level of deterioration. A bridge is considered Functionally Obsolete when it no longer adequately serves either the road it carries or the undercrossing route.) Additionally, seismic retrofit and scour mitigation activities were eligible activities under the HBP program. MAP 21 combined the HBP program with other funding categories; however, the criteria previously used in the HBP program are still relevant factors to consider when prioritizing potential bridge projects.

Annual Target:

Replace or rehabilitate at least one Department owned SD or FO bridge annually. The goal is evaluated based on the contracts awarded in a given calendar year. Tables have been included to allow for ease of tracking. The tables do not include structures that are subject to routine preservation and maintenance (such as expansion joint replacement, repair of deck cracking, etc.) activities included in 3R or District Betterment projects

Ultimate Target: Zero.

TRACKING OF PROJECTS THAT MEET PERFORMANCE MEASURE CRITERIA:

Year	Target Met Y-N/# of Bridges	Structure #'s	County	Contract #	Description of Work/Comments
2008	Yes/1	B-89	CL	3360	Replacement of Bunkerville Br.
2009	Yes/1	H-788	CL	3366BD	Replacement of Wm Springs Br. (FO)
2010	No	-	-	-	-
2011	No	-	-	-	3476 bid rejected
2012	Yes/4	G-884 E/W G-885 E/W	EU	3525	Rehab & Seismic retrofit
2013	Yes /2	B-1066 E/W	EL	3540	Carlin Retrofit- remove from FO list.
2014	Expected to/3	B-395 G-324	EU	-	Replace bridges on FREU 02 @ Dunphy. Scheduled Doc 11/13.
		G-29*	PE	-	Removal of off-system SD bridge (No Replacement) Scheduled Doc 6/14
2015	Expected to/1	B-100	CH	-	Replace SD bridge on SR 115. Scheduled Doc 11/14.

*Removal of SD bridge included in Performance Measure Tracking

TRACKING OF PROJECTS THAT DO NOT MEET PERFORMANCE MEASURE CRITERIA:

Year	# of Bridges	Owner	Structure #'s	County	Contract #	Description of Work/Comments
2008	-		-	-	-	-
2009	-		-	-	-	-
2010	-		-	-	-	-
2011	2	NV	I-843 E/W	WA	3443	I-80 Seismic retrofit
	1	NV	I-1452	CL	3445	I-515 Seismic retrofit
	1	EL	B-1942	EL	3459	Replace S. Fork Owyhee River Br
	2	NV	I-975N/S	CL	3447DB	Replace I-15 Bridges (Not SD or FO)
2012	1	CH	B-1592	CH	3515	Replace Alcorn Rd Br
	16	NV	Various	HU	3524	Rehab structures and seismic retrofit (some) of I-80 structures in Winnemucca.
	2	NV	G-927 E/W	EL	3461	Rehab & Seismic retrofit. I-80 Bridges. Not SD.
2013	1	EL	B-1662	EL	3538R	Replace Mary's River Br. Contract completed Nov, 2013.
	6	NV	B-1111, 1112, 1113 E/W	EL	3540	Seismic Retrofit/Rehab of I-80 bridges @ Carlin Tunnel. Contract awarded 5/13.
2014	2		I-1773, I-1774	WA	-	Seismic retrofit of I-580 Airport Ramps. (I-1774 is FO) Scheduled Doc 4/14.
	1	Reno	B-178	WA	-	Virginia St. Br replacement. Scheduled Doc 8/14.
2015	4	NV	H-948, G-949, G-953, I-956	CL	-	Seismic Retrofit of I-15 structures. Scheduled Doc 11/14.
	1	NV	B-1351	WA	-	Scour mitigation of B-1351 at Truckee River on SR 447 near Nixon. Scheduled Doc 11/14.
	1	LY	B-1610	LY	-	Replace SD off-system Nordyke Rd Bridge. Scheduled Doc 11/14.
	7	NV	I-1261, I-812	WA,DO	-	Seismic retrofit, scour

			N/S, B-1262 N/S, B-1263 N/S			and rehab of multiple structures on US 395. Scheduled Doc 11/14.
	1	HU	B-1658	HU	-	Replace Eden Valley Rd Br @ Humboldt River. Scheduled Doc 1/15
	4	NV	B-764 E/W, G-772 E/W	WA	-	Scour mitigation at I-80 bridges at Truckee river. Scheduled Doc Date 1/15.

A table has been included in order to provide historical reporting of SD and FO bridges.

	TOTAL STATE OWNED BRIDGES	**STATE SD BRIDGES**	**STATE FO BRIDGES**	**COMMENTS**
2006 BASELINE	1045	20	17	2007 Data.
2008	1056	20	30	2009 Data. The increase in the number of FO bridges was due to refined inspection methods for measuring lateral underclearance.
2010	1064	18	24	2011 Data.
2012	1116	19	28	2013 Data.

NOTES:

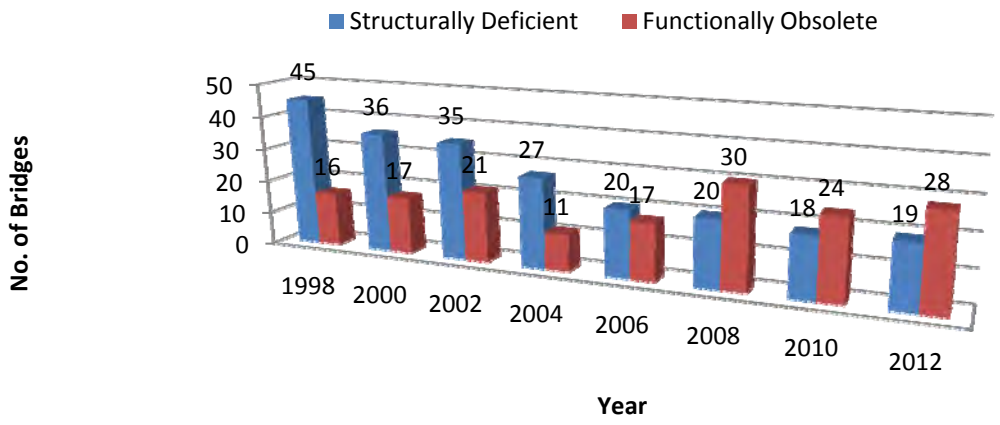
(1) Bridge counts shown are based on the number of SD and FO bridges as reported in the NDOT State Highway Preservation Report. This report is published every 2 years.

Descriptions of Structurally Deficient and Functionally Obsolete bridges from the 2013 Nevada State Highway Preservation Report are included below for information.

A bridge is considered Structurally Deficient (SD) when significant load-carrying elements are found to be in poor condition, has insufficient load carrying capacity and may have weight limits posted to remain in service, or may be more susceptible to flooding with significant traffic impacts.

A bridge is considered Functionally Obsolete (FO) when the original design geometrics such as shoulder width, land width, lateral clearance and vertical clearance do not meet current standards. FO bridges may be more susceptible to congestion, collisions, or flooding because of the restrictive clearances and geometrics.

Due to the fact that these terms cause undue concern, FHWA is considering changing the terminology. These terms do not imply that the bridge is unsafe. Safety and maintenance concerns are identified during regularly scheduled inspections.



Strategy Plan Support:

This performance measure works towards meeting the Department of Transportation Strategic Plan goals to: Optimize safety, Innovate, Deliver timely and beneficial projects and programs, and effectively preserve and manage our assets. These goals can be met in the following ways: Safety for the motoring public will be optimized by replacing structurally deficient and rehabilitating functionally obsolete bridges. The Bridge Division will seek and implement innovative solutions to the challenges faced by the Bridge Program. The Division will deliver timely and beneficial bridge projects and programs. Meeting this performance measure will help effectively preserve and manage Department assets.

Measurement and Supporting Data:

In FY 2007 – There were 37 State owned bridges in Nevada that were Structurally Deficient or Functionally Obsolete and were eligible for federal funding. Additionally, there were 34 bridges needing repair/replacement owned by local agencies that were also eligible for federal funding. Please refer to the table above for additional data.

Strategies for Improvement:

Short range to next reporting:

Evaluate programmed projects for possible preservation actions, corrective maintenance and risk reduction activities and include these activities into project scope as appropriate.

NDOT Bridge Division provides information regarding state bridge policies and practices to local agencies in order to cooperate with and assist them.

Long range:

Perform bridge rehabilitation and replacement as allowed under the MAP 21 program. Continue to consider previous criteria used to establish eligibility under the previous HBP program, and utilize preservation strategies to extend performance and serviceability of elements commonly causing deterioration of structures. These include repairs such as deck repair/replacement, deck overlays, replacement of bridge joints, fatigue crack repair and repainting of steel structures. Maintain seismic retrofit program and scour mitigation program to minimize risks from these extreme events.

Seek additional funds to reduce the time frame of eliminating structurally deficient or functionally obsolete bridges, which is estimated to take at least 37 years with present funding level, based on the current number of Deficient bridges. At current funding levels, this time frame will increase as Nevada's bridges age and the number of bridges categorized as structurally deficient or functionally obsolete increases.

ANNUAL EVALUATION OF PERFORMANCE MEASURE

Was the annual target met? The target is expected to be met.

What 'Strategies for Improvement' were successful?

The current strategies have had mixed success when considering the annual goal established in October 2010. Originally, the goal of replacing/rehabilitating 1 bridge biennially was successful.

What 'Strategies for Improvement' were not successful? Why? N/A

What new 'Strategies for Improvement' will be initiated in FY2013?

Short range to next reporting:

Additional short range strategies beyond those stated have not been identified.

Long range:

Additional long range strategies beyond those stated have not been identified.

Does this performance measure effectively measure what is desired?

Yes. The performance measure does allow tracking of the state owned SD/ FO bridges.

Is there a better performance measure that should be considered?

No. Use of a percentage based measurement (as some states use) was considered. A percentage based measure could show a decrease in SD/FO bridges (thus an improvement), as new structures are added to the inventory. This could occur with no decrease in the actual number of SD/FO bridges; therefore, the numerical based measure is viewed as superior.

Will meeting the next yearly target have a fiscal impact?

Not at this time. The performance measure was established based on the current revenue. As the bridges age and deteriorate and the infrastructure grows, additional structures will become SD and/or FO, increasing the number of these structures in Nevada's inventory.

15. STREAMLINE PERMITTING PROCESS

Performance Measure:

Percentage of permits issued or rejected within 45 days of receipt.

Ultimate Target: 95% **Annual Target:** 95%

Measurement and Supporting Data:

We exceeded the targeted performance measure for this year of 95%, for this fiscal year by processing 98.43% of all permits statewide.

Overview of Performance Measure:

The Performance Measure identified for the R/W Division was to process 95% of encroachment permits within 45 days. The development of Transportation Policy (TP) 10-1-3 ENCROACHMENT PERMIT PROCESSING TIME SCHEDULE set a 45 working day process for all accepted encroachment permit applications.

Were the targets met?

Yes. As stated above, we processed 98.43% of all permits accepted. The year-end performance measure for each district is as follows: District 1 achieved 97.70%, processing 298 permits, District 2 achieved 99.16% while processing 119 permits, and District 3 achieved 100% while processing 83 permits.

What 'Strategies for Improvement' were successful?

The development of the Encroachment Permit TP and its 45 working-day requirement allowed the Department to address several issues that have resulted in significant improvement to the time necessary to process encroachment permits. The pre-audit of all permits has been successful in resolving issues prior to submittal. This allows us to resolve issues outside of the processing of permits that could have caused us to reject permits in the past. The simultaneous review of permits by all affected divisions continues to improve the processing time.

Lastly, the number of permits accepted has significantly changed. In fiscal year 2009/2010 a total of 484 permits were accepted. In fiscal year 2010/2011 the number of permits accepted increased from 484 to 673 or 39%. For fiscal year 2011/2012 the number of permits accepted increased by 22% to 822. For fiscal year 2012/2013 a total of 776 were accepted a decrease of 5.6% from the previous year. From Fiscal year 2009/2010 through Fiscal Year 2012/2013 the total number of permits accepted by the Department has increased approximately 60%.

The Encroachment Permit Process is a key component of IRWIN. The complete implementation of the IRWIN system as of October 1, 2011, has improved flow through the review process and will provide up to date and accurate reporting. It is critical that all Districts continue to use IRWIN and keep the information as up to date as possible. There is no anticipated direct fiscal impact for next year.

Does this performance measure effectively measure what is desired?

Yes. The goal was to have 95% of all accepted applications processed within 45 working days. Information Services has provided a tool for providing this information utilizing the data from the present Encroachment Permits Intranet System.

Is there a better performance measure that should be considered?

No, this performance measure is the most applicable and is effective.

Will meeting the next yearly target have a fiscal impact? If so, explain.

There is no anticipated direct fiscal impact for next year.

Was the annual target met?

Yes.

Targets for Next Three Fiscal Years:

FY14: 95%

FY15: 95%

FY16: 95%

STATE HIGHWAY FUND ANNUAL REVENUE AND EXPENDITURES

STATE HIGHWAY FUND ANNUAL REVENUE AND EXPENDITURES

Assembly Bill 595 in the 2007 Legislative Session included the requirement for the Department to report on the funding sources, amount and expenditures (Section 47.2). There is an annual report entitled "Highway Special Revenue Fund" Financial Schedules for State Fiscal Year ending June 30, 2013. The following three tables provide the required information:

1) Schedule of Revenues and Receipts – Budgetary Basis
2) Comparative Schedule of Expenditures and Disbursements – Budgetary Basic
3) Highway Fund Balance – Budgetary Basis

The first table reports that total FY 2013 revenues into the State Highway Fund were approximately $909 million while the second table contains the total FY 2013 actual expenditures, which were approximately $907 million. These two tables also include other detailed financial data about transportation-related revenues and expenditures.

The third table indicates that the Highway fund balance decreased from approximately $275.6 million in FY 2011 to $134.0 million FY 2012.

