NEVADA DOT
SAFE AND CONNECTED

NEVADA DEPARTMENT OF TRANSPORTATION

2017 PERFORMANCE MANAGEMENT REPORT

December 2017

Rudy Malfabon, P.E.
Director

Brian Sandoval
Governor

PERFORMANCE MANAGEMENT REPORT

Performance Management Cycle

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

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State of Nevada Transportation Board Members

Brian Sandoval	Chairman/Governor
Mark Hutchison	Vice Chairman/Lt. Governor
Ron Knecht	State Controller
Tom Skancke	Member - District 1
Frank Martin	Member - District 1
Len Savage	Member - District 2
Emil "BJ" Almberg, Jr.	Member - District 3

NDOT Administration

Rudy Malfabon	Director
Bill Hoffman	Deputy Director
Tracy Larkin-Thomason	Deputy Director
David Gaskin	Deputy Director
John Terry	Assistant Director Engineering
Reid Kaiser	Assistant Director Operations
Sondra Rosenberg	Assistant Director Planning
Robert Nellis	Assistant Director Administration

NDOT Staff Involved

Peter Aiyuk – Chief Performance Analysis Engineer
Cole Mortensen – Chief of Project Management
Anita Bush – Chief Maintenance and Operations Engineer
Jennifer Eyerly – Chief of Administrative Services
Ken Mammen – Chief Traffic-Safety Engineer
Sharon Foerschler – Chief Construction Engineer
Allison Wall –Human Resources Manager
Mark Evans – Employee Development Manager
Oscar Fuentes – Safety Manager
Jessen Mortensen – Chief Bridge Engineer
Wayne Miller – Equipment Superintendent
Ruth Borrelli – Chief of Right-Of-Way
Paul Frost – Chief of Roadway Design
Natalie Caffaratti – Assistant Chief of Roadway Design
Darin Tedford – Chief Materials Engineer
Sean Sever – Communications Director

DEPARTMENT VISION, MISSION, AND GOALS

MISSION,
VISION GOALS,
and VALUES

MISSION

Provide, operate, and preserve a transportation system that enhances safety, quality of life and economic development through innovation, environmental stewardship and a dedicated workforce.

VISION

To be a leader and partner in delivering effective transportation solutions for a safe and connected Nevada.

STRATEGIC PLAN GOALS

Safety first

Cultivate environmental stewardship

Efficiently operate and maintain the transportation system of Nevada

Promote internal and external customer service

Enhance organizational and workforce development

CORE VALUES

Respect – Treat others with dignity and value their contribution
Integrity – Do the right thing
Accountability – Take pride in our work and be accountable for our actions
Communication – Communicate with transparency and responsiveness both internally and externally
Teamwork – Foster collaborative partnerships both internally and externally
Flexibility - Be responsive to changing conditions and open to new ideas

INTRODUCTION

NDOT's Performance Management is a collaborative process in which all major divisions of the department are involved in monitoring their quarterly, 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 Department-wide 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 essential and 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 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 Benefit-Cost Analysis for capacity projects that cost at least $25 million (NRS 408.3195).**

The annual report will include the criteria used in the benefit-cost 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

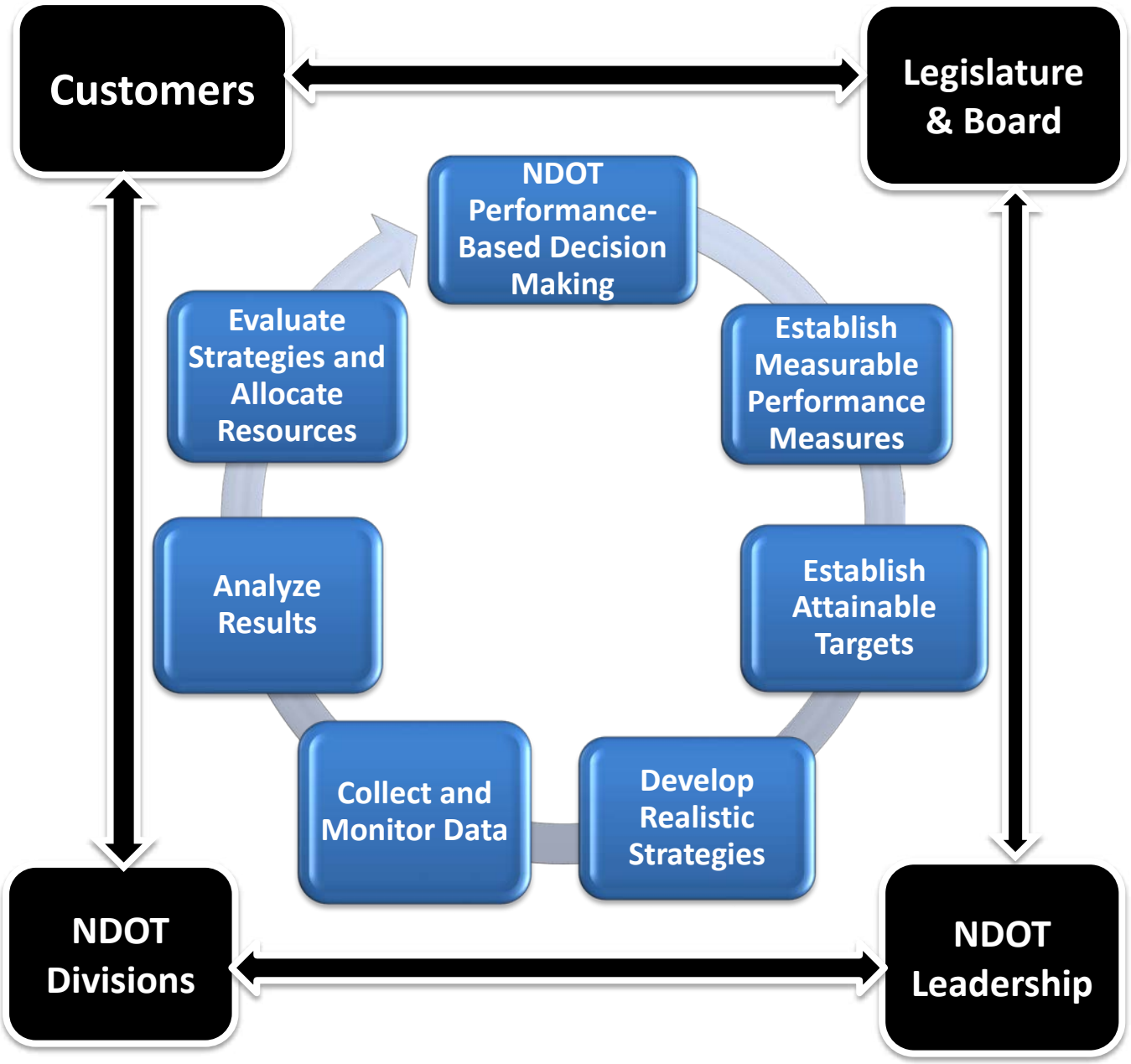
NDOT's Performance Management is a collaborative process in which all the major divisions of the department are involved in monitoring their quarterly, annual and ultimate performance targets resulting in a customer-oriented, balanced, effective, efficient, transparent and performance-based decision-making 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 Department-wide 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.

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 legislature.

In Fiscal Year 2017, NDOT continued to monitor its performance-based management process. The performance management dashboard, the performance measures overview, and the detailed data trends sections of this report provide further information regarding NDOT's performance in Fiscal Year 2017.

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 communication, 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 cycle that includes identifying realistic and specific performance measures, establishing measurable and attainable targets, developing comprehensive and effective strategies to help achieve the targets, collecting quarterly data 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 & Serious Injury Crashes
13. Project Delivery- Schedule and Estimate for Bid Advertisement
14. Maintain State Bridges
15. Streamline Permitting Process

Performance Measures Overview


Performance Measures Overview

Performance Measure		Target	Current Status	Target Met	Trend (5yrs or less)	Desired Trend
Employee						
Reduce Work Place Accidents (1)	Injuries/Illnesses per 100 employees	2% Annual Reduction	2.6% Decrease			
	Injuries/Illnesses requiring medical attention per 100 employees	2% Annual Reduction	0.5% Decrease			
Provide Employee Training (2)	Percentage Employees Trained According to Requirements	74% Compliance Annually	Average 83% Compliance			
Improve Employee Satisfaction (3)	Percentage Employees Satisfied with NDOT	75% Annually	67% Satisfied			
Project Delivery						
Streamline Agreement Process (4)	Percentage Agreements Processed within 30 days	90% Annually	96% Processed within 30 days			
Streamline Project Delivery – Bid Opening to Construction Completion (7)	Percentage Projects Completed on Schedule and Within Budget	80% Annually	90% within Budget			
			100% within Schedule			
			62% Change Order < 3% Cost Increase			
Streamline Project Delivery – Schedule and Estimate for Bid Advertisement (13)	Percentage of Scheduled Projects Advertised within the Reporting Year	75% Advertised within the Reporting Year	78% Performance			
	Percentage of Advertised & Awarded Projects within Established Construction Cost Estimate Range	70% Delivered within Established Cost Estimate Range	32% (Oct. vs Award)			
			44% (Eng. vs Award)			
Streamline Permitting Process (15)	Percentage Encroachment Permits Processed within 45 days	95% Annual	94.6% Processed within 45 Days			
Assets						
Maintain State Highway Pavement (8)	State Roadways Maintained at "Fair or Better" Condition (Road category definition in report)	Category 1: 95%	99.6%			
		Category 2: 95%	93.7%			
		Category 3: 95%	95.7%			
		Category 4: 95%	80.6%			
		Category 5: 95%	49.1%			
Maintain NDOT Fleet (9)	Percentage Mobile Equipment in Need of Replacement	1% Annual Decrease	5.8% Decrease			
	Percentage Fleet in Compliance with Condition Criteria	1% Increase	7.1% Decrease			
Maintain NDOT Facilities (10)	Percentage of Facilities Assessments & Condition	2% Annual Increase	0% Increase			
Maintain State Bridges (14)	Annual Reduction in Structurally Deficient (SD) Bridges	Replace or Rehabilitate at least 1 SD Bridge Per Year	0 SD Bridge replaced			


Performance Measures Overview

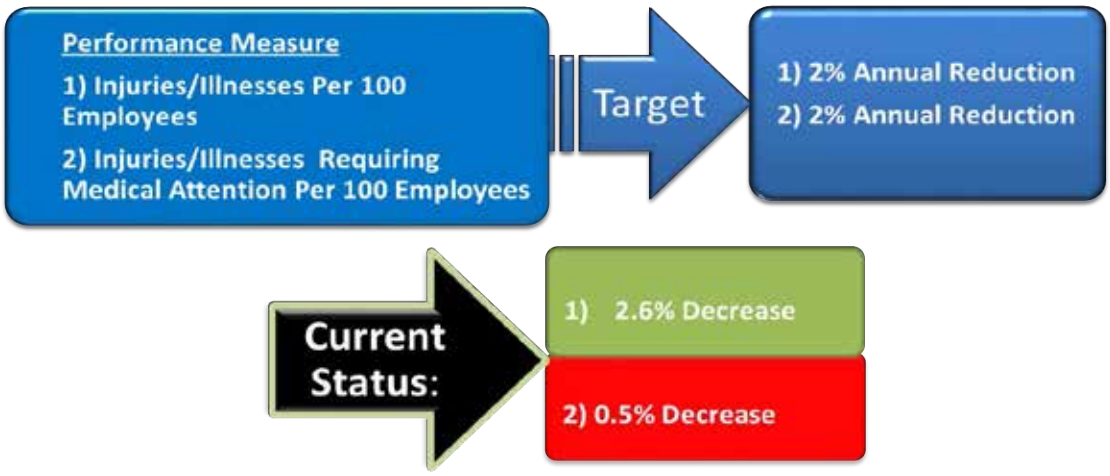
Performance Measure		Target	Current Status	Target Met	Trend (5yrs or less)	Desired Trend
Safety						
Emergency Management, Security and Continuity of Operations (11)	Percentage of Emergency Management Plans Implemented	100% Annually	87.5% Compliance			
Reduce Fatal & Serious Injury Crashes (12)	Number of Traffic Fatalities	Decrease the projected 2013 - 2017 five year rolling avg. of 303 fatalities by at least one	N/A	2017 status to be determined by end of 2018	Adoption of new target in 2017	
	Number of Serious Traffic Injuries	Decrease the projected 2013 - 2017 five year rolling avg. of 1,184 serious injuries by at least one	N/A	2017 status to be determined by end of 2018	Adoption of new target in 2017	
	Number of Traffic Fatalities per 100M VMT	Decrease the projected 2013 - 2017 five year rolling avg. of fatalities per 100M VMT by at least .05	N/A	2017 status to be determined by end of 2018	Adoption of new target in 2017	
	Number of Serious Traffic Injuries per 100M VMT	Decrease the projected 2013 - 2017 five year rolling avg. of serious injuries per 100M VMT by at least .05	N/A	2017 status to be determined by end of 2018	Adoption of new target in 2017	
Our Partners						
Improve Customer and Public Outreach (5)	Customer Satisfaction & Public Outreach	Annual Increase in Social Media Goals (Facebook likes, Twitter followers & retweets, YouTube views) 85%	48.9% Average Increase above set targets			
Reduce and Maintain Congestion Levels on the State Roadway System (6)	Percent of person-miles traveled on Nevada Interstate that are reliable	85%	88.50%			
	Percent of person-miles traveled on Nevada non-interstate NHS that are reliable	65%	66.00%			
	Annual hours of peak-hour excessive delay per capita	Pending	N/A	N/A	N/A	
	Percent of non-single occupancy vehicle travel in Nevada urbanized areas	Pending	N/A	N/A	N/A	

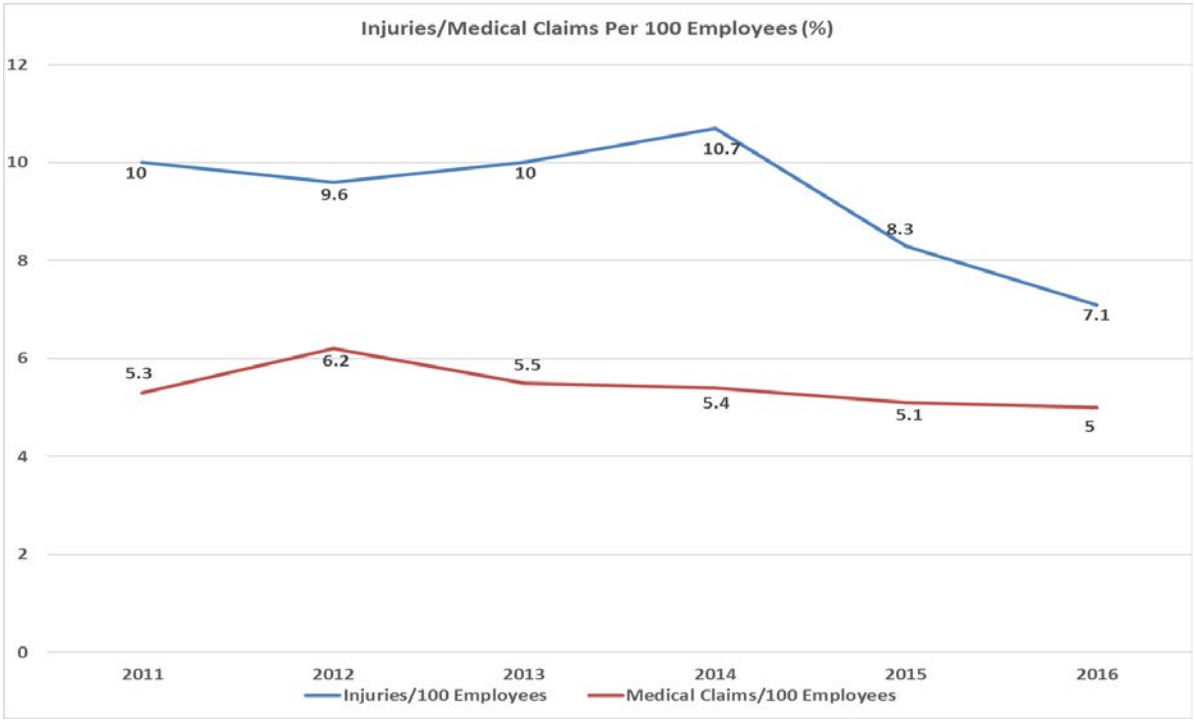
PERFORMANCE DASHBOARD

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 2017. Detailed information regarding each performance measure is provided in the "Performance Management Detailed Data Trends" section of this report.

1. Reduce Workplace Accidents

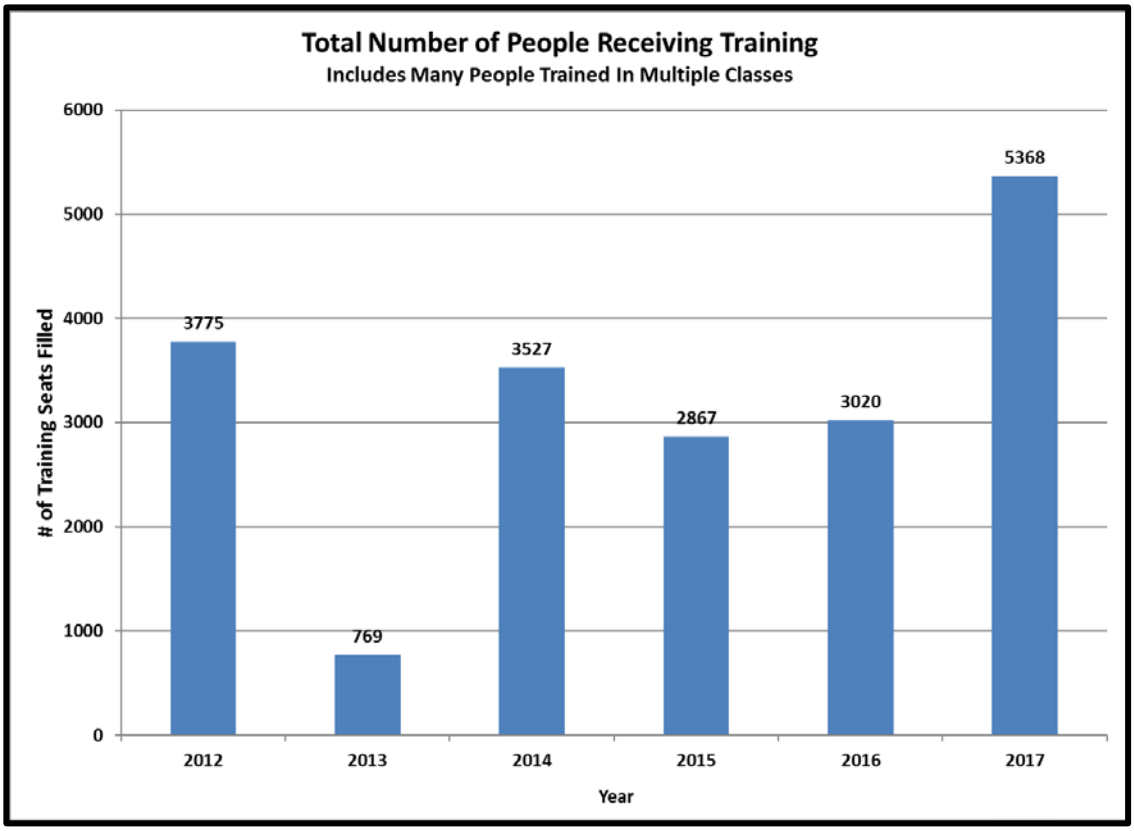
Executive Summary: This Performance Measure has two parts to track; the rate of workplace injuries/illnesses, and the severity rate of employee workplace injuries/illnesses. Comparing calendar year (CY) 2016 to the baseline of previous five-year average (2011-2015), work place injury/illness rate declined by 2.6% while the severity rate which is an indication of medical claims declined only by 0.5%. Also, the average claim cost went up from the previous five-year average of $10,131.75 per claim to $12,978.24 per claim in 2016. Measure 1 met the target whilst measure 2 did not because the annual decrease was less than the 2% target. Data for this measure covers CY 2016. For detailed information about this performance measure please refer to page 29.





2. Provide Employee Training

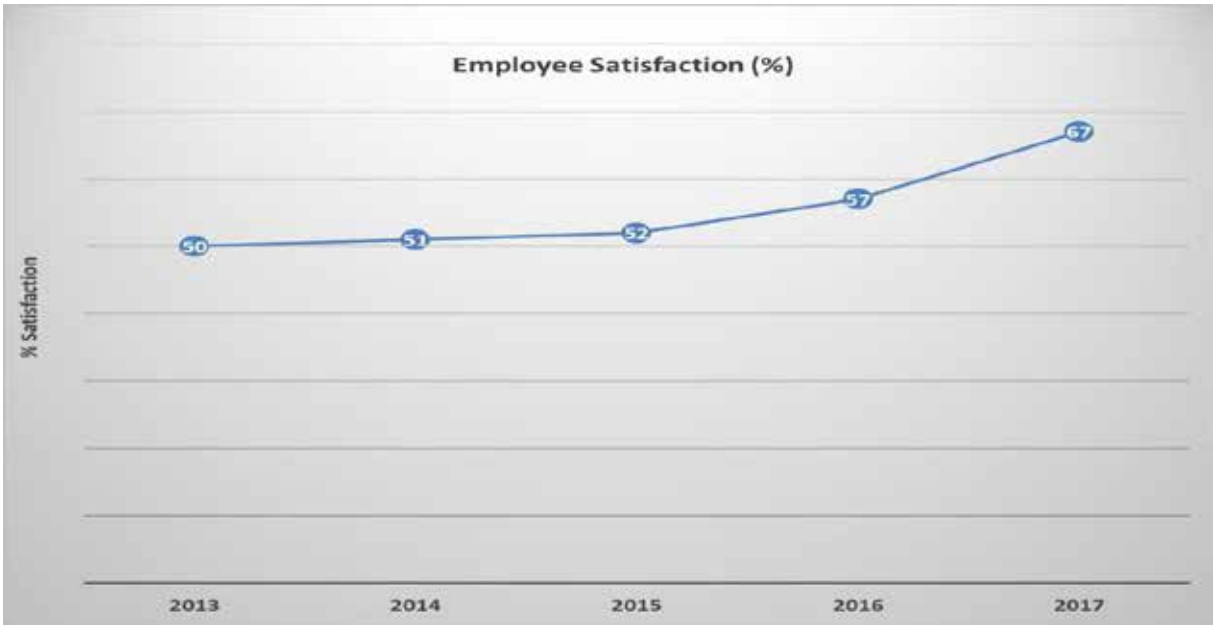
Executive Summary: What is tracked and measured for this performance measure is the percentage of employees trained in accordance with prescribed training plans and State statue training requirements. The target for state fiscal year (SFY) 2017 was set at 74% for all required training, and 83% compliance was achieved which is well above the set target. This is the highest level of compliance in the past five years. The higher completion level demonstrates that an increased use of computer technology was an effective strategy. For detailed information about performance measure 2, please refer to page 33.



3. Provide Employee Satisfaction

Executive Summary: This performance measure tracks the percentage of employees who are satisfied with the NDOT work environment. The methodology for tracking this performance measure is through the yearly employee satisfaction survey.

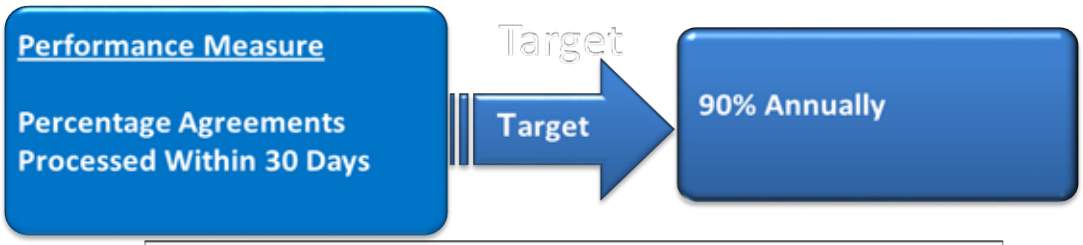
The percentage of employees surveyed who are extremely or somewhat satisfied with NDOT in state fiscal year (SFY) 2017 is 67%. This is lower than the set target of 75% annual satisfaction. However, this is 10 percentage points higher than it was in SFY 2016. For detailed information about performance measure 3, please refer to page 37.

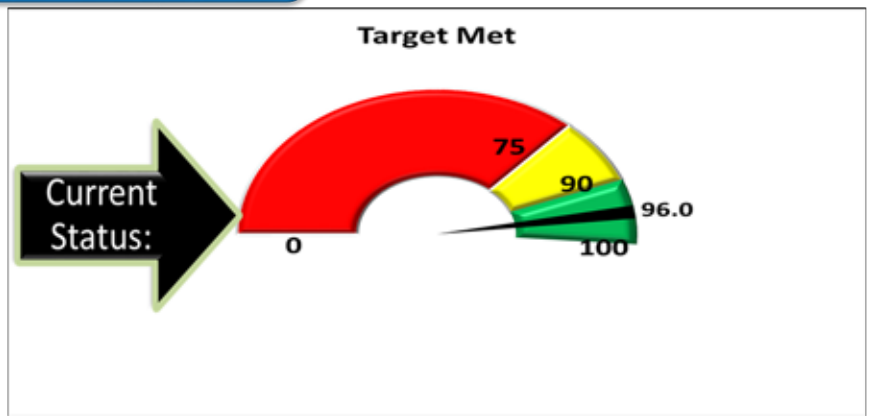


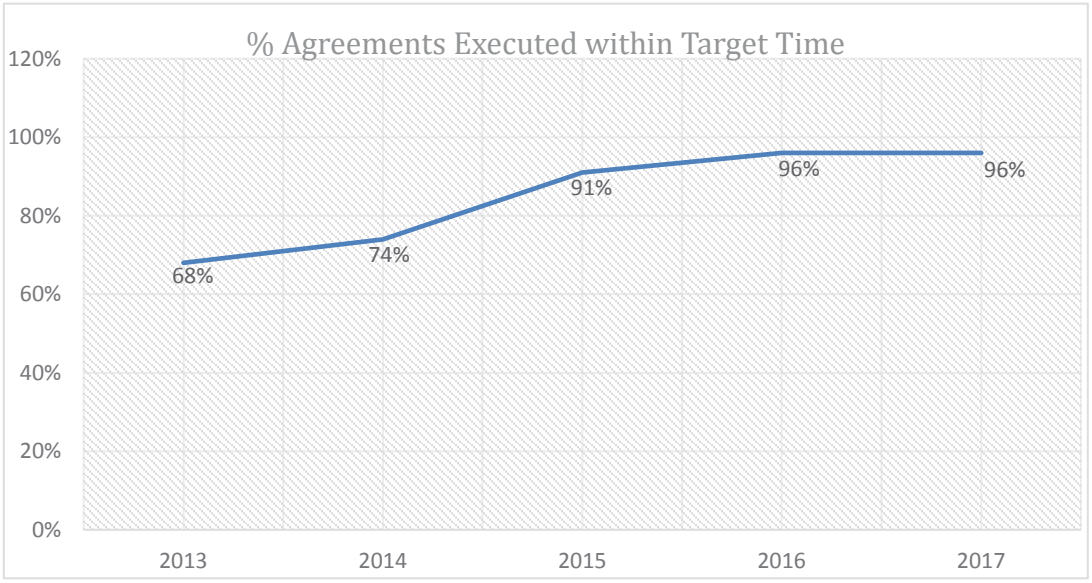
4. Streamline Agreement Process

Executive Summary: In state fiscal year (SFY) 2017, 96% of all agreements submitted to Agreement Services were executed within 30 days or less. This exceeds the performance target of 90%.

Also, in SFY 2017 it took an average of 11 days excluding time agreement with second party or awaiting Transportation Board approval to execute an agreement. This is a better performance compared to SFY 2016 which took an average of 12 days. For detailed information about performance measure 4, please refer to page 41.







5. Improve Customer and Public Outreach

Executive Summary: This performance measure works toward meeting the NDOT Strategic Plan goal to be in touch with our customers. This performance measure is aligned with the goals and strategies set forth within the NDOT communications plan. The performance metrics that are tracked, measured and analyzed to determine how the department is doing are: Facebook likes, Twitter followers, Twitter retweets and You Tube views. Public Information staff are also improving all performance areas including making the NDOT website more user friendly, increasing internal and media communications, and improving public involvement.

The communications director is the champion of this Performance Measure and state fiscal year (SFY) 2017 is the second year the section starts tracking and reporting on this measure. 2016 will be the beginning year for trend analysis for this performance measure. For more information about this Performance Measure, please refer to page 44.

Social Media Goals

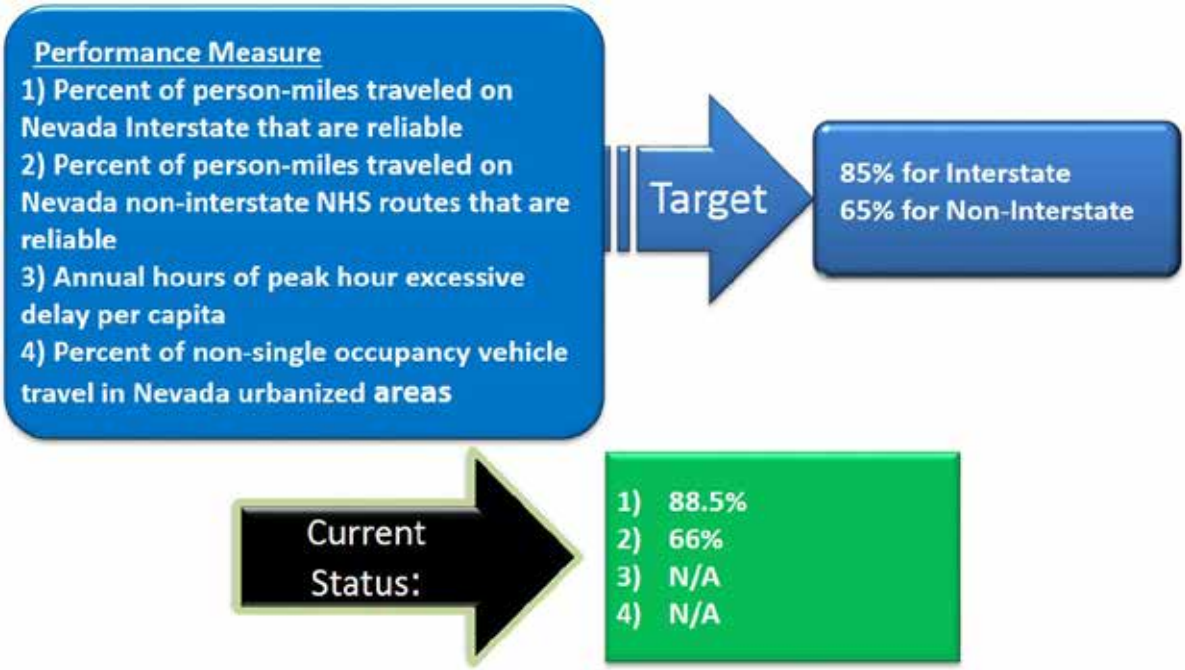
- Increase Facebook likes to 3,600 by the end of fiscal year (FY17) - **increased to 8,560**
- Increase Twitter followers to 20,000 by the end of fiscal year (FY17) – **increased to 22,800**
- Increase Twitter retweets by 10% by the end of fiscal year (FY17) – **increased by 5%**
- Increase YouTube views by 10% by the end of fiscal year (FY17) – **increased by 54%**

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

Executive Summary: There are four parts to this performance measure. Only two of the four performance metrics - Percent of person-miles traveled on Nevada Interstate that are reliable and Percent of person-miles traveled on Nevada non-interstate NHS routes that are reliable were measured and reported this calendar year (CY). Annual hours of peak hour excessive delay per capita and Percent of non-single occupancy vehicle travel in Nevada urbanized areas were not measured and reported due to insufficient data.

