193-18

NEVADA DEPARTMENT OF TRANSPORTATION

2018 PERFORMANCE MANAGEMENT REPORT

December 2018

Rudy Malfabon, P.E.
Director

2018 PERFORMANCE MANAGEMENT REPORT

Brian Sandoval

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
Virginia Valentine	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
Cole Mortensen	Assistant Director - Engineering
Thor Dyson	Assistant Director - Operations
Sondra Rosenberg	Assistant Director - Planning
Robert Nellis	Assistant Director - Administration

NDOT Staff Involved

Peter Aiyuk – Chief Performance Analysis Engineer
Nick Johnson – Chief of Project Management
Anita Bush – Chief Maintenance and Operations Engineer
Lynn Hoffman – Chief of Administrative Services
Ken Mammen – Chief Traffic/Safety Engineer
Sharon Foerschler – Chief Construction Engineer
Allison Wall –Human Resources Manager
Barbara Stearns – Employee Development Manager
Oscar Fuentes – Safety Manager
Jessen Mortensen – Chief Bridge Engineer
Wayne Miller – Equipment Superintendent
Ruth Borrelli – Chief of Right-Of-Way
Scott Hein – 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

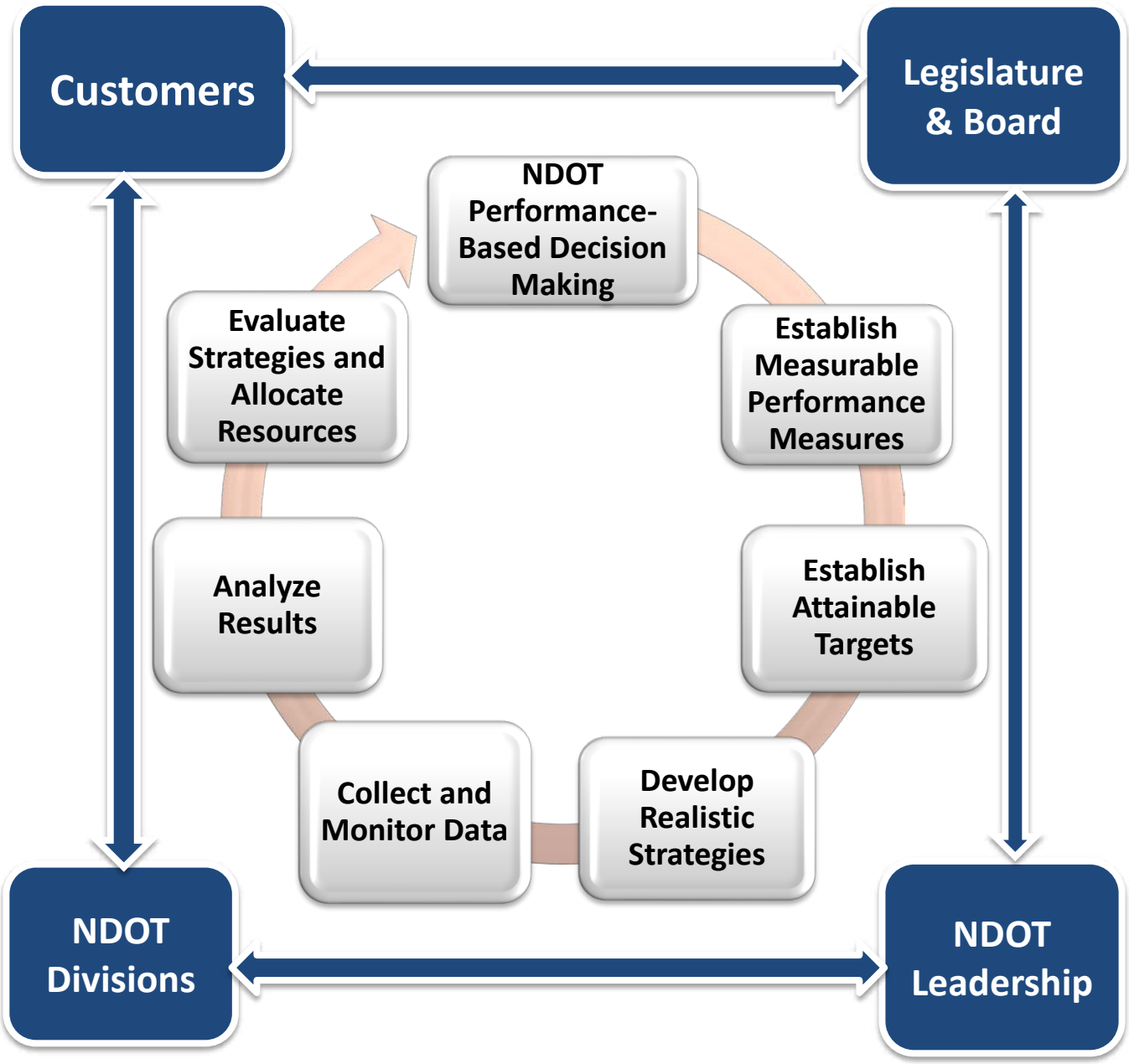
NDOT's Performance Management is a collaborative process in which all the major divisions of the department are involved in monitoring their quarterly, annual and ultimate performance targets resulting in a customer-oriented, balanced, effective, efficient, transparent and performance-based decision-making 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 goals, with performance measures to track, monitor, and report for 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 process by conducting quarterly performance 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 2018, NDOT continued to monitor its performance-based management process. The performance management dashboard, the performance measures overview, and the detailed data trends section of this report provide further information regarding NDOT's performance in Fiscal Year 2018.