State of Nevada
Highway Special Revenue Fund
Schedule Of Revenues And Receipts - Budgetary Basis
For The Years Ended June 30, 2013 and 2012
(In thousands)

	2013	2012
State user taxes		
Gasoline taxes	$ 185,651	$ 185,171
Motor vehicle fees and taxes		
Vehicle registration & bicycle safety fees	102,119	99,815
Motor carrier fees	36,729	38,542
Drivers license fees	18,696	19,014
Special fuel taxes	80,913	79,198
Total motor vehicle fees and taxes	238,457	236,569
Total state revenue	424,108	421,740
Federal Aid reimbursement		
Department of Interior	(40)	-
Federal Aviation Administration	253	225
Federal Emergency Management Administration	-	109
Federal Highway Administration	342,743	455,833
Federal Rail Administration	-	545
Federal Transit Administration	7,817	9,941
Total Federal Aid	350,773	466,653
Miscellaneous receipts		
Departments of Motor Vehicles & Public Safety authorized revenue	48,852	46,956
Appropriations from other funds	242	(56)
Proceeds from sale of bonds	-	-
Agreement income	36,093	13,038
Interest	324	351
Sale of surplus property	17	78
AB595 property tax	19,481	13,539
AB595 bond revenue	10,605	56,180
Other sales & reimbursements	18,506	20,639
Total miscellaneous receipts	134,120	150,725
Total revenue and receipts - budgetary basis	$ 909,001	$ 1,039,118

State of Nevada
Highway Special Revenue Fund
Comparative Schedule of Expenditures and Disbursements - Budgetary Basis
For the Fiscal Year Ending June 30, 2013 and 2012
(In thousands)

	2013			2012
	Budgeted	Actual Using Budgetary Basis	Variance Favorable (Unfavorable)	Actual Using Budgetary Basis
Department of Transportation				
Labor	$ 131,036	$ 123,775	$ 7,261	$ 120,419
Travel	2,181	1,884	297	2,209
Operating	66,502	60,751	5,751	61,870
Equipment	8,654	4,891	3,763	3,655
Capital improvements	640,226	455,852	184,374	722,800
Bond expenditures	-	-	-	-
Other programs	14,613	10,236	4,377	10,051
Total operations	863,212	657,389	205,823	921,004
Cost of fuel sold to other agencies	3,885	3,568	317	3,821
Total Department of Transportation	867,097	660,957	206,140	924,825
Department of Motor Vehicles (see Note 2)	116,357	85,520	30,837	89,686
Department of Public Safety (see Note 2)	93,701	76,452	17,249	76,092
	210,058	161,972	48,086	165,778
Appropriations to other funds				
Board of Examiners	-	-	-	-
Transportation Services Authority	2,454	2,328	126	2,512
Public Works Board	653	552	101	601
Traffic Safety	224	177	47	188
Investigations	365	363	2	355
DMV Training Division	799	791	8	668
Legislative Counsel Bureau	5	-	5	-
Dept of Information Technology	-	-	-	-
Total appropriations to other funds	4,500	4,211	289	4,324
Other disbursements				
Transfer to bond fund	84,000	79,788	4,212	80,483
Total other disbursements	84,000	79,788	4,212	80,483
Total expenditures & disbursements - Budgetary basis	$ 1,165,655	$ 906,928	$ 258,727	$ 1,175,410

NEVADA DEPARTMENT OF TRANSPORTATION
HIGHWAY FUND BALANCE (BUDGETARY BASIS)
STATE FISCAL YEARS 2010-2012

	ACTUAL FISCAL YEAR FY 2010	ACTUAL FISCAL YEAR FY 2011	ACTUAL FISCAL YEAR FY 2012
BEGINNING FUND BALANCE:			
GENERAL OBLIGATION BONDS	$20,625,730	$0	$0
OTHER HIGHWAY FUND	239,886,424	258,396,000	275,621,000
TOTAL BEGINNING FUND BALANCE:	**$295,089,000**	**$258,396,000**	**$275,621,000**
ADD:			
REVENUES	$988,709,170	$1,084,340,578	$1,039,119,285
BOND PROCEEDS	0	0	0
TOTAL ADDITIONS:	**$988,709,170**	**$1,084,340,578**	**$1,039,119,285**
DEDUCT:			
DEPT OF TRANS. NON-BOND EXPENDITURES	$723,281,850	$806,965,179	$924,297,994
DEPT OF TRANS. BOND EXPENDITURES	20,625,730	0	0
EXP. & APPROP TO OTHER AGENCIES	269,326,599	256,117,259	251,112,645
TOTAL DEDUCTIONS:	**$1,013,234,178**	**$1,063,082,438**	**$1,175,410,639**
ADJUSTING ENTRIES:			
CONTROLLERS OFFICE CAFR(1) ADJUSTMENTS	-$12,167,991	-$4,033,140	-$5,331,646
TOTAL ADJUSTING ENTRIES:	-$12,167,991	-$4,033,140	-$5,331,646
ENDING FUND BALANCE:			
GENERAL OBLIGATION BONDS	$0	$0	$0
OTHER HIGHWAY FUND	215,694,432	275,621,000	133,998,000
TOTAL ENDING FUND BALANCE:	**$258,396,000**	**$275,621,000**	**$133,998,000**

MAJOR PROJECTS ANNUAL STATUS REPORT

TYPICAL PROJECT DEVELOPMENT PROCESS

The Department's project development process typically consists of four major phases: planning, environmental clearance, final design, and construction. These phases are described in more detail below. The development process is based on federal and state laws and regulations, engineering requirements, and a departmental review and approval process. This appendix provides an overview of the four phase process, identifies major milestones within the phases, and describes the information developed during each phase.

Project Planning Phase

In this phase the project needs are analyzed and conceptual solutions are developed. Project descriptions, costs, and schedules are broadly defined. The planning phase typically addresses such issues as number of lanes, location and length of project, and general interchange and intersection spacing. The intent of this phase is to develop the most viable design alternatives, and to identify the best means to address risks and uncertainties in cost, scope and schedule.

Environmental Clearance Phase

For the environment clearance phase, major projects are subject to the National Environmental Policy Act (NEPA) to address potential social, environmental, economic and political issues. During this phase studies are conducted to define existing conditions, and identify likely impacts and mitigations so the preferred design alternative is selected from among the various alternatives. In this phase the project scope is more fully defined, right-of-way issues are generally identified, project costs and benefits are estimated, and risks are broadly defined. Finally, a preliminary project schedule is determined. At the conclusion of this phase, major projects are divided into smaller construction segments to address project's social, environmental, economic and political issues as well as funding availability and constructability.

Final Design Phase

During this phase, the design of the selected alternative identified during the environmental clearance phase is finalized. In this phase the project scope is finalized, a detailed project design schedule and estimate is developed, and project benefits are fully determined. The right-of-way requirements are also determined and acquisition is initiated. Additionally, utilities relocation is initiated toward the end of the final design phase. At the end of this phase the project design and cost estimate are complete and the project is advertised for construction.

Construction phase

During this phase projects are constructed based on the final design plans. Depending on the nature of the project, utilities relocation might occur during early stages of this phase. Due to the complexity of major projects, a detailed construction schedule, traffic control plans, and environmental mitigation strategies are developed in consultation with the selected contractor.

PROJECT STATUS SHEET EXPLANATION

The information contained on the project status sheet is centered on the Department's project development process. This process typically consists of the four major phases: planning, environmental clearance, final design and construction. Additional details of these phases are contained in Appendix A, which details the project development process utilized by the Department of Transportation. The project status sheets contain several items of information as follows:

Project Description: Contains the preliminary project scope, which generally identifies features of the project i.e. length, structures, widening, and interchanges, and directs the project development process.

Project Benefits: Summarizes the primary favorable outcomes expected by delivering the project.

Project Risks: Indentifies the major risks that might impact project scope, cost, and schedule. Unforeseen environmental mitigation, right-of-way litigation, and inflation of construction materials or land values are only a few items that can adversely effect project development. Appendix B, Dealing with Project Risk, provides more details.

Schedule: Provides the time ranges for the four primary phases of project development: planning, environmental clearance, final design, and construction. Generally the schedule, by state fiscal years, reveals the time range for starting or completing a phase. It indicates the starting range early in the development process and completion range latter in the process. Appendix B, Dealing with Project Risks, provides more details concerning the time ranges.

Project Costs: Project cost ranges are provided by activity: 1) engineering activities that includes planning, environmental clearance and final design costs, 2) right-of-way acquisition, and 3) construction. Costs are adjusted for inflation to the anticipated mid-point of completing a phase. Appendix B, Dealing with Project Risks, provides more detail on the range of project cost estimates.

What's changed since last update? Contains summaries of the project scope, cost, and schedule changes, if any.

Financial Fine Points: Includes the total expended project costs and brief summary of financial issues.

Status Bars at the Bottom of the Form: Shows the percentage completion for the primary project development activities that are in progress: planning, environmental clearance, final design, right-of- way acquisition, and construction.

MAJOR PROJECTS SUMMARY SHEETS

	Project Number
I-15 Projects	
I-15 North Phase 2 Package A - Craig Road to Speedway Boulevard	1
I-15 North Phase 2 Package B - Craig Road to Speedway Boulevard	2
I-15 North Phase 2 Package C - Craig Road to Speedway Boulevard	3
I-15 North Phase 2 Package D - Craig Road to Speedway Boulevard	4
I-15 North Phase 2 Package E - Craig Road to Speedway Boulevard	5
I-15 North Phase 3 - Speedway Boulevard to Apex Interchange	6
I-15 North Phase 4 - I-15/CC-215 Northern Beltway Interchange	7
I-15 NEON P3 - I-15 Desert Inn Road	8
I-15 Urban Resort Corridor Study	9
I-15 South Bermuda Road Interchange	10
I-15 South Pebble Road Overpass	11
I-15 South Starr Avenue Interchange	12
I-15 South Cactus Avenue Interchange	13
I-15 South Las Vegas Boulevard from St. Rose Parkway to Sunset Road	14
I-15 South Phase 2 Sloan Road to Blue Diamond (SR 160)	15
I-15 South Sloan Road Interchange	16
I-15 South - Stateline to Sloan Road	17
I-515/US-95/US93 Projects	
I-515 Freeway Improvements – Rancho Drive to Charleston	18
US-95/US93: Boulder City Bypass Phase 1 Package 2A - Foothill Drive to US-95	19
US-95/US93: Boulder City Bypass Phase 1 Package 2B - Foothill Drive to US-95	20
US-95/US93: Boulder City Bypass Phase 1 Package 3-Foothill Drive to Silverline Road	21
US-95/US93: Boulder City Bypass Phase 2 - US95 to Hoover Dam Bypass	22
US-95 Northwest Projects	
US-95 Northwest Phase 1 - Rainbow Boulevard (SR 595) to Ann Road	23
US-95 Northwest Phase 2A - Ann Road to Durango Drive	24
US-95 Northwest Phase 3 Clark County 215 Interchange	25
US-95 Northwest Phase 5 - Kyle Canyon Road Interchange	26
Northern Nevada Projects	
I-80 – Robb to Vista	27
US-395 North - McCarran Blvd. to Stead Blvd	28
US-395 Northbound - Moana Lane to I-80	29
SR-445 - Pyramid Highway Improvements	30
US-395 Carson City Freeway Phase 2B - S. Carson St. to Fairview Dr.	31
I-580 at Meadowood Mall Way	32

1

I 15 North - Phase 2 Package A

Craig Road (SR 573) to Speedway Boulevard

Project Sponsor: NDOT

Project Manager: Dwayne Wilkinson, P.E.

(702) 671-8879

Project Description:

- Part 2 Package A is one of five construction elements that the I 15 North Phase 2 project has been divided into.
- This project consists of pavement restoration, pavement widening into the median between Craig and Lamb, widening of structures G 958 N and G 958 S, and replacement of the existing right of way fence.
- Part 2 Package A includes the construction of the following improvements:
- Remove & replace PCCP with ACP (Craig to Lamb)
- Construct ACP (Lamb to Speedway)
- Pavement widening into median between Craig & Lamb
- Widen & seismic retrofit for G 958 N & G 958 S and
- ROW fence replacement
- Improvements will be constructed within the existing 1-15 Right-of-Way.
- Project length: 4.8 miles.

Schedule:

Planning:

Complete

Environmental:

Complete

Final Design:

2012 - 2014

Construction:

2015 - 2017

Project Cost Range:

Engineering:

$0.35 - $0.40 M

Right of Way:

$0

Construction:

$13.6 - $ 14.0 M

Total Project Cost:

$ 13.95 - $ 14.4 M

Project Benefits:

- Improve Safety
- Reduce Travel Times
- Decrease Congestion
- Improve Freeway Operations
- Increase life of pavement
- Provide Detour Lanes for Future Corridor Work

What's Changed Since Last Update?

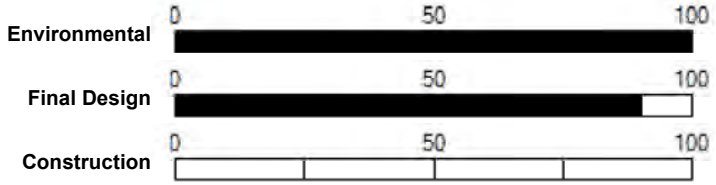
- Scope: Added pavement widening into median between Craig and Lamb, and widening of structures G-958 N and G-958 S
- Schedule: Final Design completion changed and anticipated construction commencement added
- Cost: Construction costs revised to reflect current scope
- I 15 North Phase 2 Project Broken into Packages to Accommodate Funding Limitations

Project risks:

- Uncertainty of Future Construction Materials and Labor Costs
- Funding uncertainty for Construction
- Widen bridges within UPRR and private

Financial Fine Points(Key Assumptions):

- Total funding expended for Package A Construction: $0
- Total funding expended for the Environmental Phase for all five construction elements: $875,000
- Construction inflation escalation (2.7%) is to midpoint of construction



October , 2013

NEVADA DOT

2

I 15 North - Phase 2 Package B

Contract 3526 Under Construction

Craig Road (SR 573) to Speedway Boulevard

Project Sponsor: NDOT

Project Manager: Dwayne Wilkinson, P.E.

(702) 671-8879

Project Description:

- Part 2 Package B is one of five construction elements that the I 15 North Phase 2 project has been divided into.
- Construct ITS elements between Craig Rd to Speedway Boulevard.
- Improvements will be constructed within the existing 1-15 Right-of-Way.
- Project length: 4.8 miles.

Schedule:

Planning:

Complete

Environmental:

Complete

Final Design:

Complete

Advertised:

9/19/2012

Construction:

Completed December 2013

Project Cost Range:

Engineering:

$0.1 M

Right of Way:

$0.0 M

Construction:

$5.5 M

Total Project Cost:

$5.6 M

Project Benefits:

- Improve Freeway Operations
- Improve Safety

What's Changed Since Last Update?

- Scope -No Change
- Schedule -No Change
- Cost -Construction and Total Costs revised to reflect current estimate
- I 15 North Phase 2 Project Broken into Packages to Accommodate Funding Limitations

Project risks:

- Uncertainty of Contingency Costs

Financial Fine Points(Key Assumptions):

- Total funding expended for Package B Construction: $2.02 M
- Total funding expended for the Environmental Phase for all 5 elements: $0.875 M
- Construction escalation (2.7%) is to 2013 approximate midpoint of construction
- Funding source for the project engineering is AB 595 (State).
- Funding source for the project Construction is CMAQ (Federal).

Environmental 0 50 100

Final Design 0 50 100

Construction 0 50 100

October , 2013

NEVADA DOT

I 15 North - Phase 2 Package C

Craig Road (SR 573) to Speedway Boulevard

Project Sponsor: NDOT

Project Manager: Dwayne Wilkinson, P.E

(702) 671-8879

Project Description:

- Part 2 Package C is one of five construction elements that the I 15 North Phase 2 project has been divided into.
- Construct Bridges - widen & seismic retrofit for G-961 N & G-961 S, seismic retrofit only for I-956.
- Improvements will be constructed within the existing 1-15 Right-of-Way.

Schedule:

Planning:

Complete

Environmental:

Complete

Final Design:

2012 - 2014

Construction:

2016 - 2018

Project Cost Range:

Engineering:

$0.16 - $0.2 M

Right of Way:

$0

Construction:

$3.9 - 4.0 M

Total Project Cost:

$4.06 - $ 4.20 M

Project Benefits:

- Improve Safety
- Increase Capacity to Accommodate Projected Local and Interstate Traffic
- Decrease Congestion
- Reduce Travel Time
- Improve Freeway Operations

What's Changed Since Last Update?