The National Performance Measurement Research Data Set (NPMRDS) was used to measure and in analyzing the performance of our Interstate and non-Interstate NHS roadway systems. Based on the analysis using CY 2016 data, 88.5% of person-miles traveled on Nevada interstate system were reliable, while 66% of person-miles traveled on Nevada non-interstate NHS roads were reliable. For detailed information about this Performance Measure refer to page 46.

Definition of Travel Time Reliability – Travel Time Reliability is an indication of consistency or expectation by drivers that it will take an estimated amount of time to traverse a certain distance on a stretch of roadway. It is measured by the day or at different times of the day.



7. Streamline Project Delivery - Bid Opening to Construction Completion

Executive Summary: This performance measure tracks the percentage of Design Bid Build and Construction Manager at Risk projects completed within the established ranges for cost estimate, change orders and schedule.

This performance measure is based on completed contracts and does not include projects in progress. In state fiscal year (SFY) 2017, an average of 90% of completed contracts were within budget, 100% within schedule, and 62% had change orders less than a three percent cost increase. For detailed information about performance measure 7, please refer to page 48.

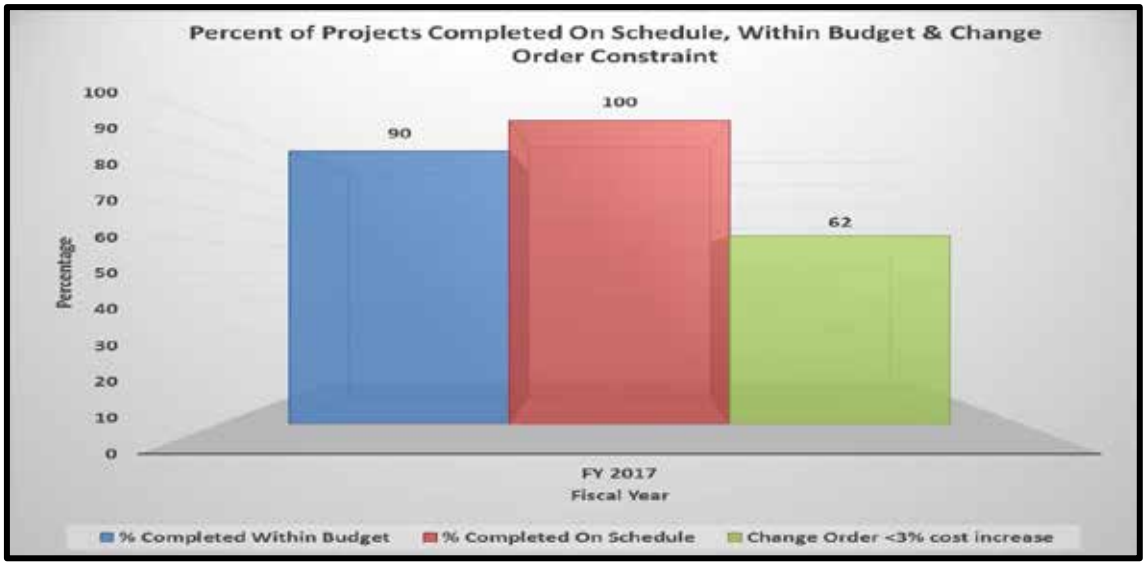
Performance Measure

1) Percent Projects Completed Within 10% Of Original Programmed Budget
2) Percent Projects Completed Within 10% Of Original Assigned Working Days
3) Percent Projects Completed With Cost Increase Of Less Than 3% Change Orders

Target: 80% Annually

Current Status:

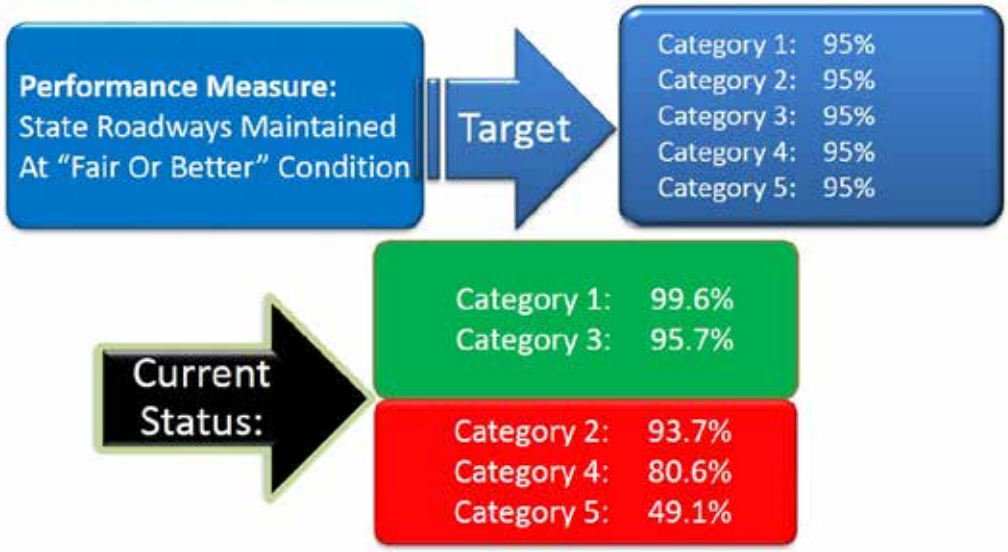
1) 90% Within Budget
2) 100% Within Schedule
3) 62% Change Order < 3 % Cost Increase



8. Maintain State Highway Pavement

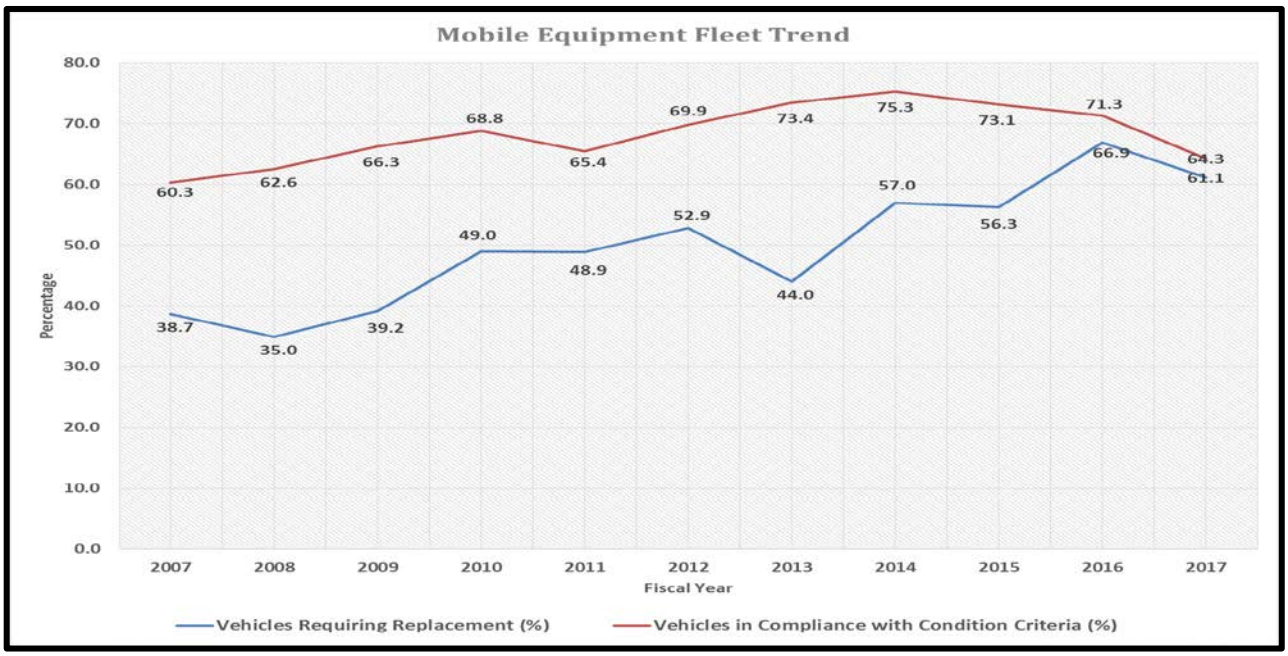
Executive Summary: In state fiscal year (SFY) 2017 NDOT was able to meet the performance targets of 95% fair or better pavement condition in categories 1 and 3, but was unable to address the needs of categories 2, 4 and 5 roadways to bring them up to the minimum target.

For the Department to maintain the roadway network in fair or better condition, rehabilitation work is performed on the roadways each year. To increase the percentage of pavements in "Fair" or better condition, rehabilitation work must be performed on all roads more than the rate of deterioration of the pavement. For detailed information about performance measure 8, please refer to page 52.



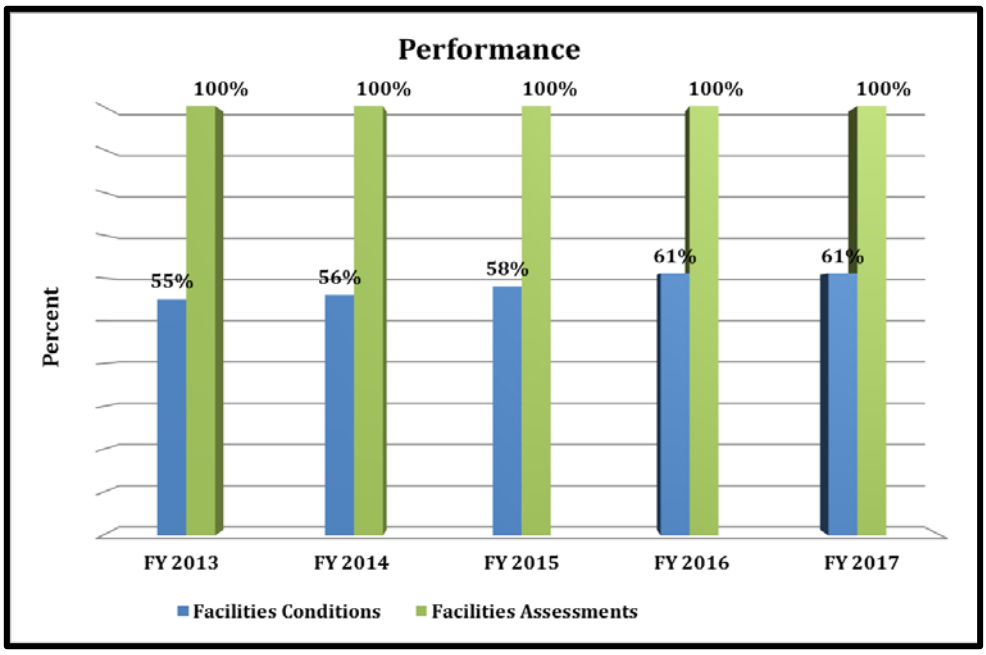
9. Maintain NDOT Fleet

Executive Summary: During state fiscal year (SFY) 2017, the percentage of the NDOT mobile equipment fleet requiring replacement decreased by 5.8% over the prior year, but increased by 22.42% over the base year 2007. The percentage of fleet in compliance with preventive maintenance requirements to ensure the expected life of our vehicles is not compromised decreased by 7.1% over the prior year, but increased by 3.96% compared to the base year. Performance target 1 was met, while Performance target 2 wasn't met. For detailed information about performance measure 9, please refer to page 59.



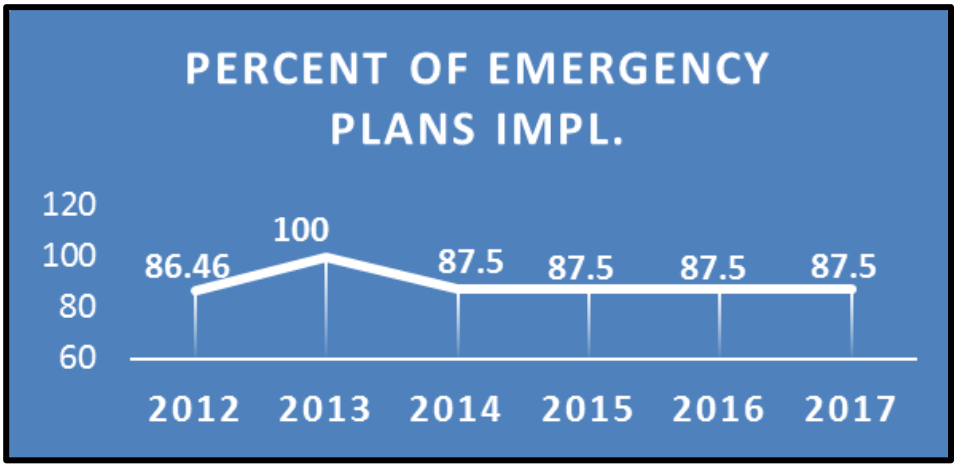
10. Maintain NDOT Facilities

Executive Summary: State fiscal year (SFY) 2013 is considered the base year for this performance measure because NDOT adopted a new method to measure the performance of the "facilities condition" that includes finer details compared to prior years. In SFY 2017 an overall performance of 61% facilities assessments and condition was achieved. This is higher by eight percentage points compared to the base year, and remained the same compared to the year before. The performance in SFY 2017 of 0% didn't meet the established target of a 2% annual increase. For detailed information about performance measure 10, please refer to page 61.



11. Emergency Management, Security, and Continuity of Operations

Executive Summary This performance measure tracks the percentage of emergency plans that have been completed, training and education provided to appropriate personnel, and plans tested, exercised and updated. Training and updates are completed on a biennial basis. In SFY 2017 we achieved an 87.5% compliance level, which did not meet our goal for the year of 100%. The reason for not meeting the target is because the Homeland Security Plan was not updated. The reason it was not updated was because of approved absences of key NDOT staff, time spent on the Beatty fire/flood event, and preparation for mass migration workshop in Las Vegas (VG-17). For detailed information about performance measure 11, please refer to page 67.



12. Reduce Fatal & Serious Injury Crashes

Executive Summary: During calendar year (CY) 2017, NDOT continued to work with partners to implement the strategies of the Strategic Highway Safety Plan.

NDOT has changed the reporting format for this performance measure to align with federal reporting requirements for both the FHWA and the NHTSA. This performance measure now has four parts that will be tracked as shown below. Due to the adoption of this new format and the establishment of yearly targets, the assessment of this performance measure will be determined at the end of 2017 and reported in the 2018 performance report.

The data presented is from 2012 to 2016 and the analysis uses projections and the five-year average. For detailed information about performance measure 12, please refer to page 72.

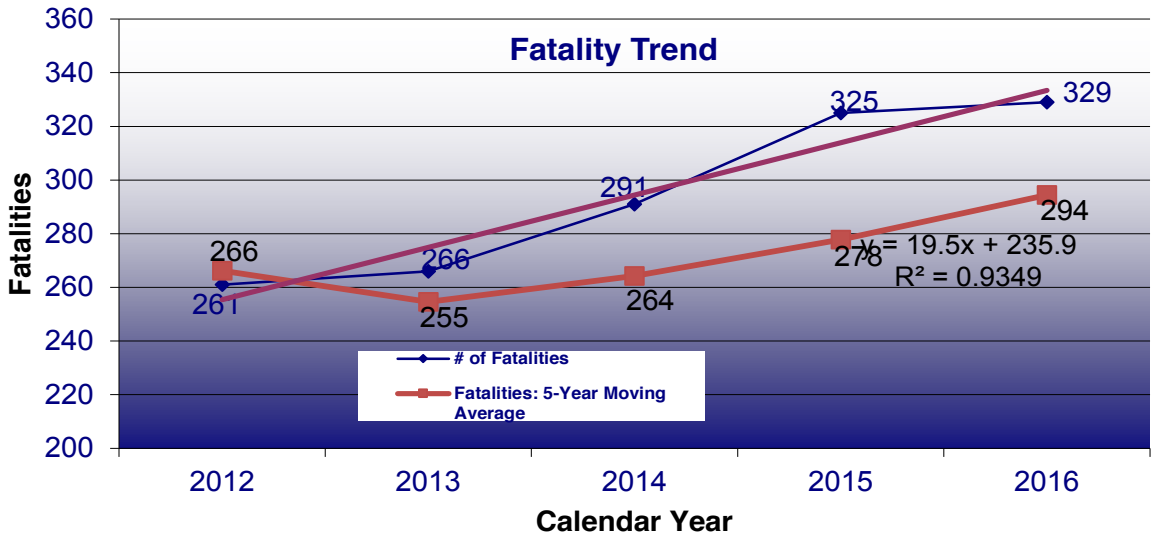
Performance Measure
1. Number Of Traffic Fatalities
2. Number Of Serious Traffic Injuries.
3. Number Of Fatalities Per 100M VMT
4. Number Of Serious Injuries Per 100M VMT.

Target

Five year rolling period (2013-2017)
1. Decrease the projected 5-year rolling avg. of traffic fatalities by at least one
2. Decrease the projected 5-year rolling avg. of serious injuries by at least one
3. Decrease the projected 5-year rolling avg. of fatalities per 100M VMT by at least .05
4. Decrease the projected 5-year rolling avg. of serious injuries Per 100M VMT by at least .05

Current Status:

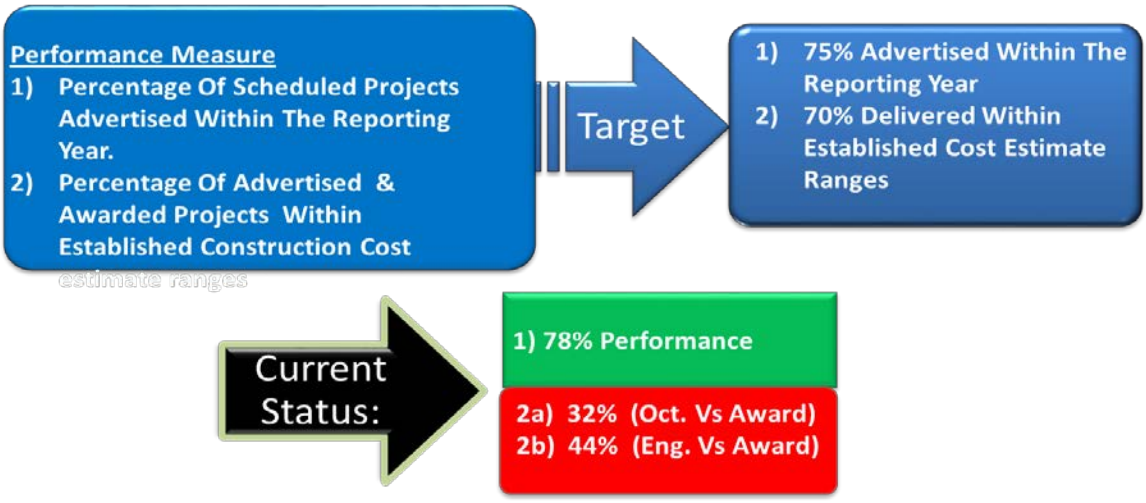
1) N/A
2) N/A
3) N/A
4) N/A

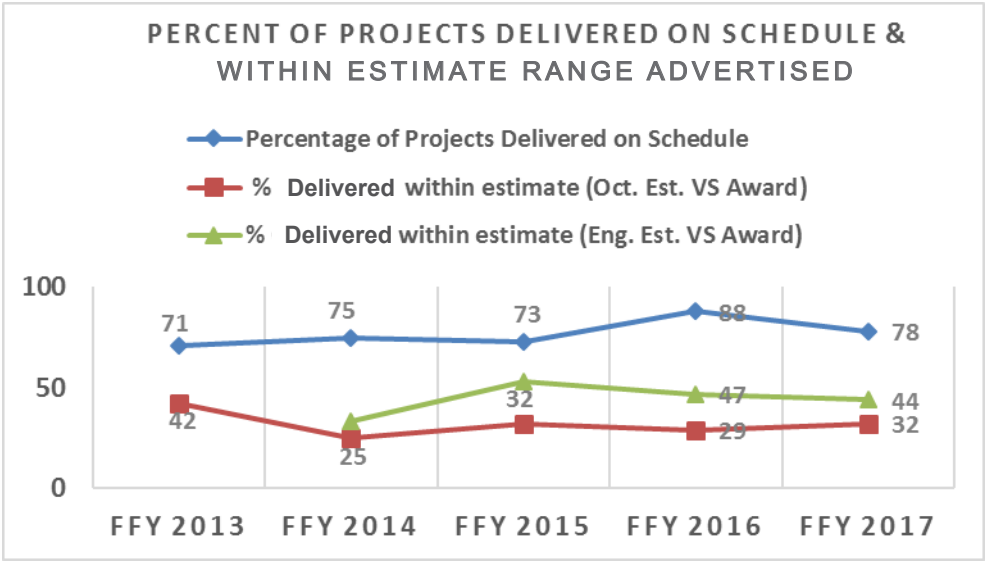


13. Streamline Project Delivery - Schedule and Estimate for Bid Advertisement

Executive Summary: This performance measure has been established as the percentage of scheduled projects advertised within the reporting year, and the percentage of advertised and awarded projects within the established construction cost estimate ranges. The construction cost estimate ranges are +/-15% of the October estimate of construction costs and +/-10% of the engineer's estimate of construction costs at time of bid.

The performance measure incorporates most projects advertised by the Department. Contracts managed through the districts and maintenance sections were not included as they are developed through a separate process than the typical transportation project. Capital improvement projects completed by the Architecture Division were also excluded from this performance measure.
For detailed information about performance measure 13, please refer to page 78.

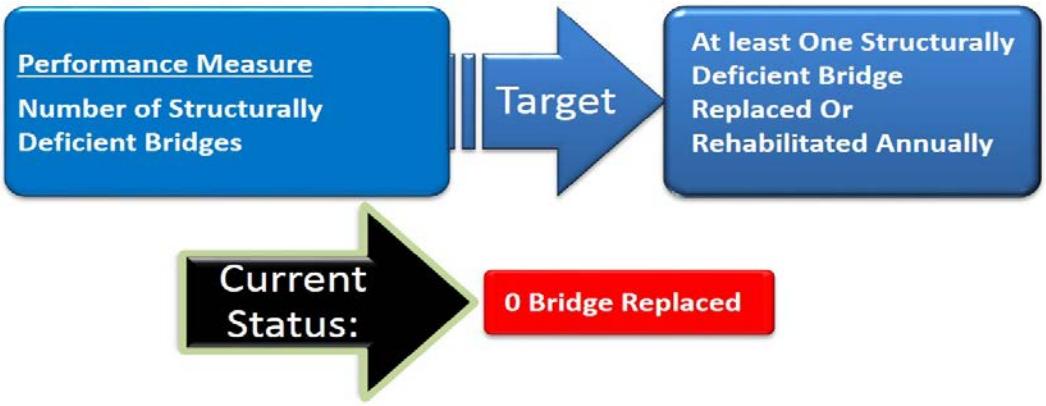


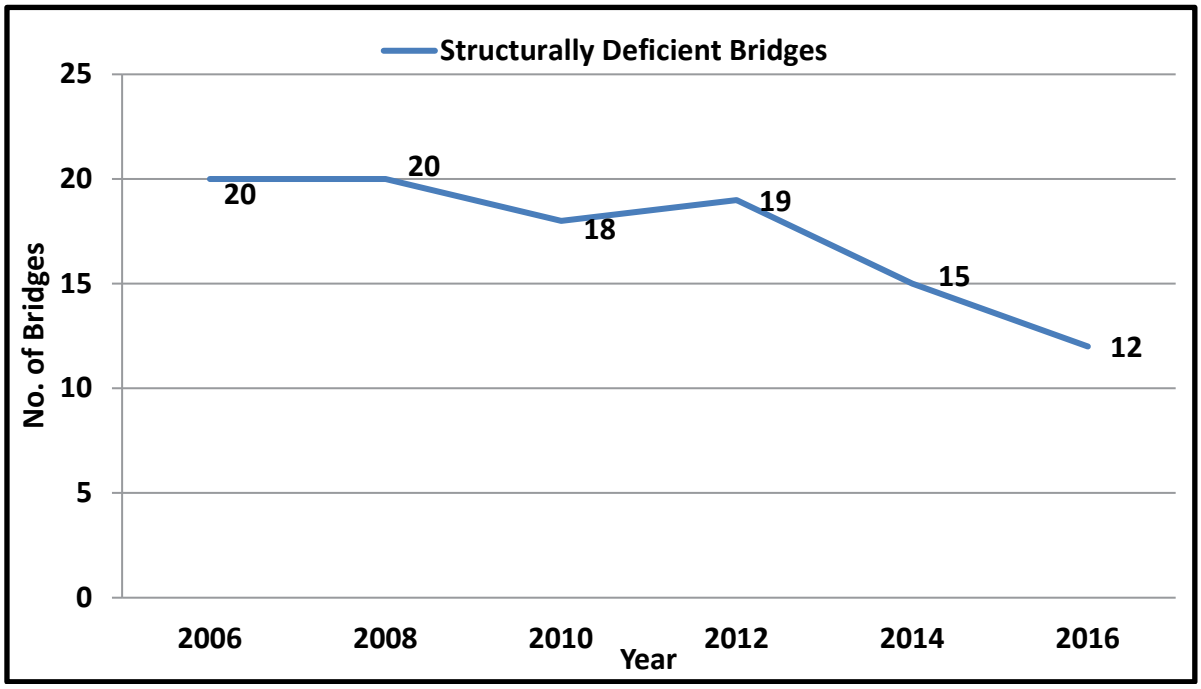


14. Maintain State Bridges

Executive Summary: The performance measure for the Structures division was modified to include only department-owned bridges which are categorized as Structurally Deficient (SD). The use of Functionally Obsolete category has been eliminated because it does not reflect bridge condition, maintenance or replacement needs. This is in line with the MAP-21 ACT.

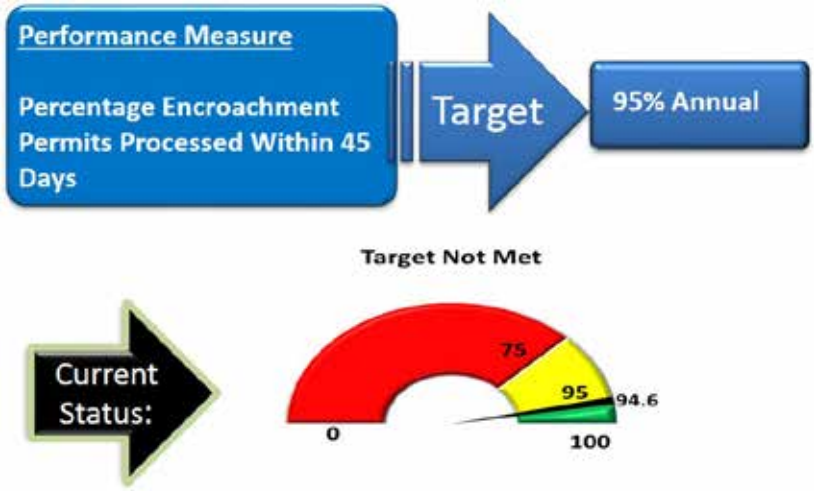
During calendar year 2016, NDOT didn't replace one bridge which was structurally deficient. This doesn't meet the performance target of replacing or rehabilitating at least one bridge per year. For detailed information about performance measure 14, please refer to page 83.





15. Streamlining Permitting Process

Executive Summary: During state fiscal year 2017, the NDOT Right-Of-Way Division processed a total of 720 permits of which 681 were processed within 45 days. This translates to a 94.6% performance which is slightly below the performance target of 95%. 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 88.



Summary of Status	Dist. 1	Dist. 2	Dist. 3	HQ	Total
Total permits accepted	897	257	147	1	1,302
Total permits processed in more than 45 days	33	4	2	0	39
Total permits processed within 45 days	495	149	37	0	681
Total permits processed	528	153	39	0	720
Total permits processed with re-reviews	94	153	39	0	286
Total permits processed through FHWA	44	11	3	0	58
Percent permits processed in more than 45 days	6.25%	2.61%	5.13%	0.00%	5.42%
Percent permits processed within 45 days	93.75%	97.39%	94.87%	0.00%	94.58%

Note: All calculations in this report have been handled in accordance with TP-1-10-3

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.

Ultimate Target: Zero **Yearly Target:** 2% Reduction

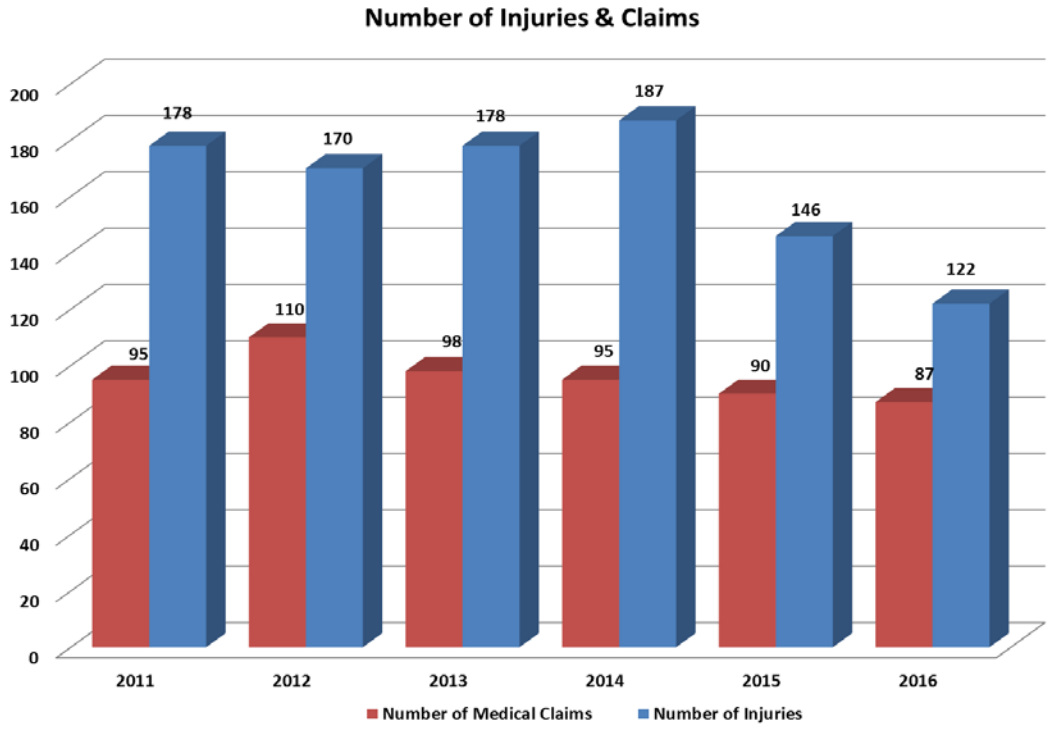
Champion:
Safety and Loss Control Section Manager
Human Resources Manager
Support Divisions: All

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 an ongoing endeavor. This performance measure works towards meeting the Department of Transportation strategic plan goals to: safety first and enhance organizational and workforce development.