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	0.5% Decrease	✗		↓
	Injuries/Illnesses requiring medical attention per 100 employees	2% Annual Reduction	1.4% Decrease	✗		↓
Provide Employee Training (2)	Percentage Employees Trained According to Requirements	77% Compliance Annually	Average 81% Compliance	✓		↑
Improve Employee Satisfaction (3)	Percentage Employees Satisfied with NDOT	75% Annually	69% Satisfied	✗		↑
Project Delivery						
Streamline Agreement Process (4)	Percentage Agreements Processed within 30 days	90% Annually	98% Processed within 30 days	✓		↑
Streamline Project Delivery – Bid Opening to Construction Completion (7)	Percentage Projects Completed on Schedule and Within Budget	80% Annually	94% within Budget	✓		↑
			100% within Schedule	✓		↑
			75% Change Order < 3% Cost Increase	✗		↑
Streamline Project Delivery – Schedule and Estimate for Bid Advertisement (13)	Percentage of Scheduled Projects Advertised within the Reporting Year	80% Advertised within the Reporting Year	74% Performance	✗		↑
	Percentage of Advertised & Awarded Projects within Established Construction Cost Estimate Range	80% Delivered within Established Cost Estimate Range	41% (Oct. vs Award)	✗		↑
			37% (Eng. vs Award)	✗		↑
Streamline Permitting Process (15)	Percentage Encroachment Permits Processed within 45 days	95% Annual	95.8% 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%	98.1%	✓		↑
		Category 2: 95%	86.1%	✗		↑
		Category 3: 95%	93.8%	✗		↑
		Category 4: 95%	72.6%	✗		↑
		Category 5: 95%	39.7%	✗		↑
Maintain NDOT Fleet (9)	Percentage Mobile Equipment in Need of Replacement	1% Annual Decrease	4.2% Decrease	✓		↓
	Percentage Fleet in Compliance with Condition Criteria	1% Increase	1.5% Decrease	✗		↑
Maintain NDOT Facilities (10)	Percentage of Facilities Assessments & Condition	2% Annual Increase	2%	✓		↑
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

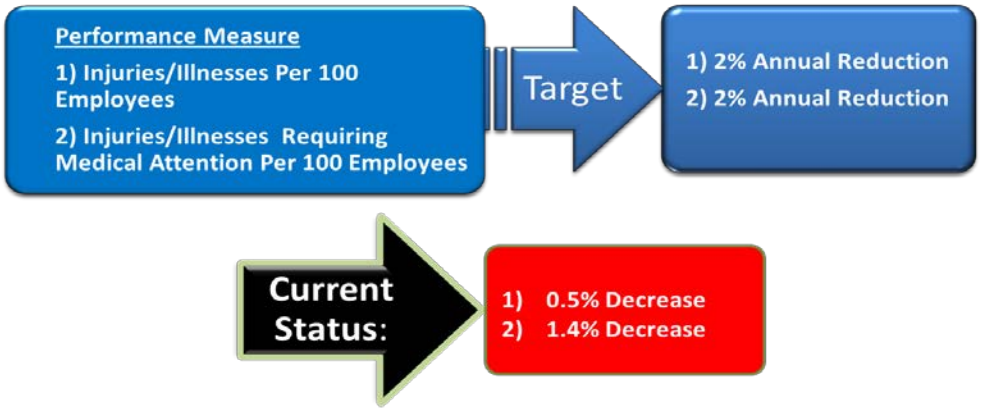
Performance Measure		Target	Current Status	Target Met	Trend (5yrs or less)	Desired Trend
Safety						
Emergency Management, Security and Continuity of Operations (11)	Percentage of Emergency Management Plans Implemented	100% Annually	100% Compliance			
Reduce Fatal & Serious Injury Crashes (12)	Number of Traffic Fatalities	Decrease the projected 2013 - 2017 five year rolling avg. of 303 fatalities by at least one	311			
	Number of Serious Traffic Injuries	Decrease the projected 2013 - 2017 five year rolling avg. of 1,184 serious injuries by at least one	1,180			
	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	1.22 to 1.15			
	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	3.77 to 3.88			
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)	75%			
Reduce and Maintain Congestion Levels on the State Roadway System (6)	Percent of person-miles traveled on Nevada Interstate that are reliable	85%	86.8%			
	Percent of person-miles traveled on Nevada non-interstate NHS that are reliable	65%	86.8%			
	Annual hours of peak-hour excessive delay per capita (Urbanized Areas)	< 12hrs	11hrs			
	Percent of non-single occupancy vehicle travel in Nevada urbanized areas	> 20%	21.5%			