- Scope: Structures G 958 N and G 958 S have been moved to Package A
- Schedule: No Change
- Cost: Reduced to reflect change in scope
- I 15 North Phase 2 Project Broken into Packages to Accommodate Funding Limitations

Project risks:

- Uncertainty of Future Construction Materials and Labor Costs
- Funding uncertainty for Construction
- Widen bridges within UPRR and private Right of Way

Financial Fine Points(Key Assumptions):

- Total funding expended for Package C Construction: $0
- Total funding expended for the Environmental Phase for all 5 elements: $875.000
- Construction inflation escalation (2.7%) is to midpoint of construction

Environmental 0 50 100

Final Design 0 50 100

Construction 0 50 100

October , 2013

NEVADA DOT

4

I 15 North - Phase 2 Package D

Craig Road (SR 573) to Speedway Boulevard

Project Sponsor: NDOT

Project Manager: Dwayne Wilkinson, P.E.

(702) 671-8879

Project Description:

- Part 2 Package D is one of five construction elements that the I 15 North Phase 2 project has been divided into.
- This project consists of corridor widening from Craig Rd to Speedway Boulevard from 4 to 6 lanes.
- Improvements will be constructed within the existing 1-15 Right-of-Way.
- Widen 4 bridges over 2 UPRR crossings within UPRR and private Right of Way.
- Project length: 4.8 miles.

Schedule:

Planning:

Complete

Environmental:

Complete

Final Design:

2012 - 2015

Construction:

2016 - 2017

Project Cost Range:

Engineering:

$0.6 -$0.7 M

Right of Way:

$0

Construction:

$25.7 - $29.4 M

Total Project Cost:

$26.3 - 30.1 M

Project Benefits:

- Increase Capacity to Accommodate Projected Local and Interstate Traffic
- Decrease Congestion
- Reduce Travel Time
- Improve Freeway Operations
- Improve Safety

What's Changed Since Last Update?

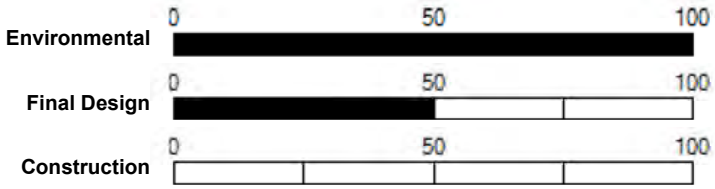
- Scope -No Change
- Schedule -Design Completion Changed to 2015
- Cost - Current Estimate
- I 15 North Phase 2 Project Broken into Packages to Accommodate Funding Limitations

Project risks:

- Uncertainty of Future Construction Materials and Labor Costs
- Funding uncertainty for Construction

Financial Fine Points(Key Assumptions):

- Total funding expended for Package D Construction: $0
- Total funding expended for the Environmental Phase for all 5 elements: $875.000
- Construction inflation escalation (2.7%) is to midpoint of construction



October , 2013

NEVADA DOT

I 15 North - Phase 2 Package E

Craig Road (SR 573) to Speedway Boulevard

Project Sponsor: NDOT

Project Manager: Dwayne Wilkinson, P.E.

(702) 671-8879

Project Description:

- Phase 2 Package E is one of five construction elements that the I 15 North Phase 2 project has been divided into.
- This project consists of installing ITS elements from the Speedway Blvd to Apex Interchange.
- Improvements will be constructed within the existing 1-15 Right-of-Way.
- Project length: 4.8 miles.

Schedule:

Planning:

Complete

Environmental:

Complete

Final Design:

2013 - 2015

Construction:

TBD

Project Cost Range:

Engineering:

$0.05 -0.1 M

Right of Way:

$0

Construction:

$2 - $2.21 Million

Total Project Cost:

$2.05 - 2.31 Miliion

Project Benefits:

- Improve Safety
- Reduce Travel Times
- Decrease Congestion
- Improve Freeway Operations

What's Changed Since Last Update?

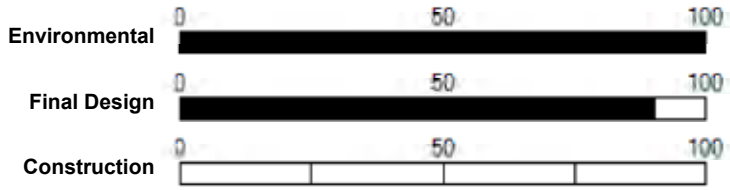
- Scope - No change.
- Schedule - Construction depends on funding availability.
- Cost - No change.
- Project broken into packages to accommodate funding limitations

Project risks:

- Completion of construction packages will depend on availability of funding
- Coordination with UPRR may delay project schedule

Financial Fine Points(Key Assumptions):

- Total funding expended for Package E Construction: $0
- Total funding expended for the Environmental Phase including all five elements: $875,000
- Construction inflation escalation (2.7%) is to midpoint of construction



October , 2013

6

I 15 North - Phase 3

Speedway Boulevard to Apex Interchange

Project Sponsors: NDOT

Project Manager: Dwayne Wilkinson, P. E.

(702) 671-8879

Project Description:

- This is the third phase of improvements to the I-15 North Corridor between US 95 and Apex Interchange.
- Widen I-15 from four lanes to six lanes from Speedway Boulevard to the Apex Interchange.
- Project length: 4.6 miles

Schedule:

Planning:
Complete

Environmental Phase:
Complete

Final Design:
2018

Construction:
TBD

Project Cost Range:

Engineering:
$10 - $12 million

Right-of-Way:
$3 - $3.6 million

Construction:
$75 - $85 million

Total Project Cost:
$88 - $101 million

Project Benefits:

- Increase capacity
- Reduce trip times
- Improve access to areas planned for development in North Las Vegas
- Improve operations
- Improve safety

What's Changed Since Last Update?

- Scope - No Change
- Schedule - Updated Final Design to 2018
- Cost - No Change

Project risks:

- Project completion will depend on the availability of funding.
- Uncertainty of proposed Sheep Mountain Parkway terminus.

Financial Fine Points(Key Assumptions):

- Total funding expended for phase 3: $0 (design phase not started)
- Total funding expended for I 15 North Environmental phase: $875,000
- Inflation excalation (2.7%) is to approximate midpoint of construction
- Funding source for this project has not yet been identified.

Environmental complete 0 50 100

Design Complete 0 50 100

October , 2013

NEVADA DOT

I 15 North - Phase 4

I 15 / CC 215 Northern Beltway Interchange

Project Sponsor: NDOT

Project Manager: Dwayne Wilkinson, P. E.

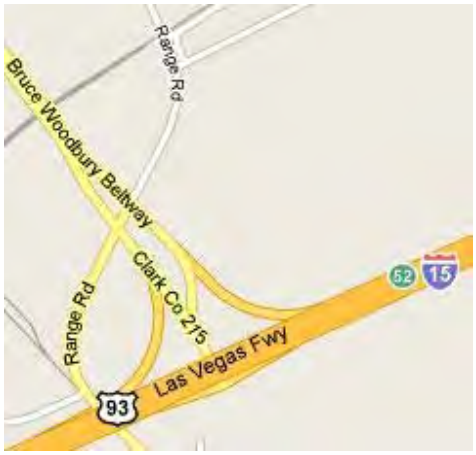
(702) 671-8879

Project Description:

- Construct new ramps to complete a system-to-system interchange configuration at the I-15 / CC-215 Las Vegas Beltway interchange.
- Improvements will be constructed within the existing I-15 and CC-215 Right-of-Way.
- This is the last of four phases of improvements to the I-15 North Corridor between US 95 and Apex Interchange (15 miles).

Schedule:

Planning:
Complete
Environmental:
Complete
Final Design:
Start 2013 - 2018
Construction:
TBD



Project Cost Range:

Engineering:
$7.4 - $14.0 million
Right-of-Way:
$1.0 - $5.0 million
Construction:
$123.0 - $140.0 million
Total Project Cost:
$131.4 - $159.0 million

Project Benefits:

- Increase capacity.
- Reduce trip times.
- Improve access to areas planned for development in North Las Vegas.
- Improve operations with full freeway-to-freeway connectivity.
- Improve safety.

What's Changed Since Last Update?

- Scope - Working to break project into affordable construction packages to accommodate funding limitations.
- Schedule - No Change
- Cost - No Change

Project risks:

- Uncertainty of future construction and labor costs.
- Construction funding availability.
- Railroad Involvement - UPRR Permits

Financial Fine Points(Key Assumptions):

- Total funding expended: $120,200
- Total funding expended for I-15 North Environmental phase: $875,000
- Inflation escalation (2.7%) is to 2018 approximate midpoint of construction.
- Construction schedule and funding for this project has not yet been identified.

% Environmental Complete 0 50 100

% Design Complete 0 50 100

October , 2013

NEVADA DOT

8

Project NEON P3

I-15 Desert Inn Road

Project Sponsor: NDOT

Project Manager: Cole Mortensen, P.E.

(775) 888-7742

Project Description:

- HOV Direct Connector from US 95 to I 15 and I-15 widening improvements from Spaghetti Bowl to south of Sahara; Add/Drop lanes at Oakey/Wyoming
- Local Access Improvements to Las Vegas Downtown Redevelopment
- New access to Alta
- I-15/Charleston Interchange Reconstruction
- Project Length: 4.83 miles
- *This project now includes what was previously Phases 1-4 in a Public Private Partnership delivery.

Schedule:

Planning:

Complete

Environmental:

Complete

Final Design:

Complete in 2013

Construction:

TBD

Project Cost Range:

Engineering:

$24 - $26 Million

Right-of-Way and Utilities:

$150 -$157 Million

Construction:

$291 - $303 Million

Total Project Cost:

$466 - $486 Million

Project Benefits:

- Will accommodate anticipated traffic increases
- New access to Downtown Redevelopment
- Reduce congestion along local streets and I-15
- Extends HOV System

What's Changed Since Last Update?

- Scope - NEPA Re-evaluation approved
- Schedule - The anticipated delivery of Phase 1 has been delayed due to the analysis and development of the P3 RFP
- Cost - No change

Project risks:

- Complex construction in a high volume dense urban area
- Complexity in maintaining traffic, staging, relocating utilities and reducing impacts
- Complex right-of-way issues may impact schedule and cost
- Funding uncertainty

Financial Fine Points(Key Assumptions):

- Total Funding Expended: $88,700,000
- Inflation escalation (4%) to 2020 approximate midpoint of construction
- Additional Federal, State, Local and Regional Funding will be required

% Environmental Complete 0 50 100

Design Complete 0 50 100

October , 2013

NEVADA DOT

I 15 Urban Resort Corridor Study

Project Sponsor: NDOT

Senior Project Manager: Jeff Lerud

(775) 888-7589

Project Description:

- The I-15 Urban Resort Corridor Study along I-15 from I-215 (Bruce Woodbury Beltway) to the south, to US 95 (Spaghetti Bowl) to the north.
- Enhance access and mobility within the resort corridor; develop a phased implementation stragegy for future improvements to I-15 in the resort corridor area in addition to currently planned improvements.
- Prepare an early action plan for near-term improvements to enhance mobility and operations.

Schedule:

Planning:

Completed

Environmental:

TBD

Final Design:

TBD

Construction:

TBD

Project Cost Range:

Engineering:

TBD

Right-of-Way:

TBD

Construction:

TBD

Total Project Cost:

TBD

Project Benefits:

- Improve capacity, operations, safety, access and mobility.
- Meet stakeholders/public expectations.
- Improve quality of life.
- Support economic development.
- Reduce trip times.

What's Changed Since Last Update?

- Scope - No Change
- Schedule - No Change
- Cost - No Change
- Planning Phase Completed

Project risks:

- Consensus building among the resort owners.
- Funding uncertainty.
- Economic development along the corridor could require design changes affecting scope, schedule and budget.

Financial Fine Points(Key Assumptions):

- Total funding expended: $786,738

Planning complete 0 50 100

October , 2013

10

I 15 South - Bermuda Road Interchange

Project Sponsor: City of Henderson

Assistant Chief Project Manager: Lynnette Johnston, P.E.

(702) 671-6601

Project Description:

- I-15 South Project from Sloan to Tropicana has been broken into nine (9) Project elements to address funding and constructability opportunities.
- This is one element of the I-15 South project.
- Construct new interchange at Bermuda Road.

Schedule:

Planning:
Complete
Environmental:
Complete
Final Design:
2026 - 2027
Construction:
TBD

Project Cost Range:

(Environmental Phase Estimates)
Engineering:
$16 - $17.5 million
Right-of-Way:
$3.5 - $4 million
Construction:
$128.5 - $134.5 million
Total Project Cost:
$148 - $156 million

Project Benefits:

- Interchanges on I-15 reduce congested traffic on the main line and associated regional facilities.
- Connect Regional traffic.

What's Changed Since Last Update?

- Scope - No Change
- Schedule - No Schedule. Unfunded on 2035 RTP.
- Cost - No Change

Project risks:

- Unit price and property escalation may affect project cost.

Financial Fine Points(Key Assumptions):

- Funding not available until 2026-2030 per current Financial Plan.
- Total funding expended for I-15 South Environmental Studies (all phases): $3.5 million
- Inflation index distribution of 2% - 5% is to 2029 approximate midpoint of construction.
- Funding Source (Financial Plan 2009): Q10 Extended ($57.1M) and STP Clark County ($60M).

% Environmental Complete 0 50 100

% Design Complete 0 50 100

October , 2013

NEVADA DOT

I 15 South - Pebble Road Overpass

Project Sponsor: Clark County

Assistant Chief Project Manager: Lynnette Johnston, P.E.

(702) 671-6601

Project Description:

- I-15 South Project from Sloan to Tropicana has been broken into nine (9) Project elements to address funding and constructability opportunities.
- This is one element of the I-15 South Project.
- Construct overpass at Pebble Road and I-15

Schedule:

Planning:
Complete
Environmental:
Complete
Final Design:
TBD
Construction:
TBD

Project Cost Range:

(Environmental Phase Estimates/Removal from RTP)

Engineering:
$6.5 - $7 million
Right-of-Way:
$8 - $10 million
Construction:
$51.5 - $53 million
Total Project Cost:
$66 - $70 million

Project Benefits:

- Interchanges on I-15 reduce congested traffic on the main line and associated regional facilities.
- Connect regional traffic.
- Improve origin destination time of travel.

What's Changed Since Last Update?

- Scope - No Change
- Schedule - This project was removed from 2030 RTP.
- Cost - No Change

Project risks:

- Unit price and property escalation may affect project cost.

Financial Fine Points(Key Assumptions):

- Funding not available until 2040. Project was removed from current Financial Plan. Project costs will be impacted due to inflation.
- Total funding expended for I-15 South Environmental Studies (all phases): $3.5 million
- Funding Source (Financial Plan 2009): Private Developers ($30M)

% Environmental Complete 0 50 100

% Design Complete 0 50 100

October , 2013

12

I 15 South - Starr Avenue Interchange

Project Sponsor: NDOT

Assistant Chief Project Manager: Lynnette Johnston, P.E.

(702) 671-6601

Project Description:

- I-15 South, from Sloan Road to Tropicana Ave. has been broken into nine packages to address funding and constructability opportunities.
- Construct a new interchange at Starr Avenue with on & off-ramps
- Connect to Las Vegas Blvd (east side) and Dean Martin Drive (west side)
- I-15 over Starr Avenue and shifted 50 ft. to the east of the existing I-15.

Schedule:

Planning:

Complete

Environmental:

Complete

Final Design:

2010-2014

Construction:

2016-2020

Project Cost Range:

(Environmental Phase Estimates)

Preliminary Engineering:

$10 - $11 million

Right-of-Way:

$15 - $24 million

Construction:

$47 - $66 million

Total Project Cost:

$72 - $101 million

Project Benefits:

- Improve access to I-15 with new interchange
- Connect east-west regional traffic from Las Vegas Blvd to/from Dean Martin Drive
- Improve I-15 mainline capacity

What's Changed Since Last Update?