Measurement and Supporting Data:

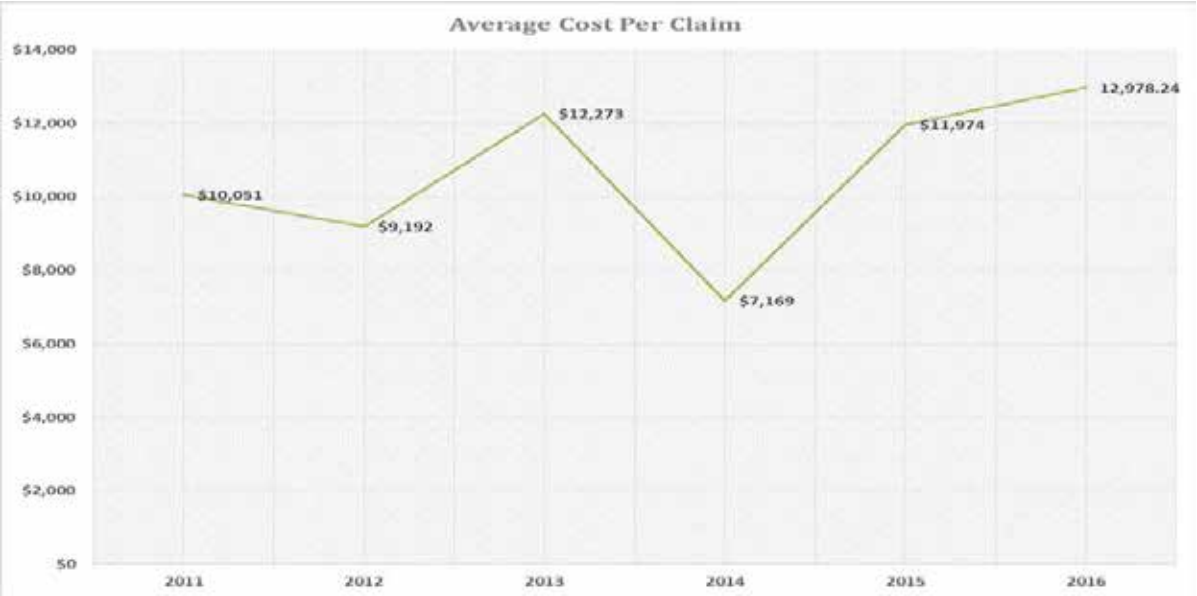
Calendar Year	*2011*	*2012*	*2013*	*2014*	*2015*	*2016*
Total # of Injuries	178	170	178	187	146	122
# Injuries/All Employees	10%	9.61%	10%	10.68%	8.31%	7.10%
Total # Medical Claims	95	110	98	95	90	87
Medical/Employees	5.30%	6.20%	5.51%	5.43%	5.12%	5.00%
Average Claim Cost	$10,051	$9,192	$12,273	7,168.96	11.973.92	12,978.24
Average # Employees	1783	1769	1777	1751	1757	1717

Calendar Year	2011-2015 Avg.	2016
Total # Injuries	171.8	122
Injury rate (%)	9.7	7.1
Total # Medical Claims	97.6	87
Serious injury rate (%)	5.5	5.0
Claim cost	10,131.75	12,978.24



The annual baseline is the average of 2010 through 2015. Data is reported on a calendar year pursuant to federal OSHA reporting requirements. The State total is the average number of employees during any given quarter or year and it is used to calculate the injury and severity rates. Claim costs include all medical expenses and any reserves. The target to reduce the injury rate by 2% compared to the previous five-year average was met by the end of 2016, but the target of reducing the severity rate by 2% compared to the previous five-year average was not met. However, all the metrics except the average claim cost were lower in 2016 compared to 2015.

Majority of injuries sustained in calendar year 2016 were strains and sprains to lower back and shoulders due to slips and falls which are two of the top four causes of injuries per Federal OSHA. The number of back and shoulder claims went from 9 in CY 2015 down to 8 in CY 2016.



Strategies for Improvement Next Calendar Year

Short range to next reporting:
Continue outreach workers' compensation training for all Districts and Divisions. Claim costs have been added to the data and the Safety and Loss Control Section has worked diligently with the agencies third-party administration overseen by the State of Nevada Risk Management Division to provide the best medical treatment for agency employees and to control costs.

Long range:

- Continue identifying specific safety training that can be conducted by existing staff and take cooperative steps to ensure courses are conducted, including Global Harmonization System, First Aid/CPR/AED, New Employee Safety Orientation, and OSHA-mandated classes.
- As time and resources permit, continue efforts to develop and distribute an Employee Safety Survey to assess the agency's culture as it pertains to safety, and evaluate the responses to determine areas of need within the safety program.
- Develop and implement a safety and health fair for NDOT employees.
- Increase staff by two additional agency safety/loss control coordinators to reduce workers' compensation claims that will focus on workplace inspections, training and assist Districts and Divisions with motor vehicle accident investigations.
- Increase staff by one clerical support to perform clerical and data entry assignments.
- Include safety/loss control in all levels of projects to ensure the safety and health of all NDOT employees and contractor employees.

Were the targets met?
Measure 1 was met but measure 2 was not.

What "strategies for improvement" were successful?
Increased communication by sending bi-monthly safety e-mails has led to a higher level of safety awareness which in turn has prompted overwhelming input from workers who were not fully committed

to improving the safety program. The agency safety/loss control coordinator increased the number of trained employees.

The vehicle database continues to be maintained by the Safety and Loss Control section as required by the Federal Motor Carrier Safety Administration.

The safety/loss control coordinator trained over three hundred employees in CPR/First Aid/Infant and AED.

The headquarters building is equipped with six emergency evacuation chairs, two per floor. The basement is equipped with a powered emergency evacuation chair to mobilize employees who may require assistance in the event of an emergency.

Cooperative efforts between the Training Section and Safety and Loss Control to implement a safety and health training matrix were successful. Several mandatory safety courses were identified in the system specifically targeting new hires and new supervisory staff.

What "strategies for improvement" were not successful and why?
The motor vehicle accident database in conjunction with the State of Nevada Risk Management Division database indicate that for the past four years deductibles and vehicle/heavy equipment repairs costs have increased in all Districts and Divisions. All Districts and Divisions must perform effective pre-trip/post-trip inspections of all vehicles and comply with NDOT's seatbelt and no texting policies to reduce these costs in the future. The State of Nevada Risk Management Division plans to increase NDOT's motor vehicle accident deductibles from $500 to $700. The heavy equipment deductibles will increase from $5,000 to $7,000 due to the number of at-fault employee accidents.

Does this performance measure effectively measure what is desired?
No

Is there a better performance measure that should be considered?
Not now

Will meeting the next yearly target have a fiscal impact? If so, explain:
There will be an increased cost to the Safety/Loss Control travel budget due to additional workers' compensation training for all Districts and Divisions employees. This will support the "new approach" system in place for injured workers' to receive the best medical treatment as well as an understanding of NDOT policies, Nevada Revised Statutes and Nevada Administrative Codes related to workers' compensation. In addition, the agency Safety/Loss Control Coordinator and the NDOT Safety Trainer will continue to conduct inspections and training throughout the agency.

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

FY17 Target: 74% compliance for all required training

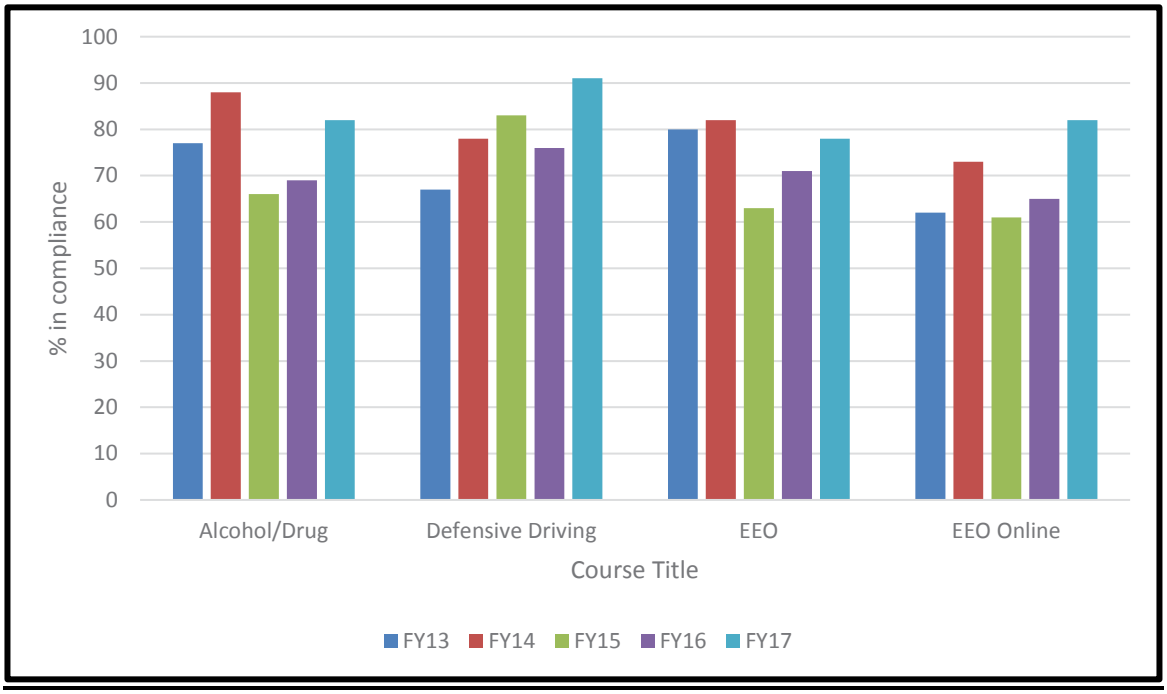
Overview and Plan Support:
The classes selected for inclusion in the performance measure apply to the entire department and are required by Nevada Administrative Code 284, the State Administrative Manual, or a specific NDOT Transportation Policy. All the included classes are either required for all employees or all supervisors.

The compliance number calculated for each class reflects the percentage of employees who were required to take the class and have successfully completed it within the designated time. The time periods range from one-time attendance to yearly attendance. The compliance percentages for the required classes are then averaged to determine the performance measure. The FY2017 compliance target was exceeded by 9% and was 12% higher than the previous year. This is the highest level of compliance in the past five years. The higher completion level demonstrates that an increased use of computer technology was an effective strategy.

Measurement and Supporting Data:

Requirement	Total Employees Requiring Training*	% in compliance for FY					# Trained in FY 17
		2013	2014	2015	2016	2017	2017
Alcohol & Drug Program	494	77	88	66	69	82	195
Defensive Driving	1660	67	78	83	76	91	741
EEO	494	80	82	63	71	78	185
EEO -Online	494	62	73	61	65	82	242
Employee Appraisal	1660	79	77	64	67	82	250
Global Harmonization	1660	59	78	76	81	90	379
Grievance Procedures	494	79	80	67	70	81	203
Internet Security Awareness	1660	29	65	68	72	66	1278
Interviewing & Hiring	494	82	78	68	74	87	260
Progressive Discipline	1660	79	78	65	71	83	191
Sexual Harassment Prevention	1660	76	93	92	74	93	1214
Work Performance Standards	494	79	77	64	67	80	230

*Number of employees and supervisors


100
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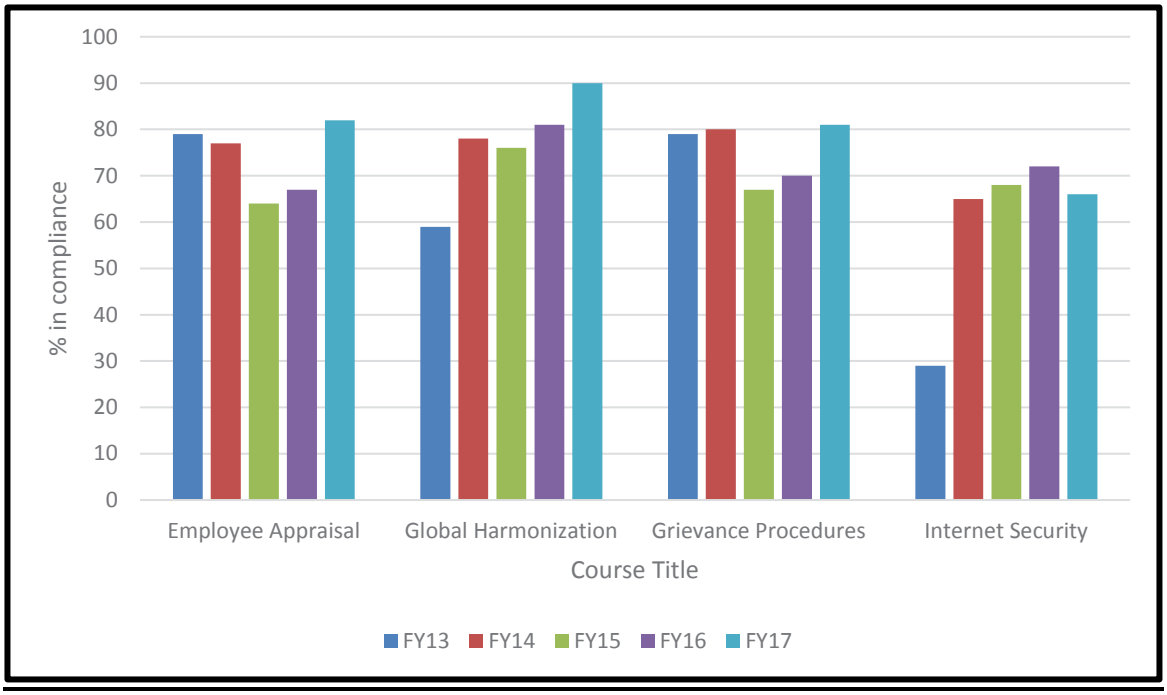
% in compliance
Alcohol/Drug
Defensive Driving
EEO
EEO Online
Course Title
FY13
FY14
FY15
FY16
FY17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Employee Appraisal
Global Harmonization
Grievance Procedures
Internet Security
Course Title
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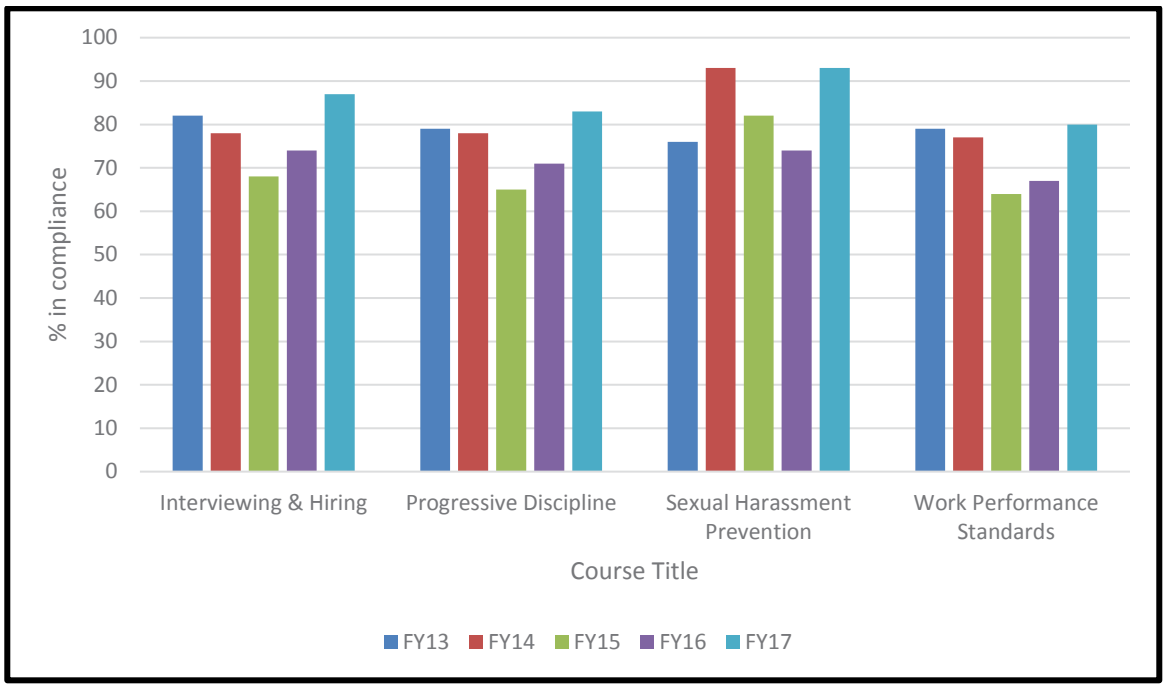
FY16
FY17



Annual Evaluation of Performance Measure?
The annual target for FY 2017 was 74% and the ultimate target is 100% compliance overall. The average for the 12 required classes was 83% which shows an increase of 12% from last fiscal year's average of 71% and exceeded the FY 2017 target by 9%. Additionally, the level of compliance for all classes except Internet Security Awareness increased. The decrease in compliance for this class is attributed a tighter interpretation of the relevant policy by NDOT's IT Division and the requirement for all employees to take a new online class.

Annual Target status: Met

Which "Strategies for Improvement" were successful?
Two actions helped boost compliance: implementation of NDOT's e-HR system training module and the agency's wider acceptance and promotion of state-provided online classes. The launch of the e-HR system made it convenient for employees, their supervisors, and the training coordinators to determine which classes were needed by any given employees. The system sent periodic reminders to employees who were out of compliance and sent notifications to their supervisors and training coordinators.

In the past, NDOT has strongly encouraged employees to take all the required classes through NDOT instructor-led versions (except for the classes that are only offered online.) Employees are now encouraged to take available instructor-led classes the first time they need to attend and then take the online classes as refreshers.

Which "Strategies for Improvement" were not successful?
Many classes still suffer from last minute "no-shows" and drops and efforts to remind people of their upcoming class commitments have not eliminated this. Since the number of instructor-led courses are determined by anticipated enrollment, it is harder to reach the 100% enrollment rate if seats aren't filled.

Cross training of instructors in order to offer more classes has been minimal because of turn-over issues. No one is currently teaching instructor-led versions of the Alcohol and Drug program or the Progressive Discipline class.

What new "Strategies for Improvement" will be initiated in FY 2018?
Short range to next reporting:

- Continue to monitor the success of the e-HR system in generating stronger compliance numbers.
- Do more promotional activities to remind people of the availability of classes and the need to complete required classes.
- Do a better job of documenting instructors manuals to facilitate cross training and consistency.
- Develop online refresher classes that are specific to NDOT.
- Make a stronger use of activities and case studies to make instructor-led classes more interesting.

Long range:

- Add additional required classes as needed.
- Embed consistent leadership principles in all required classes. These principles should reinforce the strategic plan.

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

Is there a better performance measure that should be considered?
The new e-HR system reports each employees level of compliance with the classes required for them. This will be a useful statistic to report on a quarterly and a yearly basis. When the new strategic plan is fully implemented, it would be useful to consider if there might be a performance measure that would better reflect its intent.

Will meeting the next yearly target have a fiscal impact? If so, explain.
No.

Target for Next Three Fiscal Years:
Turnover of NDOT employees in general as well as increased workload and turnover for the instructors will affect the agency's ability to hit the ultimate target of 100%. However, this may be mediated somewhat by the employees' willingness to take classes online. Compliance for the Internet Security Awareness should increase based on additional follow-up being done by the IT department, although it is doubtful there will be another increase as high as this year's, further growth is possible, Based on the average increase of 3% during the past four years, future annual targets are:
FY17: 86%
FY18: 89%
FY19: 92%

3. Improve Employee Satisfaction

Performance Measure:
Percentage rating obtained from employee satisfaction survey

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

Champion:
Chief, Human Resources
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 quality staff. A satisfied workforce will excel at their duties and this benefits the Department and our customers. This performance measure works towards meeting the Nevada Department of Transportation's strategic plan goals to: promote a safety-first culture, efficiently operate and maintain the transportation system in Nevada, promote internal and external customer service, and enhance organizational and workforce development.

Measurement and Supporting Data:

2008 FY (Base Year)	70%
2009 FY	67%
2010 FY	62%
2011 FY	50%
2012 FY	48%
2013 FY	50%
2014 FY	51%
2015 FY	52%
2016 FY	57%
2017FY	67%

Table 1. Historical Level of Employee Participation (Respondents)

Performance Survey			
Year of Survey	Survey Launch Date	Survey Closing Date	# of Employees Responding
2008	July 14	August 15	764
2009	July 13	August 2	616
2010	May 18	June 25	905
2011	June 23	July 15	598
2012	May 29	July 1	718
2013	June 13	July 19	621
2014	June 10	July 29	1020
2015	April 27	July 20	1081
2016	April 25	June 20	957
2017	June 28	August 30	929

Overview

Table 2. Employee Satisfaction Survey Results

Key Question Response Comparison From 2016 to 2017			
Survey Category	2016 Percentage	2017 Percentage	Percentage of Increase/Decrease
Satisfaction of workplace safety.	71.9%	77.2%	5.3%
Satisfaction of workplace physical conditions.	68.0%	68.9%	0.9%
Satisfaction with ability to express concerns to their immediate supervisor.	74.4%	79.9%	5.5%
Satisfaction with ability to communicate effectively with their immediate supervisor.	65.8%	72.5%	6.7%
Satisfaction with their immediate supervisor recognizing when they go above and beyond their normal duties.	62.0%	71.1%	9.1%
Satisfaction with management applying policy decisions consistently.	39.9%	49.4%	9.5%
Satisfaction with ability to express concerns to their management.	54.8%	62.4%	7.6%
Satisfaction with flexibility of employees work hours.	74.4%	83.4%	9.0%
Percentage of employees who would recommend NDOT to a friend	49.2%	58.3%	9.1%

Was the annual target met?

No

Sixty-seven percent (67%) of employees are extremely or somewhat satisfied with the Nevada Department of Transportation as an employer compared to seventy percent (70%) the base year. The 2017 percentage did increase by 10 compared to 2016.

While employee participation in the survey decreased from last fiscal year, it is still the fourth highest employee participation since the survey began in 2008.

What "strategies for improvement" were successful?

The percentage of employees who are extremely or somewhat satisfied with the Nevada Department of Transportation as an employer has increased nine percent (10%) from last year. Ten percent is the largest increase since the base year of 2008.This has been the largest increase since the base year of 2008. See Table 2 above for 2016/2017 comparison.

What "strategies for improvement" were not successful and why?

The current economic environment and overall decrease in State pay and benefits is continuing to have a direct impact on the satisfaction of the Nevada Department of Transportation employees. Only 24.4% of 2017 respondents are satisfied with their salary which is the exact percentage for satisfied respondents in 2016. Respondents satisfied with their benefits increased from 29.9% in 2016 to 35.7% in 2017. However, adjusting salary and benefits are not within the authority of NDOT.

What "strategies for improvement" will be initiated in FY2018?
Short range to next reporting:

- Continue communications from management to employees including "Muffins with Malfabon" and Division Head Staff Meetings.
- Create flexibility in the workplace, job security, training opportunities and a pleasant work environment for employees.
- Evaluate pay inequities though the accelerated salary process.
- Encourage and require supervisory training, in compliance with regulations, that includes communication, management styles, and coaching.
- Communicate to employees that the survey results have been reviewed.

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?

Yes, this performance measure works towards meeting the Nevada Department of Transportation's strategic plan goals to: promote a safety-first culture, efficiently operate and maintain the transportation system in Nevada, promote internal and external customer service, and enhance organizational and workforce development.

Is there a better performance measure that should be considered?
No; however, employee job satisfaction hinges in part on pay and benefits. Until pay and benefits are surveyed we are not likely to see significant improvement in the results of related parts of the annual surveys.

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

No

4. Streamline Agreement Execution Process

Performance Measure:
Percentage of Agreements executed within 30 days from when division submits agreement to the date when it is fully executed, excluding time the agreement is with the second party for signature or awaiting Transportation Board approval.

Target: 90%

Champion:
Administrative Services Division Chief

Support Divisions:
All divisions that procure professional services over $2,500

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 have a tremendous impact on the operations, impeding 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, operate and preserve a transportation system that enhances safety, quality of life and economic development through innovation, environmental stewardship and a dedicated workforce. It moves Department in the direction to accomplishing its goals to: promote a safety-first culture, cultivate environmental stewardship, efficiently operate and maintain the transportation system, promote internal and external customer service, and enhance organizational and workforce development.

Summary:
For FY 2017, the average number of calendar days to execute agreements, measured from the time they were submitted to Agreement Services until the time of agreement execution but excluding the time the agreement was with the second party or awaiting Transportation Board approval, was 11 days. The Department executed 506 agreements during the fiscal year, and 485 of those were executed in 30 days or less. Therefore 96% of all agreements were executed within 30 days, exceeding the target of 90%. This is an improvement over fiscal year 2016 where the average number of days to execute agreements was 12 days.

It is significant to note that of the 21 agreements not executed within 30 days, almost 50% of them (10 agreements) were with other public entities. These include Cooperative, Interlocal and Local Public Agency (LPA) agreement types. These types of agreements often require extensive coordination with the other public entities, and items often must be discussed with Boards of Directors and other

authorities within the entity. This extensive coordination contributes to the length of time it takes to execute these types of agreements.

Measurement and Supporting Data:

	Number of Agreements Executed	Number Executed Within 30 Days	Percent Executed Within 30 Days	Average Number of Days to Execute
FY 2017	506	485	96%	11

Strategies for Improvement

Short range to next reporting:
Several Local Public Agencies (LPAs) have expressed interest in using DocuSign to electronically sign their agreements. Administrative Services staff are working with NDOT Legal Division, NDOT LPA section and the LPAs to finalize document routing. Once test documents have been successfully processed Agreement Services will send future LPA agreements via DocuSign, which should decrease processing times.

In addition, the Administrative Services Division Chief is working with other division chiefs to identify vacant positions for reclassification to Agreement Managers. These positions will closely monitor procurement, agreement execution, and management of agreements throughout the life of projects being undertaken by their assigned division(s). This will help further expedite the procurement process.

Long range:
Continue to assess the relevance of performance measure data, revising the measure as necessary to accurately reflect the time it takes to process an agreement. Mandate that all agreements must be processed via DocuSign.

Were the targets met?
Yes

What "strategies for improvement" were successful?
While no new positions were made available for agreement management, existing Agreement Services staff do an excellent job coordinating with Project Managers to ensure their agreements are processed timely.

What "strategies for improvement" were not successful and why?
Processing LPA agreements via DocuSign was discussed with DocuSign company, and we are awaiting their direction and possible software modification to implement this measure.

What new "strategies for improvement" will be initiated in FY2018?
Short range to next reporting:

The current targets are being exceeded, and the process is working well. Continue to ensure 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 discuss strategies for improving execution of LPA agreements.

Long range strategy:
The current targets are being exceeded, and the process is working well. Continue to regularly assess the current performance measure, data collected, it's relevance to reporting actual performance, and make revisions as applicable.

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. 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. Expeditious procurement will also ensure that NDOT meets the Environmental Protection Agency (EPA) Consent Decree and Stormwater Permit terms and conditions to avoid future penalties or sanctions.

5. Improve Customer and Public Outreach

Performance Measure:
Improve Customer & Public Outreach.

Annual Target:
Exceed goals set forth in NDOT communications plan.

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

Overview of performance measure:
This performance measure works toward meeting the NDOT strategic plan goal to promote internal and external customer service. NDOT operates in a frequently changing environment where communication is extremely important. Projects, programs, and demographics are constantly evolving, along with the challenges that accompany them. NDOT has consistently overcome these challenges with a strong focus on proactively providing accurate and reliable information to all who may be affected. NDOT will continue to find new ways to approach communication to expand our reach across multiple communication channels to improve the agency's customer and public outreach.

Measurement and Supporting Data:
Supporting Data:
NDOT recently partnered with a University of Nevada, Reno, Reynolds School of Journalism class to develop a communications plan for the department that includes a positioning statement, key messages, a goal strategy, target audience and most importantly, branding and a tagline. The brand, "safe and connected," demonstrates how greatly NDOT cares for the safety of Nevada's drivers and pedestrians and keeps them mobile and connected every day. The plan, which was enhanced and further developed by the NDOT Public Information staff and interns, stresses the need to continue to focus on NDOT's mission of roadway safety and connectivity through a variety of communication channels.

Measurement:
NDOT Public Information is happy to report that most of the measurement goals for fiscal year 2017 have been met. In some cases, goals were exceeded by a very large amount. Final results are listed in red.