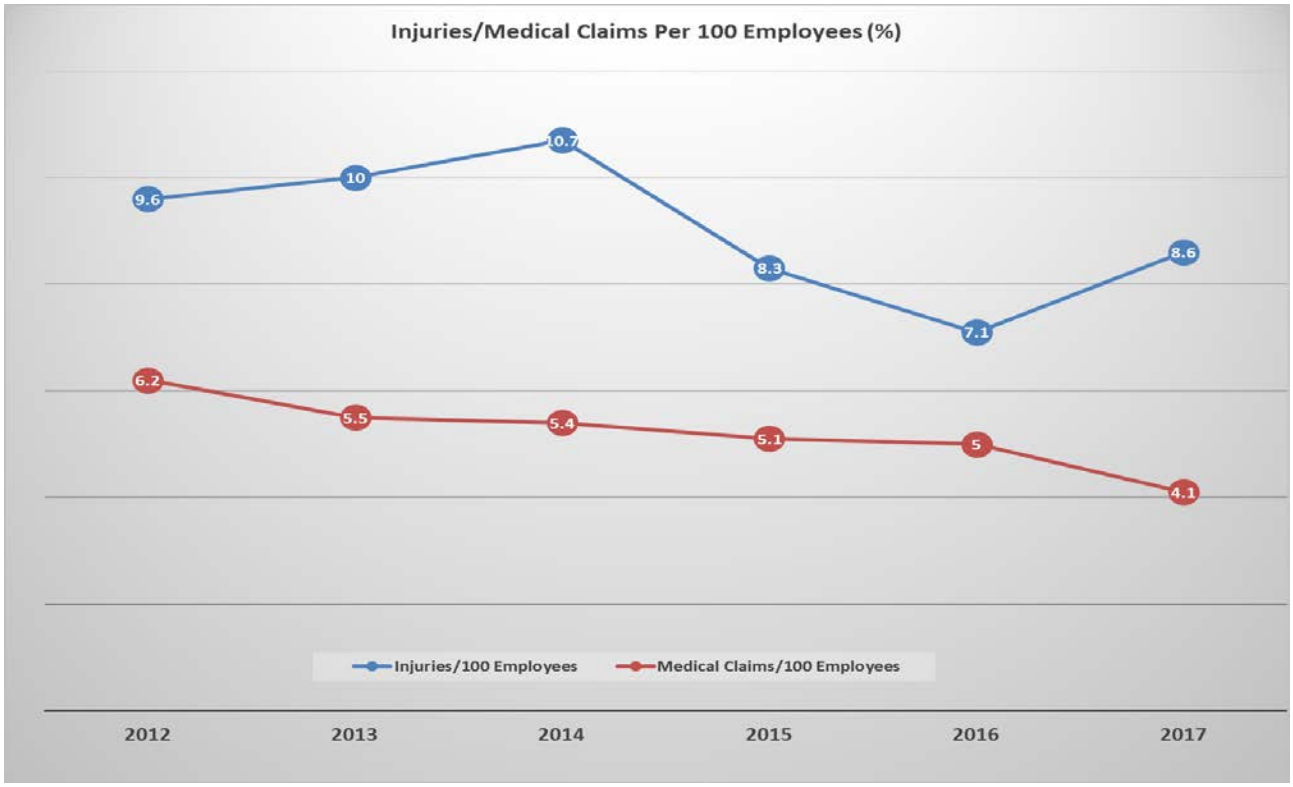
PERFORMANCE DASHBOARD

The following Performance Management Dashboard provides an executive summary of each of the 15 performance goals and their related performance measures, targets, and the status of each performance measure in relation to established targets for Fiscal Year 2018. Detailed information regarding each performance measure is provided in the "Performance Management Detailed Data Trends" section of this report.

1. Reduce Workplace Accidents

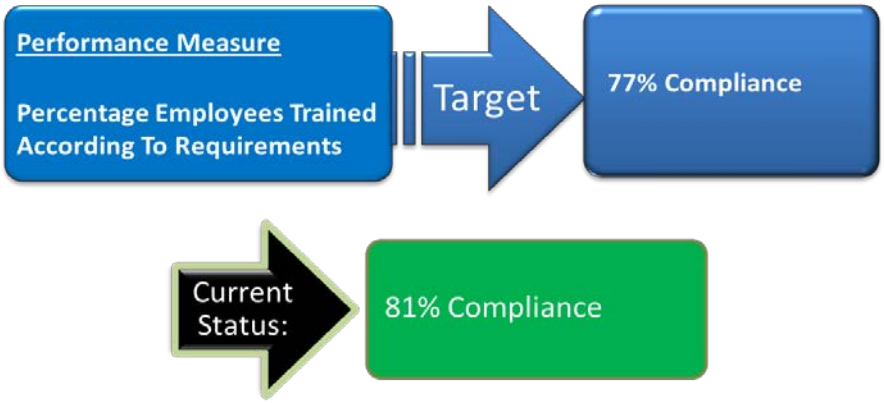
Executive Summary: Two performance measures have been established for this Performance goal with two performance metrics tracked; the rate of workplace injuries/illnesses, and the severity rate of employee workplace injuries/illnesses. Comparing calendar year (CY) 2017 to the previous five-year average baseline (2015-2016), work place injury/illness rate declined by 0.5%, and the severity rate declined by 1.4%. Also, the average claim cost declined from the previous five-year average of $11,798.75 per claim to $9,089.07 in 2017. The two performance measures did not meet the 2% target that was set. Data for these measures covers CY 2017. For detailed information about the performance measures for this goal please refer to page 29.