- Scope - No change
- Schedule - No change
- Cost - No change

Project risks:

- Uncertain Right of Way costs
- Material and labor cost escalation
- Year when construction funds are available
- Utility & bill board relocation
- Cell phone tower, re-location potential or avoidance

Financial Fine Points(Key Assumptions):

- Total funding expended for Starr Interchange: $122,000
- Total funding expended for I-15 South Environmental Studies (all phases): $3.5 million
- Inflation index distribution of 2% - 5% for year 2024 approximate midpoint of construction.
- Funding Source (RTP 2035): Interstate Maintenance Discretionary ($3.44M), SAFETEA-LU Priority Project ($7.20M), Local Funds ($12.98 M), STP Clark County ($52.80 M) and Public Lands Highways ($1.19 M).

% Environmental Complete 0 50 100

% Design Complete 0 50 100

October , 2013

NEVADA DOT

I 15 South - Cactus Avenue Interchange

Project Sponsor: NDOT

Assistant Chief Project Manager: Lynnette Johnston, P.E.

(702) 671-6601

Project Description:

- I-15 South Project from Sloan to Tropicana has been broken into nine (9) Project elements to address funding and constructability opportunities.
- Construct new interchange at Cactus Avenue.

Schedule:

Planning:

Complete

Environmental:

Complete

Final Design:

Complete

Advertise:

Complete

Construction:

Start 2nd Quarter 2013 -

Complete 1st Quarter 2015

Project Cost Range:

(Environmental Phase Estimates)

Engineering:

$5.5 - $6.5 million

Right-of-Way:

$8 - $15 million

Construction:

$43 million

Total Project Cost:

$56.5 - $64.5 million

Project Benefits:

- Reduce congested traffic on I-15.
- Connect regional traffic.

What's Changed Since Last Update?

- Scope - No Change
- Schedule - No Change
- Cost - No change

Project risks:

- Unit price and property escalation may affect project cost.

Financial Fine Points(Key Assumptions):

- Funding expended for Cactus Interchange: $6.9 Million
- Total funding expended for I-15 South Environmental Studies (all phases): $3.5 million
- Inflation index distribution of 2% - 5% is to 2014 approximate midpoint of construction
- Funding Source: Interstate Maintenance Discretionary ($4.9M), SAFETEA-LU High Priority Projects ($16.6M), STP Clark County ($34.9M), National Highway System ($18.2M), Old Ear Mark Remnant (0.14M) and Section 115 Transfer Project (0.9M).
- Construction: 2013 - 2015

% Environmental Complete 0 50 100

% Design Complete 0 50 100

% Construction 0 50 100

October , 2013

NEVADA DOT

14

I 15 South - Las Vegas Boulevard

St. Rose Parkway to Sunset Road

Project Sponsor: Clark County

Project Manager: Jason S. Tyrrell, P.E.

(702) 671-8852

Project Description:

- I-15 South from Sloan to Tropicana has been broken into nine (9) Project elements to address funding and constructability opportunities.
- This is one element of the I-15 South Project.
- Widening of Las Vegas Boulevard (parallel to I-15) from St. rose Parkway (SR 146) to Sunset Road from 2 to 3 lanes in each direction.
- Project Length: 7.2 miles
- This project will be constructed in two packages:
- Package 1: Las Vegas Boulevard from Silverado to Sunset - *Completed as of July 2011
- Package 2: Las Vegas Boulevard from St. Rose to Silverado Ranch

Schedule:

Planning:

Complete

Environmental Clearance:

Complete

Final Design:

Package 1- Complete ,

Package 2- 70%

Construction:

Package 1 -Complete,

Package 2 TBD

Project Cost Range:

(Environmental phase estimates):

Engineering:

$4 - $4.5 million

Right-of-Way:

$0

Construction:

$31.5 - $33 million

Total Project Cost:

$35.5 - $37.5 million

Project Benefits:

- Increase capacity
- Improve safety
- Improve access
- Reduce trip times
- Reduce vehicle emissions
- Reduce idling
- Improve driver comfort

What's Changed Since Last Update?

- Scope - No Change
- Schedule - No Change
- Cost - No Change

Project risks:

- Complexity in maintaining traffic staging, relocating utilities and reducing impacts to traveling public.

Financial Fine Points(Key Assumptions):

- Total NDOT Funding Expended for LV Blvd.: $0
- Total funding expended for I-15 South Environmental studies (all phases): $3.5 million
- Inflation index distribution of 2% - 5% is to 2011 approximate midpoint of construction.
- Funding Source: STP Clark County ($8.3M)

% Environmental Complete 0 50 100

% Design Complete 0 50 100

October , 2013

NEVADA DOT

I 15 South - Phase 2

Sloan Road to Blue Diamond (SR-160)

Project Sponsor: NDOT

Assistant Chief Project Manager: Lynnette Johnston, P.E.

(702) 671-6601

Project Description:

- I-15 South project from Sloan to Tropicana has been broken into nine (9) project phases to address funding and constructability opportunities.
- This is one element of I-15 South Project.
- Widen I-15 from Sloan Road to Blue Diamond Road from 6 to 10 lanes.
- Project Length: 8.2 miles
- This project has been divided in two phases. Phase 2A: Widening I-15 from Sloan to Blue Diamond (SR160) 6 to 8 lanes; and Phase 2B: Widen from Sloan to Blue Diamond (SR160) 8 to 10 lanes, restripe C-D from Blue Diamond (SR160) to Tropicana Ave, replace concrete section between I-215 & Tropicana Ave and replace Tropicana Interchange.

Schedule:

Planning:

Complete

Environmental:

Complete

Final Design:

TBD

Construction:

TBD

Project Cost Range:

(Environmental Phase Estimates)

Engineering:

$47.5 - $51 million

Right-of-Way:

$0

Construction:

$371 - $392.5 million

Total Project Cost:

$418.5 - $443.5 million

Project Benefits:

- Increase capacity
- Improve safety
- Improve access
- Reduce trip times
- Reduce vehicle emissions
- Reduce idling
- Improve driver comfort

What's Changed Since Last Update?

- Scope - No Change
- Schedule - No Change
- Cost - No Change

Project risks:

- Complexity in maintaining traffic staging, relocating utilities and reducing impacts to traveling public.
- Assumes Sloan Interchange is constructed (Existing Interchange for cost and design purpose)

Financial Fine Points(Key Assumptions):

- Funding not available until 2016-2020 per current Financial Plan.
- Total funding expended for I-15 South Environmental Studies (all phases): $3.5 million
- Inflation index distribution of 2% - 5% is to 2029 approximate midpoint of construction.

Environmental Complete 0 50 100

Design Complete 0 50 100

October , 2013

NEVADA DOT

16

I 15 South - Sloan Road Interchange

Project Sponsor: City of Henderson

Assistant Chief Project Manager: Lynnette Johnston, P.E.

(702) 671-6601

Project Description:

- I-15 South Project from Sloan to Tropicana has been broken into nine (9) project elements to address funding and constructability opportunities.
- This is one element of the I-15 South Project.
- Reconstruct interchange at Sloan Road.

Schedule:

Planning:
Complete
Environmental:
Complete
Final Design:
TBD
Construction:
TBD

Project Cost Range:

(Environmental Phase Estimates)
Engineering:
$19.5 - $21 million
Right-of-Way:
$35 - $40 million
Construction:
$156.5 - $162.5 million
Total Project Cost:
$211 - $223.5 million

Project Benefits:

- Interchanges on I-15 reduce congested traffic on the main line and associated regional facilities.
- Connect Regional traffic.
- Improve origin destination time of travel.

What's Changed Since Last Update?

- Scope - No Change
- Schedule - No Change
- Cost - No Change

Project risks:

- Unit price and property escalation may affect project cost.

Financial Fine Points(Key Assumptions):

- Funding not available until 2026-2030 per current Financial Plan.
- Total funding expended for I-15 South Environmental Studies (all phases): $3.5 million
- Inflation index distribution of 2% - 5% is to 2029 approximate midpoint of construction
- Funding source (RTP 2035): STP Clark County ($65M)

Environmental Complete 0 50 100

Design Complete: 0 50 100

October , 2013

NEVADA DOT

I 15 South - Stateline to Sloan

Project Sponsor: NDOT

Assistant Chief Project Manager: Lynnette Johnston, P. E.

(702) 671-6601

Project Description:

- Reconstruct interchange ramps at Primm, Jean and Sloan Interchanges to address safety issues.
- Signing improvements with DMS signs on I-15.
- Shoulder improvements.

Schedule:

Planning:
2013 - 2015
Environmental:
TBD
Final Design:
TBD
Construction:
TBD

Project Cost Range:

Engineering:
$3 - $4 million
Right-of-Way:
TBD
Construction:
$35 - $50 million
Total Project Cost:
$38 - $54 million

Project Benefits:

- Update ramp geometrics to current standards.
- Decrease congestion.
- Improve communications and driver awareness with message signs.
- Improve on/off ramps at Primm, Jean and Sloan Interchanges.

What's Changed Since Last Update?

- Scope -Scope modified to Safety project
- Schedule - No Change
- Cost - No Change.

Project risks:

- Uncertainty of future construction materials and labor costs.
- Complex construction in a high volume rural area may affect schedule and costs.
- Funding uncertainty.

Financial Fine Points(Key Assumptions):

- Total funding expended: $0
- Funding: Government Services Tax $52 Million
- Inflation Index of 3% is to approximate midpoint of construction.

Planning Scoping 0 50 100

October , 2013

18

I 515 Freeway Improvements

Feasibility Study

Rancho Drive at 95 to Charleston at I-515 on the US 95 / I-515

Project Sponsor: NDOT

Senior Project Manager: Dwayne Wilkinson

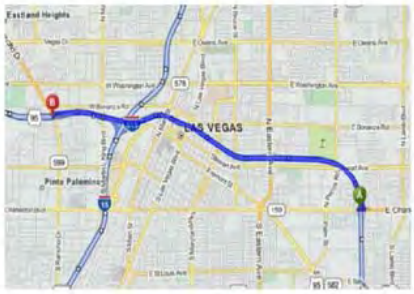
(702) 671-8879

Project Description:

- Preliminary feasibility study will analyze traffic operations and safety from Rancho to Charleston (5.13 miles) and identify improvement phasing to address corridor needs.
- Reporting on the feasibility study to begin in 2014; draft EIS withdrawn in FY 2013 will no longer be reported on.

Schedule:

Planning:
Complete
Feasibility Study:
2014
Environmental:
2014-2016
Final Design:
TBD
Construction:
TBD



Project Cost Range:

Engineering:
TBD
Right-of-Way:
TBD
Construction:
TBD
Total Project Costs:
TBD

Project Benefits:

- Feasibility study will identifity operational efficiency, capacity and safety improvements that can be phased based on funding availability.

What's Changed Since Last Update?

- Scope - Feasibility study to analyze improvement potential from Rancho to Charleston (5.13 miles)
- Schedule - Based on the RTP, Environmental 2014 - 2016
- Cost - Being reassessed. Notice of Intent to prepare EIS withdrawn

Project risks:

- Individual phases and funding obligations are unknown at this time.

Financial Fine Points(Key Assumptions):

- Concrete financial impact is unknown at this time, but the goal is to phase the work beginning in FY 2017

% Environmental Complete 0 50 100

October , 2013

NEVADA DOT

US 93 / US 95 Boulder City Bypass - Phase 1 Package 2A

Foothill Drive to US 95

Project Sponsor: NDOT

Senior Project Manager : Tony Lorenzi, P.E.

(775) 888-7317

Project Description:

- Phase 1 has been re-packaged: Package 1 - Right-of-Way Acquisitions
- Package 2A - Tortoise Fencing/Plant Salvaging
- Package 2B - Frontage Road/Retaining wall/Henderson Utilities
- Utility Relocations done prior to Package 3
- Package 3 - Mainline from Foothills Grade Separation to Silverline Road
- Package 4 - Eliminated. Split in two sections (north half will be incorporated into Package 3 and the southern half will be added to RTC's Design-Build contract for Phase 2)
- Package 5 - Mainline/RR Bridge (to be built with Package 3)
- Realignment of US 93 / US 95 to create an access controlled facility from Foothill Drive to US 95.
- One new diamond interchange and one new half interchange along with one Frontage Road will be constructed.
- Direct Connector Ramps from the new facility to and from US 93 will be constructed.
- Direct Connector Ramps from US 95 to the new facility will be constructed.
- Existing access will be perpetuated.
- Project length: 3 miles.

Schedule:

Planning:

Complete

Environmental:

Complete

Final Design:

Package 2A - Complete

Construction:

Package 2A - Complete

Project Cost Range:

(Final Design Phase Estimates)

Engineering:

$5 - $8 million

Right-of-Way:

$10 - $22 million

Construction:

$115 - $132 million

Total Project Cost:

$130 - $162 million

*** Construction and Total Project Costs were revised per updated Financial Plan

Project Benefits:

- Improves safety by eliminating a signal at US 93 and Railroad Pass Casino.
- Improves operations for Trucks from US 95 to US 93.
- Improves operations for peak trips from Boulder City to Las Vegas.
- Improves local circulation.
- Completes initial bypass phase.

What's Changed Since Last Update?

- Scope - No change
- Cost - Cost range changed based on new engineering estimate.
- Package 2 divided into 2A and 2B

Project risks:

- Concurrent utility relocations may affect schedule.
- Unit price and property escalation may affect project cost.
- Construction is not funded
- Resource conflict with other on-going projects.
- Right-of-Way acquisition schedule
- Utility Agreements are a major risk as we get closer to doc date

Financial Fine Points(Key Assumptions):

- Total funding Expended (Engineering & Right-of-Way): $5,621,696
- Total funding Expended for BC Bypass Environmental studies (all phases): $5,199,679
- Inflation escalation (4%) is to 2015 approximate midpoint of construction
- Additional Federal, State, Local, and Regional Funding will be required

% Design Complete 0 50 100

% Row Complete 0 50 100

% Construction 0 50 100

October , 2013

NEVADA DOT

20

US 93 / US 95 Boulder City Bypass - Phase 1 Package 2B

Foothill Drive to US 95

Project Sponsor: NDOT

Senior Project Manager : Tony Lorenzi, P.E.

(775) 888-7317

Project Description:

- Construct West Frontage Road to Subgrade
- Construct Retaining Wall
- Construct Drainage Features
- Relocate all Utilities (Overhead power lines for WAPA and CRC paid for under EA-73527)
- Package 2 has been split into 2A (Tortoise Fencing & Plant Salvaging) and 2B (Frontage Road/Retaining Wall & Henderson Utility Relocations)

Schedule:

Planning:
Completed
Environmental:
Completed
Final Design:
Completed
Construction:
Begin spring 2014

Project Cost Range:

(Final Design Phase Estimates)
Engineering:
$350 - $500 k
Construction:
$11 - $13 million
Total Project Cost:
$11 - $14 million

Project Benefits:

- Improves operations for Trucks from US 93 to US 95
- Improves local circulation
- Provides complete utility corridor for all underground utilities
- Improves Truck access to Industrial area

What's Changed Since Last Update?