Social Media

- Increase Facebook likes to 3,600 by the end of fiscal year (FY17) - **increased to 8,560**
- Increase Twitter followers to 20,000 by the end of fiscal year (FY17) – **increased to 22,800**
- Increase Twitter retweets by 10% by the end of fiscal year (FY17) – **increased by 5%**
- Increase YouTube views by 10% by the end of fiscal year (FY17) – **increased by 54%**

Website

- Regularly remind content editors to update/archive/delete material at least once a quarter to maintain relevant information. **Goal met – editors reminded every quarter.**
- Have new website design fully in place by end of fiscal year (FY17). **Goal met – entire website redesigned in December 2016.**

Internal Communications

- Publish an online newsletter twice a month highlighting important upcoming events and project updates. **Goal met – email newsletter distributed to more than 1,600 employees bi-weekly.**

Media Relations

- Take advantage of available resources to provide media training to department executives and program managers. **AASHTO representatives conducted a two-day media training session in June 2017 that was well-attended by project managers, public information staff and division heads.**

Public Involvement

- Utilize social media platforms to allow for participation in public events without physical attendance, such as Facebook live video, in at least one public involvement activity by end of fiscal year (FY17). **Goal met – NDOT streamed a live public hearing for Project NEON in Las Vegas that included a Q&A session where we received live questions and provided answers. The presentation received 551 views.**
- Use required processes and social media to recruit public to attend events. Measure a 5% increase in attendance by utilizing all traditional and emerging technology by end of fiscal year (FY17). **Goal met - notices for all public meetings throughout the year were posted on NDOT's social media pages. A considerable increase in public attendance was noticed, especially when partnering agencies posted to their social media pages. The 5% goal was easily met; however, there is no definite way to prove that this was directly related to social media. This performance measure may be modified to make it more measurable next year.**

Customer Service

- Achieve a 75% positive satisfaction level from all customer service survey participants by end of fiscal year (FY17). **Goal not met – a "how we did" customer satisfaction survey is now being sent out to everyone who sends the NDOT public information office an email request. The customer satisfaction rating was 72.45%, which was mainly for people calling in to complain or report a problem. This survey may be added to the NDOT website and/or social media pages, which could likely result in a more favorable rating.**

6. Reduce and Maintain Traffic Congestion on the State Maintained Roadway Sysstem

Performance Measure:

1. Percent of person-miles traveled on Nevada Interstate that are reliable
2. Percent of person-miles traveled on Nevada non-interstate NHS routes that are reliable
3. Annual hours of peak hour excessive delay per capita
4. Percent of non-single occupancy vehicle travel in Nevada urbanized areas

Annual Target: 85% for Interstate & 65% for Non-Interstate

Ultimate Target for System Performance: 90% or greater for Interstate and 70% or greater for Non-Interstate

Champion:
Chief Performance Analysis Engineer & Chief of Traffic Operations

Support Divisions:
All

This performance measure works toward meeting the NDOT strategic plan goal to efficiently operate and maintain the transportation system in Nevada.

Definition:
Travel Time Reliability is an indication of consistency or expectation by drivers that it will take an estimated amount of time to traverse a certain distance on a stretch of highway. It is measured day by day or at different time of the day.

The methodology used to track the performance metric of travel time reliability and assess the measure in this report is based on the Planning Time.

At present, performance targets have been set only for the first two performance measures that deal with reliability, but not for the peak hour excessive delay nor the non-single occupancy vehicle travel. The reason for this is due to the lack of data.

Strategy Plan Support:
The importance of the goal to reduce and maintain congestion levels on Nevada's roads is demonstrated by these performance measures which are significant indicators of the performance of the department's core mission of providing a "better transportation system" for Nevada.

The National Performance Measurement Research Data Set (NPMRDS) was used to track and measure performance of our Interstate and non-Interstate NHS roadway systems. Based on the analysis using calendar year 2016 data, 88.5% of person-miles traveled on Nevada interstate system were reliable, while 66% of person-miles traveled on Nevada non-interstate NHS roads were reliable.

Targets of 85% of the interstate, and 65% of non-interstate NHS roads were set to have Level of Travel Time Reliability(LTTR) for person -miles of travel. A LTTR threshold of 1.5 was used.
All calculations were based on the old version of the NPMRDS data set which includes some inaccurate information as well as missing geometric and traffic information for certain roadway segments.

This Performance Measures and metric have been chosen in-order to align NDOT's system performance measures as much as possible with system performance measures from US DOT due to Moving Ahead for Progress in the 21st Century (MAP-21) Act passed by Congress and signed into law July 6, 2012 and the FAST-ACT.

This uniformity will lead to simplicity in tracking, measuring and reporting on System Performance/Congestion to both the Federal Highway Administration (FHWA) and the State.

Annual Hours of Peak Hour Excessive Delay performance measure and the Non-Single Occupancy Vehicle Travel performance measure have not been tracked and are not reported in 2017 due to insufficient data and limited resources to accomplish the task. However, it is anticipated that all the necessary data and resources will be in place by the time NDOT is required to report system performance as well as congestion mitigation and air quality measures to the FHWA as called for in the final rules. NDOT is in the process of acquiring the necessary data and tools to accomplish this task.

NDOT Congestion Measuring System is an evolving process. Refinements will be made continuously as more and reliable data with extensive coverage of road segments across all geographic locations within the State become available. Currently, only the NHS system has been included in the performance tracking and analyses.

When fully functional, the system will utilize information from many sources including the Freeways and Arterials System of Transportation (FAST), Washoe County's future Traffic Management Center and others.

NPMRDS, INRIX data and analytical tools make up the engine that drives the system in identifying spatially congested locations on Nevada's interstate and arterial roadway network. It makes calculating the metric to determine target achievement or failure less cumbersome and more efficient.

Were the targets met?
Yes

Does this Performance Measure effectively measure what is desired?
Yes. However, only mileage on the Interstate and Non-Interstate NHS routes in the State were tracked and measured based on level of travel time reliability for person-miles traveled. Performance based on peak-hour delay was not measured due to the lack of data and other resources.

Is there a better Performance Measure that should be considered?
No. As mentioned above, an important reason these were chosen is to align with MAP-21 system performance requirements. Also, it captures most aspects affecting mobility which is an indication of how well the network is performing.

Will meeting the next yearly target have a fiscal impact?
Yes. Maintaining and enhancing the current Congestion Measuring and Reporting system requires yearly investments in access to INRIX data and analytical tools, as well as other data acquisition governance efforts as well as staff training.

7. Streamline Project Delivery: Bid Opening to Construction Completion

Performance Measure:
Percentage of Design Bid Build and Construction Manager at Risk projects completed within the established ranges for cost estimate, change orders and schedule.

Budget Measure: Projects completed within 10% of original programmed budget.

Change Order Measure: Projects completed with cost increase of less than 3% in Change Orders.

Schedule Measure: Projects completed within 10% of original assigned working days.

Overall Target: 80% of Projects completed within budget, schedule and change order measures.

Champion:
Chief Construction Engineer

Support Divisions: All

Strategy Plan Support:
This Performance Measure works towards meeting the Department of Transportation Strategic Plan goals by delivering timely and beneficial construction projects. This measure helps to optimize safety for road users, cultivate environmental stewardship as well as efficiently maintaining and operating the transportation system.

Summary of Previous Years:

Year	% Closed Contracts within Budget	% Closed Contracts within Schedule	% Closed Contracts within Cost Increase
SFY 2016	97	97	71
SFY 2015	94	85	68
	% Open Contracts Within Budget	**% Active Contracts Within Schedule**	
SFY 2014	76	92	N/A
SFY 2013	76	77	N/A
SFY 2012	71	78	N/A
SFY 2011	76	86	N/A

Summary for SFY 2017:

SFY 2017	Number of ***Completed*** Contracts	***Completed*** Contracts Within Budget	***Completed*** Contracts Within Schedule	***Completed*** Contracts with Change Orders Less than 3% cost increase
1st Quarter	7	86%	100%	57%
2nd Quarter	2	100%	100%	50%
3rd Quarter	13	85%	100%	69%
4th Quarter	7	100%	100%	57%
YR Total/ Average	29 Total	90%	100%	62%

Background for Change in Reporting Criteria:
Beginning with SFY 2015, Performance Measure reporting has been revised to measure the performance of completed contracts. The previous years from 2010 to 2014, performance measures were not based on completed contracts but rather open and active contracts. The reason for that approach was based on the previous interpretation of reporting requirements.

Reporting on open and active contracts does not accurately account for the true performance of the contracts; work is either ongoing (active contracts) or work has been completed (open contracts) but final quantities and/or schedules have not been balanced. By reporting the performance of active/open contracts, the interpreted data may be skewed or subjective due to incomplete quantities and schedules. Some open/active contracts were reported across multiple quarters and fiscal years also skewing the data. In addition, the completed contracts were not captured in the reported data.

Contracts are considered completed when the contract is closed out administratively and financially with the balancing of final quantities and schedules. By reporting on completed contracts, the true performance of the contracts is captured and the reporting is an accurate representation of the Performance Measures.

Current Reporting

SFY 2017 Budget Performance:
Performance is based on contracts completed and closed out administratively and financially. The budget is the contract award amount plus contingencies as programmed by the Department. Contingencies are included in all contracts to account for potential quantity overruns and change orders. The budget performance is reported as the total amount paid compared to the budget.

SFY 2017 Change Order Performance:
Performance is based on the comparison of change order values to the award amount not including contingencies. Contracts completed with change orders exceeding 3% of the award amount were reported.

SFY 2017 Schedule Performance:
Performance is based on the number of working days awarded to the contract in the original contract documents compared to the final number of working days assessed to the contract.

Were the targets met?
The target Performance Measures for budget and schedule were met and/or exceeded. However, the Performance Measure for change orders was not met. As stated above, the budget for all construction contracts includes contingencies. The contingencies are designed to account for variabilities in quantities and potential change orders encountered during construction. The contract quantities are estimated based on design calculations but paid quantities are based on actual field installations. It is important to note that actual quantities paid can be higher or lower than estimated design quantities.

Per the "Nevada Department of Transportation Project Cost Estimation Guide", contingencies are set at 7% for contracts less than $3M, 5% for contracts between $3M and $25M and 3% for contracts greater than $25M. Therefore, contracts with change orders exceeding 3% will typically fall within budget while exceeding the Performance Measure for change orders.

Strategies for Improvement for SFY 2018

Short range strategies on change orders:

- Continue to work with Design, Project Management and other Divisions to improve the quality of design plans and specifications with an increased emphasis on training and educating new NDOT employees on developing quality plans and specifications and calculating accurate quantities.
- Continue to take on an increased interactive role with the project development teams to identify potential conflicts or issues and spending time in the field reviewing current conditions to minimize change orders during construction.
- Continue to serve as active participants in the Bid Review and Analysis Team to assist in evaluating contractor bids to identity potential plan, specification and quantity inconsistencies which may lead to change orders.

Long range strategies on change orders:

- Continue to identify and track trends to assist in reducing recurrences of common errors and conflicts which lead to change orders.
- Provide consistent guidance to internal Divisions and educate new employees on issues that arise during construction to prevent recurrence on future projects.
- Continue to monitor active and open contracts for budget, change order and schedule performance.

What "strategies for improvement" were successful?
The improvements made revolve around the correct measure of performance: completed contracts. The true performance of any given contract can only be measured when it is completed, not during ongoing construction or balancing of final quantities and/or schedule.

What "strategies for improvement" were not successful and why?
The Strategies for Improvement have not been successful for change orders. There are a variety of reasons that may account for not meeting the Change Order Performance Measure however errors and omissions with the contract documents attributed to experienced staff members retirements, turnovers and lack of employee retention is a large contributing factor. The depth of knowledge and experience within the Department is decreasing rapidly with the current staffing challenges.

Does this Performance Measure effectively measure what is desired?
Yes, this Performance Measure accurately reflects project performance for budget and schedule.

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, meeting the target for change orders will reduce the expenditures on projects which will have a direct fiscal impact to the Department. Budget and schedule targets are currently being met, however close monitoring and management during active construction will help maintain or improve these target levels and further reduce costs and time.

8. Maintain State Highway Pavement

Performance Measure:
Percentage of state maintained roadways in fair or better condition.

Ultimate Target:
Perform annual rehabilitation as necessary to maintain the condition of the roadway network in conformance with the established goals and additional rehabilitation as necessary to eliminate the accumulated backlog.

Annual Target:

Road category 1:	95% Minimum fair or better condition
Road category 2:	95% Minimum fair or better condition
Road category 3:	95% Minimum fair or better condition
Road category 4:	95% Minimum fair or better condition
Road category 5:	95% Minimum fair or better condition

Strategy Plan Support:
This performance measure supports the Department's strategic plan to efficiently operate and maintain the transportation system in Nevada. For the Department to maintain the roadway network in fair or better condition, maintenance and rehabilitation work is performed on the roadways each year. To increase the percentage of pavements in fair or better condition, this work must be constructed on all roads more than the rate of deterioration of the pavement.

The Department's Pavement Management System (PMS) is used to maintain and improve the condition of the entire state-maintained roadway network. This network consists of a 5,521 Centerline mile inventory that is classified into five separate road prioritization categories. Each road prioritization category consists of pavements that share similar rates of deterioration and require similar timing for maintenance and rehabilitation repair work. The pavement in each road prioritization category is objectively rated and quantified using the Present Serviceability Index (PSI) pavement condition rating system. This rating system is divided into six sections that correspond to pavement in very good, good, fair, mediocre, poor, and very poor or failed condition.

Various maintenance and rehabilitation repair strategies are constructed to improve pavement condition. Maintenance repair strategies include work such as chip seals, filling potholes, and patching. Rehabilitation repair strategies include work such as asphalt overlays and recycling methods. The cost and construction timing for the various repair strategies are significantly different and contingent on the pavement condition at the time of the repair. There is a significant cost savings when pavement is proactively rehabilitated in fair condition as compared to reactively reconstructed in very poor condition. Repair work costs as much as six times more for major reconstruction when pavement is in very poor or failed condition as compared to the less invasive rehabilitation techniques that can be used when pavement is in fair or better condition.

Measurement and Supporting Data:
Current Pavement Condition of the State-Maintained Road Network
A pavement condition target of 95% minimum fair or better has been established for each category of road. This target represents a reasonable condition in which the road should be maintained. It also represents a balance between condition and expense. It is known that smoother roads in better condition are less expensive to maintain and rehabilitate. Inversely, when roads become rough, cracked or rutted,

more money must be spent to bring them back to acceptable condition. Under current funding levels, an expectation of fair or better condition is a realistic balance between available funding and acceptable condition. A description of each of the condition categories listed below is also included later in this report.

TABLE 1 illustrates the current condition of the roadway network for which NDOT is responsible and includes the annual targets which have been established for the condition of the roads. For this particular data collection period, only 5,100 miles of the total 5,421 miles of the roadway network were surveyed and are reported on in this table. This is because not all roads in the system are tested for ride and/or condition.

TABLE 1. Pavement Condition versus Annual Target by Road Category

Condition	PSI Rating Scale	PSI Condition by Road Prioritization Category Percentage (%) and Number of Miles					
		Road Category 1	Road Category 2	Road Category 3	Road Category 4	Road Category 5	Roadway Network Totals
Very Good	5.00 to 4.00	82.3% 437	48.6% 449	30.3% 363	9.0% 75	0.7% 12	**26.2%** **1,336**
Good	3.99 to 3.50	14.5% 77	30.7% 284	47.8% 573	36.6% 305	12.8% 207	**28.4%** **1,446**
Fair	3.49 to 3.00	2.8% 15	14.4% 133	17.6% 211	35.0% 292	35.5% 573	**24.0%** **1,224**
Mediocre	2.99 to 2.50	0.4% 2	4.7% 43	2.5% 30	14.3% 119	26.5% 427	**12.2%** **621**
Poor	2.49 to 2.00	0.0% 0.00	1.1% 10	0.8% 10	3.0% 25	16.1% 259	**6.0%** **304**
Very Poor	< 2.00	0.0% 0	0.5% 5	1.0% 12	2.2% 18	8.3% 134	**3.3%** **169**
Total Miles:		**531**	**924**	**1,199**	**834**	**1,612**	**5,100**
Condition Goal: Min. Percentage of Roads in Fair or Better Condition		**95%**	**95%**	**95%**	**95%**	**95%**	**----**
Current Condition: Percentage of Roads in Fair or Better Condition		**99.6%**	**93.7%**	**95.7%**	**80.6%**	**49.1%**	**----**
Does the current condition meet the condition goal?		**YES**	**NO**	**YES**	**NO**	**NO**	**----**

*2016 PSI calculated using2015 segments.

Pavement Preservation Repair Work for the State-Maintained Road Network

During state fiscal year (SFY) 2017, NDOT advertised approximately $92 million worth of contract maintenance and rehabilitation pavement repair work. These expenditures addressed the preservation needs for approximately 220 miles of roads. TABLE 2 contains a financial summary of the advertised maintenance and rehabilitation pavement repair work that was accomplished on the state-maintained roadway network during SFY 2017 along with the corresponding amount of mileage that was improved.

TABLE 2. Advertised Pavement Repair Work for SFY 2017

Fiscal Year	Contract Maintenance Repair Work Expenditure and Mileage	Contract Rehabilitation Repair Work Expenditure and Mileage	Total Contract Maintenance and Rehabilitation Repair Work Expenditure and Mileage
2017	$19,843,137	$79,747,005	$99,590,142
	366 Miles	107 Miles	473 Miles

Backlog of Pavement Preservation Repair Work

Due to funding constraints, a backlog of pavement preservation repair work has accumulated over the years. In TABLE 1, a red line is visible at the bottom of the fair condition level. The established goal of 95% fair or better requires that at least 95% of the roads are above the red line. The backlog is calculated by multiplying the percentage of miles in excess of 5% that are below the red line by the estimated cost of rehabilitating those roads. The total backlog cost based on 2016 condition is shown in TABLE 3.

TABLE 3. Backlog of Pavement Preservation Repair Work for Entire Network

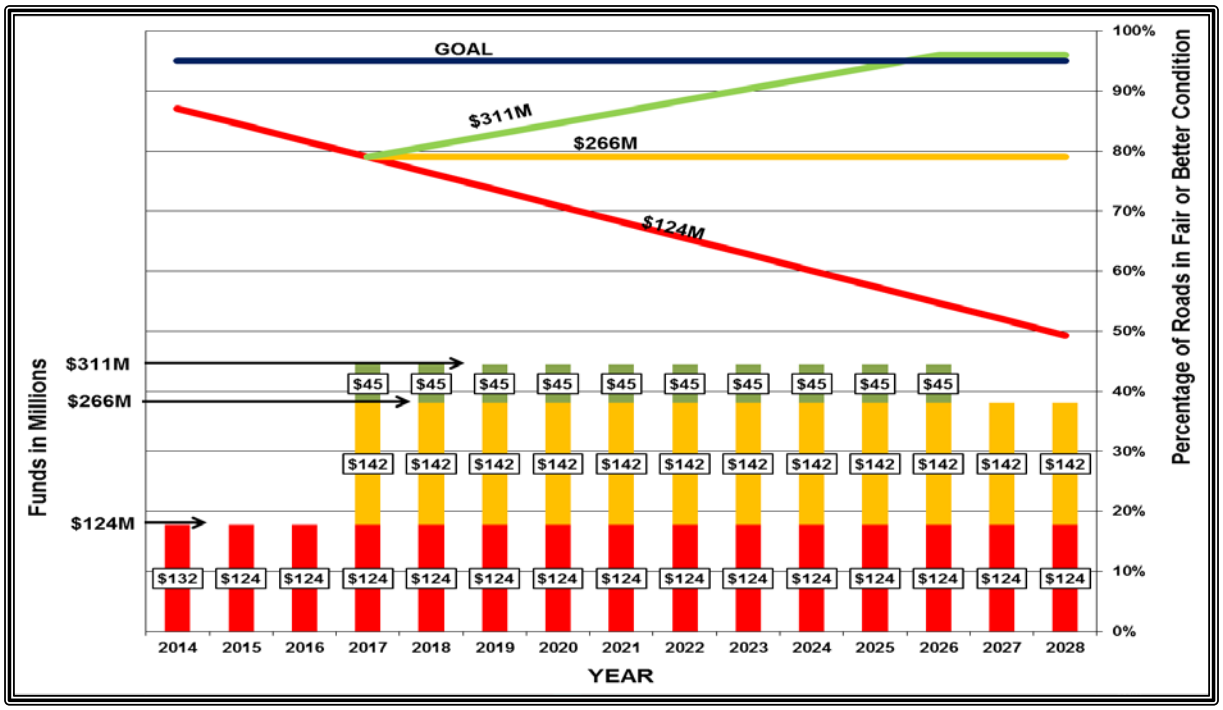
Road Prioritization Category	1	2	3	4	5
Deficient Pavement in Miles	0	11.8	0	120.3	739.4
Estimated Cost to Rehabilitate Pavement Per Mile	$2.1M	$1.3M	$0.7M	$0.6M	$0.5M
Total Cost to Rehabilitate Pavement Per Road Category	$0M	$15.3M	$0M	$72.2M	369.7M
Total Backlog of Pavement Rehabilitation Work	**$457.2M**				

Effects of Future Funding on Backlog and Pavement Condition

The estimated total backlog of pavement preservation work is only a part of the funding gap that currently exists in the budget for maintenance and rehabilitation. As illustrated by the red line in Figure 1 below, despite an average $124 million dollars spent annually on the roads in the state-owned roadway network, the average condition of the roads continues to deteriorate.

Currently, on average, only 79% of the entire state-owned roadway network is in fair or better condition. It has been estimated that an additional $142 million dollars needs to be spent on our roads annually to simply maintain the current condition, represented by the yellow line. To improve the condition of the network to meet the established goals, an additional $457 million, divided across ten years, would need to be spent to eliminate the backlog, for a total of $311 million as shown as the green line. The total amount of funding required maintaining the condition of the roads at a higher level, meeting the goal of 95%, would likely be less than the total of $124 million and $142 million due to the lower cost of maintaining roads in better condition. These estimates are based on current conditions, predicted future conditions, current material and construction costs and current deterioration models.

FIGURE 1. Effects of Additional Funding on Pavement Condition



Background Information

To effectively monitor the condition of all the state-maintained pavements and to prioritize which pavements need rehabilitation, NDOT has classified the 5,421 miles of roads on the state-maintained roadway network into five separate road prioritization categories. These categories are based on heavy truck equivalent single axle loads (ESALs), average daily traffic (ADT), and federal guidelines for highway classification descriptions. The roads within each category have similar in-place pavement thicknesses, similar rates of deterioration, and require similar timing for maintenance and rehabilitation work.

TABLE 4 lists the five separate road prioritization categories and corresponding descriptions. Also listed are several examples of easily recognized roads throughout the state to assist with understanding the significance of the descriptions.

TABLE 4. NDOT's Road Prioritization Categories

Road Prioritization Categories	[1]Description	Examples
1	Controlled Access Roads	IR015, Clark County IR580, Washoe County IR080, Elko County
2	ESAL > 540 or ADT > 10,000	SR146, St. Rose Parkway, Clark County US050, Lincoln Highway, Carson City SR227, Fifth Street, Elko County
3	540 ≥ ESAL > 405 or 1,600 < ADT ≤ 10,000 + NHS	SR157, Kyle Canyon Road, Clark County SR028, Lake Tahoe Area, Douglas County SR225, West Urban Limits of Elko, Elko County
4	405 ≥ ESAL > 270 or 400 < ADT ≤ 1,600	SR158, Deer Creek Road, Clark County SR206, Foothill Road/Genoa Lane, Douglas County SR228, Jiggs Road, Elko County
5	ADT ≤ 400	SR156, Lee Canyon Road, Clark County SR121, Dixie Valley Road, Churchill County SR229, Secret Pass Road, Elko County

[1]ESAL is an acronym for "Equivalent Single Axle Load." This engineering concept is the basis for the method used to quantify the standard loading of trucks and count the heavy trucks that travel on roads. ADT is an acronym for "Average Daily Traffic." The Pavement Management System includes the ADT data, as provided by NDOT's Traffic Division, for every road in the state-maintained roadway network. NHS is an acronym for the "National Highway System." The NHS consists of roads important to the nation's economy, defense, and mobility as defined by the United States Department of Transportation.

The concept that pavements should provide a smooth, comfortable, and safe ride for travelers requires a pavement condition rating system that includes all the attributes important to travelers. These attributes include travelers' responses to motion and appearance as demonstrated by a smooth riding surface that is free from cracking, patching, and potholes. A pavement condition rating system has been developed that objectively measures all the attributes that are important to travelers. This rating system is called the Present Serviceability Index (PSI) as mentioned in the strategy plan support section.

The PSI pavement condition rating system values are calculated using pavement roughness measurements and mathematical formulas that quantify pavement distresses such as cracking, raveling, rutting, and potholes. These measurements and formulas are combined and standardized into an objective rating scale numbered from zero to five. Pavements rated from four to five are interpreted as pavements in "new" or very good condition with very smooth surfaces that are completely free of distress or irregularities. Pavements rated less than two are interpreted as pavements in very poor or failed condition having the roughest of surfaces that are no longer navigable at the posted speed limit. The PSI pavement rating system is used to quantify the pavement condition for each route within the state-maintained roadway network.
TABLE 5 illustrates how the PSI rating scale is subdivided into six separate sections that correspond to pavements in very good, good, fair, mediocre, poor, and very poor or failed condition. Descriptions of the various pavement conditions include the types of distresses that typically occur at each condition level.

TABLE 5. NDOT's Road Prioritization Categories

Pavement Conditions	PSI Rating Scale	Description of Pavement Conditions
Very Good	**5.00 to 4.00**	Pavements in "very good" condition have an excellent, very smooth ride quality and are completely free of pavement distress. Pavements are in "new" condition.
Good	**3.99 to 3.50**	Pavements in "good" condition have a very smooth ride quality and begin to show minor distresses that are typically environmental rather than load related. Distresses include minor non-wheelpath longitudinal and transverse cracks as well as minor surface raveling.
Fair	**3.49 to 3.00**	Pavements in "fair" condition have a good ride quality except noticeable environmental distress has developed. Non-wheelpath longitudinal and transverse cracks are frequent. There is light surface oxidation and weathering. Structural distress in the form of ruts and fatigue cracks begin to occur.
Mediocre	**2.99 to 2.50**	Pavements in "mediocre" condition have a barely acceptable ride quality and have accumulated significant environmental and structural distresses. Pavements have non-wheelpath longitudinal cracking and transverse cracks so closely spaced that block cracks develop. Ruts and fatigue cracks are present.
Poor	**2.49 to 2.00**	Pavements in "poor" condition have a poor ride quality and have accumulated large amounts of environmental and structural related distresses. The non-wheelpath longitudinal and transverse cracks are severe. The surface is weathered, rutted, and fatigue cracks are widespread.
Very Poor or Failed	**< 2.00**	Pavements in "very poor" condition have a very poor ride quality and have accumulated significant environmental and structural distresses. The surface is pitted and there are wide non-wheelpath longitudinal and transverse cracks. Networked, spalled fatigue cracks and deep ruts are prevalent. The deterioration is so advanced potholes are prevalent. The roads are no longer navigable at the posted speed limits.

Strategies for Improvement

Short Range to next reporting:

- Use pavement prediction models to anticipate future pavement condition levels. This will help predict what amount of funding will be required in the future.
- Collect pavement condition data as frequently as possible to provide the most accurate information regarding the state-maintained roadway network.

Long Range:

- Assist in the effort to distribute limited funding in the most appropriate manner, addressing the targets for all performance measures.
- Monitor the effects of rehabilitation and preservation strategies versus the actual needs of the system and make any necessary updates and adjustments to the rehabilitation program.
- Take steps to create decision tree models that will document the decision-making processes used when determining the timing of pavement rehabilitation work and the selection of the type of repair strategy used.

Annual Evaluation of Performance Measure

Was the annual target met?
The annual target was met for road categories 1 and 3, but not for categories 2, 4 and 5. Current funding levels do not allow meeting the annual target in every category.

What "strategies for improvement" were successful?
Previous performance measure strategies for improvement such as focusing on high volume roads have resulted in road categories 1 and 3 meeting the targets for pavement condition. This is important due to the amount of traffic and the cost to rehabilitate those roads. Categories 2, 4, and 5 roads are allowed to deteriorate into less than fair conditions because of funding constraints. Without increased funding for pavement rehabilitation the condition of the roads will continue to decline.

What "strategies for improvement" were not successful?
None

What new "strategies for improvement" will be implemented in 2018?

Short range to next reporting:
The Department will concentrate on implementing the strategies listed above.

Long Range:
The Department will concentrate on implementing the strategies listed above.

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 is realistic, cost effective and acceptable.

Is there a better performance measure that should be considered?
Other performance measures exist and have been investigated by the Department. This measure accurately portrays the experience of the traveling public and what condition is reasonable for the roadway network.

Will meeting the next yearly target have a fiscal impact? If so, explain.
Yes, the impact of underfunding the annual needs of the system will lead to an increased backlog and deterioration of the entire roadway network. Proactively applying rehabilitation and preservation strategies to the state-maintained roadway network can extend pavement service life and reduce costly reconstruction project costs by 4 to 6 times. Costly reconstruction projects not only impact the Department's budget, but impact the traveling 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:

(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 lifespan 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

Measurement and Supporting Data:

	Replacement Criteria Measured Annually	Condition Criteria	Change	
SFY 2007	38.65 %	60.30 %		
SFY 2008	34.96%	62.55 %	-3.69%	+2.25 %
SFY 2009	39.18 %	66.30 %	+.53 %	+6.00 %
SFY 2010	49.01%	68.84 %	+10.36 %	+8.84 %
SFY 2011	48.88%	65.42%	+10.23%	+5.12%
SFY 2012	52.86 %	69.86 %	+14.21%	+9.56 %
SFY 2013	44.00 %	73.41 %	+5.35 %	+13.11%
SFY 2014	56.99%	75.28%	+18.34%	+14.98%
SFY 2015	56.29%	73.11%	+17.64%	+12.81%
SFY 2016	66.91%	71.31%	+28.26%	+11.01%
SFY 2017	61.07%	64.26%	+22.42%	+3.96%

Strategy Plan Support

In state fiscal year (SFY) 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: put safety first, cultivate environmental stewardship, efficiently

operate and maintain the transportation system in Nevada, promote internal and external customer service, and enhance organizational and workplace development.

Strategies for Improvement
Short range to next reporting:
1) a. Revise replacement criteria by increasing usage criteria in selected class codes.
   b. Remove age criteria in other specified class codes.
   c. Implement policy controls for equipment replacement.
2) a. Analyze quarterly Preventive Maintenance (PM) due and accomplished on core fleet.
   b. Develop enforceable policy for non-compliance of PM standards.

Long range:
1) a. Reduce fleet size by usage assessments.
   b. Minimize retention of replaced vehicles.
2) a. Perform annual fleet condition audit.
   b. Develop predictive maintenance program.

ANNUAL EVALUATION OF PERFORMANCE MEASURE
Was the annual target met?
Yes on 1. No on 2.

What "strategies for improvement" were successful?
1) We were successful in minimizing the number of vehicles retained.
2) 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 and why?
1) Strategies to reduce replacement deficit were detrimentally affected from loss of funds.
2) Unable to develop a predictive maintenance program due to lack of available personnel.

What new "strategies for improvement" will be initiated in FY 2017?
Short range to next reporting:
1) Attempt to rebuild more units.
2) Improve notification process for timely preventive maintenance.

Long range:
1) Reduce fleet size through utilization assessments.
2) 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.
1) Yes – Meeting the target will require substantial use of funds.
2) 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 facility assessments completed and percent of priority facilities work completed.