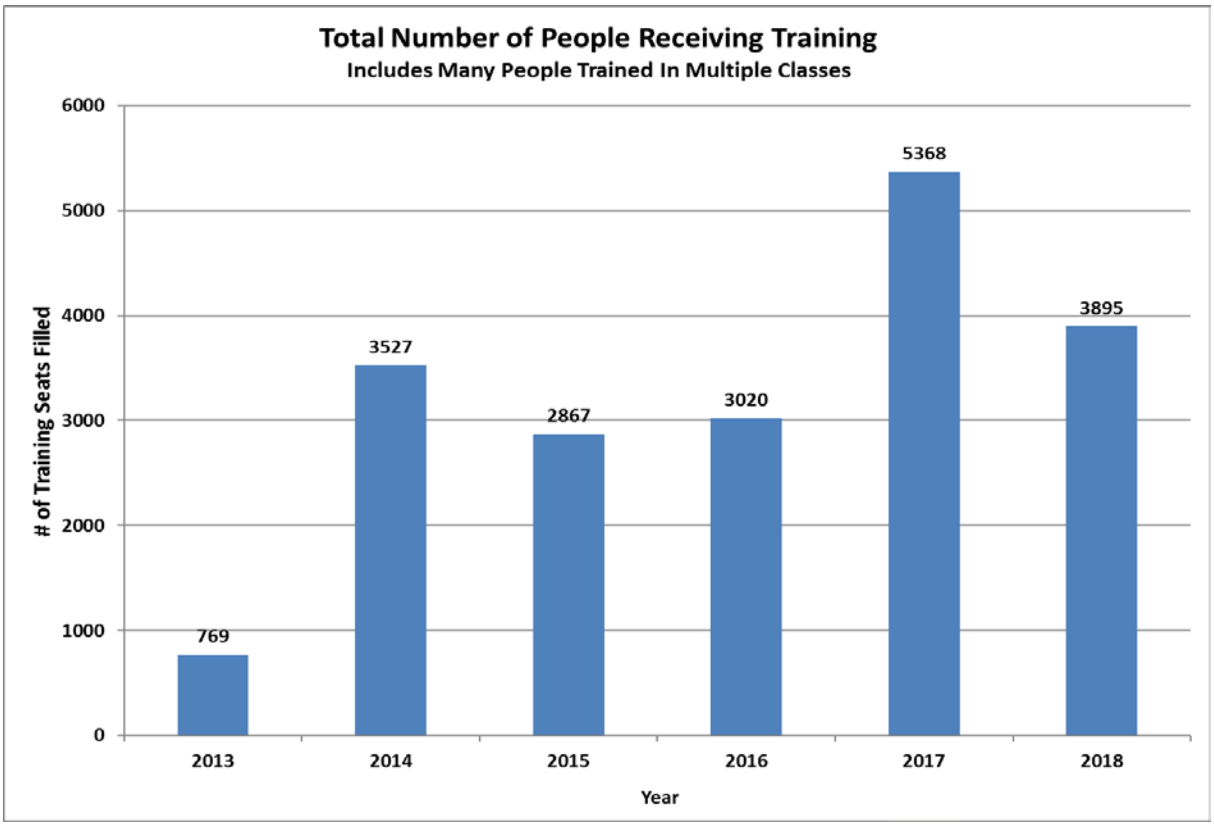




2. Provide Employee Training

Executive Summary: Percentage of employees trained in accordance with prescribed training plans and State statue training requirements is the performance measure. The target for state fiscal year (SFY) 2018 was set at 77% for all required training, and 81% compliance was achieved. This is well above the established target but below the level achieved in SFY 2017. This continual higher level of achievement demonstrates the increased use of computer technology as an effective strategy. For detailed information about performance measure 2, please refer to page 34.

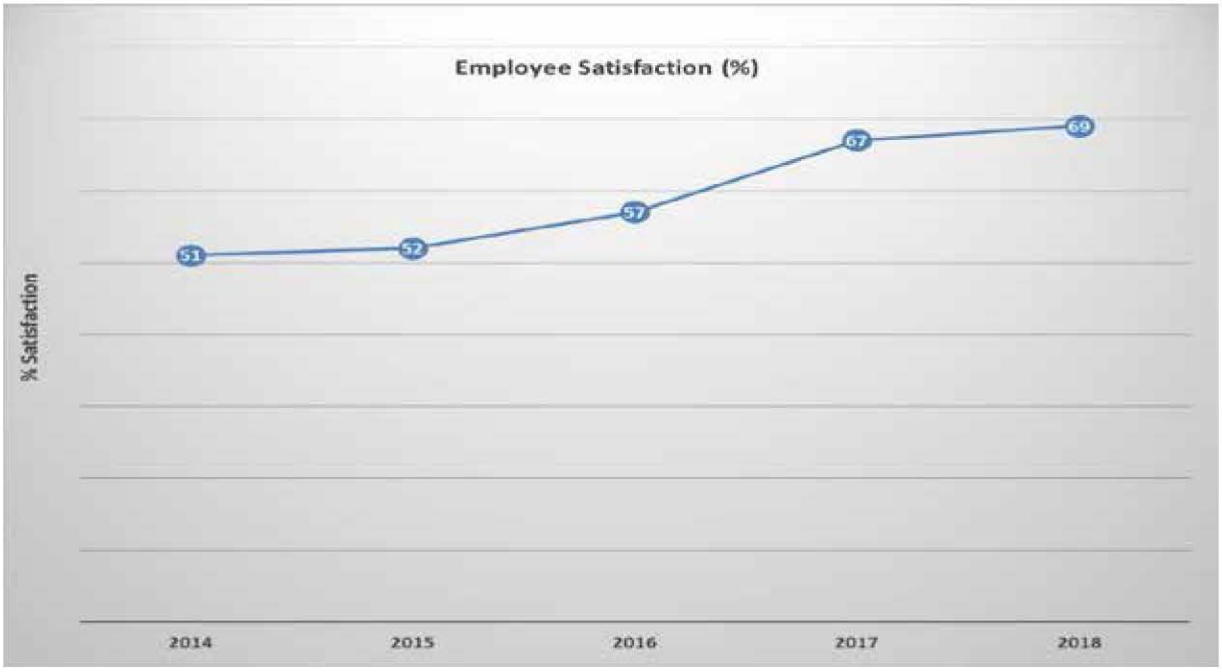




3. Improve Employee Satisfaction

Executive Summary: The performance measure for this goal is 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.

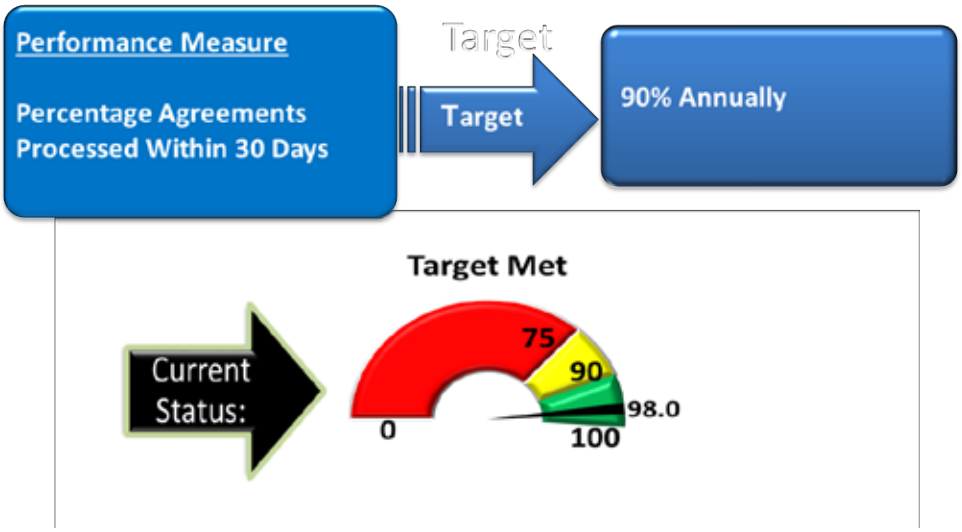
The percentage of employees surveyed who are extremely or somewhat satisfied with the NDOT in state fiscal year (SFY) 2018 is 69%. This percentage is lower than the set target of 75%. However, it is 2 percentage points higher than it was in SFY 2017 with an upward trend in the last five years. For detailed information about this performance measure please refer to page 39.