- Scope: No change
- Schedule: Construction moved to Spring of 2014
- Cost: Cost range changed based on updated engineering estimates
- A portion of the Frontage Road will be paved with Package 2B
- Major utility relocations taken out of Package 2B and will be done prior to Package 3

Project risks:

- Concurrent utility relocations may affect schedule
- Utility agreements are a major risk
- Hazardous materials found during construction

Financial Fine Points(Key Assumptions):

- Total funding expended (Engineering & Right-of-Way): $251,135
- Inflation escalation (4%) is to 2015 approximate midpoint of construction.
- Additional Federal, State, Local, and Regional Funding will be required.

Final Design completed 0 50 100

Construction completed 0 50 100

October , 2013

US 93 / US 95 Boulder City Bypass - Phase 1 Package 3

Foothill Drive Grade Sep to Silverline Road

Project Sponsor: NDOT

Senior Project Manager : Tony Lorenzi, P.E.

(775) 888-7317

Project Description:

- Realignment of US 93 / US 95 to create an access controlled facility from Foothill Drive to US 95.
- One new diamond interchange along with one Frontage Road will be constructed.
- Direct Connector Ramps from the new facility to and from US 93 will be constructed.
- Direct Connector Ramps from US 95 to the new facility will be constructed.
- Existing access will be perpetuated.
- Project length: 2 miles

Schedule:

Planning:

Completed

Environmental:

Completed

Final Design:

Package 3 Ad Date Summer 2014

Construction:

Fall 2014

Project Cost Range:

(Final Design Phase Estimates)

Engineering:

$750k - $1 million

Right-of-Way:

Incidental

Construction:

$57 - $65 million

Total Project Cost:

$58 - $66 million

Project Benefits:

- Improves safety by eliminating a signal at US 93 and Railroad Pass Casino.
- Improves operations for Trucks from US 95 to US 93.
- Improves operations for peak trips from Boulder City to Las Vegas.
- Improves local circulation.
- Completes initial bypass phase.

What's Changed Since Last Update?

- Scope: Package 4 was split into two segments. Northern half will be incorporated into Package 3 and the southern half will be incorporated into the RTC's Design-Build contract for Phase 2.
- Schedule: Package 3 delivery moved to FY 2014 to meet the RTC's schedule
- Cost: Cost range changed based on new engineering estimate

Project risks:

- Unit price and property escalation may affect project
- Resource conflict with other on-going projects
- Field Changes
- Increased Roadway Excavation unit prices due to additional blasting
- Design omissions
- Landscaping redesign
- Hazardous materials found during construction

Financial Fine Points(Key Assumptions):

- Total funding expended (Engineering & Right-of-Way): $315,127
- Total funding expended for BC Bypass Environmental studies (all phases): $5,199,679
- Inflation escalation (4%) is to 2015 approximate midpoint of construction.
- Additional Federal, State, Local and Regional Funding will be required.

% Design Complete 0 50 100

% ROW Complete 0 50 100

October , 2013

22

US 93 / US 95 Boulder City Bypass - Phase 2

US 95 to Hoover Dam Bypass

Project Sponsor: NDOT

Senior Project Manager: Tony Lorenzi, P.E.

(775) 888-7317

Project Description:

- Provide extension of Phase I from US 95 to tie into the Hoover Dam Bypass at Nevada Interchange
- Provide limited access bypass to the south of Boulder City for US 93 traffic
- 4 lane divided highway facility
- Require several bridge structures over existing access roads and to provide wildlife access
- NDOT working with RTC to administer Design-Build Procurement for Phase 2
- Project length: 12.5 miles

Schedule:

Planning:

Complete

Environmental:

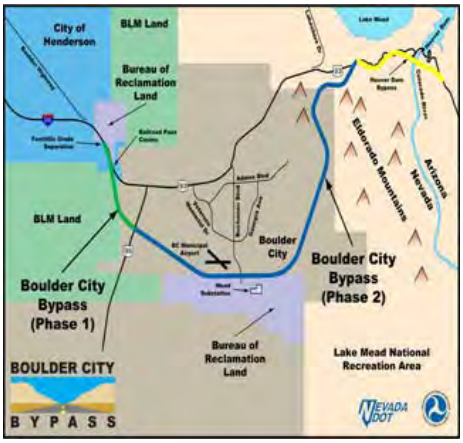
Complete

Final Design:

2014-2015

Construction:

2015



Project Cost Range:

(Planning phase estimates):

Engineering:

$15 - $30 million

Right-of-Way:

$2 - $4 million

Construction:

$350 - $450 million

Total Project Cost:

$365 - $480 million

Project Benefits:

- Reduce congestion of US 93 through Boulder City
- Provide additional safety to existing US 93 within Boulder City
- Decrease travel time from Las Vegas to Nevada/Arizona border

What's Changed Since Last Update?

- Scope - Package 4 of Phase 1 was eliminated by splitting into two segments. The southern half was incorporated into Phase 2 project limits
- Schedule - RTC of Southern NV to proceed with Design/Build: RFP to be issued in 2014
- Cost - Updated cost information not available

Project risks:

- Aggressive procurement schedule - need to start construction Fall 2014
- Unit price escalation may affect project cost.
- Difficult design & construction issues in a mountainous terrain may affect cost & schedule.
- Project was approved to be administered using Design-Build delivery method by the RTC Board of Commissioners following the passage of AB413 for fuel tax index Bill

Financial Fine Points(Key Assumptions):

- Total funded Expended (Engineering & Right-of-Way): $3,082,110
- Total funding Expended for BC Bypass environmental studies (all phases): $5,199,679
- Inflation escalation (4%) is to 2027 approximate midpoint of construction.
- RTC Southern Nevada to fund majority of work using AB413 fuel tax indexing revenues

% Design Complete 0 50 100

% ROW Complete 0 50 100

October , 2013

US 95 Northwest - Phase 1

Rainbow Boulevard (SR 595) to Ann Road

Project Sponsor: NDOT

Project Manager: Cole Mortensen, PE

(775) 888-7742

Contractor: Capriati Construction

Project Description:

- This is the first phase of the US 95 Northwest Project that extends from Washington Avenue to Kyle Canyon Road.
- Alleviate congestion within the corridor by increasing capacity.
- Provide new and improved freeway connections to improve regional connectivity, consistent with land use planning
- Phase 1 Extends from Rainbow Boulevard to Ann Road
- Project length: 6.02 miles

Schedule:

Planning:

Complete

Environmental:

Complete

Final Design:

Complete

Advertise Project:

Complete

Construction:

Complete July 2013

Project Cost Range:

(Construction Phase Estimates):

Engineering:

$3.5 million

Right-of-Way:

$0.1 million

Construction:

$82.4 million

Total Project Cost:

$86.0 million

Project Benefits:

- Increase capacity
- Improve safety
- Improve access
- Meet stakeholder/public expectations
- Reduce trip times
- Reduce vehicle emissions
- Reduce idling
- Beautify corridor
- Improve driver comfort

What's Changed Since Last Update?

- Scope - No change
- Schedule - No change
- Cost - No change

Project risks:

- Change in site conditions
- Contractor delays

Financial Fine Points(Key Assumptions):

- Total Expended for Construction: $80 - $83 million
- Total Expended for Final Design: $3.6 million
- Total Expended for Environmental Studies (all US 95 Northwest phases): $4.8 million
- Funding source:
- *$60 million AB 595
- *$42.5 million Federal
- *$2.3 million State

% Construction Complete 0 50 100

October , 2013

NEVADA DOT

24

US 95 Northwest - Phase 2A

Ann Road to Durango Drive

Project Sponsor: NDOT

Project Manager: Dwayne Wilkinson, P.E.

(702) 671-8879

Project Description:

- This is the second phase of the US 95 Northwest Project that extends from Washington Avenue to Kyle Canyon Road
- Alleviate congestion within the corridor by increasing capacity
- Provide new and improved freeway connections to improve regional connectivity, consistent with land use planning
- Project length: 3.038 miles MP CL 90.591-93.629
- This project is anticipated to be constructed in 2 packages
- Package A : Ann to Durango
- Package B; Durango to Kyle Canyon

Schedule:

Planning:

Complete

Environmental:

Complete

Final Design:

2013

Construction:

2014

Project Cost Range:

(Environmental Phase Estimates):

Engineering:

$5.5 - $6.5 million

Right-of-Way:

$0, No acquisitions required

Construction:

$75 - $85 million

Total Project Cost:

$81 - $92 million

Project Benefits:

- Increase capacity
- Improve safety
- Improve access
- Meet stakeholder/public expectations
- Reduce trip times
- Reduce vehicle emissions
- Reduce idling
- Beautify corridor
- Improve driver comfort

What's Changed Since Last Update?

- Scope - No change
- Schedule - The project design is 100% complete. Commencement of construction expected 2014
- Cost - No change

Project risks:

- Unit price escalation may affect project cost
- Complex design issues may impact schedule and scope
- Complex right-of-way and utilities issues may impact schedule and cost

Financial Fine Points(Key Assumptions):

- Total funding Expended for Phase 2: $1.32 million
- Total funding Expended for US 95 Northwest Environmental Studies (all phases): $5 million
- Inflation escalation (2.7%) to midpoint of construction in 2017
- Funding source: TBD

% Design Complete 0 50 100

% Construction Complete 0 50 100

October , 2013

NEVADA DOT

US 95 Northwest - Phase 3 Clark County 215 Interchange

Project Sponsor: NDOT and Clark County

Senior Project Manager: Dwayne Wilkinson, P. E.

(702) 671-8879

Project Description:

- This is the third phase of the US 95 Northwest project that extends from Washington Ave to Kyle Canyon Rd
- Construct new system to system interchange at CC 215
- This project is anticipated to be constructed in 4 packages.
- Package A: Ramps providing north to east, west to south, and east to south movements (2015)
- Package B: Widen CC 215 interchange @ Sky Pointe, provide local access to Sky Point and Centennial.
- Package C: Widen CC 215 interchange at John Hebert (2025) local access to Oso Blanco
- Package D: Final Interchange (2035)

Schedule:

Planning:

Complete

Environmental:

Complete

Final Design:

TBD

Construction:

TBD

Project Cost Range:

(Final Design Phase Estimates):

Engineering:

$13.6 - $14.3 million

Right-of-Way:

$0 - $0.4 Million

Construction:

$219 - $276 million

Total Project Cost:

$233 - $290 million

Project Benefits:

- Increase capacity
- Improve safety
- Improve access
- Meet stakeholder/public expectations
- Reduce trip times
- Reduce vehicle emissions
- Reduce idling
- Beautify corridor
- Improve driver comfort

What's Changed Since Last Update?

- Scope - The project is anticipated to be constructed in 4 packages.
- Schedule - No Change
- Cost - No Change

Project risks:

- Cost and schedule impacts of perpetuating local access has yet to be quantified
- Unit price escalation may affect project cost
- Complex right of way and utility issues may impact schedule and costs.

Financial Fine Points(Key Assumptions):

- Total funding Expended for Phase 3: $2,800,000
- Total funding Expended for US 95 Northwest Environmental Studies (all phases): $5 million
- Inflation escalation (4%) to midpoint of construction 2018
- Funding source: TBD

% Design Complete 0 50 100

% ROW Complete 0 50 100

October , 2013

26

US 95 Northwest - Phase 5 Kyle Canyon Road Interchange

Project Sponsor: City of Las Vegas and NDOT

Senior Project Manager: Dwayne Wilkinson, P.E.

(702) 671-8879

Project Description:

- This is the fifth phase of the US 95 Northwest Project that extends from Washington Ave to Kyle Canyon Road.
- Alleviate congestion within the corridor by increasing capacity.
- Provide new and improved freeway connections to improve regional connectivity, consistent with land use planning.
- Construct new interchange at Kyle Canyon Road.

Schedule:

Planning:
Complete
Environmental:
Complete
Final Design:
TBD
Construction:
TBD

Project Cost Range:

Engineering:
$2.5 - $3 million
Right-of-Way:
$1 - $1.5 million
Construction:
$32 - $36.5 million
Total Project Cost:
$35.5 - $41 million

Project Benefits:

- Increase capacity
- Improve safety
- Improve access
- Meet stakeholder/public expectations
- Reduce trip times
- Reduce vehicle emissions
- Reduce idling
- Beautify corridor
- Improve driver comfort

What's Changed Since Last Update?

- Scope - No change
- Schedule - No change
- Cost - No change

Project risks:

- Unit price escalation may affect project cost
- Complex design issues may impact schedule and scope
- Complex right of way and utility issues may impact schedule and costs.

Financial Fine Points(Key Assumptions):

- Total Expended for Final Design: $0 (Design phase not started)
- Total Expended for Environmental Studies (all US 95 Northwest phases): $5 million
- Inflation escalation (4%) to midpoint of Construction in 2027
- Funding source: TBD

Design complete 0 — 50 — 100

October , 2013

NEVADA DOT

I 80 Robb to Vista

Project Sponsor: NDOT

Senior Project Manager: Jeff Lerud

(775) 888-7589

Robb to Vista I-80
Keeping Reno/Sparks Moving

Project Description:

- Make operational and capacity improvements to I-80 from Robb Drive to Vista Blvd.
- Make operational and capacity improvements to the I-80/I-580 interchange (Spaghetti Bowl)
- Early Action and Phase 1 (I-80 Robb to Vista Design-Build) projects from Washoe County Freeway Corridor Study scoping report completed.
- Phase II scoping will commence after completion of the I-80 Robb to Vista design/build project.
- Project Length: 10.4 miles

Schedule:

Planning:

2008 - 2014

Environmental:

TBD

Final Design:

TBD

Construction:

TBD

Project Cost Range:

(Planning Phase Estimates)

Engineering:

$85 - $105 million

Right-of-Way:

$95 - $125 million

Construction:

$900 - $1.1 billion

Total Project Cost:

$1.08 billion - $1.33 billion

Project Benefits:

- Improve operations and capacity along I-80.
- Improve safety
- Provide better connectivity between I-80 and I-580/US 395.
- Accommodate future projected traffic.

What's Changed Since Last Update?

- Scope - No change
- Schedule - Planning extended
- Cost - No change

Project risks:

- Limited Right-of-Way
- Phase II and beyond unfunded- delay in identifying needed funds will affect schedule and increase costs.
- Environmental process not started - Project cost, scope and schedule may be impacted.
- Resources may need to be reallocated to higher priority projects - project cost, scope and schedule may be impacted.

Financial Fine Points(Key Assumptions):

- Total Funding Expended by NDOT: $140, 000
- Inflation escalation (4%) is to 2020 approximate midpoint of construction
- Additional Federal, State, and local funding will/may be required

Planning Complete 0 50 100

October , 2013

NEVADA DOT

28

US 395 North - McCarran Blvd to Stead Blvd

Project Sponsor: NDOT

Senior Project Manager: Jeff Lerud, P.E.

(775) 888-7589

Project Description:

- Widen US 395 to increase capacity and improve traffic operations.
- Modify interchange ramps and cross streets as necessary to improve operations.
- Widen bridge structures at Stead, Lemmon Drive, Golden Valley, UPRR, Virginia Street, Panther Valley, Parr Blvd and Clear Acre Lane if necessary.
- Perpetuate drainage features.
- Replace and install new signs.