Annual Target: Increase by 2%

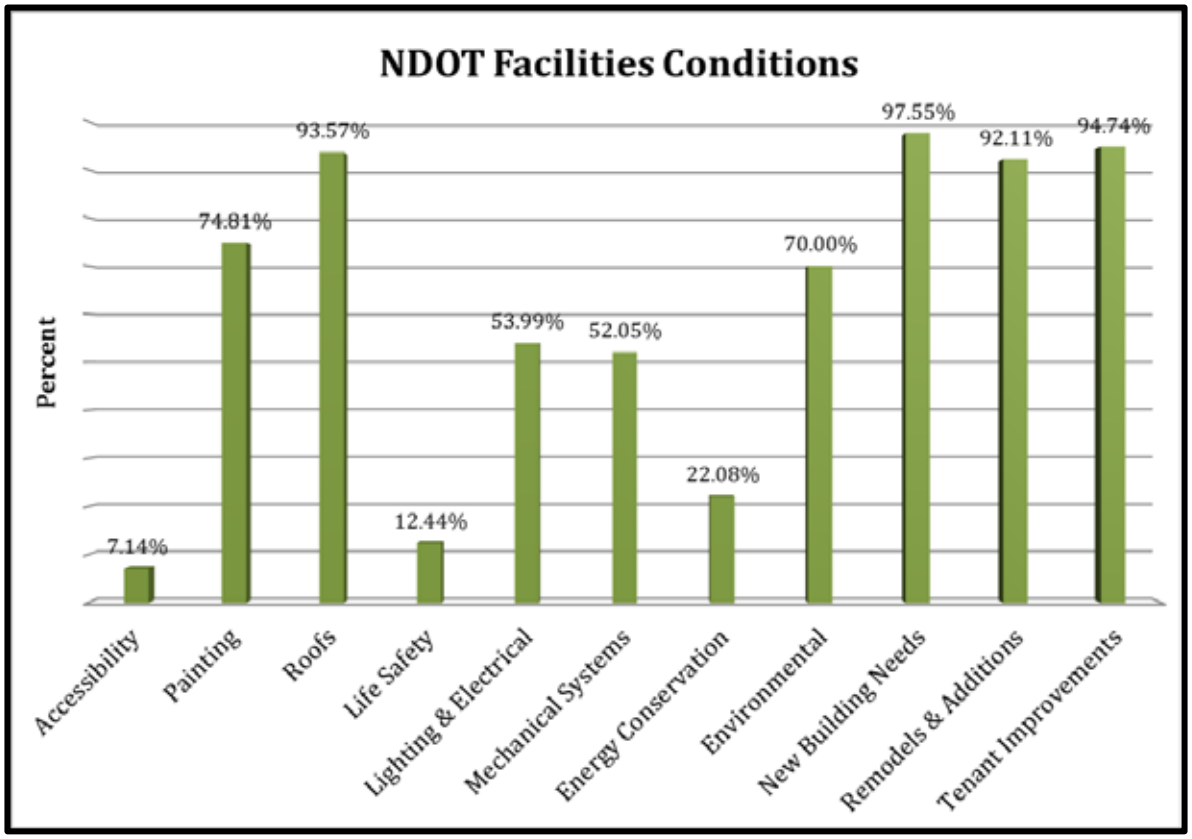
Ultimate Target: 100%

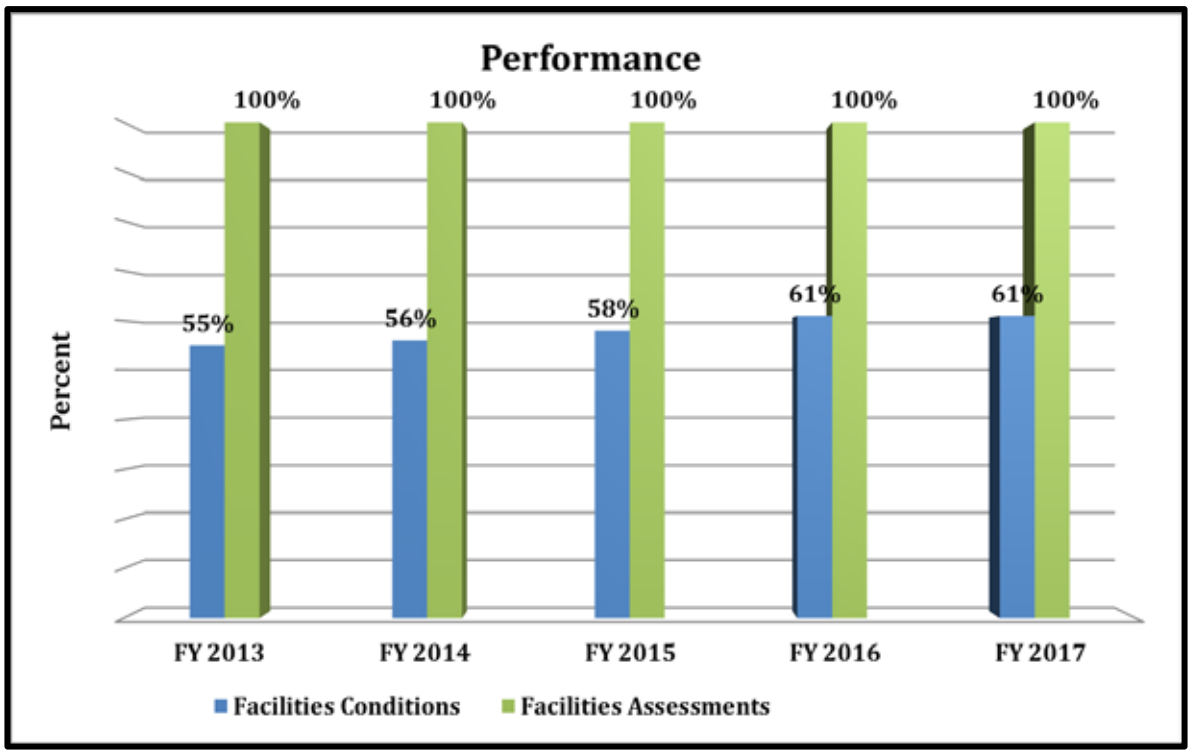
Strategy Plan Support:
Facility Condition Analysis (FCA) reports will ensure our buildings comply with building and safety codes, are safe and properly maintained. Each Department owned and maintained facility will be evaluated on a seven-year cycle. Completion of the priority work items will return 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 put safety first, cultivate environmental stewardship, efficiently operate and maintain the transportation system in Nevada, promote internal and external customer service, and enhance organizational and workplace development.

Measurement and Supporting Data:

SFY 2011	87%
SFY 2012	87%
SFY 2013 (New Method - Base Number)	53%
SFY 2013	55%
SFY 2014 (September 2014)	56%
SFY 2015	58%
SFY 2016	61%
SFY 2017	61%


NDOT Facilities Conditions
Percent
7.14%
74.81%
93.57%
12.44%
53.99%
52.05%
22.08%
70.00%
97.55%
92.11%
94.74%
Accessibility
Painting
Roofs
Life Safety
Lighting & Electrical
Mechanical Systems
Energy Conservation
Environmental
New Building Needs
Remodels & Additions
Tenant Improvements


Performance
Percent
100%
100%
100%
100%
100%
55%
56%
58%
61%
61%
FY 2013
FY 2014
FY 2015
FY 2016
FY 2017
Facilities Conditions
Facilities Assessments

Strategies for Improvement:

Short range to next reporting:
Architecture recently hired a new PM II to replace the vacancy. The support and experience provided by the new PM II will be critical to the ongoing increase in PM #10 and overall success of the Architecture Section. Projects are developing rapidly and it is expected that FY 2018 to be a very successful year.

Long range:

The PM III will continue to develop a true long-range work plan. The PM II will help to ensure that the staff PM's are working on the long-range plan and are accountable for their work loads. The statewide painting program has been reactivated in the end of SFY 2017. Painting on-call contracts and biennial painting plans will be very beneficial to the Department and will result in good gains to performance measure 10.

Architecture has begun work on creating a statewide roofing program. Roofs around the state are failing rapidly. Investment in the condition of our roofs is critical. The current goal is to have this program ready for funding in the 2019 legislative session. Staff shortage will be a challenge to this program. It is the opinion of the PM III that a full-time project manager should be dedicated to this program.

Revival of targeted statewide programs as mentioned above is important to the ability of Architecture to proactively plan for projects and be more responsive to Department needs. Presently, the work program is almost entirely reactive, rather than planned. Deferred maintenance needs, Stormwater program needs, EV charge station program needs, and others have overwhelmed the staffing capacity of the Architecture office. Creation of programs would include long term prioritized projects, standard details and specifications, codified procedures, dedicated funding streams, and specialist project managers whose duties are primarily driven by a given program rather than whatever project request is next on the list. True commitment to this strategy will require additional staff and reorganization of the Architecture office: some PM's would primarily manage individual statewide programs, and others would be grouped into design squads that would primarily be responsible for producing in-house design documentation.

Maintenance and Asset Management (M&AM) is assisting Architecture with the RFQ for the statewide facility condition analysis (FCA) to be completed in 2019 (due to Architecture staffing constraints). The FCA is planned to be significantly expanded, which will provide data that has not previously been reported, and will also provide data in a much more useable format. This will assist with creation of more targeted work programs that will provide the improvements needed most by the various NDOT divisions.

During the planning and execution phases of the FCA, Architecture plans to install compliance thresholds for the categories of Accessibility, Life Safety, and Energy Conservation. Currently, these categories are binary, which can yield misleading compliance numbers. For example, a building which is substantially compliant with respect to accessibility but has only one or a few minor accessibility violations would be recorded as not compliant in the spreadsheet. If we instead were to add a compliance threshold – perhaps something like 90% compliant as the threshold to be recorded as compliant in the performance measure – then I believe the data from the Accessibility category would represent accessibility compliance much more accurately.

One of the problems with the data from the previous FCAs is that the data is difficult to access which in turn makes it difficult to use the data to plan for future projects. The upcoming FCA will be designed to improve the accessibility and usability of the data.

ANNUAL EVALUATION OF PERFORMANCE MEASURE

Was the annual target met?

The target increase of 2% in will not be met in SFY 2017. The projects we have completed are meaningful, but many do not trigger a change in the status of the spreadsheet, so they do not register in the composite performance figure. For example, under the Accessibility category, the smallest ADA infraction means most buildings still report as "No" for accessibility compliance.

The following projects have been completed during SFY 2017:

1. CIR 57 – Repairs to the Las Vegas North Maintenance Station UPS
2. CIR 70 – Ely Maintenance Station ADA improvements
3. CIR 125 – Tonopah oil drum storage
4. CIR 171 – Reno Progress Lab ventilation improvements
5. CIR 179 – Traffic Safety reconfiguration
6. CIR 190 – Wadsworth Rest Area sanitary sewer improvements
7. CIR 192 – Fernley Maintenance Station, Building #4 access ramp and stairs
8. CIR 195 – Hot Springs restrooms addition; absorb room 113 into 115 (Don's room)
9. CIR 198 – Security improvements to the Flight Ops building
10. CIR 233 – HQ Records Division move
11. CIR 249 – Fallon Stockroom security improvements
12. CIR 250 – South Las Vegas roof walk pad replacement
13. CIR 253 – Build office for Sean Smith (Elko)
14. CIR 256 – HQ Architecture re-carpet
15. CIR 271 – Systems Furniture (Fernley)
16. CIR 280 – Replace Pneumatic Valves and Controls (HQ)
17. CIR 284 – Replace Shop Roof (Montgomery Pass)
18. CIR 296 – Systems Furniture (HQ)
19. NO CIR – Battle Mountain re-roof
20. NO CIR – Chiller replacement in the Carson HQ and Materials Lab

The following is the current Architecture work load:

1. D I
    a. CIR 57, 65, 191, 215 – LV N. Maintenance Station site rehabilitation and new vehicle wash
    b. CIR 69 – Tonopah MS administrative building renovation and addition
    c. CIR 122 – Tonopah, enclose seven vehicle stalls
    d. CIR 194 – Permit I-515 / Flamingo Pit transfer station
    e. CIR 203 – Alamo salt/sand storage Sprung
    f. CIR 219 – Construct salt/sand Sprung at Blue Jay
    g. CIR 221 – Montgomery Pass salt/sand Sprung
    h. CIR 246 – Assist DI as necessary to mitigate private parcels at SR 321 / SR 322 in Pioche, Lincoln County
    i. CIR 282 – Replace all locks on N. Maintenance Station campus
    j. CIR 295 – Fix damaged building at Lathrop Wells RA
    k. NO CIR – Mountain Springs residence re-siding
    l. NO CIR – RFQ for feasibility study to relocate LV NMS to Shaumber Rd in NW LV.

m. NO CIR – Complete Mt. Charleston electrical upgrade

2. D II
    a. CIR 86 – Wellington salt/sand structure and retaining walls
    b. CIR 82A – Complete water and sewer services to Logging Rd. crew room
    c. CIR 109 – Move the Sprung enclosing the Trento APECS unit; connect APECS to new electrical service installed as a part of the US 50 ITS project.
    d. CIR 187B, 187C, 193 – Fire alarm, elevator, and HVAC for Galletti administrative building
    e. CIR 205 – C-cure sliding gate at Fallon north entrance
    f. CIR 210 – Move Fallon Harrigan Safety/training manufactured building
    g. NO CIR – Virginia City site rehab (inherited from Roadway Design)

3. D III
    a. CIR 133 – Ely partial site rehab and vehicle wash
    b. CIR 145 – Elko administrative building windows, doors
    c. CIR 147 – Elko administrative building HVAC
    d. CIR 148 – Manufactured building for Communications and Environmental staff
    e. CIR 153B – Construct new paint booth and wash
    f. CIR 159 & 214 – Re-siding of residences at Quinn River and Orovada
    g. CIR 240 – Replace potable water system at Quinn River MS
    h. CIR 294 – Upgrade electrical service at C920 field lab
    i. NO CIR – Water connection to vehicle wash and orchard at Quinn River MS

4. Carson HQ
    a. CIR 26 – Reconfigure Design Div. 4th floor area
    b. CIR 186 – Replace elevators in main administrative building
    c. CIR 195 – Renovate restrooms, add restrooms, relocate break area at Hot Springs
    d. CIR 195B – Backup power for training room so it can be used as an alternate EOC
    e. CIR 258 – Furniture reconfiguration in HQ Legal
    f. CIR 289 – Active Scrum study for IT
    g. CIR 296 – Furniture reconfiguration in HQ room113
    h. NO CIR – Re-roof main administrative building
    i. NO CIR – Draft CIR for long-range plan at Hot Springs

5. Equipment Division
    a. CIR 91, 111 – Install evaporative coolers at Galletti Equipment buildings
    b. CIR 257 – Replace entire hot water heating distribution system at Galletti Sign Shop building
    c. CIR 279 – Replace footings for equipment lifts at Galletti Equipment building

6. Electric Highway
    a. CIR 232 – Install EV charge station at Veterans' Memorial Park in Hawthorne
    b. CIR 243 – New Hidden Springs EV charge station in Tonopah near JCT US 6 / US 95

7. Statewide programs
    a. C-cure as occurs
    b. Statewide fuel system replacement

c. Statewide painting
d. New on-call contracts for civil, architectural, structural, electrical, mechanical, utility locating
e. RFQ for statewide facility condition analysis
f. Reactivate statewide roofing program

What "strategies for improvement" were successful?
A written work program that lists the active projects for each PM has been very helpful. The work program has directed the efforts of the PMs more as a team rather than a collection of individuals. The work program has also been successful in holding PMs accountable for the projects on which they are expected to be working.

What "strategies for improvement" were not successful and why?
The staffing level of Architecture continues to restrict the amount of work that can be performed. As of today, there are 162 open capital requests in the log with an estimated total value of more than $130M.

What new "strategies for improvement" will be initiated in FY2018?

Short range to next reporting:
Incorporate data from the building assessments into the new PM #10. Identify meaningful elements that can be tracked to show improvement or lack of improvement. See "Strategies for Improvement" section above.

Long range:
See "Strategies for Improvement" as stated above.

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.
No.

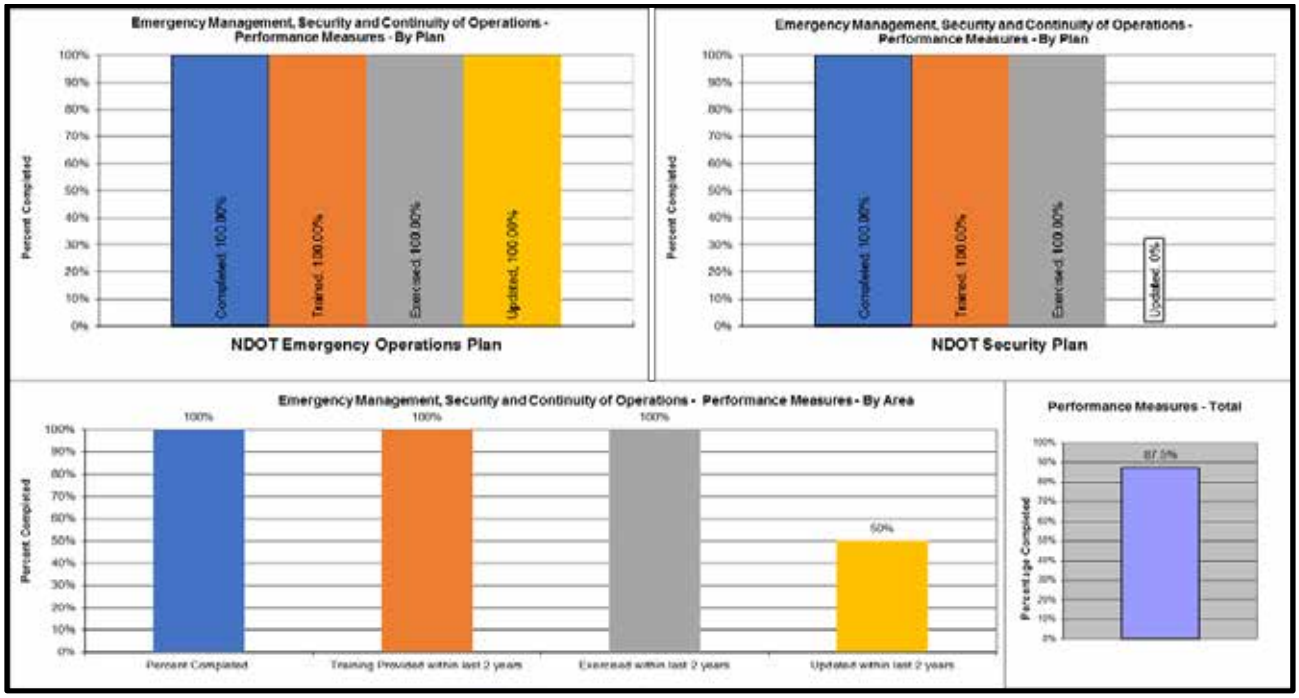
11. Emergency Management, Security and Continuity of Operations

Performance Measure:
Percent of emergency plans that have been completed, training and education have been provided to appropriate personnel. Emergency plans have been tested and exercised, along with being updated to accommodate changes in departmental processes and policies, reflecting any changes to Federal and State guidelines. Training and updates should be completed on a biennial basis. Plans include:

- NDOT Emergency Operations Plan
- NDOT 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 position to respond to health and safety issues. This performance measure works towards meeting the Department of Transportation Strategic Plan goals to:

- Safety firs
- Cultivate environmental stewardship
- Efficiently operate and maintain the transportation system in Nevada
- Promote internal and external customer service
- Enhance organizational and workforce development

Summary: July 2016 – June 2017:

The preparation for Operation Earth Hammer/VG-17 continued during the first quarter of FY17. This exercise was developed in close coordination with the Nevada National Guard and the Nevada Division of Emergency Management (NDEM), along with numerous state agencies and LPA's. The exercise scenario was an earthquake (6.7m) on the "Frenchman Fault", near Lake Mead in Las Vegas. There were weekly video/phone conference meetings with District I staff to prepare them for this exercise. On July 27th, we conducted alongside NDEM, ICS (Incident Command System) training for District I staff preparing them for Operation Earth Hammer/VG-17. On November 15th, 2016, the massive exercise was conducted. An After-Action Report was being developed right after this, however due to the major flooding events of January and February this past year this has been delayed, our hope is to have this completed by the end of this calendar year (2017).

Emergency Management worked with Administrative Services regarding the "Emergency Response Procedures" project. Creating a template for the Districts to use for large emergencies or small ones. It provides a simple yet effective way of declaring a "District Emergency", tracking its progress through the NDOT chain of command along with coordination and communication during the actual event. Not only is this project beneficial for the Districts it is for the HQ staff as well. As it provides easy to follow procedures and guidelines.

On July 28th, 2016, the ESF-1 (Emergency Support Function) personnel were called in to assist in the response to the Pyramid Lake fires (Sutcliff). NDOT provided resources at the request of the Incident Commander on scene during the fires. NDOT was present at the SEOC for a period of two days. There was very minimal damage to our infrastructure (100 wooden guiderail posts were lost due to the fire). NDOT manned road closures and provided traffic control when needed during the fires.

Emergency Management section met with NDOT's Bridge Division in July 2016 regarding the plan to develop a Bridge Response Plan. This plan would be used during an emergency event such as an earthquake that causes damage to NDOT bridge structures, this plan will instruct users (bridge engineers, inspectors, management) of how to respond, and manage a damaged structure situation following a disaster. It was decided that the plan would be best placed as an annex to the NDOT EOP (Emergency Response Plan). During the VG-17 exercise Stantec Consulting, the firm tasked with writing this plan was present. This helped them greatly to better understand NDOT's methods in dealing with real events and how NDOT responds to them. The plan has since been developed. The Emergency Management section reviewed the draft (June – 2017) and forwarded comments to Bridge Division for inclusion into the final draft.

NDOT's Emergency Management section utilizes and operates the "Road Closure Mapping Program. During a training session (Fall-2016) for NDOT staff relating to Operation Earth Hammer/VG-17, it was discovered that the "Test Application" was not functioning. There is also the "Production Application". NDOT IT (GIS Section) had somehow deleted the files associated with the "Test Application", rendering the program useless.

On October 14th, 2016 ESF-1 (Emergency Support Function) personnel were called in to the SEOC to assist in the response to the Washoe Valley Fires (Little Lake). NDOT provided resources at the request of the Incident Commander on scene during the fires. NDOT was present at the SEOC for a period of

one day (5am to 7pm). NDOT maintenance personnel manned road closures and provided traffic control when needed during the fires.

January and February 2017 flooding events: For the first time in Nevada's and NDOT's history we experienced two major flooding events, back to back. These floods severely impacted District II and District III. Both flooding events were "Atmospheric River" storms. The January event began on Saturday January 7th, with very heavy and consistent rainfall. These rains lasted until January 9th. This rain quickly became a flooding event, causing significant damage to NDOT's highway infrastructure, with the most severely impacted region being Pyramid Lake, north of Reno, as well as the Sierra Front mountainous area. On the morning of January 9th, the rain began to turn into snow compounding the already dangerous travel conditions for motorists and NDOT crews. NDOT Maintenance & Asset Management personnel were activated. NDOT's role was to provide up to the minute updates on road conditions, respond to resource requests from state, county, city and tribal entities as well as communicate with NDOT District Management and NDOT senior management, as well as participating in meetings with state officials and the National Guard. The routes that had sustained damage during the January event were SR447, SR207, SR342, SR877, SR445, SR446, SR659, I-80, US50A, US95A, US50 and US395.

The total estimated damages were $10 Million. NDOT submitted an emergency relief reimbursement funding request (6-29-17) through FHWA for the damages. NDOT is also submitting an emergency relief reimbursement funding request through FEMA for debris removal, Pre-Staging contracts and the Lahontan US50/US95 culvert placements for an estimated amount of $1.5 Million.

The February event, began on the 5th and lasted until the 10th. This storm was very similar to the January storm in that it was also an "Atmospheric River". The town of Montello, northeast of Wells, was severely impacted by this storm. Due to the very heavy rains in this region an earthen dam west of Montello had broken and released a massive amount of water, slicing through highway SR233 in multiple locations causing the town of Montello to be completely cut-off for a period. NDOT Maintenance and Asset Management personnel were notified by the Nevada Division of Emergency Management that the State Emergency Operations Center would not be activated, however NDOT would be on standby. Maintenance and Asset Management personnel did coordinate the resource requests from the offices at Hot Springs and at home through the weekend. Emergency Management personnel maintained communication with NDOT Districts II and III Management and NDOT HQ Management throughout the event, briefing on the latest status as well as response and recovery efforts. The routes that had sustained damage during the February event were SR233, US395A, I-580, SR341, SR431, US50, US395, I-80, SR225 and US93.

Total estimated damages amounted to $5 Million. NDOT has submitted an emergency relief reimbursement funding request through FHWA (6-29-17) for these damages. NDOT is also submitting an emergency relief reimbursement funding request through FEMA, for debris removal, Pre-Staging contracts and the Lahontan US50/US95 culvert placements for an estimated amount of $1.5 Million.

Training FY2017:
During this fiscal year, training sessions were provided or attended by NDOT personnel. For a complete list of all the training provided or attended contact the Maintenance and Asset Management division or the Performance Analysis division.

Exercises FY2017:
During this fiscal year, exercises were provided or attended by NDOT personnel. For a complete list of all the exercises provided or attended contact the Maintenance and Asset Management division or the Performance Analysis division.

Updates:
The following plans/procedures received updates during this FY:

July 1st– The contact list for the NDOT Emergency Operations Plan was updated to reflect changes in personnel and positions.

October 1st– The contact list for the NDOT Emergency Operations Plan was updated to reflect changes in personnel and positions.

January 1st– The contact list for the NDOT Emergency Operations Plan was updated to reflect changes in personnel and positions.

April 1st – No contact list updates were conducted for 4th quarter (position was vacant).

The Security Plan was scheduled to begin major updates in January of 2017. However, due to the emergency flooding events of January and February and an employee unexpectedly leaving during that period added to the workload. Those led to the decision to put the Plan update on hold until NDOT finalized the submittals with FEMA and FHWA. It is estimated that the Plan update will be completed around fall of 2017.

For the detailed Emergency Management, Security and Continuity of Operations Report contact the Maintenance and Asset Management Division or the Performance Analysis Division.

Strategies for Improvement:

Short range:

- Conduct some table top exercises during 3rd quarter of FY 2018

Long range:

- Exercises will be held at least twice each year (bar any large emergencies). The After-Action Reports will be used to update the Emergency Operations and Security plans.
- Provide training in preparation for exercises as well as after the exercises to mitigate areas needing improvement identified in the exercises.

Were the targets met? No

What "strategies for improvement" were successful?
Conducting exercises tests and provide training for NDOT personnel on disaster response activities. They also provide valuable feedback needed to update plans and procedures. Regular exercises will remain a fundamental part of our strategy. Training is also supplied to the Districts based on requests and feedback received from the exercises and actual events.

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 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 and why?
See above for comments on updates on "Short Range".

What new "strategies for improvement" will be initiated in FY 2018?

Short range:

- The strategies implemented to date have been successful in achieving our performance measures. We will continue to update and refine as determined to be necessary the Emergency Operations and Security plans.

Long range strategy:

- Completion of the Security Plan for approval and distribution.

Does this performance measure effectively measure what is desired? Yes

Is there a better performance measure that should be considered?
No, based on our years of performing this function and our experience we feel at this point that what we are currently measuring is working.

This Performance Measure has been revised to reflect the merging of separate plans. The Mobile Fleet Security Plan has already been incorporated into the NDOT Homeland Security Plan. The Continuity of Operations Plan, District Level Emergency Operations Plan and the Southern Nevada Evacuation Plan have been included into the NDOT Emergency Operations Plan.

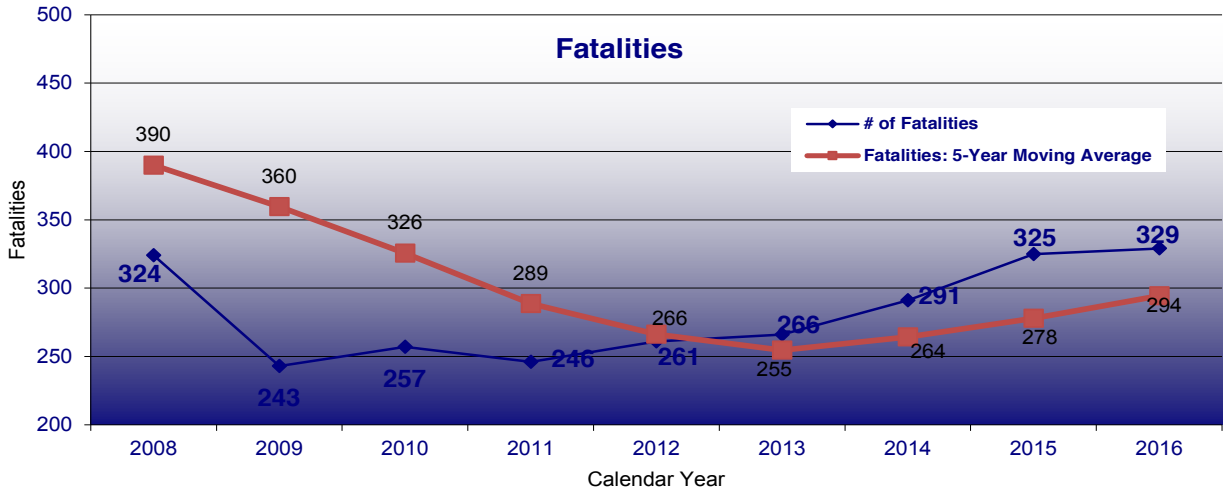
Will meeting the next yearly target have a fiscal impact? If so, explain.
No fiscal impact is anticipated.

12. Reduce Fatal Crashes

Performance Measure:
Number of fatalities, fatality rate, serious injuries, serious injury rate and new for 2018 the number of non-motorist on Nevada's streets and highways.

Annual Target: The methodology of how we calculate our targets has been changed to reflect the current upward trend on most of the performance measures. For each performance measure, the current trend for the last four and five years of annual data was reviewed and the more statistically significant trend was used to project forward to the end of 2017 Realizing that before we can decrease the number of annual fatalities, the number will hit an upward plateau, we have set our 2017 target to be one less than the projected trend for the five-year moving average in 2017. After we reach this target, we will continue this trend in future years on a downward trend to our ultimate goal of zero.
We have set goals for 2017 but since we are switching methodologies form previous years, we will not be reporting on meeting the targets until next year.

Ultimate Target: Zero
The State of Nevada has been experiencing an unfortunate increase in fatalities on our roadways since 2012. This increase has impacted the five-year rolling average as it has also crept up.



Measurement and Supporting Data:
These measurements are in line with FHWA and NHTSA reporting requirements

Measure 1: Number of traffic fatalities

Target - Decrease the projected 2013-2017 five-year rolling average of 303 traffic fatalities by at least one.

Measure 2: Number of serious traffic injuries

Target - Decrease the projected 2013-2017 five-year rolling average of 1,184 serious injuries by at least one.