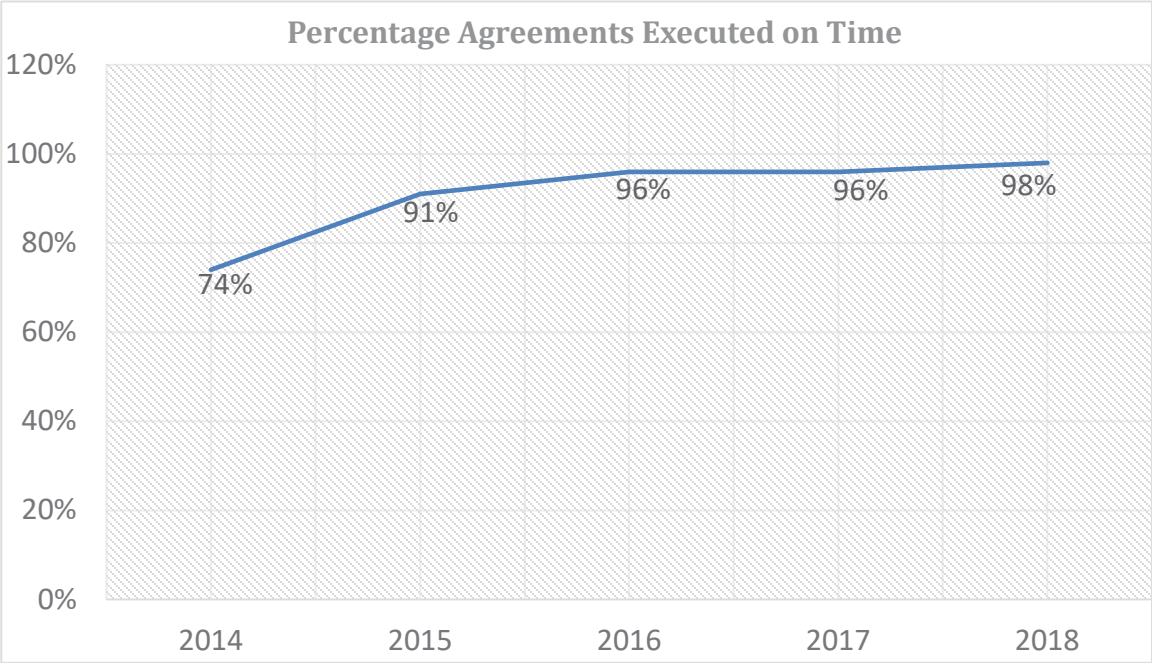


4. Streamline Agreement Process

Executive Summary: In state fiscal year (SFY) 2018, 98% of all agreements submitted to Agreement Services were executed within 30 days or less. This exceeds the performance target of 90%.

Also, in SFY 2018 it took an average of 8 days excluding the time agreement is with second party or awaiting Transportation Board approval to execute the agreement. 2018 had a better performance compared to SFY 2017 which took an average of 11 days to execute an agreement. For detailed information about this performance measure please refer to page 43.

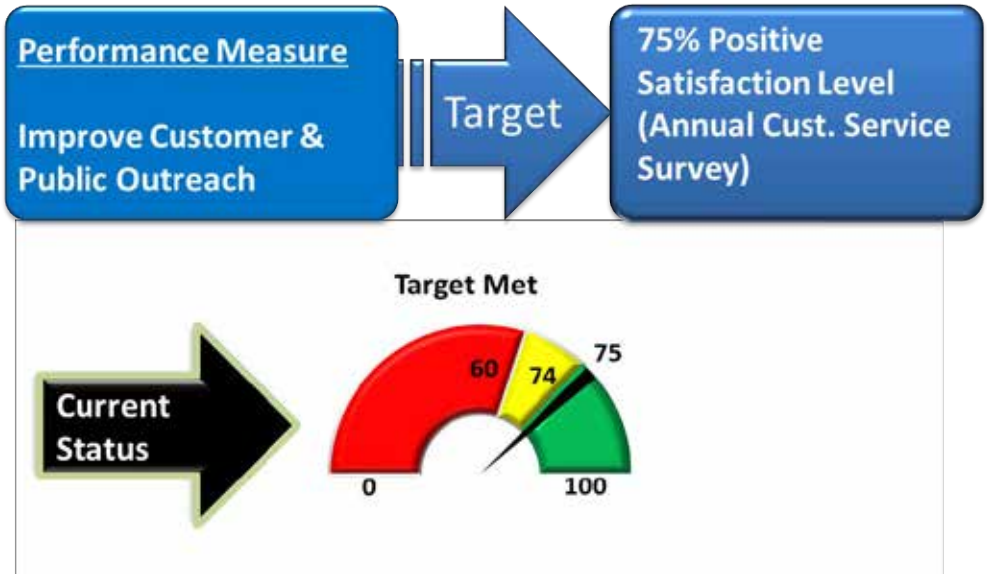




5. Improve Customer and Public Outreach

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.