Schedule:

Planning:

TBD

Environmental:

TBD

Final Design:

TBD

Construction:

TBD

Project Cost Range:

(Planning Phase Estimates)

Engineering:

$7 - $9 million

Right-of-Way:

$3 - $6 million

Construction:

$70 - $85 million

Total Project Cost:

$80 - $100 million

Project Benefits:

- Relieve heavy peak hour congestion and reduces crashes associated with congestion.
- Reduces travel time.
- Improves overall traffic operations.

What's Changed Since Last Update?

- Scope - No Change
- Schedule - The project has been put on hold subject to funding availability.
- Cost - No Change

Project risks:

- Environmental requirements.
- UPRR Clearance and requirements.
- Unknown Right-of-Way and utility impacts.
- Impact of new development in the region.
- Concurrent planning associated with the Pyramid Connector.

Financial Fine Points(Key Assumptions):

- Total funding expended: $50,000
- Inflation escalation (4%) is to 2015, approximate mid-point of construction
- No funding has been identified for this project

Planning Complete: 0 — 50 — 100

October , 2013

NEVADA DOT

US 395 Northbound - Moana Lane to I-80

Project Sponsor: NDOT

Senior Project Manager: Jeff Lerud, P. E.

(775) 888-7589

Project Description:

- Widen northbound US 395 to improve traffic operatons from the Moana Lane interchange to the I-80 interchange.
- Widen northbound bridges at Vassar, Mill, Glendale, Truckee River, Kietzke, UPRR, and 4th Street.
- Replace overhead sign structures.
- Perpetuate drainage features.
- Reconstruct northbound ramps at Mill, Glendale, Villanova & I-80.
- Project length: 2.87 miles

Schedule:

Planning:
Complete
Environmental:
Complete
Final Design:
Complete
Construction:
Complete

Project Cost Range:

(Final Design Phase Estimates):
Engineering:
$9 - $10 million
Right-of-Way:
$2 - $5 million
Construction:
$50 - $60 million
Total Project Cost:
$61 - $75 million

Project Benefits:

- Relieves heavy northbound peak hour congestion and reduces crashes associated with congestion.
- Reduces northbound travel time from 16 minutes to 3 minutes in peak hour from Moana to I-80.
- Improves overall northbound traffic operations and reduces multiple weaves and lane changes at the Spaghetti Bowl interchange.

What's Changed Since Last Update?

- Scope - No change
- Schedule - Project Completed.
- Cost - No change.

Project risks:

- Unexpected design or contract document changes during construction
- Private development along the freeway alters the project design and/or construction

Financial Fine Points(Key Assumptions):

- Total funding Expended: $34.9 million.
- Inflation escalation (4%) is to 2011, mid-point of construction.
- Washoe County RTC contributed $20 million towards the project.
- The AB 595 income stream, federal and state funds will be used to fund the rest of the project.

Construction 0 50 100

October , 2013

NEVADA DOT

30

SR 445 Pyramid Highway Improvements

Project Sponsor: Washoe County RTC and NDOT

Washoe RTC Project Manager: Doug Maloy, P.E.

NDOT Project Manager: Dale Keller

Phone: (775) 888-7603

Project Description:

- Calle de la Plato to La Pasada- Transition from 4 Lane Arterial to 6 lane freeway
- La Pasada to Sparks Blvd. - Develop Pyramid alignment into 6 lane freeway with frontage roads.
- Continue 6 lane freeway from Sparks Blvd. to Dics Dr. either on the Pyramid alignment with frontage roads or on a separate alignment to the west.
- Extend 6 lane freeway through Sun Valley to US-395
- Widen and improve Pyramid highway from Disc Dr. to Queen Way
- Widen and extend Disc Dr. to Vista Blvd.

Schedule:

Planning:

Complete

Environmental:

2010 - 2014

Final Design:

TBD

Construction:

TBD

Project Cost Range:

(Planning phase estimates)

Engineering:

$40M - $60M

Right-of-Way:

$100M - $150M

Construction:

$410M - $660M

Total Project Costs:

$550M - $870M

Project Benefits:

- Address congestion and safety along the Pyramid Highway and McCarran Blvd. Corridors
- Provide alternative access to freeway system
- Improve safety

What's Changed Since Last Update?

- Scope - No change.
- Schedule - No change
- Cost - No change.

Project risks:

- Construction in a dense urban residential area
- Funding sources for all phases not identified
- Complex right of way and utility issues may impact schedule and costs.

Financial Fine Points(Key Assumptions):

- Total RTC Funding Expended - $7,300,000
- Inflation escalation (2.7%) to midpoint of construction in 2020

% Environmental Complete 0 50 100

October , 2013

NEVADA DOT

US 395 Carson City Freeway - Phase 2B

South Carson Street to Fairview Drive

Project Sponsor: NDOT

Project Manager: Jeff Lerud, P. E.

(775) 888-7589

Project Description:

- This project will be delivered in four packages. Construction is complete for Phase 2B Packages 1 & 2.
- Phase 2B Package 3 & 4 will complete the remainder of the project
- Construct 3 miles of 4 lane access controlled Freeway which will complete the nine mile system around the state Capitol.
- Complete the interchange at Fairview Drive - providing full traffic movements.
- Construct the South Carson Street Interchange.
- Construct over four miles of sound walls to mitigate traffic noise.
- Construct flood control facilities including detention basins, channels, box culverts, and the Freeway drainage system.
- Project length: 3.37 miles.

Schedule:

Planning:

Complete

Environmental:

Complete

Final Design:

TBD

Construction:

TBD

Project Cost Range:

(Final design phase estimates):

Engineering:

$11 - $13 million

Right-of-Way:

$30 - $32 million

Construction:

$100 - $150 million

Total Project Cost:

$137 - $190 million

Project Benefits:

- Relieve traffic congestion on Carson Street through Carson City and local streets along the freeway corridor.
- Reduce travel times through the region.
- Provide flood control protection.
- Improve opportunities for economic development along the corridor and downtown.

What's Changed Since Last Update?

- Scope - Package 3 & 4 will complete the remainder of the Freeway
- Schedule - TBD
- Cost - No change

Project risks:

- Project completion date will depend on the availability of funds.
- Concurrent utility relocation will be required.
- Changes in design standards could affect schedule and budget.
- New development along the corridor.

Financial Fine Points(Key Assumptions):

- Total funding expended: $54 million
- Inflation escalation (2.7%) to midpoint of construction in 2017.
- Construction funding source: TBD

% Design Complete 0 50 100

% ROW Complete 0 50 100

October , 2013

32

I 580 at Meadowood Mall Way

Project Sponsors: Washoe County Regional Transportation Commission and Nevada Department of Transportation

Washoe RTC Project Manager: Michele Dennis, P.E.

Phone: (775) 335-1861

NDOT Project Manager: Adam T. Searcy, P.E.

(775) 888-7597

Contractor: Meadow Valley Contractors

Project Description:

- Construct grade separation at I 580 and Meadowood Mall Way.
- Extend Meadowood Mall Way from S. Virginia Street to Kietzke Lane.
- Add I 580 southbound off- and northbound on-ramps at Meadowood Mall Way.
- Add frontage roads between Neil Road and Meadowood Mall Way.

Schedule:

Final Design:

Complete

Construction:

Substantial Completion, 2nd quarter 2013

Project Cost Range:

(Design phase estimates):

Engineering:

$7 million

Right-of-Way:

$5 million

Construction:

$22 - $24 million

Total Project Cost:

$34 - $36 million

Project Benefits:

- Accommodate present and future traffic demand entering and exiting I 580.
- Reduce traffic volumes at the on- and off-ramps in the project area.
- Improve the levels of service (LOS) at several key intersections in the project area.
- Provide additional Freeway access to reduce the volume of traffic using the south Virginia Street ramps.
- Reduce traffic at the intersection of South McCarran Blvd./South Virginia Street.
- Improve traffic circulation on arterial streets in the area.

What's Changed Since Last Update?

- Scope - No Change
- Schedule - Substantial completion June 2013.
- Cost - No Change

Project risks:

- Complex construction in an urban/retail commercial area.
- Complexity in maintaining traffic, and reducing impacts to retail businesses.
- Simultaneous construction adminstered by RTC in project limits.

Financial Fine Points(Key Assumptions):

- $22 million ARRA Federal Stimulus Funds applied to awarded Contract 3389

Construction 0 50 100

October , 2013

NEVADA DOT

APPENDICES

APPENDIX A

BENEFIT-COST ANALYSIS OF CAPACITY PROJECTS

The Department is required under NRS 408.3195 to conduct benefit cost analysis for larger highway capacity projects. Specifically, prior to submitting a project to the Board for approval, the Department will prepare such a written analysis for highway projects that will increase capacity on the State Highway System and cost at least $25 million. Subsequently, this analysis was done and is being reported on active projects before the Department requests the Board to approve funding for construction, including right-of-way acquisition and utility work. The Benefit-Cost (B/C) ratio calculations are being done on the larger capacity projects that are expected to be funded for construction within 10 years and, thereby, appear in the Transportation System Projects document. The policy that governs the analysis of benefits and costs, TP 1-11-1, is included at the end of the section entitled Discussion of the Calculations of Costs and Benefits.

The B/C ratios for several projects have been determined in FY 2008, 2009, 2010, 2011 and 2012. The following table reports the B/C ratio of a total of 13 projects that are in the Transportation System Projects document. The table reports results of the analysis.

Blue Ribbon Task Force Projects (FY 2008)	NPV B/C
I-15 South Corridor – Tropicana Avenue to Sloan Road	4.11
US 95 Northwest Corridor – Rainbow Blvd to Kyle Canyon Road	3.63
I-15 North Corridor – Spaghetti Bowl to Apex	3.39
I-15 – NEON (Sahara Avenue to Spaghetti Bowl)	1.97
I-515 – Spaghetti Bowl to Foothills Road	1.94
Other Major Projects (FY 2009)	NPV B/C
US 395 – Moanna to I-80 Northbound Add Lane	2.34
US 395 – Carson City Freeway (1996 updated in 2009)	4.44
Other Major Projects (FY 2010)	NPV B/C
I-80 – Design-Build	3.57
Other Major Projects (FY 2011)	NPV B/C
I-580/Meadowood Complex Improvements	2.70
I-215/ Airport Connector Interchange	3.08
Other Major Projects (FY 2012)	NPV B/C
SR 160 (Blue Diamond) from SR 159 to Mountain Springs	2.10
S. McCarron Phase 1, Mira Loma Dr. to Greg St.	3.57
S. McCarron Phase 2, Mira Loma Dr. to Greg St.	2.47

Other Major Projects (FY 2013)	NPV B/C
I-15 Interchange at Milepost 118 in Mesquite, Nevada	5.0
Boulder City Bypass Phase I: Foothills Drive to US-93/US-95 Interchange	0.9
I-15 Pavement Rehabilitation: Dry Lake Rest Area to Logandale/Overton Interchange	1.7
I-80 Pavement Rehabilitation Dunphy Interchange to Emigrant Pass Interchange	1.2
North 5th Street Super Arterial Phases 1C & 1D: Carey to Cheyenne	12.6
SR 160 Widening: SR 159 to Mountain Springs	2.1
US 93 Pavement Rehabilitation & Truck Climbing Lanes	8.3
South McCarran Boulevard – Phase I Virginia Street to Mira Loma Drive	3.57
South McCarran Boulevard – Phase II Mira Loma Drive to Greg Street	2.47
US 395 Southern Corridor E Clearview Drive SR 88	2.13
US-50 Widening Project Chaves Road to Roy's Road	1.9
I-80 West of Emigrant Pass Interchange Pavement Rehabilitation	1.1
F Street Connection Washington Ave. to Bonanza Road	1.15
Wadsworth Bypass Road (PLIR 35) Pyramid Lake Indian Reservation Washoe County, Nevada	1.6

DISCUSSION OF THE CALCULATIONS OF COSTS AND BENEFITS

Introduction

The determination of the benefit and costs has received considerable use for many decades. The process was first proposed by a French engineer by the name of Dupuit in 1844. The method provides an analysis framework whereby many benefits and costs are quantified. It has become a widely used tool and enables the decision-making process of ranking projects to become more transparent. For the private sector it is a tool to guide private investment and has been certainly helpful to assist assessing the cost effectiveness of public projects. For the private sector, normally economic efficiency is the primary objective, but the public sector needs to consider economic equity as well. As the social and environmental factor became important, the economic analysis of projects came more complex and, therefore, more difficult.

The application of the B/C ratio calculations for this Annual Report compares each proposed project with a set of factors that are converted to monetary values. This appendix discusses the input data needed to conduct a B/C ratio calculation, which includes: travel time benefits, crash benefits, motor vehicle emissions and cost benefits, vehicle operating cost benefits, and capital cost. In addition, the limitation of the B/C analysis is presented.

Input

Travel Time Benefits

Highway speeds and volumes came from the Regional Transportation Commissions and Metropolitan Planning Organizations regional travel demand models. For the value of travel time, the personal travel was 50% of local median wage while business travel by truck/bus drivers was 100% of the mean wage for these occupations plus fringe benefits. The wage value in Clark County came from the Nevada Department of Employment, Training, and Rehabilitation, which was $20.82 in 2011. The state reported a wage of $21.95for heavy equipment and large truck operators. A 50% fringe was used because it was an average of several labor groups. The same data were obtained for Carson City/Douglass County and Washoe County, and identical calculations were performed. Vehicle occupancy was based in household surveys, census data and travel demand output.

Table E-1 Travel Cost and Vehicle Occupancy

Location	Personal Travel	Business Travel	Vehicle Occupancy
Clark County	$10.72	$33.33	1.45
Carson City/Douglass County	$10.18	$32.78	1.43
Washoe County	$10.93	$33.54	1.28

Crash Benefits

The freeway and expressway, with controlled access, crash rates are normally lower than local streets and roads that had little or no access control. Consequently, by increasing freeway capacity more travelers will benefit from lower accident rates. The rates are illustrated in Table E-2.

Table E-2 Nevada Crash Rates by County

Location	Traffic Crashes Percentage[2]	Number of Crashes[2]	PDO[1,2]	INJURY[2]	FATAL[2]	Crash rates
Clark County	0.802	39045	29215	15956	164	257.72
Washoe County	0.119	5771	3533	2207	31	168.67
Carson City/Douglas County	0.021	1001	733	260	8	134.34

Note: [1] Property Damage Only [2] Number of crashes in 100 million vehicle miles of travel

The total cost of accident types is contained in Table E-3. These costs were derived from a report from NYSDOT-Safety Information Management System, adjusted to 2011 dollars.

Table E-3 Accident Cost Assumptions (2013 dollars)

Accident Type	Cost
Fatality	$3,914,477
Injury	$105,562
Property Damage Only	$5,214

Motor Vehicle Emissions and Cost

The rate of motor vehicle emissions and associated health cost was based on data from California and are contained in Table E-4.

Table E-4 Vehicle Emission Health Cost Assumptions (Dollars/Ton)

Emission Type	Cost
Carbon monoxide	$145
Fine Participates	$484,293
Nitrogen oxides	$59,077
Hydrocarbons	$8,484

Vehicle Operating Costs

- The consumption of fuel was determined by the average speed and the zone to zone distances. The fuel consumption rates were based on data from 2000 California Air

Resources Board and expressed as gallons per mile and is a function of speed

- Auto/Bus-$16.42: (50 percent of $20.53 times occupancy rate); Mean hourly wage, all occupations, Washoe County. 2011Nevada Occupational Employment & Wages (OES); http://www.nevadaworkforce.com/?PAGEID=67&SUBID=117. Accessed on September 2011.