Measure 3: Number of fatalities per 100M Vehicle Miles Traveled (VMT)

Target - Decrease the projected 2013-2017 five-year rolling average of 1.22 fatalities per 100M VMT to at most 1.17 fatality rate.

Measure 4: Number of serious Injuries per 100M Vehicle Miles Traveled (VMT)

Target - Decrease the projected 2013-2017 five-year rolling average from 3.77 serious injuries per 100 Million VMT to at most 3.72 serious injury rate.

Measure 5: Number of Non-Motorized Fatalities (And Non-Motorized Serious Injuries)

This is a new measure and targets will be included in 2018.

Strategies for Improvement
Short range to next reporting:

- The 2016-2020 SHSP has been approved by the NECTS and we are currently working under the new document.
- Due to the loss of funding from the FAST Act, we will continue to Promote Zero Fatalities to the public (the fifth E of safety, everyone) in cooperation with the Office of Traffic Safety to the extent possible allowed by current funding levels. This is a tremendous step backwards for the Zero Fatalities program as we were
- gaining momentum, public awareness and acceptance.
    a. www.zerofatalitiesnv.com website
    b. Media
    c. Grassroots Marketing
- The next Safety Summit is tentatively planned for the fall of 2018 and will be held in Las Vegas.
- Continue the Road Safety Assessment (RSA) program by completing the mitigations database and tracking tools associated with the RSA program. We will also be including "work zone" RSA's in major projects as a standard item.
- 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 high crash locations, both intersections and corridors.
    - Expand the systemic safety program beyond centerline rumble strips
        - Flashing Yellow Arrows, median cable rail projects, shoulder widening and slope flattening, truck climbing lanes and passing lanes, turn pockets on state routes with posted speeds over 55MPH.
    - Perform Safety Management Plans, which are corridor safety studies that focus on the safety of all users and incorporated access management, public and stakeholder input, crash analysis, roadways engineering and applications of the Highway Safety Manual (HSM) methods to reduce crashes.
    - Follow the principles of access management
    - Implement geometric intersection improvements
        - Roundabouts, compact roundabouts, redesign of sweeping free right-hand turn lanes.
- Continued cooperation and close coordination 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
- We will be pursuing more pedestrian enhancement projects with the additional $10,000,000 of state funds
- NDOT Traffic Safety Engineering is championing the change from a 4-inch edge line to a 6-inch edge line and we will have supporting documentation coming before the end of 2017.
- NDOT Traffic Safety Engineering Railroad Safety Program continues to implement the states Railway-Highway Crossing (Section 130) program.

- Identifying existing asphalt, timber, and dirt crossing surfaces and prioritizing a list of projects.
- Identify existing passive crossing for potential improvements to active crossings.
- Analyzing the new hazard index that the railroad section had developed to make stat specific hazard index.
- Continue to work with Cities, Counties, Railroad, State and Federal Agencies to ensure all crossings have the correct signage and markings.

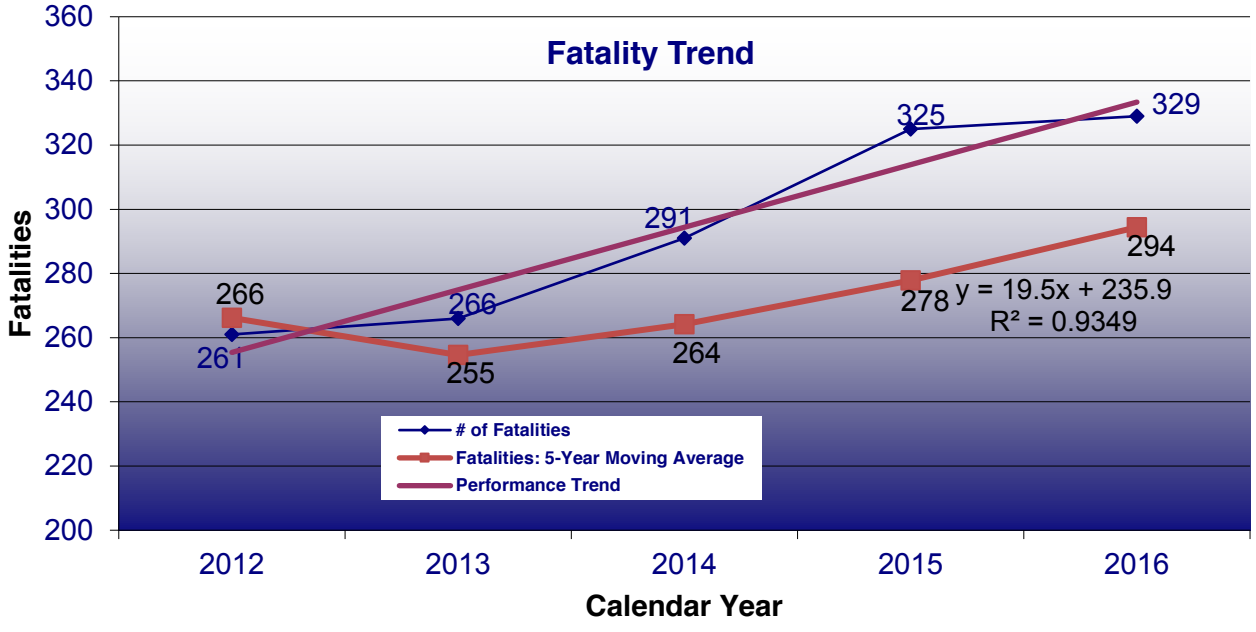
Long range:

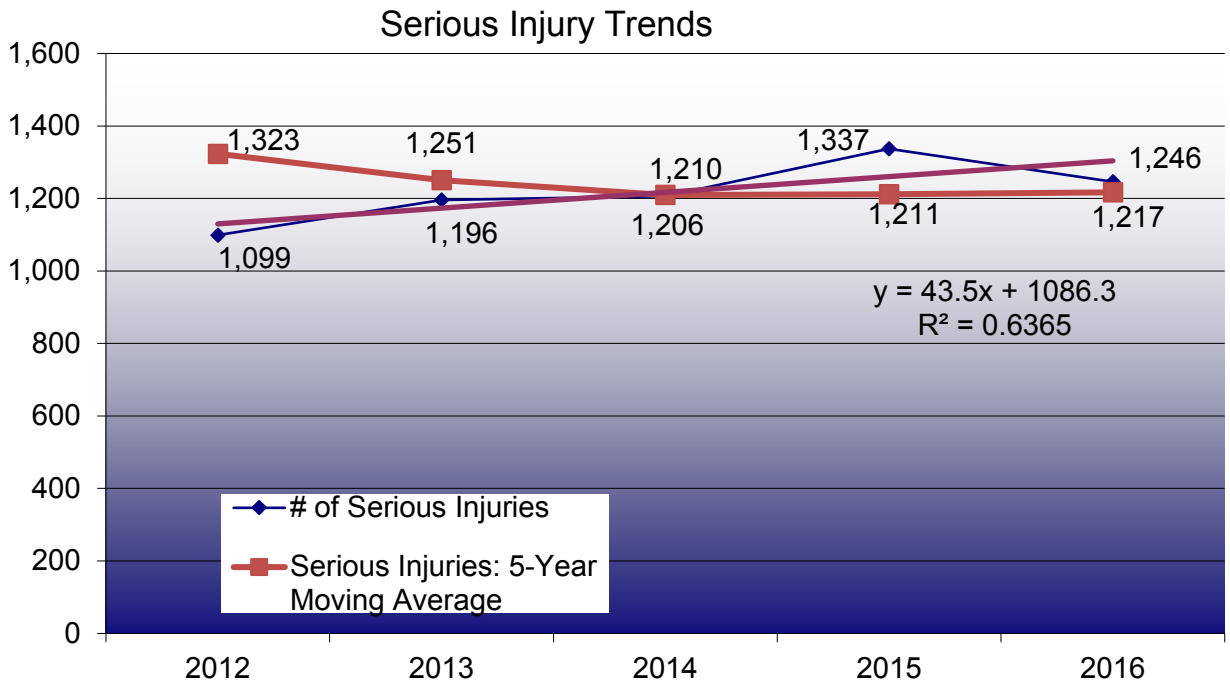
- Introduce new safety mitigations to Nevada for assessment and adoption into policy.
- Participate in the development and expansion of the Traffic Incident Management program to efficiently manage traffic crashes.
- Bring safety to the planning process as a quantitative measure.
- Keep Nevada at the forefront of the Safety initiatives at the national level.
- Initiate a rural "curve enhancement" program that updates signage and possibly place High Friction Surface at certain locations
- Continue to build the "Safety Analyst" database and compare outcomes to current methods to further build on the Data Driven Solutions.
- NDOT Traffic Safety Engineering Railroad Safety Program develops a State Action Plan as required by the FAST Act.

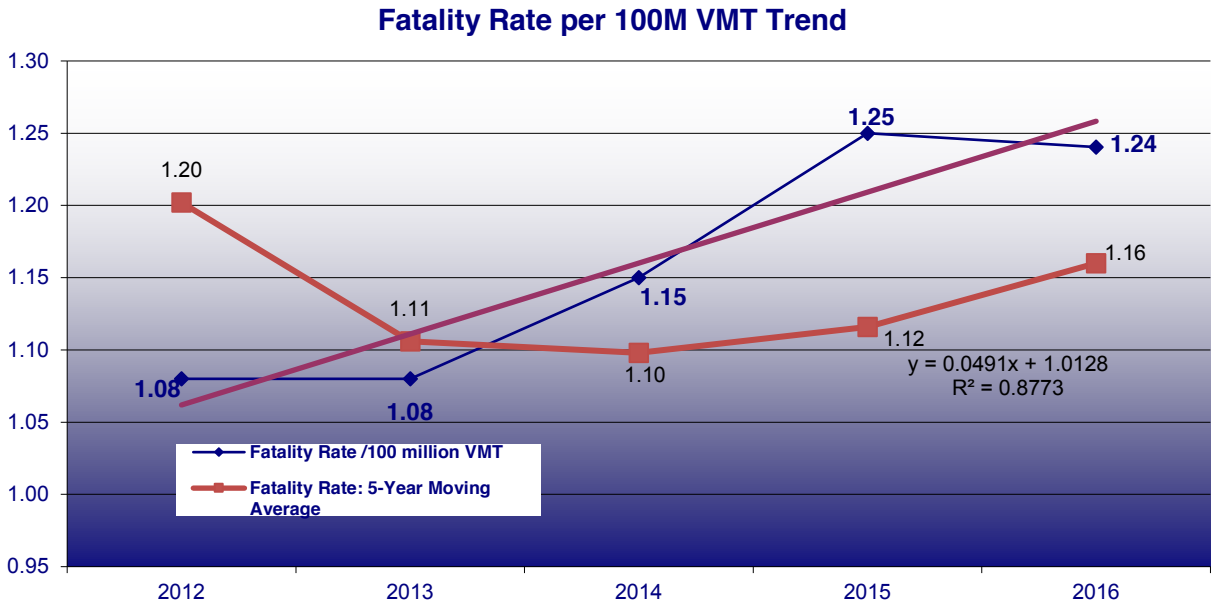
Was the annual target met?

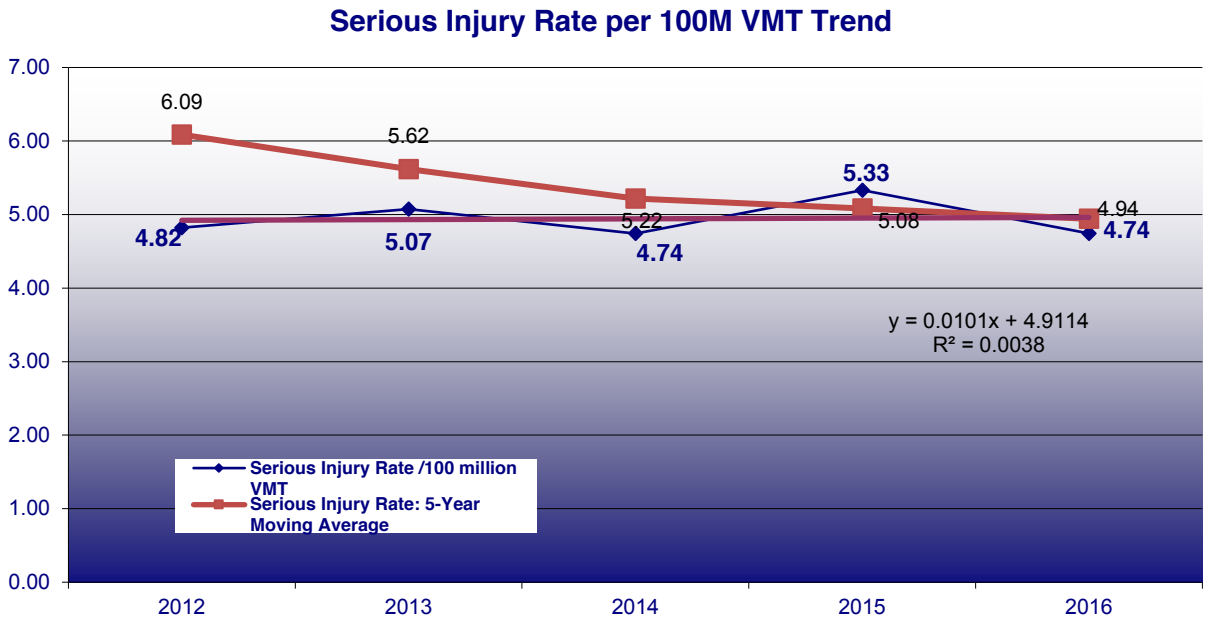
N/A

NDOT Safety Engineering Division in coordination with the Office of Traffic Safety at the Nevada Department of Public Safety have adopted a new methodology for setting targets and calculating the metrics for this performance measure. The target for the five-year rolling period ending 2017 was set based on projection using trend analysis from baseline data. Because calendar year 2017 is not yet ended, and because of the nature of how crash data is reported and processed by the Department of Public Safety and NDOT, the status if these targets are met will be reported by the end of 2018.




Serious Injury Trends
1,600
1,400
1,200
1,000
800
600
400
200
0
1,323
1,251
1,210
1,337
1,246
1,099
1,196
1,206
1,211
1,217
y = 43.5x + 1086.3
R² = 0.6365
# of Serious Injuries
Serious Injuries: 5-Year Moving Average
2012
2013
2014
2015
2016


Fatality Rate per 100M VMT Trend
1.30
1.25
1.20
1.15
1.10
1.05
1.00
0.95
1.20
1.11
1.08
1.08
1.15
1.10
1.25
1.12
1.24
1.16
y = 0.0491x + 1.0128
R² = 0.8773
Fatality Rate /100 million VMT
Fatality Rate: 5-Year Moving Average
2012
2013
2014
2015
2016



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 Assessment 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 Communications Liaison 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 and why?

It is hard to determine what is causing the increase in fatalities and what strategies are not working. We have seen a shift in the types of crashes with the increase in pedestrian and motorcycle fatalities and a decrease in other types of crashes such as lane departures, so those mitigation strategies appear to be effective., A Primary seatbelt law was not approved by the legislature in 2017, therefore cannot be implemented as identified in the SHSP. The primary seat belt law will come back up in the 2019 legislative cycle. Automated Enforcement has yet to be introduced as there are no willing champions. 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.

Does this performance measure effectively measure what is desired?

No**.** This measure is an indicator of how the entire State is performing regarding 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 the Local Public agencies. The DOT is constantly improving the working relations with the Local entities to help achieve this goal.

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 such as measuring only State-owned roadways

Will meeting the next yearly target have a fiscal impact? If so, explain.
Yes. The Department will continue to spend funds to improve the safety of the entire State transportation system. NDOT will also continue working with our partners to take advantage of opportunities to reduce the severity and frequency of motor vehicle crashes statewide. Every life saved, and every serious injury avoided lessens or eliminates the cost to the families who would have been affected, as well as reduce 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 advertised and awarded projects within the established construction cost estimate ranges. The construction cost estimate ranges are +/-15% of the October estimate of construction costs and +/-10% of the engineer's estimate of construction costs at time of bid.

The performance measure incorporates most projects advertised by the Department. Contracts managed through the districts and maintenance sections were not included as they are developed through a separate process than the 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 the Department to spend more federal funds and therefore produce more projects for the state.

Annual Target: 75% **Ultimate Target:** 80%

Strategy Plan Support:
This performance measure works towards meeting the Department of Transportation strategic plan goals to put safety first, cultivate environmental stewardship, efficiently operate and maintain the transportation system in Nevada, promote internal and external customer service, and enhance organizational and workplace development.

Project Delivery Data:
At the beginning of the reporting period, 50 projects were planned/scheduled for delivery and out of these 39 were delivered.

Over the course of the reporting period a total of 51 (planned & not planned) projects were delivered.

- 39 were planned for delivery at the beginning of the reporting period
- 12 were not planned
  - 10 were delivered early due to changes in program priorities
  - 2 were emergency/urgent contracts

Project Estimate Data:

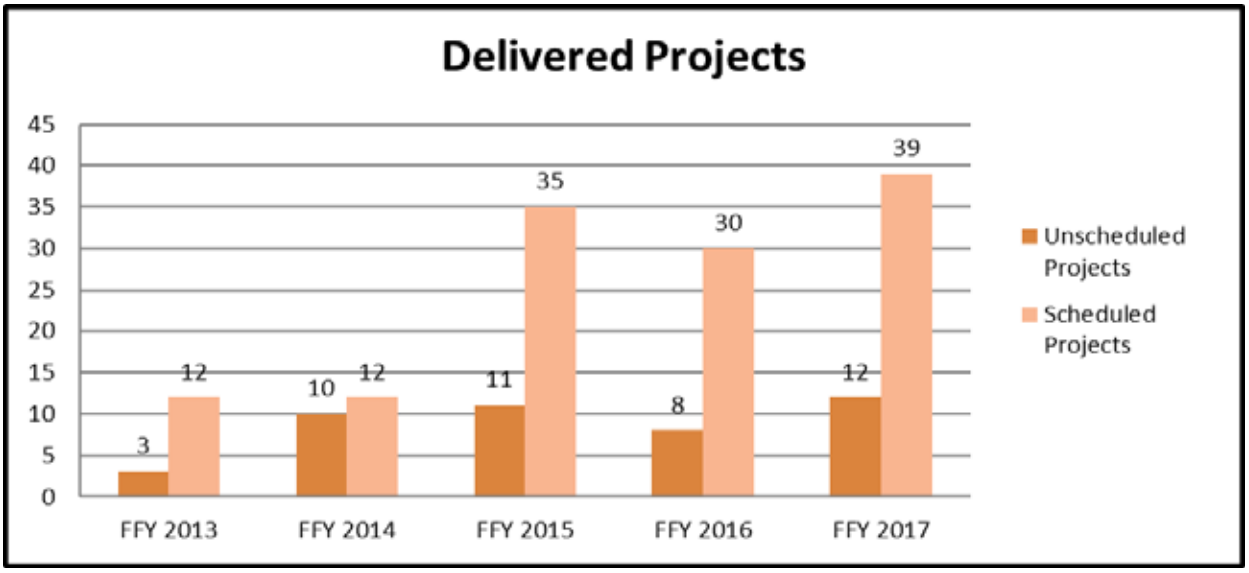
Over the course of the reporting period, 37 projects out of the 39* planned projects delivered were measured for performance within the established construction cost estimate range between the October estimate and the award costs, of which:

- 12 project award costs were within the +/- 15% range
- 25 project award costs were **not** within the +/- 15% range
- 2 project award cost had not been determined yet

*The 12 non-planned projects were excluded from this delivery total because they did not have an October estimate to compare against.

Over the course of the reporting period, 48 projects out of the 51 total delivered projects were measured for performance within the established construction cost estimate range between engineer's estimate at the time of bid and the award costs, of which:

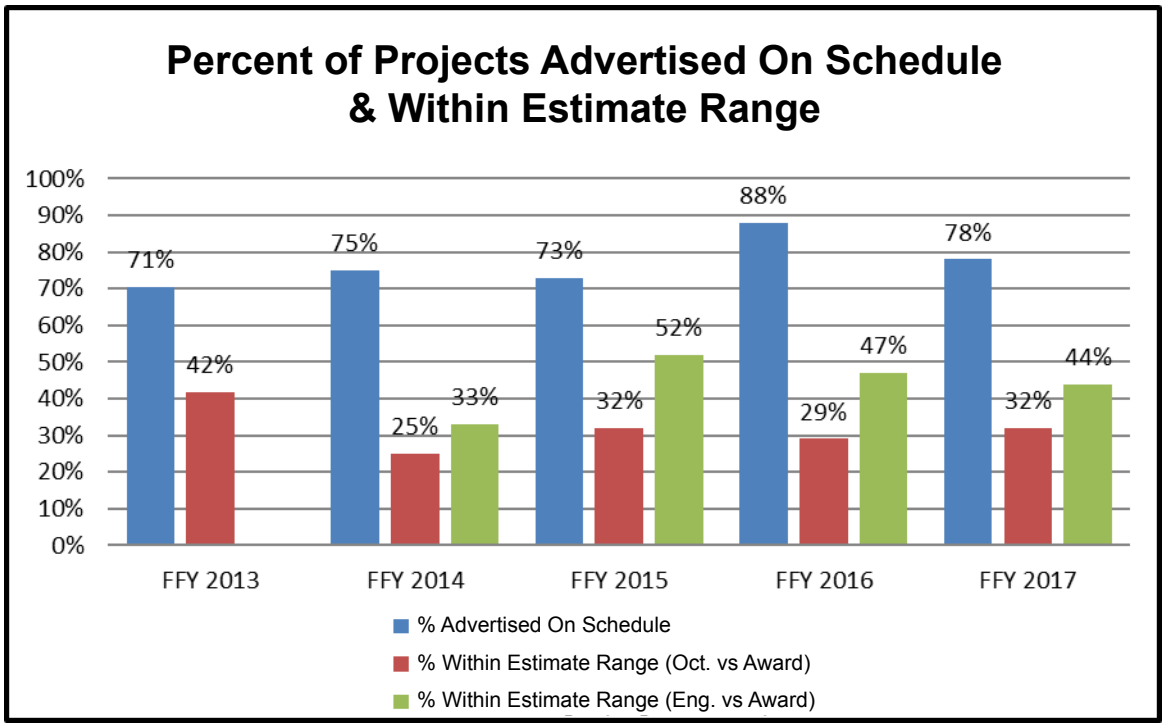
- 21 project award costs were within the +/- 10% range
- 27 project award costs were **not** within the +/- 10% range
- 3 projects were not measured:
  - 2 project award costs have not been determined yet
  - 1 project was delivered as Design Build



Measurement and Supporting Data:
The established list of scheduled projects included 50 projects. Of the 50 projects, 39 (78%) scheduled/planned projects were advertised within the reporting year.

Of the 39 projects that were scheduled and delivered for this reporting year, 37 have been awarded or had an apparent low bid at the time of reporting. Of the 37 projects, 12 (32%) of the project's award costs fell within +/- 15% of the October cost estimate.

Of the 51 projects delivered during reporting year, 48 have been awarded or had an apparent low bid at the time of reporting. Of the 48 projects, 21 (44%) of the project's award costs fell within +/- 10% of the engineer's estimate at time of bid.



Were the annual targets met?
The delivery target of 75% of scheduled projects was met this year with a performance of 78%.

The awarded construction cost estimate target of 70% of delivered projects within +/- 15% of the October cost estimate was not met this year with a performance of 32%.

The awarded construction cost estimate target of 70% of delivered projects within +/- 10% of the engineer's estimate at bid was not met this year with a performance of 44%.

We met our performance goal for project delivery. The projects that did fail were delayed due to project scope change and change in Department priorities.

The failed construction cost estimates did not show a consistent resulting trend with the awarded construction cost estimates coming in both above and below the engineer's estimate at bid.

What new "strategies for improvement" will be initiated?
In federal fiscal year (FFY) 2016 we successfully met our increased annual delivery goal of 75% and the previous four years we had successfully met our annual delivery performance of 70%. Our "ultimate" goal is 80% and we planned to increase our goal to 80% if we met the 75% for this reporting period (FFY 2017). Since our performance was at 78% our target will increase to 80% for this next reporting period, FFY 2018.

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

- ❖ At the October baseline list development, further document project scope elements, project unknowns and other risks that affect the cost estimate
- ❖ Continue to coordinate with all impacted divisions to establish the list of projects to be measured 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 earlier into project development
- ❖ 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 delivery issues are, however, the project status documentation during the tracking of the performance data should assist with better identifying where there are issues in the process. The Department can then 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 now for project delivery but there are some adjustments to the data tracking that can be made to add value to the performance measure. More detailed documentation on the cause for delivery delays such as unforeseen changes to projects, changes in priorities, mandates, funding impacts, and specific project development issues will help us better identify where improvements need to be made.

The October baseline construction cost estimates established at the beginning of the reporting period are still at various levels (i.e., planning, 30%, 60%, and 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 cost estimating performance issues. To achieve a true measure of our cost estimating performance

early in the project development process, a common early project development milestone was needed so we track the cost estimate at the same point for each project. For the FFY 2018 reporting we will be tracking the intermediate (60%) design submittal cost estimate for the October baseline estimate so we have an "apples to apples" comparison for earlier cost estimates. We can then better track and identify the early cost estimating issues causing us to miss our goal.

Adding the engineer's estimate at the time of bid as a comparison criterion has given us a more consistent measure of our cost estimating at the end of the project development process.

The FHWA Stewardship Performance indicators have been introduced for FFY 2016. There are overlapping goals in relation to NDOT's Performance Measure 13. In future performance measure tracking and reporting for project delivery and estimates we would like to work towards making the goals align.

Will meeting the next yearly target have a fiscal impact? If so, explain.
Yes. Meeting the yearly targets will allow the Department to optimize project funding and potentially deliver more projects.

14. Maintain State Bridges

Performance Measure:
Number of Department-owned bridges which are categorized as Structurally Deficient (SD) or Functionally Obsolete (FO).

Summary:
Number of Department owned bridges which are categorized as Structurally Deficient (SD) or Functionally Obsolete (FO). The base figure is 37 of 1045 bridges (*State Highway Preservation Report – 2007*). This base figure was established based on the federal eligibility requirements of the Highway Bridge Program (HBP) in effect at that time. Prior to MAP 21, eligibility and priority for funding projects under the HBP program was based on a bridge's Sufficiency Rating and other factors. 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.

Map 21 eliminated the Functionally Obsolete classification as a funding criterion; therefore, the information presented below only includes data related to Structurally Deficient bridges. Because the FO designation does not reflect bridge condition, maintenance or replacement needs, the Structures Division no longer considers it in the development of our work program. Subsequent reports will no longer included any references to the Functionally Obsolete designation.

Annual Target:
Replace or rehabilitate at least one Department owned SD bridge annually. The goal is evaluated based on the contracts awarded in each 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 activities (such as expansion joint replacement, repair of deck cracking, etc.) included in 3R or District Betterment projects.

Table 1 lists all projects that meet the Departments established performance measures. Table 2 includes additional structural work performed by the Department that does not meet the performance measures. These projects are often eligible for federal funding but do not satisfy the performance measure of reducing the number of structurally deficient bridges owned by the Department.

As shown in Table 2, these are primarily seismic retrofits or bridge replacements. The Department's on-going efforts to retrofit seismically deficient bridges are an important part of our annual work plan, but seismic deficiencies alone do not relate to a structurally deficient classification and do not meet the performance criteria. The table does also include the replacement of structurally deficient bridges that are owned by other agencies. While it is essential these bridges be replaced, they do not meet the performance criteria which only addresses Department owned structures.

Ultimate Target: Zero

TABLE 1: TRACKING OF PROJECTS THAT MEET PERFORMANCE MEASURE CRITERIA

Year	Target Met Y-N/# of Bridges	Structure #'s	County	Contract #	Description of Work/Comments
2009	Yes/1	H-788	CL	3366BD	Replacement of Wm Springs Br. (FO)
2010	No	-	-	-	-
2011	No	-	-	-	3476 bids 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	Yes /2	B-395 G-324	EU	3557	Replace 2 SD bridges on FR EU02 at Dunphy
2015	Yes/1	B-100	CH	3608	Replace SD bridge on SR115
2016	No	-	-	-	-
2017	Expect Yes/1	B-1392E	PE	-	Replace SD bridge on I-80
2018	Expect Yes/5	B-474	DO	-	Replace SD bridge on SR757
		I-1899	CL	-	Replace SD bridge on SR582
		B-425	MI	-	Replace SD bridge on SR361
		B-639	EL	-	Replace SD bridge on SR226
		B-242	CH	-	Replace SD bridge on Maine St, Fallon

TABLE 2: TRACKING OF PROJECTS THAT DO NOT MEET PERFORMANCE MEASURE CRITERIA

Year	# of Bridges	Owner	Structure #'s	County	Contract #	Description of Work/Comments
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 11/13.
	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	NV	I-1773, I-1774	WA	3574	Seismic retrofit of 2 bridges on I-580
	1	Reno	B-178	WA	-	Replace 1 SD bridge
2015	4	NV	H-948, G-949, G-953, I-956	CL	3597	Seismic Retrofit of 4 bridges on I-15
	1	LY	B-1610	LY	3601	Replace 1 SD bridge on Nordyke road
	4	NV	B-1262 N/S, B-1263 N/S	DO	3595	Seismic retrofit and scour mitigation of 4 bridges
	3	NV	I-1261, I-812 N/S	WA	3598	Seismic retrofit of 3 bridges on I-580
2016	-	-	-	-	-	-
2017	-	-	-	-	-	-
2018	4	NV	G-772 E/W	WA	-	Scour mitigation of 2 bridges on I-80
	8	NV	I-717 E/W, I-470 E/W, H-844 E/W, I-700 E/W	WA/LY	-	Seismic retrofit of 8 bridges on I-80
	1	HU	B-1658	HU	-	Replace 1 SD bridge

A table has been included to provide historical reporting of SD bridges.

Year	Total State-Owned Bridges	State SD Bridges	Comments
2006 BASELINE	1045	20	2007 Report.
2008	1056	20	2009 Report.
2010	1064	18	2011 Report.
2012	1116	19	2013 Report.
2014	1154	15	2015 Report.
2016	1163	12	2017 Report.

NOTES:

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

A description of Structurally Deficient bridges from the 2017 Nevada State Highway Preservation Report is included below for information.

A bridge is considered Structurally Deficient (SD) if significant load-carrying elements are found to be in poor or worse condition due to deterioration and/or damage, or the adequacy of the waterway opening

provided by the bridge is determined to be extremely insufficient to the point of causing intolerable traffic interruptions.

Because the term "Structurally Deficient" causes undue concern, FHWA is considering changing the terminology. The term does 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 put safety first, cultivate environmental stewardship, efficiently operate and maintain the transportation system in Nevada, promote internal and external customer service, and enhance organizational and workplace development. These goals can be met in the following ways: safety for the motoring public will be achieved by replacing structurally deficient bridges. The Division will deliver timely and environmentally considered bridge projects and programs. Meeting this performance measure will help effectively and efficiently operate and maintain the transportation system.