In (SFY) 2018 a customer satisfaction level of 75% was achieved. This performance met the target of 75% that was set at the beginning of the year. The satisfaction level is determined from an Annual Customer Service Survey. 2018 is the third year this methodology has been applied to track and evaluate this performance measure. For more information about this Performance Measure please refer to page 46.



Social Media Goals

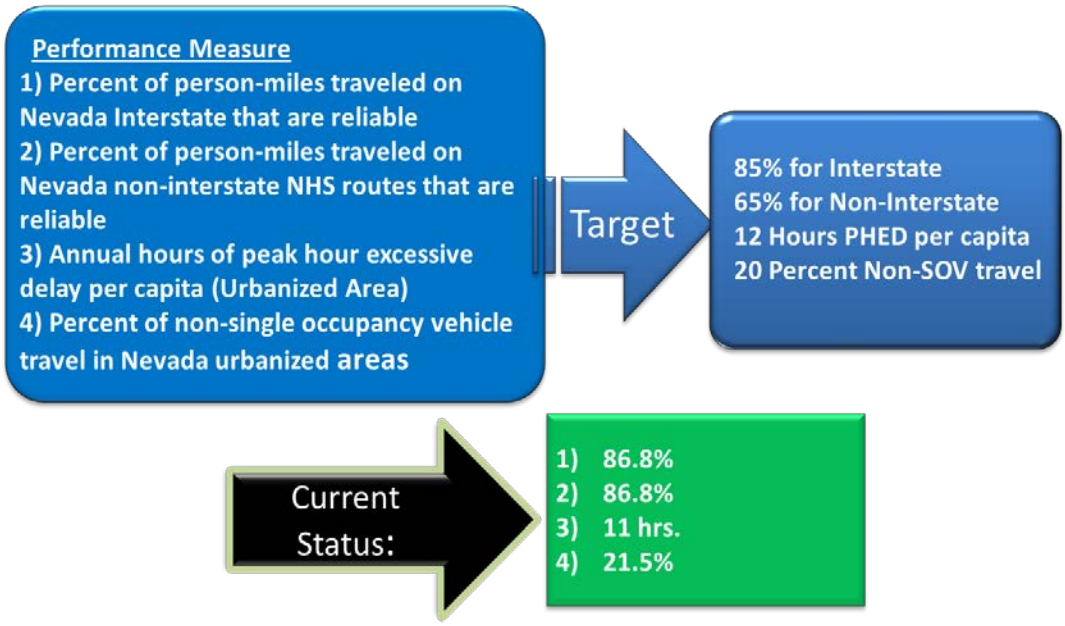
- Increase Facebook likes to 10,000 by the end of fiscal year (FY18) - **increased to 10,057**
- Increase Twitter followers to 25,000 by the end of fiscal year (FY18) – **increased to 26,671**
- Increase Twitter retweets by 10% by the end of fiscal year (FY18) – **decreased by 45%**
- Increase YouTube views by 10% by the end of fiscal year (FY18) – de**creased by 0.3%**
- Increase Instagram followers to 1,000 by the end of fiscal year (FY 18) – **increased to 1,158**

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

Executive Summary: There are four performance measures related to this performance goal - percent of person-miles traveled on Nevada Interstate that are reliable, percent of person-miles traveled on Nevada non-interstate NHS routes that are reliable, annual hours of peak hour excessive delay per capita, and, percent of non-single occupancy vehicle travel in Nevada urbanized areas.

The National Performance Measurement Research Data Set (NPMRDS) was used to analyze the performance of Nevada's Interstate and non-Interstate NHS roadway systems. Based on the analysis using CY 2017 data, 86.8% of person-miles traveled on Nevada interstate and non-interstate NHS roadways were reliable. The targets for the annual hours of peak hour excessive delay per capita and the percent of non-single occupancy vehicle travel were both achieved. For detailed information about this Performance Measure refer to page 49.

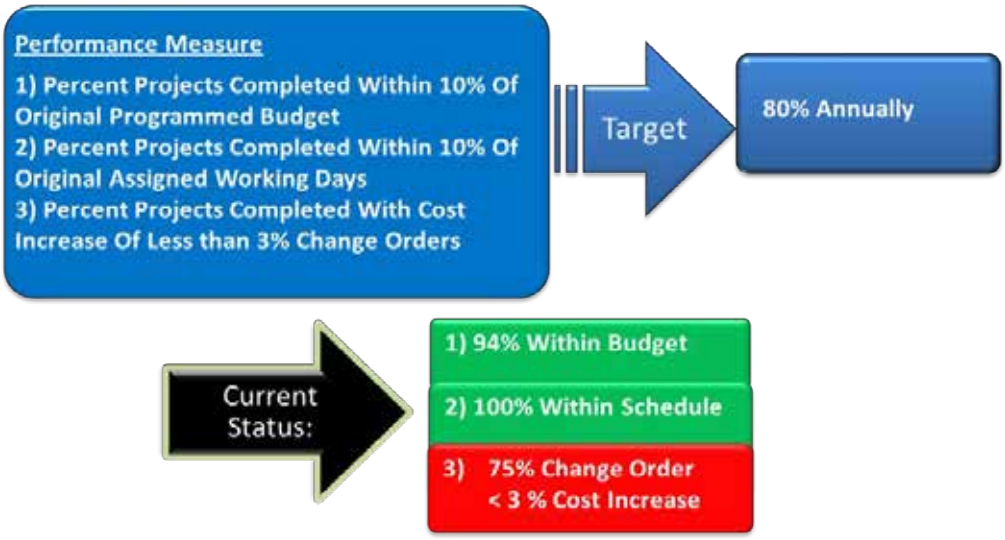
Definition of Travel Time Reliability – Travel Time Reliability is an indication of consistency or expectation by drivers that it will take an estimated amount of time to traverse a certain distance on a stretch of roadway.