  Trucks-$25.51 ($21.26 times 20.0 percent for benefits); Mean hourly wage, truck drivers, heavy and tractor-trailers, Washoe County. 2011 Nevada Occupational Employment & Wages (OES); http://www.nevadaworkforce.com/?PAGEID=67&SUBID=117. Accessed on September 2011.

Cost per Gallon of Fuel

- Mid-Grade Fuel: $3.75/gallon. Source: AAA Daily Fuel Gauge Report, Nevada Metro Averages, September 2011. http://fuelgaugereport.opisnet.com/NVmetro.asp
- Diesel fuel: $3.92/gallon. Source: AAA Daily Fuel Gauge Report, Nevada Metro Averages, September 2011. http://fuelgaugereport.opisnet.com/NVmetro.asp

Non-fuel Operating Costs	Car ($/mile)	Truck ($/mile)
Tires	$0.0096	$0.0230
Depreciation	$0.2485	$0.3207
Maintenance	$0.0444	$0.1030
Insurance	$0.0645	$0.0640
License, Registration, Taxes	$0.0397	$0.0210
Finance Charge	$0.0549	$0.1600

Capital Cost

The capital cost included all implementation costs, but not any maintenance and repair costs. Likewise transit service costs were not included.

Limitations

In general, it is difficult to convert all diverse costs and benefits into monetary values. At times funding limitations might require the selection of an alternative that does not have the highest B/C ratio, simply because there is not sufficient funding. While the B/C ratio calculation reported herein is an excellent parameter to help select projects or alternatives, it does have limitations.

One limitation deals with the project cost impact on humans; therefore, a factor, i.e. community impact, will need to be addressed.

Another limitation deals with the system impact of large highway capacity projects. Correcting a significant urban freeway congestion problem at a particular site moves the primary 'bottleneck' (site of congestion) to another location. Such a project will probably have

considerable benefit within the project limits, but might not provide much, if any, overall system improvement. Consequently, at least one area wide factor is needed to address the system wide impacts. One of the Department's new performance measures is: percent of daily vehicle miles of travel at Level of Service E or worse. This measure is called the 'system congestion index'.

Another limitation with a benefit-cost analysis is that many times a project will have an economic development benefit component. This economic development component is very difficult to quantify monetarily. Different items that can be considered when trying to estimate the economic development component include the number of marginal jobs that a project will enable to be created, the increase in property values along a project, the amount of new tax revenues generated for all levels of government because of the project, and the marginal increase in total Nevada gross product. Each of these items is problematic to estimate by themselves, then to try to estimate the change in these items induced because of transportation projects becomes extremely difficult. For these reasons, the economic development component is not normally considered in a typical NDOT benefit-cost analysis.

Nationally, discount rates vary from zero to 7% and sometimes higher. Modeled national inflation rates fluctuate considerably as well; however, NDOT staff believes that the spread between inflation and the discount rate is the important factor. NDOT staff has modeled the discount rate from 0% to 4% higher than inflation and performed sensitivity analyses on a wider range. In most cases, the discount rate and the inflation rate have very little impact on the results of the benefit/cost analysis. The discount rate of 7% is used because of OMB (Office of Management and Budget) Circular A-94 and is applied to all benefit/cost analyses.

The final limitation is the level of favorable public opinion toward a project. If there is a negative public perception toward a particular project, even if the perception is not justified, a high priority score might not suffice for a project to proceed toward implementation. In summary, even a good project needs public support; consequently, the level of public acceptance will be documented, most likely during the NEPA process.

Once the projects have been prioritized, they must be distributed among the various funding categories, meaning that a lower priority project might be funded before a higher priority because it is in a category with much more funding. Additionally, a lower priority project might be simple and easy to design and build compared with a large scale project might have major mitigation issues. In this case, the lower priority would likely be constructed first.

APPENDIX B

PROJECT PRIORITY RATIONALE

INTRODUCTION

Every year, the Department is responsible for the programming of federal and state funding for a wide range of transportation improvement projects across the state. Allocating these significant resources in an equitable, efficient, and effective manner requires a multifaceted approach. The Department has adopted flexible, yet accountable procedures to meet the needs of the traveling public, advance the Department's goals and priorities, and address the needs of a myriad of constituencies across the state.

The Board, comprised primarily of elected officials, provides oversight on the project selection process. The Board annually approves the Transportation System Projects, which contains the Statewide Transportation Improvement Program (STIP), Annual Work Program, and Short and Long-Range Elements. Upon its approval in the fall of every year, the Transportation System Projects document is forwarded to the U.S. Department of Transportation for final approval.

Project priority rationale should be guided by our "Statewide Long-Range Transportation Plan" containing 'Guiding Principles' that provide policy guidance for the development and operation of the Nevada Transportation System. These guiding principles include the following topics: 1) Safety, 2) Mobility and Accessibility, 3) Environmental Stewardship, 4) Fiscal Responsibility, 5) Freight Movement, 6) Asset Management, and 7) Customer Service. For the purpose of this discussion, these principles that directly affect the transportation system are characterized as follows:

1) Safety – To improve the safety of all modes of travel
2) Mobility – To provide a multimodal, interconnected and efficient system
3) Environmental – To ensure the system is considerate to the human and natural
4) environment
5) Fiscal Responsibility – To maximize the transportation funding and invest it wisely
6) Freight Movement – To improve the safety and efficiency of motor carriers
7) Asset Management – To protect the transportation system assets

The following subsections describe the more significant funding programs used by the Department to follow the guiding principles of the Statewide Long-Range Transportation Plan. The programs include: Capacity Projects, Bridge, State Highway Preservation, Highway Safety Improvement, and Transportation Enhancement.

CAPACITY PROJECTS PROGRAM

The Department cooperates in the development and ensures adoption of Regional Transportation Plans and Regional Transportation Improvement Programs in Nevada. Projects within the jurisdiction of the four Metropolitan Planning Organizations must be included within the Transportation System Projects document without change from regional planning documents approved by the Metropolitan Planning Organizations.

The Department evaluates the capacity project budget by focusing on that portion of the Department budget that is both available to apply towards capacity projects and under the direct control of the Department. This "Potential Capacity Budget" is calculated by adding federal and state components

that meet the above criteria. With the approval of the 2007 AB 595, the Department now requires a benefit/cost analysis on capacity improvement projects that cost at least $25 million. In addition, the Department requires that major projects included in the Transportation System Projects document be evaluated by standard criteria including project feasibility.

As of 2005, entities not within Metropolitan Planning Organizations' jurisdictions are requested to submit a Project Submittal Application for proposed transportation improvement projects. Applications are due to the Program Development Division by January 1. Those projects submitted for consideration are evaluated by a project evaluation team utilizing criteria based on current conditions, project impact, and project complexity. Using these criteria, proposed transportation improvement projects are ranked and submitted to the Director for consideration. The Director recommends the selection of projects advancing into the Annual Work Program of the Transportation System Projects document.

BRIDGE PROGRAM

Highway assets are managed using two systems: A pavement management system and a bridge management system. Both systems provide an inventory of existing assets, their condition, needed repairs, and repair priorities. The bridge management system aids in identifying bridges in need of replacement and rehabilitation. Federal Highway Bridge Program funds are available to replace and rehabilitate substandard publicly owned highway bridges. While the primary focus of this program is to replace or rehabilitate bridges, these funds can also be used for:

- Conducting federally mandated inspection on all existing bridges
- Compiling federally mandated inventory information
- Upgrading bridges to resist seismic activity
- Mitigating potential scouring of bridge supports due to flooding

Eligible expenses are funded at ninety-five percent federal funds with a five percent match by the bridge's owner. A minimum of fifteen percent of the federal funds must be applied to bridges off the federal-aid system. The remaining balance of federal funds may be applied to bridges on the federal-aid system. Bridges on federal and tribal lands are also eligible but are neither authorized nor administered by the Department.

There are approximately 1819 bridges open to the public in Nevada that are owned and maintained by the Department and local agencies. Additionally, several bridges are owned and maintained by federal agencies and a few by private entities. Of the State and Local bridges, 96 are currently eligible for federal funding. Eligibility and the priority of replacement and rehabilitation projects are based on a bridge's Sufficiency Rating. The Sufficiency Rating is a numerical assessment of a bridge's serviceability, and is calculated based on a compilation of select inventory data and condition assessment data. The importance of a bridge to the transportation system and rate of deterioration are also considered when selecting replacement and rehabilitation projects.

STATE HIGHWAY PRESERVATION PROGRAM

The Department maintains 5,376 miles of highways. The total number of miles fluctuates annually as new highways are constructed and others are eliminated due to Relinquishment and Road

Transfer activities to counties and cities, prompted by the 1999 Assembly Concurrent Resolution (ACR) 3. These highways carry 58 percent of Nevada's traffic and 87 percent of the heavy trucks. The Department is responsible for protecting highway assets and preserving existing highways. Highway assets are managed using two systems: a pavement management system and a bridge inventory system. Both systems provide an inventory of existing assets, their condition, needed repairs, and repair priorities. The basic principle of pavement preservation is that timely lower-cost improvement will save money and better serve the public. For example, timely overlays will cost about 25 percent of the cost of waiting a few more years when reconstruction is necessary. At present, approximately $300 million is needed annually for pavement preservation projects to maintain the present quality of highway pavements. To preserve the state highway system at low cost, action plans are used that optimize the use of available funds. The Department's action plan in priority order is as follows:

To apply timely overlays on Interstate and other Principal Arterials, Minor Arterials, and other moderate to high volume roads.

To further develop economical repair strategies for our low-volume roads.

To continue coordinating and integrating routine pavement maintenance activities with planned overlay and reconstruction work.

Within this action plan, individual projects are prioritized based on pavement age, traffic volume, axle loads, and condition. From this analysis, an action list is formulated based on the financial consequences of not doing the project. Further assessment data is collected from field surveys in conjunction with district-engineer offices. Collaboratively, repair strategies are formulated along with an appropriate funding level to accomplish the Department's preservation and other goals.

HIGHWAY SAFETY IMPROVEMENT PROGRAM

The overall objective of the Highway Safety Improvement Program is to implement effective safety measures that reduce the number and severity of crashes on Nevada highways. The Highway Safety Improvement Program consists of several components, namely:

1) Collecting and maintaining data files for crashes, traffic volumes, and highway features.
2) Analyzing data files to determine high crash sites
3) Conducting engineering studies of high crash locations in order to develop highway safety improvements.
4) Establishing priorities for implementing safety improvements.
5) Programming and implementing highway safety improvement projects.
6) Evaluating crashes before and after the implementation of safety improvements.
7) Determining the overall effectiveness of the prescribed safety improvements.

The Department also cooperates with the agencies listed below to implement the Nevada Strategic Highway Safety Plan.

- Department of Health/Bureau of Family Health Services
- RTC of Washoe County
- Department of Public Safety/Office of Traffic Safety Department of Public Safety/Nevada Highway Patrol
- Federal Motor Carrier Safety Administration

- Department of Motor Vehicles
- Federal Highway Administration
- Nevada Sheriffs' and Chiefs' Association
- RTC of Southern Nevada
- Nevada Association of Counties

TRANSPORTATION ENHANCEMENT PROGRAM

The Transportation Enhancement Program requires that ten percent of the Federal Surface Transportation Program (STP) monies apportioned to each state be set aside for the funding of enhancements to the transportation system. Transportation Enhancement Program funding includes activities such as:

- Pedestrians and bicycles facilities
- Safety and educational activities for pedestrians and bicyclists
- Acquisition of scenic easements and scenic or historic sites
- Landscaping and other scenic beautification
- Rehabilitation of historic transportation buildings, structures, or facilities
- Environmental mitigation of water pollution and habitat connectivity
- Establishment of transportation museums

Local governments, state agencies, and federal agencies may submit applications for project funding. Private groups may apply for project funding, but must apply through a public entity or agency. Projects must be for one of the categories specified by law and must be related to surface transportation.

Enhancement projects are prioritized for funding by the Statewide Transportation Technical Advisory Committee. Members of this committee represent a wide range of transportation interests, including several local, state, and federal agencies. Within the urbanized area, the Metropolitan Planning Organizations initially prioritizes projects in their jurisdictions. A subcommittee of the Statewide Transportation Technical Advisory Committee prioritizes projects from the non-urbanized areas of the state. The Statewide Transportation Technical Advisory Committee approves and recommends to the Director a final priority list of projects. Upon the Director's approval, the enhancement projects are included in the Statewide Transportation Improvement Program (STIP).

APPENDIX C

PERFORMANCE MANAGEMENT PLAN

INTRODUCTION

The Department has developed performance measures among the four major divisions that were developed to support the achievement of the seven Department Strategic Plan Goals, which are to:

1) Optimize safety
2) Be in touch with and responsive to our customers
3) Innovate
4) Be the employer of choice
5) Deliver timely and beneficial projects and programs
6) Effectively preserve and manage our assets
7) Efficiently operate the transportation system

These performance measures are designed to quantify progress in meeting those goals. The fifteen performance measure topics are listed below. The following performance measures plan includes the actual performance measures, annual and ultimate targets, the performance measure champions, brief discussion of the strategy plan support, measurement and supporting data, and short and long range strategies. Additionally, an annual evaluation of the performance measures is included.

ADMINISTRATION DIVISION

Reduce Work-Place Accidents
Provide Employee Training
Improve Employee Satisfaction
Streamline Agreement Execution Process
Improve Customer and Public Outreach

PLANNING DIVISION

Reduce and Maintain Traffic Congestion

OPERATIONS DIVISION

Streamline Project Delivery: Bid Opening to Construction Completion
Maintain State Highway Pavement
Maintain NDOT Fleet
Maintain NDOT Facilities
Emergency Management, Security, and Continuity of Operations

ENGINEERING DIVISION

Reduce Fatal Crashes
Streamline Project Delivery: Schedule and Estimate for Bid Advertisement
Maintain State Bridges
Streamline Permitting Process

1. REDUCE WORK PLACE ACCIDENTS

Performance Measure:

1) The rate of work place injuries/illnesses per 100 employees.
2) The rate of medical claims per 100 employees for work place injuries/illnesses requiring medical attention.

The rate of injuries is reported as the number of work place injuries and illnesses per 100 employees and number of injuries and illnesses requiring medical attention per 100 employees as documented through annual OSHA 300 Log Reporting data. Data is based on calendar year per federal reporting requirements.

Annual Target: 10 % Reduction **Ultimate Target:** Zero

Division(s) Responsible:

Administrative Services- Safety and Loss Control Manager

Administrative Services- Human Resources Manager

Support Divisions:

All

Strategy Plan Support:

Safety extends to all aspects of the Department from the roadways to the office. Identifying and reducing risk to the Department, our employees and the public is continuous. This performance measure works towards meeting the Department of Transportation Strategic Plan goals to: Optimize Safety and Be the Employer of Choice.

2. PROVIDE EMPLOYEE TRAINING

Performance Measure:

Percentage of employees trained in accordance with prescribed training plans and State statute requirements.

Annual Target: 75 % **Ultimate Target:** 100%

Division(s) Responsible:

Administrative Services- Employee Development Manager

Administrative Services- Human Resources Manager

Support Divisions:

All

Strategy Plan Support:

Competency Training of the workforce keeps employees safe and helps to reduce injuries, lost time, and litigation. Competency Training also provides the skills and abilities to enable employees to achieve higher job performance. This benefits the Department and Nevada's citizens by providing a high-quality and safe transportation infrastructure. This performance measure has a positive impact on all of the Department of Transportation's Strategic Plan goals, especially: Optimize safety, be the employer of choice, deliver timely and beneficial projects and programs, effectively preserve and manage our assets, and efficiently operate the transportation system. Both NAC and Division Matrix training are addressed by Training Section competency Training programs.