Measurement and Supporting Data:
2007 FY – There are 37 State owned bridges in Nevada that are Structurally Deficient or Functionally Obsolete and are eligible for federal funding. Additionally, there are 34 bridges needing repair/replacement owned by local agencies that are 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 to cooperate with and assist them.

Long range to next reporting:
Perform bridge rehabilitation and replacement as allowed under the MAP 21 program and the FAST act. 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 for eliminating structurally deficient bridges. Many of the Department's bridges entered the inventory with the construction of the interstate system in the 1960's, and as these bridges continue to age, the number categorized as structurally deficient will continue to increase. While the Department has reduced the overall number of deficient bridges in recent years, at current funding levels, it is anticipated that the number of SD bridges will increase more rapidly than they can be replaced.

ANNUAL EVALUATION OF PERFORMANCE MEASURE

Was the annual target met?
No, the target was not 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.

We were unable to meet our target performance measure for the current evaluation period because of external issues encountered that affected project schedules. As noted in the 2016 annual report, the Muller Lane bridge (B-474) was scheduled for replacement pending utility relocation. Delays with the utility relocation pushed the project into 2018.

What "strategies for improvement" were not successful? Why?
N/A

Does this performance measure effectively measure what is desired?
Yes. The performance measure does allow tracking of the state- owned SD 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 bridges (thus an improvement), as new structures are added to the inventory. This could occur with no decrease in the actual number of SD bridges; therefore, the numerical based measure is viewed as superior.

Will meeting the next yearly target have a fiscal impact?
Not now. 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, increasing the number of these structures in Nevada's inventory.

15. Stream 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:

Summary of Status	Dist. 1	Dist. 2	Dist. 3	HQ	Total
Total permits accepted	897	257	147	1	1,302
Total permits processed in more than 45 days	33	4	2	0	39
Total permits processed within 45 days	495	149	37	0	681
Total permits processed	528	153	39	0	720
Total permits processed with re-reviews	94	153	39	0	286
Total permits processed through FHWA	44	11	3	0	58
Percent permits processed in more than 45 days	6.25%	2.61%	5.13%	0.00%	5.42%
Percent permits processed within 45 days	93.75%	97.39%	94.87%	0.00%	94.58%

Note: All calculations in this report have been handled in accordance with TP-1-10-3

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

Was the annual target met?
No. All three Districts annual reporting reflects a 94.58% of all permits processed were done within 45 days or less. The annual performance measure for each district is as follows: District 1 achieved 93.75%, processing 528 permits, District 2 achieved 97.39% while processing 153 permits, and District 3 achieved 94.87% while processing 39 permits. District 1 accepted 897 permits, District 2 accepted 257 permits, and District 3 accepted 147 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.

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.

Isthere a better performance measure that should be considered?
No. During our recent economic downturn the state experienced a decrease in the number of permits submitted. As the economy recovers we are starting to see an increase in permits as well as more projects going out to bid. The Chief Performance Engineer has suggested that we increase the goal of 95%. After discussing the increasing workloads of the different divisions, it was determined that the goal of 95% would remain as is.

Will meeting the next yearly target have a fiscal impact? If so, explain.
There is no anticipated direct fiscal impact for next year.

Targets for Next Three Fiscal Years:
FY18: 95%
FY19: 95%
FY20: 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, 2016. 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 2017 revenues into the State Highway Fund were approximately $1.25 billion while the second table contains the total FY 2017 actual expenditures of approximately $1.25 billion. These two tables also include other detailed financial data about transportation-related revenues and expenditures.

The third table indicates the Highway fund balance was $518,618,772 in FY 2016. This balance is significantly higher compared to FY 2015 balance of $317,361,548 million.

Revenue

State of Nevada Highway Special Revenue Fund Schedule Of Revenues And Receipts - Budgetary Basis For The Years Ended June 30, 2017 and 2016 (In thousands)		
	2017	2016
State user taxes		
Gasoline taxes	$ 205,670	$ 200,076
Motor vehicle fees and taxes		
Vehicle registration & bicycle safety fees	116,079	113,890
Basic Government Service Tax	38,567	
Motor carrier fees	41,378	40,911
Drivers license fees	26,743	27,034
Special fuel taxes	88,445	84,723
Total motor vehicle fees and taxes	311,212	266,558
Total state revenue	516,882	466,634
Federal Aid reimbursement		
Department of Interior	-	-
Federal Aviation Administration	-	72
Federal Emergency Management Administration	-	-
Federal Highway Administration	368,632	442,917
Federal Rail Administration	-	-
Federal Transit Administration	-	7,849
Total Federal Aid	368,632	450,838
Miscellaneous receipts		
Departments of Motor Vehicles & Public Safety authorized revenue	111,938	96,757
Appropriations from other funds	175	153
Proceeds from sale of bonds	185,001	200,008
Agreement income	9,907	26,133
Interest	5,182	2,593
Sale of surplus property	1,265	881
AB595 property tax	21,499	20,264
AB595 bond revenue	16,988	1,438
Other sales & reimbursements	20,768	27,611
Total miscellaneous receipts	372,723	375,838
Total revenue and receipts - budgetary basis	$ 1,258,237	$ 1,293,310

State of Nevada
Highway Special Revenue Fund
Comparative Schedule of Expenditures and Disbursements - Budgetary Basis
For the Fiscal Year Ending June 30, 2017 and 2016
(In thousands)

	2017			2016
	Budgeted	Actual Using Budgetary Basis	Variance Favorable (Unfavorable)	Actual Using Budgetary Basis
Department of Transportation				
Labor	$ 141,931	$ 139,309	$ 2,622	$ 124,331
Travel	3,066	2,427	639	2,559
Operating	76,045	71,232	4,813	67,579
Equipment	15,909	9,051	6,858	16,896
Capital improvements	663,562	541,434	122,128	508,232
Bond expenditures	379,188	179,766	199,422	65,009
Other programs	14,917	9,983	4,934	12,391
Total operations	1,294,618	953,202	341,416	796,997
Cost of fuel sold to other agencies	3,501	2,143	1,358	2,298
Total Department of Transportation	1,298,119	955,345	342,774	799,295
Department of Motor Vehicles (see Note 2)	162,792	119,447	43,345	119,132
Department of Public Safety (see Note 2)	96,832	78,304	18,528	78,499
	259,624	197,751	61,873	197,631
Appropriations to other funds				
Board of Examiners	-	-	-	-
Department of Administration	3,900	3,900	-	-
Transportation Services Authority	2,974	2,450	524	2,460
Public Works Board	3,374	3,083	291	497
Traffic Safety	274	259	15	250
Investigations	391	375	16	371
DMV Training Division	763	754	9	695
DMV Emergence Response	780	780	-	319
Fleet Services Capital Purchase	-	-	-	325
Legislative Counsel Bureau	25,331	10,360	14,971	-
Dept of Information Technology	-	-	-	-
Total appropriations to other funds	37,787	21,961	15,826	4,917
Other disbursements				
Transfer to bond fund	84,000	78,896	5,104	68,527
Total other disbursements	84,000	78,896	5,104	68,527
Total expenditures & disbursements				
- Budgetary basis	$ 1,679,530	$ 1,253,953	$ 425,577	$ 1,070,370

STATE HIGHWAY FUND BALANCE (BUDGETARY BASIS) STATE FISCAL YEARS 2014 - 2016			
	ACTUAL FY 2014	**ACTUAL FY 2015**	**ACTUAL FY 2016**
BEGINNING FUND BALANCE:			
GENERAL OBLIGATION BONDS	$0	$94,090,812	$54,189,233
RESTRICTED FUNDS	$26,510,031	$22,534,088	$17,967,597
OTHER HIGHWAY FUND	$105,153,969	$216,821,100	$245,204,718
TOTAL BEGINNING FUND BALANCE:	**$131,664,000**	**$333,446,000**	**$317,361,548**
ADD:			
REVENUES	$884,469,371	$861,159,660	$1,091,421,933
BOND PROCEEDS	$100,018,664	$0	$200,007,547
TOTAL ADDITIONS:	**$984,488,035**	**$861,159,660**	**$1,291,429,480**
DEDUCT:			
DEPT OF TRANS. NON-BOND EXPENDITURES	$526,427,064	$588,711,452	$733,843,798
DEPT OF TRANS. BOND EXPENDITURES	$5,927,852	$39,901,579	$65,008,555
EXP. & APPROP TO OTHER AGENCIES	$246,016,342	$241,676,159	$271,517,511
TOTAL DEDUCTIONS:	**$778,371,258**	**$870,289,190**	**$1,070,369,864**
ADJUSTING ENTRIES:			
CONTROLLERS OFFICE CAFR ADJUSTMENTS	-$4,334,777	-$6,954,923	-$19,802,391
TOTAL ADJUSTING ENTRIES:	**-$4,334,777**	**-$6,954,923**	**-$19,802,391**
ENDING FUND BALANCE:			
GENERAL OBLIGATION BONDS	$94,090,812	$54,189,233	$189,188,225
RESTRICTED FUNDS	$22,534,088	$17,967,597	$34,949,101
OTHER HIGHWAY FUND	$216,821,100	$245,204,718	$294,481,446
TOTAL ENDING FUND BALANCE:	**$333,446,000**	**$317,361,548**	**$518,618,772**

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. After 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: Identifies 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 affect 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 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

MAJOR PROJECTS

I-15 Projects

- I-15 North Phase 2 Package A - Craig Road to Speedway Boulevard
- I-15 North Phase 3 - Speedway Boulevard to Apex Interchange
- I-15 North Phase 4 - I-15/CC-215 Northern Beltway Interchange
- I-15 NEON DB
- I-15 Urban Resort Corridor Study
- I-15 South Bermuda Road Interchange
- I-15 South Pebble Road Overpass
- I-15 South Starr Avenue Interchange
- I-15 South Las Vegas Boulevard from St. Rose Parkway to Sunset Road
- I-15 South Phase 2A-2B
- I-15 South Sloan Road Interchange
- I-15 South – Stateline to Sloan Road

I-515/I-11Projects

- I-11 Phase 1 - Foothills Drive Grade Sep to Silverline Road North of US-95
- I-11 Phase 2 - Silverline Road to the Nevada Interchange

US-95 Northwest Projects

- US-95 Northwest Phase 2B – Ann Road to Kyle Canyon Road (SR 157)
- US-95 Northwest Phase 3A – CC 215 Beltway Interchange
- US-95 Northwest Phase 3C – CC 215 Beltway Interchange
- US-95 Northwest Phase 3D/E – CC 215 Beltway Interchange
- US-95 Northwest Phase 5 – Kyle Canyon Road (SR 157) Interchange

Northern Nevada Projects

- I-80 – Robb to Vista
- US-395 North – McCarran Blvd. to Stead Blvd.
- Pyramid Highway - US 395 Connection
- US-395 Carson City Freeway Phase 2B – S. Carson St. to Fairview Dr.

I 15 North - Part 2 Package A

Craig Road (SR 573) to Speedway Boulevard

Project Sponsor: NDOT

Project Manager: Dwayne Wilkinson, P.E.

(702) 671-8879

Project Description:

- This project consists of corridor improvements from Craig Road to Speedway Blvd inclusive of:
- Capacity improvements - widening Craig Rd to Speedway Blvd from 4 to 6 lanes
- Remove & replace PCCP with ACP (Craig to Lamb)
- Drainage improvements
- Widen & seismic retrofit of 4 structures (G-958N, G-958S, G-961N & G-961S) over 2 UPRR crossings
- Landscape and aesthetic improvements
- Right-of-way fence replacement
- All construction within the existing I-15 right-of-way
- Project length: 4.8 miles

Schedule:

Planning:

Complete

Environmental:

Complete

Final Design:

Complete

Construction:

3rd Quarter 2016 - 2018

Project Cost Range:

Engineering:

$ 1.93 M

Right of Way:

$ 0.22 M

Construction:

$ 37.6- $ 39.5 M

Total Project Cost:

$ 38.8 - $ 41.7 M

Project Benefits:

- Improve safety
- Reduce travel times
- Decrease congestion
- Improve freeway operations
- Increase life of pavement
- Increase I-15 capacity to accommodate projected traffic

What's Changed Since Last Update?

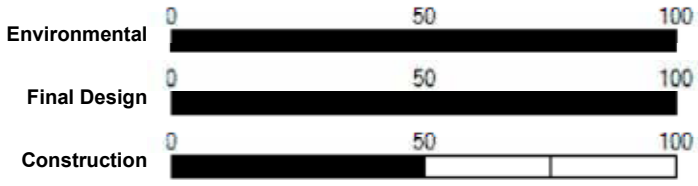
- Scope: No change
- Schedule: No change
- Cost: No change
- Construction contract awarded to Las Vegas Paving on 6/7/2016 for $33,800,000; construction ongoing

Project risks:

- Coordination with railroad during bridge construction
- Drilled shaft construction
- Work zone traffic control

Financial Fine Points(Key Assumptions):

- Total funding expended for Construction: $ 22,759,000
- Total funding expended for Design of all packages: $ 2,214,000
- Total funding expended for the Environmental Phase for all packages: $875,000
- Construction inflation escalation (3.7%) is to midpoint of construction



October 2017

NEVADA DOT

I 15 North - Phase 3

Speedway Boulevard to Apex Interchange

Project Sponsor: NDOT

Project Manager: Jenica Keller, P.E.

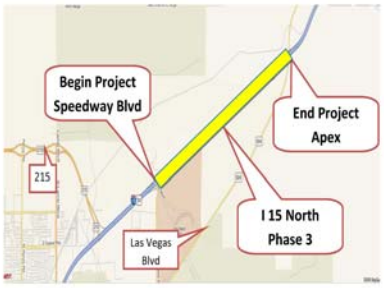
(775) 888-7592

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.
- Construct new interchange between Speedway Boulevard and Apex Interchange
- Project length: 4.6 miles

Schedule:

Planning:
Complete
Environmental Phase:
Complete
Final Design:
2018 - 2020
Construction:
2020 - 2022



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:

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

What's Changed Since Last Update?

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

Project risks:

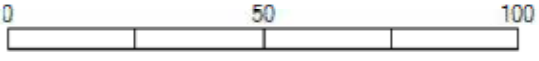
- Funding for Final Design has not been indentified in the STIP
- Timely completion of design
- Right of Way for new interchange has not be determined
- Uncertainty of proposed Sheep Mountain Parkway terminus
- Northern project limits may be modified to accommodate improvements at Garnet Interchange

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 (4.12%) is to approximate midpoint of construction
- Funding source for this project has not yet been identified

Environmental complete

Design Complete



October 2017

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:

- This is the last of four phases of improvements to the I-15 North Corridor between US 95 and Apex Interchange (15 miles)
- 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 generally within the existing I-15 and CC-215 Rights-of-Way. However, 1 to 4 acres may be required to construct the project

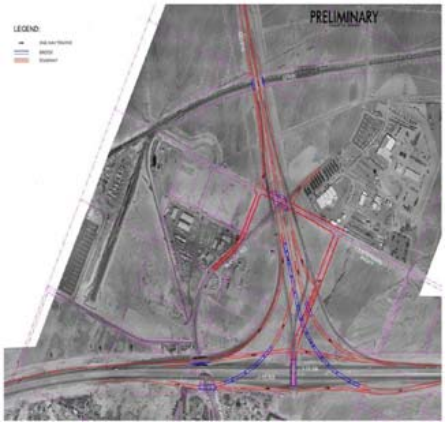
Schedule:

Planning:
Complete

Environmental:
Complete

Final Design:
Start 2015 - 2019

Construction:
2019 - 2022



Project Cost Range:

Engineering:
$8.8 - $13.4 million

Right-of-Way:
$2.9 - $3.7 million

Construction:
$107.5 - $133.9 million

Total Project Cost:
$119.2 - $151.0 million

Project Benefits:

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

What's Changed Since Last Update?

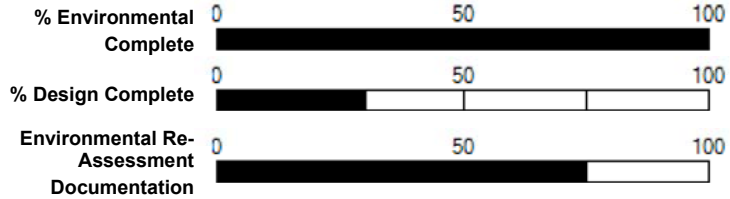
- Scope - No Change
- Schedule - Changed Final Design & Construction
- Cost - No change

Project risks:

- Cost and schedule impact of stucture design
- Cost and schedule impact of utility relocations
- Timely completion of preliminary engineering
- Railroad involvement - UPRR permits & agreement amendment
- Availability of construction funds
- Acquisition of 1 to 4 acres may be required to construct the project

Financial Fine Points(Key Assumptions):

- Total funding expended for preliminary engineering: $ 2,393,000
- Total funding expended for I-15 North environmental phase: $875,000
- Escalation is to 2020 approximate midpoint of construction
- Construction funding has been identified



October 2017

NEVADA DOT

Project NEON Design-Build

I-15 Sahara to Spaghetti Bowl

Project Sponsor: NDOT

Project Manager: Dale Keller, P.E.

(775) 888-7603

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.

Schedule:

Planning:
Complete
Environmental:
Complete
Begin Construction:
November 2016
Substantial Completion:
August 2019

Project Cost Range:

Engineering:
$50 - $60 Million
Right-of-Way and Utilities:
$225 - $250 Million
Construction:
$550 - $575 Million
Construction Engineering:
$40 - $50 Million
Total Project Cost:
$865 - $935 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?

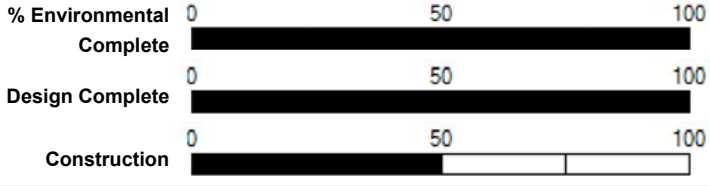
- Project is under construction

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

Financial Fine Points(Key Assumptions):

- Total Funding Expended: $498,000,000
- Transportation Board approved the authority to bond for the Project.



October 2017

NEVADA DOT

I 15 Urban Resort Corridor Study

Project Sponsor: NDOT

Senior Project Manager: Jeff Lerud

(702) 671-8865

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 2017

I 15 South - Bermuda Road Interchange

Project Sponsor: City of Henderson

Project Manager: Ryan Wheeler, P.E.

(702) 671-8876

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:

(Estimates per June 2014 CRA)
Engineering:
$9.5 - $10 M
Right-of-Way:
$1.5 - $2 M
Construction:
$93 - $98 M
Total Project Cost:
$104 - $110 M

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 - adjusted per June 2014 CRA

Project risks:

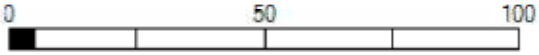
- Unit price and property escalation may affect project cost.
- Funding uncertainty

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

% Design Complete



October 2017

NEVADA DOT

I 15 South - Pebble Road Overpass

Project Sponsor: Clark County

Project Manager: Ryan Wheeler, P.E.

(702) 671-8876

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 M
Right-of-Way:
$8 - $10 M
Construction:
$51.5 - $53 M
Total Project Cost:
$66 - $70 M

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

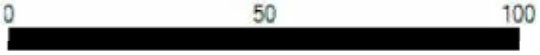
Project risks:

- Unit price and property escalation may affect project cost.
- Lack of funding may push this project well into the future

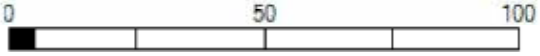
Financial Fine Points(Key Assumptions):

- Funding not available until 2040.
- Total funding expended for I-15 South Environmental Studies (all phases): $3.5 million
- Funding Source (Financial Plan 2009): Private Developers ($30M)

% Environmental Complete



% Design Complete



October 2017

NEVADA DOT

I 15 South - Starr Avenue Interchange

Project Sponsor: City of Henderson

Senior Project Manager: Ryan Wheeler

(702) 671-8876

Project Description:

- I-15 South, from Sloan Road to Tropicana Ave. has been broken into nine packages to address funding and constructability opportunities.
- This project is one piece of the overall I-15 South Corridor
- 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:

2010-2017

Construction:

2017-2018

Project Cost Range:

(Environmental Phase Estimates)

Preliminary Engineering:

$10 - $11 M

Right-of-Way:

$8 - $14 M

Construction:

$40 - $58 M

Total Project Cost:

$58 - $83 M

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
- Website updated July 2016 to reflect current configuration. Fact Sheet and FAQ sheets updated.
- Advertise date - July 5, 2017. NTP to be issued Nov 2017

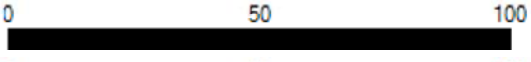
Project risks:

- Uncertain Right of Way costs
- Material and labor cost escalation
- Availability of funding
- Utility & bill board relocation
- Cell phone tower, re-location potential or avoidance

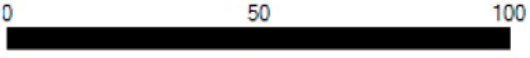
Financial Fine Points(Key Assumptions):

- Total funding expended for I-15 South Environmental Studies (all phases): $3.5 million
- Construction Funding secured with $35.2M from FRI-1 by City of Henderson, remaining funding by federal funding

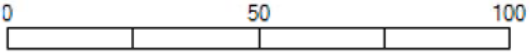
% Environmental Complete



% Design Complete



% Construction Complete



October 2017

NEVADA DOT

I 15 South - Las Vegas Boulevard

St. Rose Parkway to Sunset Road

Project Sponsor: Clark County

Project Manager: Ryan Wheeler, 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:

Complete

Final Design:

Package 1- Complete ,

Package 2- Complete

Construction:

Package 1 -Complete,

Package 2 Construction start Spring 2017

Project Cost Range:

(Environmental phase estimates):

Engineering:

$4 - $4.5 M

Right-of-Way:

$0

Construction:

$31.5 - $33 M

Total Project Cost:

$35.5 - $37.5 M

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?

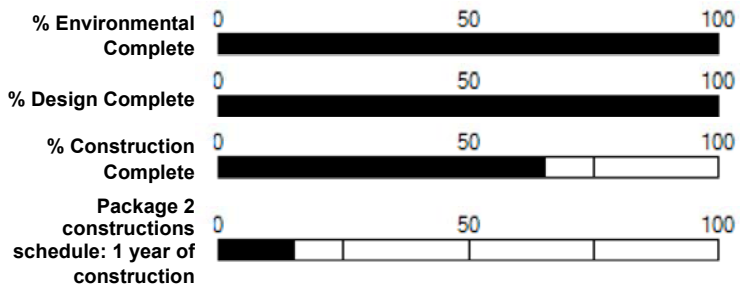
- Scope - No Change
- Schedule - No Change
- Cost - No Change
- Package 2 awarded to Las Vegas Paving, Work started Spring 2017

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.: $4.3 M
- 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)



October 2017

NEVADA DOT

I 15 South - Phase 2A/2B

Sloan Road to Blue Diamond (SR-160)

Project Sponsor: NDOT

Project Manager: Ryan Wheeler, P.E.

(702) 671-8876

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
- Phase 2B: Widen from Sloan to Blue Diamond (SR160) 8 to 10 lanes, restripe collector-distributor ramps 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:

(Estimates per June 2014 CRA)
Engineering:
$43 - $44 M
Right-of-Way:
$0
Construction:
$476 - $505 M
Total Project Cost:
$519 - $549 M

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?

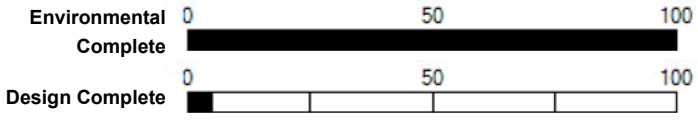
- Scope - No Change
- Schedule - No Change
- Cost - adjusted per June 2014 CRA

Project risks:

- Complexity in maintaining traffic staging, relocating utilities and reducing impacts to traveling public.
- Sloan Interchange improvements to be constructed prior to widening to accommodate additional lanes

Financial Fine Points(Key Assumptions):

- Funding not available until 2018-2024 per STIP.
- Total funding expended for I-15 South Environmental Studies (all phases): $3.5 million
- Inflation index distribution of 2% - 5% is to approximate midpoint of construction.



October 2017

NEVADA DOT

I 15 South - Sloan Road Interchange

Project Sponsor: City of Henderson

Project Manager: Ryan Wheeler, P.E.

(702) 671-8876

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:

(Estimates per June 2014 CRA)
Engineering:
$12.5 - $13 M
Right-of-Way:
$23.5 - $24.5 M
Construction:
$119.5 - $124.5 M
Total Project Cost:
$155.5 - $162 M

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 - adjusted per June 2014 CRA.

Project risks:

- Unit price and property escalation may affect project cost.
- Sloan Interchange to be constructed prior to widening to accommodate additional lanes

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 2017

NEVADA DOT

I 15 South - Stateline to Sloan

Project Sponsor: NDOT

Project Manager: Ryan Wheeler, P. E.

(702) 671-8876

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 M
Right-of-Way:
TBD
Construction:
$35 - $50 M
Total Project Cost:
$38 - $54 M

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 2017

NEVADA DOT

I 11 Phase 1

Foothills Drive Grade Sep to Silverline Road north of US 95

Project Sponsor: NDOT

Senior Project Manager : Ryan Wheeler, P.E.

(702) 671-8876

Project Description:

- Project was originally to be delivered via a series of five separate packages.
- One package regarding tortoise fencing/plant salvaging was completed ahead of the project
- Realignment of US 93 / US 95 to create an access controlled facility from Foothill Drive to Silverline Road
- 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
- A railroad bridge will be constructed to re-connect the previously severed trackes separated by US 93
- Project length: 2.5 miles

Schedule:

Planning:

Complete

Environmental:

Complete

Final Design:

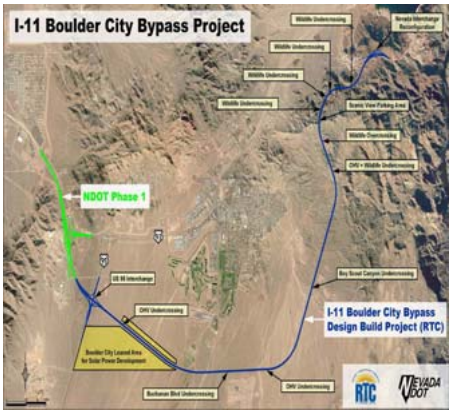
Complete

Construction:

Package 2A Complete

Contract awarded on Feb 10, 2015 to Fisher Sand & Gravel

Notice to Proceed issued May 11th 2015



Project Cost Range:

(Final Design Phase Estimates)

Engineering:

$5 - $8 million

Right-of-Way:

$10 - $28 million

Construction (Completed Phase 2A only):

$1.4 million

Construction (All Packages):

$85 - $100 million

Total Project Cost:

$100 - $138 million

Project Benefits:

- Improves safety by eliminating a half-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
- Reconnects railroad tracks previously severed by US 93
- Connects Henderson's trail system with the River Mountain Loop Trail
- Completes initial phase of the Boulder City Bypass

What's Changed Since Last Update?

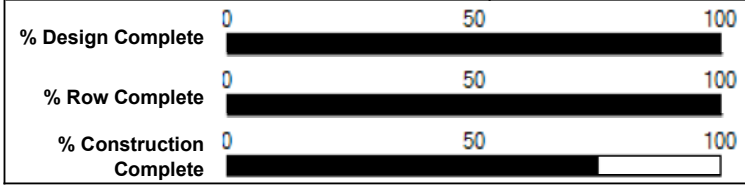
- Cost - Fisher Sand and Gravel construction bid of $83 Million
- Placing concrete paving and getting ready to tie into existing US93 and I-515
- Bridge construction and drainage structures are near final completion

Project risks:

- Right-of-Way acquisition schedule
- Final reports for NOA testing have been published and can be found on the main project website at www.i-11phaseone.com
- NOA mitigation has been determined and Contractor will follow an approved NOA Management Plan
- Timely completion of the utility agreements and associated ammendments

Financial Fine Points(Key Assumptions):

- Total funding expended (Preliminary Engineering & Environmental): $7,459,449
- Total funding expended (Right-of-Way): $18,858,124
- Total funding Expended for BC Bypass Environmental studies (all phases): $5,199,679
- Total funding expended for construction of Phase 2A: $1.4 million (actual)



October 2017

NEVADA DOT

I 11 Phase 2

Silverline Road north of US 95 to the Nevada Interchange

Project Sponsor: Nevada Department of Transportation

Project Partner: Regional Transporation Commision of Southern Nevada

Senior Project Manager: Ryan Wheeler, P.E.

(702) 671-8876

Project Description:

- Provide connection between Phase I from north of the 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
- 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

Schedule:

Planning:

Complete

Environmental:

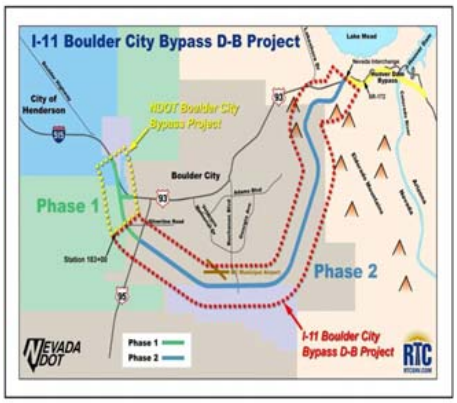
Complete

Final Design:

2015-2016

Construction:

2015-2018



Project Cost Range:

(Planning phase estimates)

Engineering:

$15 - $25 million

Right-of-Way:

$2 - $4 million

Construction:

$225 - $300 million

Total Project Cost:

$240 - $330 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?

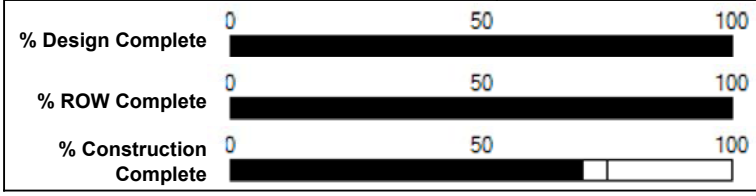
- Schedule - RTC of Southern NV administering Phase 2 as a Design-Build Contract
- Las Vegas paving was the successful Design-Builder; a notice to procced was issued on April 20, 2015
- Cost - $225 million was LVP bid to construct
- All bridges under construction; 5 miles of paving completed; 6 M CY moved.