3. IMPROVE EMPLOYEE SATISFACTION

Performance Measure:

Percentage rating obtained from employees' satisfaction surveys.

Annual Target: Overall rating 75% **Ultimate Target:** Overall rating of 80%.

Division(s) Responsible:

Administrative Services- Human Resources Manager

Support Divisions:

All

Strategy Plan Support:

Positive employee morale is critical to the success of the workplace. It is the backbone of a skilled and dedicated workforce and essential in attracting and retaining a quality staff. A satisfied workforce will excel at their duties. This benefits the Department and our customers. This performance measure works towards meeting the Department of Transportation Strategic Plan goals to: optimize safety, be in touch with and responsive to our customers, innovate, be the employer of choice, deliver timely and beneficial projects and programs, effectively preserve and manage our assets, and efficiently operate the transportation system.

4. STREAMLINE AGREEMENT EXECUTION PROCESS

Performance Measure:

Percentage of Agreements executed within 45 days from when division submits agreement to the date when it is fully executed.

Annual Target: 50% **Ultimate Target:** 90%.

Division(s) Responsible:

Administrative Services- Asst. Director Administrative Services

Administrative Services- Chief of Administrative Services

Support Divisions:

All (unless specific agreement types are looked at)

Strategy Plan Support:

Agreements are the core of all of our business practices, and must be completed prior to any action being taken. A delay has a tremendous impact in the operations of the Department. This performance measure works toward meeting the Department of Transportation Strategic Plan goals as follows: Speeding up the agreement process will help deliver timely and beneficial projects and programs. It also assists with being responsive to our customers.

5. IMPROVE CUSTOMER SATISFACTION

Performance Measure:

Numerical ratings obtained from public opinion and customer/user surveys.

Annual Target: Annual increases in public opinion and customer/user ratings.

Ultimate Target: Increases in public opinion and customer/user ratings.

Division(s) Responsible:

Communications Office- Chief of the Communications Office

Strategy Plan Support:

Public opinion and user (customer) surveys will assess public information and outreach activities, customer processes, and how well the Department is performing in the eyes of our customers. This is important so we know that we are doing the right things to be transparent, accountable, and efficient. This performance measure works toward meeting the Department of Transportation Strategic Plan goals to be in touch with and responsive to our customers.

6. REDUCE AND MAINTAIN CONGESTION LEVELS ON THE STATE MAINTAINED ROADWAY SYSTEM

Performance Measure:

Urban roadways – Maintain congestion at Level Service of D for 85% of State urban roadways

Rural roadways – Maintain congestion at Level of Service D for 90% of State rural roadways

Definition of Level of Service D – Roadways operating at up to 8 miles per hour less than the Free Flow Speed or Posted Speed Limit, and the traffic carrying capacity of the roadway is less than 0.9.

Ultimate Target: Reduce congestion by 1% per year to reach the ultimate target of 90% of State urban roadways at Level of Service D, and 95% of State rural roadways at Level of Service D

Division(s) Responsible:

Traffic Information System – Chief Traffic Information System

Performance Analysis – Chief Performance Analysis Engineer

Support Divisions:

Roadway Systems, Location, Maintenance and Operations

Strategy Plan Support:

This performance measure is one of the most important performance indicators of the NDOT maintained roadway system. It integrates the outcome of our overall investments into one measure that is a direct result of the collaborative efforts of the various divisions of NDOT. It will help reduce congestion and will help identify bottleneck locations on the NDOT maintained roadway system, which will be prioritized for improvements depending upon the funding and resources availability. It works towards meeting the Department of Transportation Strategic Plan to efficiently operate the transportation system by reducing the level of congestion and increasing safety.

This Congestion Monitoring System will be an evolving process and will be updated regularly as more data is integrated into it from the RTC's Freeways and Arterials System of Transportation, and the Washoe County's future Traffic Management Center, Synchro models, and other sources as needed.

7. STREAMLINE PROJECT DELIVERY: SCHEDULE AND ESTIMATE FROM BID OPENING TO CONSTRUCTION COMPLETION

Performance Measure:

Percentage of projects within established range of cost estimate and schedule to completion

Annual Target: 80% **Ultimate Target:** 80%

Division(s) Responsible:

Construction- Chief Construction Engineer

Support Divisions:

All

Strategy Plan Support:

This performance measure works towards meeting the Department of Transportation Strategic Plan goals by providing timely, beneficial construction projects. This measure helps to optimize safety for road users, be in touch with and responsive to our customers (road users), and efficiently operate the transportation system.

8. MAINTAIN STATE HIGHWAY PAVEMENT

Performance Measure:

Percentage of state maintained pavements needing annual preservation in order to maintain the pavement International Roughness Index (IRI) rating of good or fair condition.

Annual Target: 8%

Ultimate Target: 100%

Division(s) Responsible:

Materials Division- Chief Materials Engineer

Support Divisions:

Maintenance and Operations, Performance Analysis, Roadway Design and Districts

Strategy Plan Support:

Proactive pavement has a huge benefit in maximizing limited funds. Being proactive instead of reactive is more cost effective (4:1) in utilizing transportation project dollars. Pavement condition is also directly related to user vehicle maintenance and safety, and highway capacity. This performance measure works towards meeting the Department of Transportation's Strategic Plan goals to: optimize safety and be in touch with and responsive to our customers by providing smooth, quality pavements. To effectively preserve and manage our assets is a goal supported by implementing the Department's pavement preservation program.

9. MAINTAIN NDOT FLEET

Performance Measures:

1) Percentage of fleet requiring replacement – this measure is the percentage of the fleet that have reached the age or mileage that requires replacement.
2) Percentage of fleet in compliance with condition criteria – this measure is the percentage of the fleet that is maintained as per Department preventive maintenance requirements so that the expected life span of our vehicles is not compromised. As the fleet is maintained on the mileage and/or hourly requirements, compliance has been met.

Annual Target:

1) Declining Rate of 1% per year

2) Increasing rate of 1% per year.

Ultimate Target:

1) 10%

2) 95% rate of compliance for mileage/hourly requirements

Division(s) Responsible:

Equipment Division- Equipment Superintendent

Support Divisions:

Districts, Divisions

Strategy Plan Support:

The vehicles in the fleet are important to deliver projects and maintain a safe highway system. Equipment in good condition ensures the ability to perform NDOT's business practices and provides a safe and secure tool for staff. These performance measures work towards meeting the Department of Transportation Strategic Plan goals to: Optimize safety, Be in touch with and responsive to our customers, Innovate, Be the employer of choice, Deliver timely and beneficial projects and programs, Effectively preserve and manage our assets, and Efficiently operate the transportation system.

10. MAINTAIN NDOT FACILITIES

Performance Measure:

Percentage of building facilities that comply with regulatory building and safety codes.

Annual Target: Increase by 3% **Ultimate Target:** 100%

Division(s) Responsible:

Maintenance and Operations- Chief Maintenance Operations Engineer

Support Divisions:

Districts, Administrative Services

Strategy Plan Support:

Facility Condition Analysis (FCA) reports will ensure our buildings comply with building and safety codes, are safe and properly maintained. Each Department owned and maintained facility will be evaluated on a seven year cycle. Completion of the priority work items will return the facility to normal operation, defer deterioration, correct fire/life safety hazard, or correct ADA requirements.

This performance measure works towards meeting the Department of Transportation Strategic Plan goals to *optimize safety, be in touch with and responsive to our customers, innovate, be the employer of choice, effectively preserve and manage our assets, and efficiently operate the transportation system*.

11. EMERGENCY MANAGEMENT, SECURITY AND CONTINUITY OF OPERATIONS

Performance Measure:

Percent of emergency plans that have been completed, training and education have been provided to appropriate personnel, the plans have been tested and exercised and the plan has been updated to accommodate changes in departmental processes, federal guidelines, etc. Training and updates should be completed on a biennial basis. Plans include:

Continuity of Operations Plan

State Level Emergency Operations Plan

District Level Emergency Operations Plan

Southern Nevada Evacuation Plan

Infrastructure Security Plan

Mobile Fleet Security Plan

Department Buildings and Facilities Access Management Plan

Annual Target: 100% **Ultimate Target:** 100%

Division(s) Responsible:

Maintenance and Operations- Chief Maintenance Operations Engineer

Support Divisions:

All

Strategy Plan Support:

NDOT's emergency plans provide clear guidance on how NDOT will continue to perform critical functions and operations in the event of an emergency or disaster. Being prepared and ready for an emergency is paramount for keeping systems operating during such times, as well as being in a position to respond to health and safety issues. This performance measure works towards meeting the Department of Transportation Strategic Plan goals to:

- Optimize Safety
- Be in touch with and responsive to our customers
- Innovate,
- Deliver timely and beneficial projects and programs,
- Effectively preserve and manage our assets
- Efficiently operate the transportation system

12. REDUCE FATAL CRASHES

Performance Measure:

Number of fatalities on Nevada's streets and highways.

Annual Target: An average annual decrease of the five-year rolling average by 3.1% resulting in halving traffic fatalities and serious injuries by 2030.

Ultimate Target: Zero

Division(s) Responsible:

Safety Division- Chief Traffic/Safety Engineer

Support Divisions:

All

Strategy Plan Support:

All drivers and highway system users should expect a safe highway system. Through efforts of engineering, enforcement, education, emergency response and the will of the highway users, fatal crashes can be eliminated. The strategies for this performance measure will be based on the Nevada Strategic Highway Safety Plan. This performance measure also works towards meeting the Department of Transportation Strategic Plan goals to: Optimize safety, Be in touch with and responsive to our customers, Innovate, Deliver timely and beneficial projects and programs, Effectively preserve and manage our assets, and Efficiently operate the transportation system.

13. STREAMLINE PROJECT DELIVERY: SCHEDULE AND ESTIMATE FOR BID ADVERTISEMENT

Performance Measure:

Percentage of scheduled projects advertised within the reporting year and within the established construction cost estimate range.

Annual target: 70%

Ultimate Target: 80%

Division(s) Responsible:

Project Management Division- Chief of Project Management

Roadway Design Division- Chief Roadway Design Engineer

Support Divisions:

All units within the Department that are involved with project development.

Strategy Plan Support:

This performance measure works towards meeting the Department of Transportation Strategic Plan goals to: Be in touch with and responsive to our customers, Deliver timely and beneficial projects and programs, Optimize safety and effectively preserve and manage our assets. Goals are met by:

- Keeping NDOT customers appraised of project risks, opportunities, costs, scope and scheduling issues;
- Implementing standards to improve communication, coordination, and decision making resulting in efficient delivery of projects;
- Focusing and managing available resources towards implementing projects that preserves NDOT's assets, improves safety and relieves congestion.

14. MAINTAIN STATE BRIDGES

Performance Measure:

Number of Department owned bridges which are eligible for federal funding and are categorized as structurally deficient or functionally obsolete. Base figure is 37 of 1,704 bridges (*State Highway Preservation Report – 2007)*. Eligibility and priority for funding projects under the Bridge Program are based on a bridge's Sufficiency Rating. The Sufficiency Rating is a numerical assessment of a bridge's serviceability and is based on condition assessment inspection and inventory data. Its value varies from 0 to 100, with 100 representing no deficiencies. A bridge is eligible for replacement when its Sufficiency Rating is less than 50 and is eligible for rehabilitation when its Sufficiency Rating is less than 80. In addition to meeting the Sufficiency Rating requirement, a bridge must also be classified as either Structurally Deficient or Functionally Obsolete. A bridge is considered Structurally Deficient when key elements reach an established level of deterioration. A bridge is considered Functionally Obsolete when it no longer adequately serves the road it carries.

Annual Target: Replace or Rehabilitate at least one Department owned structurally deficient or functionally obsolete bridge. The goal is evaluated based on the contracts awarded in a given year.

Ultimate Target: Zero

Division(s) Responsible:

Structures Division- Chief Structures Engineer

Support Divisions:

Design, Project Management, and Districts

Strategy Plan Support:

This performance measure works towards meeting the Department of Transportation Strategic Plan goals to: Optimize safety, Innovate, Deliver timely and beneficial projects and programs, and effectively preserve and manage our assets. These goals can be met in the following ways: Safety for the motoring public will be optimized by replacing structurally deficient and rehabilitating functionally obsolete bridges. The Structures Division will seek and implement innovative

solutions to the challenges faced by the Bridge Program. The Division will deliver timely and beneficial bridge projects and programs. Meeting this performance measure will help effectively preserve and manage Department assets.

15. STREAMLINE PERMITTING PROCESS

Performance Measure:

Percentage of permits issued or rejected within 45 days of receipt.

Annual Target: 95% **Ultimate Target:** 95%

Division(s) Responsible:

Right of Way Division- Chief of Right of Way

Support Divisions:

Districts, Project Management, Design, Traffic/Safety and Others as needed

Strategy Plan Support:

Every encroachment to connect or work on state right of way requires a permit. This is a large area of our customer service. We must be assured the impact to the system is safe and will not negatively compromise the system, but we must meet the customer's needs for a timely response for their economic development. The majority of permits are relatively simple; however some are very complicated and require an extended technical review, thus the reason for the goal being less than 100. This performance measure works towards meeting the Department of Transportation Strategic Plan goals to optimize safety, be in touch with and responsive to our customers, innovate, and deliver timely and beneficial projects and programs.

APPENDIX D

LAS VEGAS CONVENTION AND VISITORS AUTHORITY

FUNDED PROJECTS

NEVADA DEPARTMENT OF TRANSPORTATION

LAS VEGAS CONVENTION AND VISITORS AUTHORITY FUNDED PROJECTS

Information as of December 2, 2013

Summary of AB595 bonding revenues programmed or scheduled to date:

Budget Account 4665 Rev Code 4118 - AB595 LVCVA Bond Reimb. Received to Date: $278,785,223

* *Projects Programmed (P); Scheduled (S); Contract Price (C):*

	PCEMS #	EA #	Location	Description	Amount
(C)	1-03323	73389	I 15 from I 215 to Sahara Interchange. "Gap Project"	Construct Express Lanes (Widen from 8 to 10 Lanes).	$21,864,010
(C)	1-03344	60405	I 15 From Blue Diamond Road (SR 160) to Tropicana Avenue (SR 593). Design-Build South	Capacity Improvements, New Ramps and Collector-Distributor Roads.	$254,637,263
(P)	1-03344	73423	I 15 From Blue Diamond Road (SR 160) to Tropicana Avenue (SR 593). Design-Build South	Capacity Improvements, New Ramps and Collector-Distributor Roads.	$6,050,000
				Total	**$282,551,273**

Note: Bond Revenue to be reimbursed upon NDOT expenditure & billing.

I-15 Design-Build South Projects (60405 & 73423) are not to exceed $273,545,000 total in LVCVA bonding funds.

Balance of 595L funds under agreement for I-15 Design Build South equals $12,857,737

Rudy Malfabon, P.E.
Director

Prepared by the
Performance Analysis Division
NEVADA DEPARTMENT OF TRANSPORTATION
1263 SOUTH STEWART STREET
CARSON CITY, NV 89712
www.nevadadot.com

Brian Sandoval
Governor