Project risks:

- Difficult design & construction issues in a mountainous terrain may affect cost & schedule.
- Final reports for NOA testing have been published and can be found on the main project website at www.i-11nv.com
- NOA mitigation has been determined and Contractor will follow an approved NOA Management Plan

Financial Fine Points(Key Assumptions):

- Total funding Expended: $126,333,726.38
- Total funding Expended for BC Bypass environmental studies (all phases): $5,199,679
- Inflation escalation (4%) is to 2016 approximate midpoint of construction.
- Federal Funding is covering majority of the work through reimbursement of RTC Southern Nevada using AB413 fuel tax indexing revenues advanced construction mechanisms



October 2017

NEVADA DOT

US 95 Northwest - Phase 2B

Durango Drive to Kyle Canyon Road

Project Sponsor: NDOT

Project Manager: Jenica Keller , P.E.

(775) 888-7592

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
- Widen Durango Drive to Kyle Canyon Road to 6 lanes
- Construct High Occupancy Vehicle Direct Access Ramps at Elkhorn
- Construct a regional flood control facility from Centennial to Grand Teton
- Project length: 2.45 miles
- Phase 2B will advertise with Phase 5

Schedule:

Planning :

Complete

Environmental :

Complete

Final Design:

Complete

Advertise:

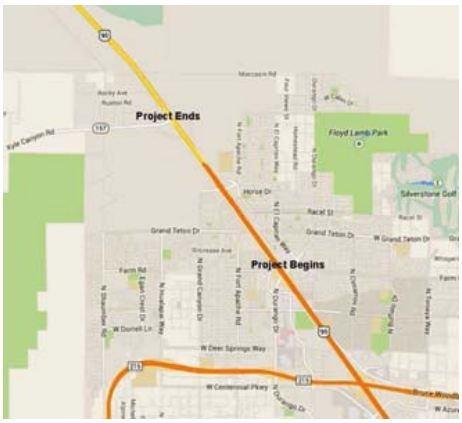
Complete

Construction:

Begin 3rd Quarter 2018

Construction:

Complete 3rd Quarter 2020



Project Cost Range:

(Final Design Phase Estimates):

Engineering (All Phases):

$2 - $3 million

Right of Way (All Phases):

$0, No acquisitions required

Construction (All Phases):

$89 - $96 million

Construction (2B):

$51 - $58 million

Total Project Cost (All Phases) :

$91 - $99 million

Project Benefits:

- Increase capacity
- Improve safety
- Improve access
- Meet stakeholder/public expectations
- Reduce trip times
- Reduce vehicle emissions
- Reduce idling
- Beautify the 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 utility issues may impact schedule and cost

Financial Fine Points(Key Assumptions):

- Total funding expended for Phase 2: $41.55 million
- Total funding expended for US 95 Northwest Environmental Studies (all phases) : $5 million
- Inflation escalation (2.27%) to midpoint of construction in 2018.
- Funding source for Phase 2B and 5:
- Federal: $52.8 million
- State: $2.8 million
- Local: $24.4 million

% Design complete 0 — 50 — 100

October 2017

NEVADA DOT

US 95 Northwest - Phase 3A

Clark County 215 Interchange

Project Sponsor: NDOT, City Las Vegas and Clark County

Senior Project Manager: Jenica Keller, P. E.

(775) 888-7592

Project Description:

- This is the third phase of the US 95 Northwest project that extends from Washington Avenue to Kyle Canyon Road
- Construct new system to system interchange at CC 215
- This third phase is anticipated to be constructed in 3 subparts (A, C and D/E)
- Phase 3A: Ramps providing north to east, west to south and east to south movements as well as regional flood control facilty work

Schedule:

Planning:

Complete

Environmental:

Complete

Final Design:

Complete

Advertise:

Complete

Construction:

Complete

Project Cost Range:

(Construction Phase Estimates):

Engineering (All Phases):

$14 - $15 million

Right-of-Way (All Phases):

$0 - $1 million

Construction (All Phases):

$200 - $230 million

Construction (3A):

$41 - $44 million

Total Project Cost (All Phases):

$214 - $246 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 right of way and utility issues may impact schedule and costs.

Financial Fine Points(Key Assumptions):

- Total funding expended for Phase 3: $55.79 million
- Total funding expended for US 95 Northwest Environmental Studies (all phases): $5 million
- Inflation escalation (2.85%) to midpoint of construction 2016
- Funding source:
- Federal: $25 million
- State: $1.3 million
- Local: $31.7 million

% Design Complete 0 — 50 — 100

% Construction Complete 0 — 50 — 100

October 2017

NEVADA DOT

US 95 Northwest - Phase 3C

Clark County 215 Interchange

Project Sponsor: NDOT, City of Las Vegas and Clark County

Senior Project Manager: Jenica Keller, P.E.

(775) 888-7592

Project Description:

- This is the third phase of the US 95 Northwest project that extends from Washington Avenue to Kyle Canyon Road
- Construct new system to system interchange at CC 215
- This third phase is anticipated to be constructed in 3 subparts (A, C and D/E)
- Phase 3C: Ramps providing north to west, south to east and south to west movements

Schedule:

Planning:
Complete
Environmental:
Complete
Final Design:
Complete 2nd Quarter 2018
Advertise:
3rd Quarter 2018

Project Cost Range:

(Final Design Phase Estimates):
Engineering (All Phases):
$14 - $15 million
Right of Way (All Phases):
$0 - $1 million
Construction (All Phases):
$180 - $221 million
Construction (3C):
$44 - $61 million
Total Project Cost (All Phases):
$194 - $237 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 right of way and utility issues may impact schedule and cost

Financial Fine Points(Key Assumptions):

- Total funding expended for Phase 3: $55.79 million
- Total funding expended for US 95 Northwest Environmental Studies (all phases): $5 million
- 3C: inflation escalation (2.30%) to midpoint of construction 2019
- Funding source: TBD

% Design Complete 0 — 50 — 100

October 2017

US 95 Northwest - Phase 3D/E

Clark County 215 Interchange

Project Sponsor: NDOT, City Las Vegas and Clark County

Senior Project Manager: Jenica Keller, P.E.

(775) 888-7592

Project Description:

- This is the thrid phase of the US 95 Northwest project that extends from Washington Avenue to Kyle Canyon Road
- Construct new system to system interchange at CC 215
- This third phase is anticipated to be constructed in 3 subparts (A, C and D/E)
- Phase 3D/E: Ramps providing west to north, south to west and east to north movements; local interchange and upgrade CC215

Schedule:

Planning:

Complete

Environmental:

Complete

Final Design:

Ongoing

Project Cost Range:

(Environmental Phase Estimates):

Engineering (All Phases):

$14 - $15 million

Right of Way (All Phases):

$0 - $1 million

Construction (All Phases):

$180 - $221 million

Construction (3D/E):

$94 - $118 million

Total Project Cost (All Phases):

$194 - $237 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 right of way and utility issues may impact schedule and cost

Financial Fine Points(Key Assumptions):

- Total funding expended for Phase 3: $55.79 million
- Total funding expended for US 95 Northwest Environmental Studies (all phases): $5 million
- 3D/E: inflation escalation (2.27%) to midpoint of construction 2021
- Funding source: TBD

% Design Complete 0 — 50 — 100

% ROW Complete 0 — 50 — 100

October 2017

NEVADA DOT

US 95 Northwest - Phase 5

Kyle Canyon Road Interchange

Project Sponsor: City of Las Vegas and NDOT

Senior Project Manager: Jenica Keller, P.E.

(775) 888-7592

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
- Phase 5 will advertise with Phase 2B

Schedule:

Planning:
Complete

Environmental:
Complete

Final Design:
Complete

Advertise:
Complete

Construction:
Begin 3rd Quarter 2018

Construction:
Complete 3rd Quarter 2020

Project Cost Range:

(Final Design Phase Estimates):

Engineering:
$3 - $4 million

Right-of-Way:
$0, No acquisitions required

Construction:
$20 - $22 million

Total Project Cost:
$23 - $26 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 utility issues may impact schedule and costs.

Financial Fine Points(Key Assumptions):

- Total Expended for Final Design: $1.70 million
- Total Expended for Environmental Studies (all US 95 Northwest phases): $5 million
- Inflation escalation (2.27%) to midpoint of Construction in 2018
- Funding source for Phase 2B and 5:
- Federal: $52.8 million
- State: $2.8 million
- Local: $24.4 million

Design complete 0 — 50 — 100

October 2017

NEVADA DOT

I 80 Robb to Vista

Project Sponsor: NDOT

Senior Project Manager: Jeff Lerud

(702) 671-8865

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)
- I-80 Robb Drive to Vista Boulevard Design-Build completed Decemeber 2013.
- 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 2017

NEVADA DOT

US 395 North - McCarran Blvd to Stead Blvd

Project Sponsor: NDOT

Senior Project Manager: Jeff Lerud, P.E.

(702) 671-8865

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 approximate mid-point of construction
- No funding has been identified for this project

Planning Complete: 0 — 50 — 100

October 2017

Pyramid Highway/US 395 Connection

Project Sponsor: Washoe County RTC and NDOT

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

NDOT Project Manager: Nick Johnson, P.E.

www.pyramidus395connection.com

Phone: (775) 888-7318

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 - 2018

Final Environmental Impact Statement (FEIS):

Winter 2014-2017

Record of Decision (ROD):

Early 2018

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.

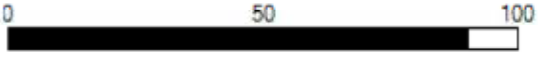
Project risks:

- 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



October 2017

NEVADA DOT

US 395 Carson City Freeway - Phase 2B

South Carson Street to Fairview Drive

Project Sponsor: NDOT

Senior Project Manager: Jeff Lerud

(702) 671-8865

Project Description:

- This project will be delivered in four packages. Construction is complete for Phase 2B Packages 1 , 2 & 3.
- Phase 2B Package 4 will construct the South Carson Interchange and complete the remainder of the project

Schedule:

Planning:
Complete

Environmental:
Complete

Final Design:
Complete

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?

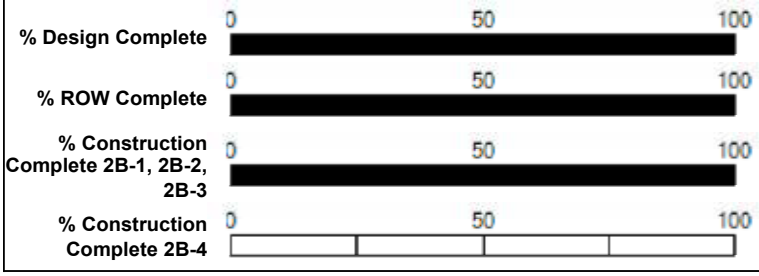
- Scope - Package 4 will complete the remainder of the Freeway
- Schedule - TBD
- Cost - No change

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: $195 million
- Construction funding source for Phase 2B-4: TBD



October 2017

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. Furthermore, B/C analysis has been done for some projects that do not meet the minimum dollar threshold but the information will beneficial to management for decision making purposes. The department has policy (TP 1-11-1) that guides the B/C analysis Program.

The B/C ratios for several projects have been determined from FY 2010 to present. The following table reports the B/C ratio results of a total of 23 projects. Attempt has been made to include B/C ratios for entire projects and not the ratios of individual phases except in cases that are appropriate.

Major Projects	B/C Ratio	Fiscal Year
I-80 – Design-Build	3.57	2010
I-580/Meadowood Complex Improvements	2.70	2011
I-215/ Airport Connector Interchange	3.08	2011
I-80 from Robb Drive to Vista Blvd	3.77	2011
SR 160 Widening: SR 159 to Mountain Springs	2.10	2012
I-15 Interchange at Milepost 118 in Mesquite, Nevada	5.0	2013
US 93 Pavement Rehabilitation & Truck Climbing Lanes	8.3	2013
South McCarran Boulevard – Phase I Virginia Street to Mira Loma Drive	3.57	2013
South McCarran Boulevard – Phase II Mira Loma Drive to Greg	2.47	2013
US 395 Southern Corridor E Clearview Drive SR 88	2.13	2013
US-50 Widening Project Chaves Road to Roy's Road	1.9	2013
F Street Connection Washington Ave. to Bonanza Road	1.15	2013
USA Parkway	17.3	2013
I-15 NEON (All Phases)	2.3	2014

Boulder City Bypass: Phases I and II Foothills Drive to West of the Hoover Dam Bypass	0.94	2014
I-15 Pavement Rehabilitation: Dry Lake Rest Area to Logandale/Overton Interchange	1.7	2014
Carson City Freeway (All Phases)	2.14	2014
SR 593 Tropicana Avenue: Dean Martin Drive to Boulder Highway (The project starts at Dean Martin Drive and ends at SR 582 Boulder Highway (SR 593 CL-3.50 to -10.85))	2.5	2014
I-15 North-Part 2 Package D (Capacity Improvements): Craig Rd. to Speedway Blvd	7.1	2014
US 95 North-Phase 2A (Ann Road to Durango Drive)	4.2	2014
I 215 from I 15 to Windmill Lane (Airport Connector)	2.6	2015
US 95 NW Phase 3A; CC 215 from US 95 to Tenaya Way MP CL 0.88 - N/E & W/S Ramps and S/B collector road	1.2	2015
SR 593, Tropicana Ave. at SR 604 Las Vegas Blvd. (Replace Escalators)	1.2	2015

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 public 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.

Benefit-Cost Analysis Assumptions and Parameters

The typical project life was assumed to be 20 years, i.e., benefits and costs accrued during a period of 20 years after the opening of the project are accounted for in the benefit/cost analysis. However, when the cost of the structural components of a project was a significant portion (greater than 25 percent) of the total project costs, a 40-year project life was assumed.

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 local mean wage plus fringe benefits. The wage values came from the occupational employment statistics survey for Nevada conducted by the Research and Analysis Bureau of Department of Employment, Training, and Rehabilitation in 2016. A 50% fringe was used because it was an average of several labor groups. Vehicle occupancy was based in household surveys, census data and travel demand output. Table E-1 lists the travel costs and vehicle occupancy rates at three metropolitan statistical areas (Carson City, Las Vegas-Paradise, and Reno-Sparks).

Table E-1 Travel Cost and Vehicle Occupancy

Metropolitan Statistical Area	Mean Wage ($/hour)	Median Wage ($/hour)	Personal Travel ($/hour)	Business Travel ($/hour)	Vehicle Occupancy Rate
Carson City	22.79	18.64	9.32	34.19	1.43
Las Vegas – Paradise	20.91	16.38	8.19	31.37	1.45
Reno - Sparks	21.74	16.78	8.39	32.61	1.28

Source: 1. Occupational employment statistics survey for Nevada conducted by the Research and Analysis Bureau of Department of Employment, Training, and Rehabilitation in 2016, http://nevadaworkforce.com/OES#last.
2. Vehicle occupancy rate is based on the 2010 census data.

Crash Benefits:

Freeways and Expressways with controlled access normally have lower crash rates than local streets and roads with 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 Severity Numbers of the Larger Counties

Location	Traffic Crashes Percentage	Number of Crashes	PDO[1]	INJURY	FATAL	Crash Rates[2]
Clark County	72.06%	33026	17123	15695	208	166.94
Washoe County	17.49%	8014	5106	2872	36	210.76
Carson City / Douglas County	3.44%	1311	1113	453	10	184.94

Notes: 1. Property Damage Only. 2. Crash rates expressed in crashes per 100,000,000 vehicles miles traveled.
Source: NDOT Traffic Safety Division.

Table E-3 FY 2016 Crash Totals by County, Rates, Annual Vehicle Miles Traveled, and Population

COUNTY	TOTAL CRASHES	% OF TOTAL CRASHES	TOTAL AVM	% OF TOTAL AVM	POPULATION	CRASH RATE
CARSON	862	1.88%	390,057,546	1.38%	55,168	220.99
CHURCHILL	397	0.87%	333,679,047	1.18%	25,770	118.98
CLARK	33026	72.06%	19,782,864,176	70.12%	2,107,031	166.94
DOUGLAS	714	1.56%	479,540,514	1.70%	48,220	148.89
ELKO	844	1.84%	811,397,095	2.88%	54,677	104.02
ESMERALDA	70	0.15%	113,460,283	0.40%	1,013	61.70
EUREKA	86	0.19%	136,130,488	0.48%	1,919	63.17
HUMBOLDT	267	0.58%	369,244,943	1.31%	17,942	72.31
LANDER	100	0.22%	141,695,931	0.50%	6,766	70.57
LINCOLN	147	0.32%	136,804,172	0.48%	5,076	107.45
LYON	413	0.90%	481,507,558	1.71%	54,229	85.77
MINERAL	75	0.16%	138,062,655	0.49%	4,463	54.32
NYE	483	1.05%	609,586,042	2.16%	45,798	79.23
PERSHING	103	0.22%	267,361,777	0.95%	6,807	38.52
STOREY	101	0.22%	45,315,181	0.16%	3,995	222.88
WASHOE	8014	17.49%	3,802,508,877	13.48%	451,248	210.76
WHITE PINE	127	0.28%	174,866,547	0.62%	10,320	72.63
TOTAL	45829	100.00%	28,214,082,832	100.00%	2,900,442	162.43

1. Source: NDOT Traffic Safety Division.
2. Crash rates expressed in crashes per 100,000,000 vehicles miles traveled.
3. NV St Demographer Pop. Projections 2015-2019.
4. July 1, 2015 - June 30, 2016.

The crash costs were derived using Highway Safety Manual's Crash Cost Estimates. Consumer Price Index (CPI) and Employment Cost Index (ECI) were obtained from the Bureau of Labor Statistics. 2001 crash costs were converted into 2016-dollar value. Table E-4 shows the values obtained as 2016 CPI adjusted human capital and comprehensive societal crash costs. Table E-5 lists crash costs by the Abbreviated Injury Scale (AIS) levels from the Benefit-Cost Analyses Guidance for Transportation Investment Generating Economic Recovery (TIGER) Grant Applicants.

Table E-4 Crash Cost Assumptions (2016 USD)

Crash Severity	2001 Human Capital Costs	2001 Comprehensive Societal Costs	Cost Difference	2015 CPI adjusted Human Capital Costs	2015 ECI Adjusted Cost Difference	2015 Adjusted Comprehensive Societal Costs
Fatal (K)	$1,245,600	$4,008,900	$2,763,300	$1,698,053	$4,053,484	**$5,751,537**
Disabling Injury (A)	$111,400	$216,000	$104,600	$151,865	$153,438	**$305,303**
Evident Injury (B)	$41,900	$79,000	$37,100	$57,120	$54,422	**$111,542**
Possible Injury (C)	$28,400	$44,900	$16,500	$38,716	$24,204	**$62,920**
PDO (O)	$6,400	$7,400	$1,000	$8,725	$1,467	**$10,192**

Source: NDOT Traffic Safety Division.

Table E-5 Crash Cost Assumptions (2016 USD)

MAIS Level	Unit value
MAIS 1	$28,800
MAIS 2	$451,200
MAIS 3	$1,008,000
MAIS 4	$2,553,600
MAIS 5	$5,692,800
MAIS 6	$9,600,000

1. Source: Benefit-Cost Analysis Guidance for TIGER and INFRA Applications, USDOT, July 2017
2. Use Table E-5 for TIGER, FASTLANE, or INFRA grant applications

Motor Vehicle Emissions and Costs:

The rate of motor vehicle emissions and associated damage costs was based on the TIGER Benefit-Cost Analysis Guidance and is contained in Table E-6.

Table E-6 Damage Costs for Criteria Pollutant Emissions (2016 USD)

Emission Type	$ / short ton
Carbon dioxide (CO_2)	Varies
Particulate matter (PM)	$337,459
Nitrogen oxides (NO_X)	$7,377
Sulfur dioxide (SO)	$43,600
Volatile Organic Compounds (VOC_S)	$1,872

Source: Benefit-Cost Analysis Guidance for TIGER and INFRA Applications, USDOT, July 2017

Vehicle Operating Costs:

- The consumption of fuel was determined by the average speed and the zone to zone distances. Fuel consumption rates were based on data from California Air Resources Board, EMFAC2011, 2011 & 2031 average and expressed as gallons per mile and is a function of speed.

Cost per Gallon of Fuel:

- Mid-Grade Fuel: $2.956/gallon, Nevada daily average on 9/14/2017 based on AAA Daily Fuel Gauge Report, http://gasprices.aaa.com/?state=NV.
- Diesel fuel: $2.882/gallon, Nevada daily average on 9/14/2017 based on AAA Daily Fuel Gauge Report, http://gasprices.aaa.com/?state=NV.

Non-fuel Operating Costs:
Table E-7 shows the vehicle non-fuel operating cost assumptions for a large sedan with 10,000 vehicle miles traveled per year.

Table E-7 Vehicle Non-Fuel Operating Cost

Non-fuel Operating Costs	Cost Per Mile
Maintenance	5.63 cents
Tires	1.54 cents
Depreciation (10,000 miles annually)	36.01 cents
Total Cost Per Mile (10,000 miles annually)	43.18 cents

Source: AAA's Your Driving Costs in 2017, http://exchange.aaa.com/automotive/driving-costs/#.WbsBeKrrup8.

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 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. The baseline 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. A three percent discount rate is recommended for performing sensitivity analyses to determine the impact of changes in the discount rate on the B/C ratio.

The final limitation is the level of favorable public opinion toward a project. If there is a negative public perception toward a 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.

The Department's future transportation project priority rationale will be guided by our Nevada "Long-Range Transportation Plan" (LRTP). The LRTP is envisioned to enhance NDOT's performance-based planning, programming and project prioritization practices. The LRTP will have three phases: Visioning, Trend and Forecast Analysis and Performance Planning. Additionally, the plan will: identify future transportation needs, guide future decision-making, include an overarching vision and be a part of a continuous transportation planning process. The LRTP will be a living document that contains support tools that meet federal transportation planning requirements."

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 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.

There are 2008 bridges in the Nevada DOT bridge inventory. Of these, 1163 are owned and maintained by the department, 771 bridges are maintained by Nevada Counties and Cities, 56 are maintained by other government agencies. There are 18 private bridges listed in the bridge inventory of which 7 are maintained by the Rail Road.

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 5,421 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 51 percent of Nevada's traffic and 74 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 $266 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 Safety engineering studies 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
- 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 ALTERNATIVES PROGRAM (TAP)

The TAP is a cost reimbursement program that provides federal transportation funding for eligible projects that improve non-motorized mobility, scenic accessibility, environmental management, historic preservation and safe route to school programs.

Project sponsors are required to provide a minimum funds match of 5% and the rest is covered by federal funds.

To be eligible, activities must fall within two broad categories: 1) Transportation infrastructure (constructed improvements); 2) Non- infrastructure projects (efforts related to education, Encouragement, Enforcement and Education).

The State's allocation is divided up between urban areas over 200,000 in population; areas under 5,000 in population; areas between 5,000 and 200,000 in populations and a statewide allocation that can be spent in any area. The largest urbanized areas of the state under the jurisdiction of the RTC of Southern Nevada and Washoe RTC prioritize TAP projects following their respective TAP guidelines.

Eligible project sponsors include, but are not limited to: Tribal Governments, Schools, School Districts, Private Schools, and Government Agencies/Entities. Other organizations may only apply when partnered with an eligible sponsor.

Nevada's TAP projects are prioritized for funding by the TAP Scoring Committee. Members of this committee represent a wide range of transportation interests, including Bicycle/Pedestrian Advocate, Tourism/Economic Development, Engineers and Planners. Once the Committee completes its ranking, the list is forwarded to the NDOT Director for approval. Upon the Director's approval, the TAP projects are included in the Statewide Transportation Improvement Program (STIP).

More information about Nevada's TAP program can be found by going to WWW.nevadadot.com/tap.

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:

1) Safety first
2) Cultivate environmental stewardship
3) Efficiently operate and maintain the transportation system in Nevada
4) Promote internal and external customer service
5) Enhance organizational and workforce development

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 Fatal & Serious Injury Crashes

OPERATIONS DIVISION

Reduce and Maintain Traffic Congestion
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

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: 2 % 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: - safety first, and, efficiently operate and maintain the transportation system in Nevada.

2. PROVIDE EMPLOYEE TRAINING

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

Annual Target: 74 % **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 the Department of Transportation's Strategic Plan goals, especially: safety first, efficiently operate and maintain the transportation system in Nevada, promote internal and external customer service, and enhance organizational and workforce development. 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 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 - safety first, cultivate environmental stewardship, efficiently operate and maintain the transportation system in Nevada, promote internal and external customer service, and, enhance organizational and workforce development.

4. STREAMLINE AGREEMENT EXECUTION PROCESS

Performance Measure:
Percentage of Agreements executed within 30 days from when division submits agreement to the date when it is fully executed, excluding time the agreement is with the second party for signature or awaiting Transportation Board approval.

Annual Target: 90% **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 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 operate and maintain the transportation system in Nevada efficiently, and promote internal and external customer service.

5. IMPROVE CUSTOMER SATISFACTION

Performance Measure:
Improve Customer and Public Outreach.

Annual Target:
Exceed goals set forth in NDOT's communications plan

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

Division(s) Responsible:
Communications Office- Communications Director

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 promote internal and external customer service.

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

Performance Measure:

1) Percent of person-miles traveled on Nevada Interstate that are reliable
2) Percent of person-miles traveled on Nevada non-interstate NHS routes that are reliable
3) Annual hours of peak hour excessive delay per capita
4) Percent of non-single occupancy vehicle travel in Nevada urbanized areas

Ultimate Target: The ultimate target will be determined with the goal of allocating available resources to maintain the roadway network at an acceptable level that is reflective of the Department's mission, vision and goals.

Division(s) Responsible:
Traffic Operations – Chief Traffic Operations Engineer
Performance Analysis – Chief Performance Analysis Engineer

Support Divisions:
Roadway Systems, Traffic Information

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 by identifying bottleneck locations on NDOT maintained roadway system, which will be prioritized for improvements depending upon funding and resources available. It works towards meeting the Department of Transportation Strategic Plan goals to efficiently operate and maintain the transportation system in Nevada by reducing the level of congestion and increasing safety.

The Congestion Monitoring System being developed will be an evolving system that will be regularly updated and improved as the practice of congestion management improves as well as improvements in data collection and analyses tools.

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 to efficiently operate and maintain the transportation system, and promote internal and external customer service.

8. MAINTAIN STATE HIGHWAY PAVEMENT

Performance Measure:
Percentage of state maintained roadways in fair or better condition.

Annual Target: 95% **Ultimate Target:** 100%

Division(s) Responsible:
Materials Division- Chief Materials Engineer

Support Divisions:
Materials, Maintenance & Asset Management, Construction, Design, Project Management, Performance Analysis and the Districts.

Strategy Plan Support:

Proactive approach in pavement preservation 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: put safety first, efficiently operate and maintain the transportation system. To effectively preserve and manage our assets is the corner stone to 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: put safety first, efficiently operate and maintain the transportation system, promote internal and external customer service, and, cultivate environmental stewardship.

10. MAINTAIN NDOT FACILITIES

Performance Measure:
Percent of facilities assessments completed and percent of facilities conditions and priority needs.

Annual Target: Increase by 2%

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 put safety first, promote internal and external customer service, and efficiently operate and maintain 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:
NDOT Homeland Security Plan

NDOT Emergency Operations 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 able to respond to health and safety issues. This performance measure works towards meeting the Department of Transportation Strategic Plan goals to:

- Safety first
- Cultivate environmental stewardship
- Efficiently operate and maintain the transportation system in Nevada
- Promote internal and external customer service
- Enhance organizational and workforce development

12. REDUCE FATAL CRASHES

Performance Measure:

Measure 1: Number of traffic fatalities

Target - Decrease the projected 2013-2017 five-year rolling average of 303 traffic fatalities by at least one.

Measure 2: Number of serious traffic injuries

Target - Decrease the projected 2013-2017 five-year rolling average of 1,184 serious injuries by at least one.

Measure 3: Number of fatalities per 100M Vehicle Miles Traveled (VMT)

Target - Decrease the projected 2013-2017 five-year rolling average of 1.22 fatalities per 100M VMT to at most 1.17 fatality rate.

Measure 4: Number of serious Injuries per 100M Vehicle Miles Traveled (VMT)

Target - Decrease the projected 2013-2017 five-year rolling average from 3.77 serious injuries per 100 Million VMT to at most 3.72 serious injury rate.

Measure 5: Number of Non-Motorized Fatalities (And Non-Motorized Serious Injuries)

This is a new measure and targets will be included in 2018.

Annual Target: Decrease the projected five year rolling average of the number of traffic fatalities and the number of serious injuries by at least one, and decrease the projected five-year rolling average of the fatality rate and serious injury rate by at least .05.

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: put safety first, and efficiently operate and maintain 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: Promote internal and external customer service, put safety first, cultivate environmental stewardship, and efficiently operate and maintain the transportation system. 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 the environment, NDOT's assets, improves safety and relieves congestion.

14. MAINTAIN STATE BRIDGES

Performance Measure:
Number of Department owned bridges which are categorized as Structurally Deficient (SD) or Functionally Obsolete (FO). Base figure is 37 of 1045 bridges (*State Highway Preservation Report – 2007*. This base figure was established based on the federal eligibility requirements of the Highway Bridge Program (HBP) in effect at the time)

Prior to MAP-21, eligibility and priority for funding projects under the HBP was based on a bridge's Sufficiency Rating and other factors. 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.

MAP-21 eliminated the Functionally Obsolete classification as a funding criterion; therefore, the information presented below only includes data related to Structurally Deficient bridges. Because the FO designation does not reflect bridge condition, maintenance or replacement needs, the Structures Division no longer considers it in the development of our work program.

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 each 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: Safety first, cultivate environmental stewardship, and efficiently operate and maintain the transportation system. These goals can be met in the following ways: safety for the motoring public is put first 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 and maintain bridges as well as bridge projects and programs efficiently. Meeting this performance measure will help 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 does not compromise safety and does not negatively affect the system. However, we must meet the customer's needs for a timely response for their economic development. Majority of permits are relatively simple but some are very complicated and require extended technical reviews, thus the reason for the target being less than 100%. This performance measure works towards meeting the Department of Transportation Strategic

Plan goals to put safety first, promote internal and external customer service, and efficiently operate and maintain the transportation system.

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 September 27, 2017

Summary of AB595 bonding revenues programmed or scheduled for active projects as of October 26, 2016:

Budget Account 4665 Rev Code 4118 - AB595 LVCVA Bond Reimb. Received to Date: $284,082,535 (a)

Status	PCEMS #	EA #	Location	Description	Amount
Scheduled & Programmed	7-03007	73824	SR 593, Tropicana Avenue, from CL 0.49 to CL 0.65; SR 604, Las Vegas Blvd, CL 37.99 To 38.11	Tropicana Pedestrian Bridge Escalators Replacement: Remove and Replace Sixteen Escalators	$ 19,612,883

(a) Reimbursement received associated with I-15 projects equals approx. $278.8M

Reimbursement received associated with pedestrian bridge escalators noted above equals approx. $19.6M

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

NEVADA DOT
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