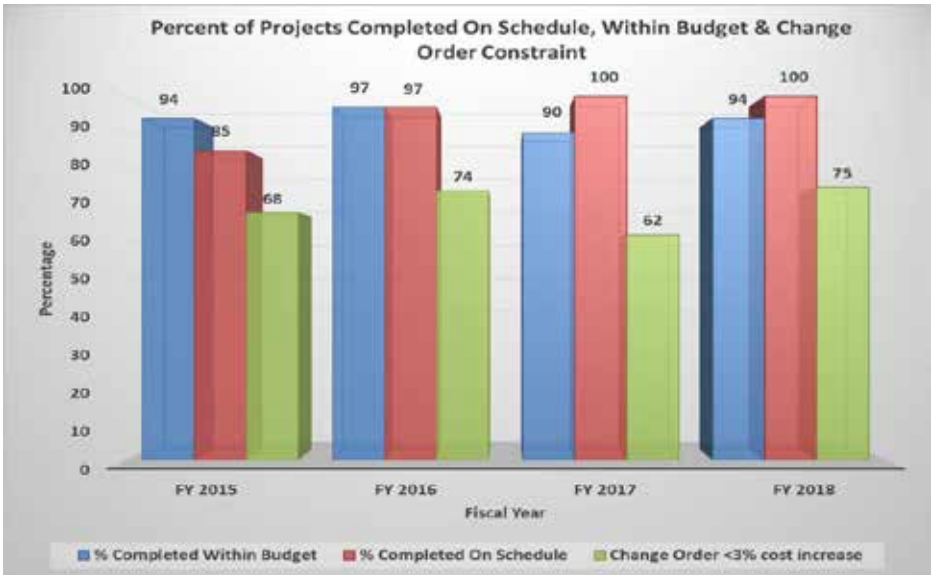


7. Streamline Project Delivery – Bid Opening to Construction Completion

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

Performance is evaluated based on completed contracts and does not include projects in progress. In state fiscal year (SFY) 2018, an average of 94% of completed contracts were within budget, 100% were within schedule, and 75% had change orders of less than three percent cost increase. Both budget and schedule performance exceeded the set target of 80%, while the Change Order performance fell a little short of the 80% target. For detailed information about performance measure 7, please refer to page 52.





8. Maintain State Highway Pavement

Executive Summary: In state fiscal year (SFY) 2018 NDOT was able to meet the performance target of 95% fair or better pavement condition for category 1 roadways but was unable to address the needs of categories 2, 3, 4 and 5 roadways to bring them up to the minimum target level.

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 55.

Performance Measure:
State Roadways Maintained At "Fair Or Better" Condition

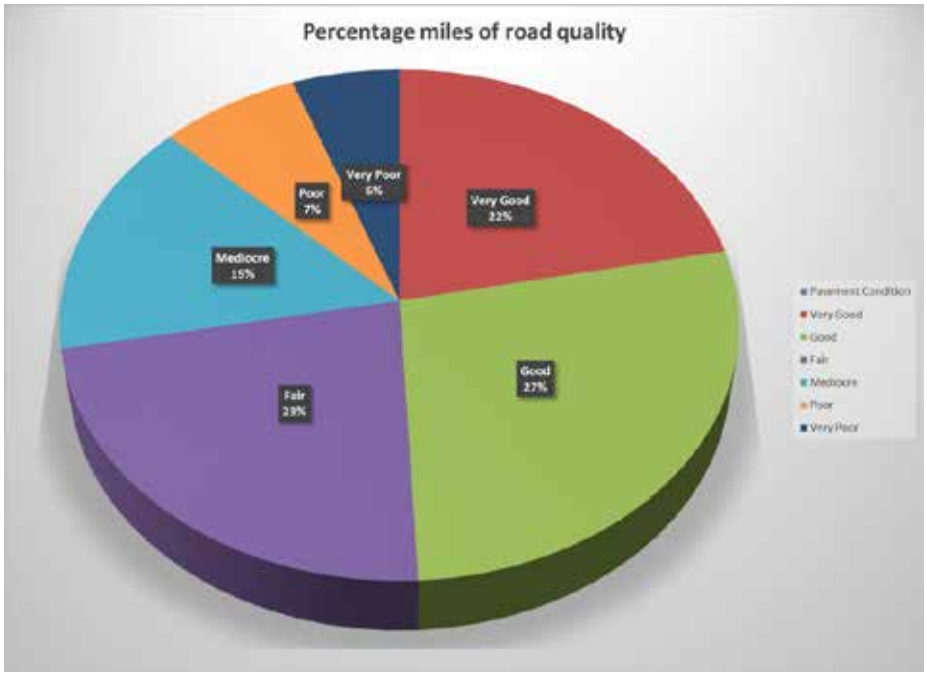
Target

Category 1: 95%
Category 2: 95%
Category 3: 95%
Category 4: 95%
Category 5: 95%

Current Status:

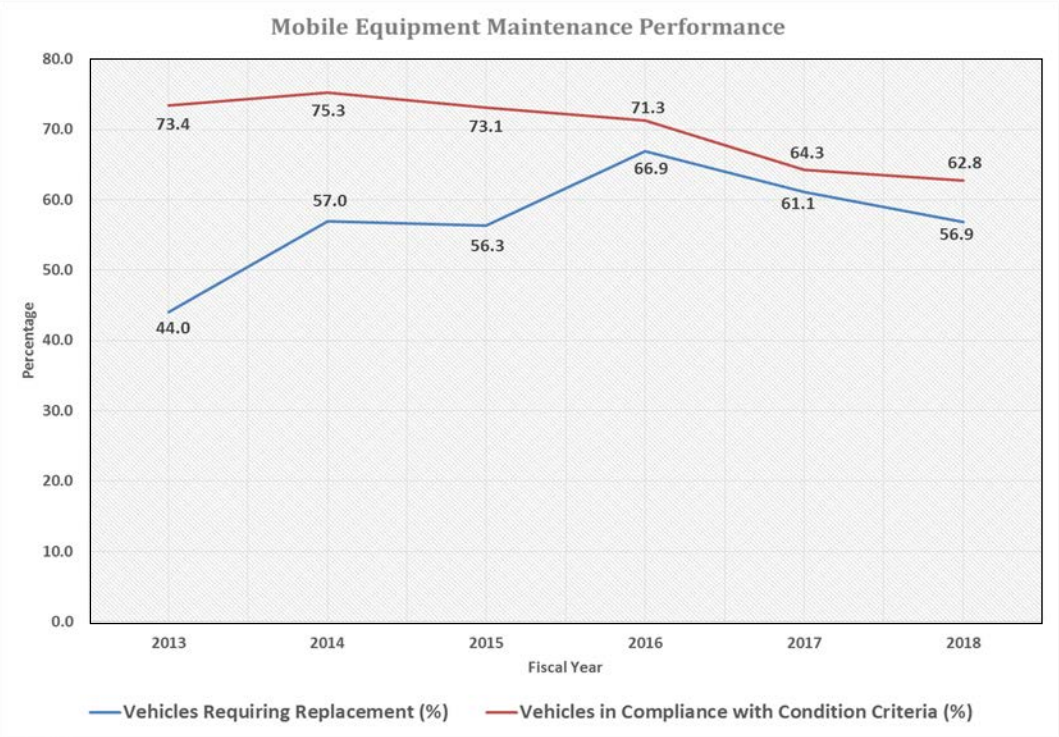
Category 1: 98.1%

Category 2: 86.1%
Category 3: 93.8%
Category 4: 72.6%
Category 5: 39.7%



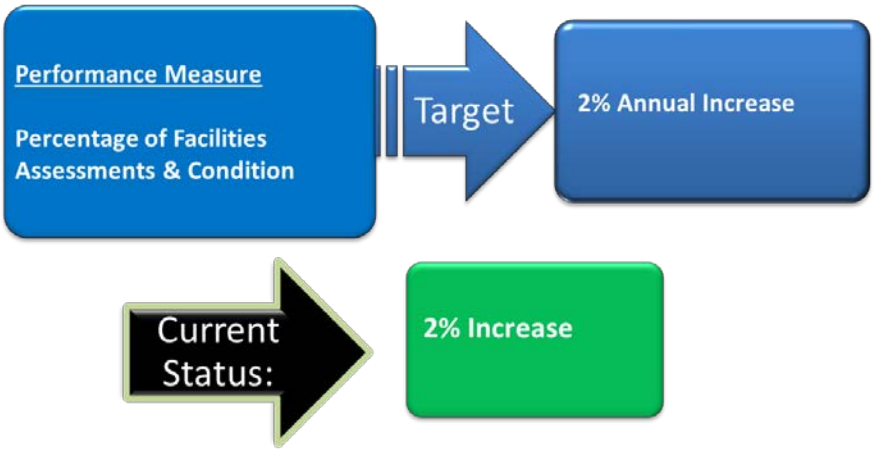
9. Maintain NDOT Fleet

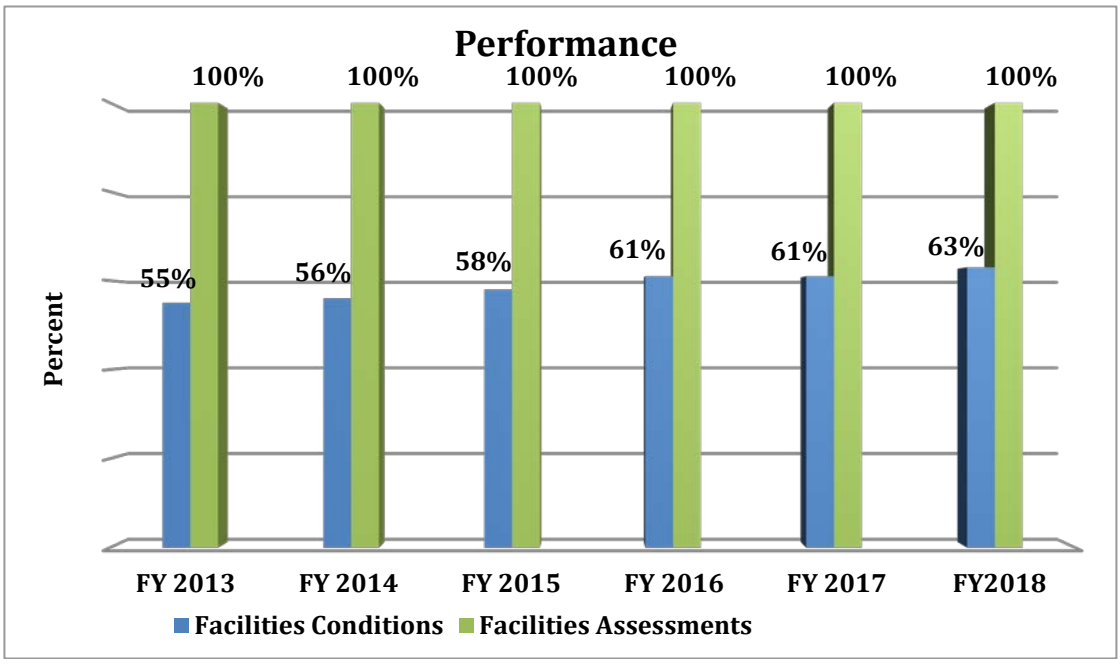
Executive Summary: In state fiscal year (SFY) 2018 the percentage of the NDOT mobile equipment fleet requiring replacement decreased by 4.2% over the prior year but increased by 18.2% over the base year 2007. The percentage of fleet in compliance with preventive maintenance requirement to ensure the expected life of Department vehicles is not compromised decreased by 1.5% over the prior year but increased by 2.5% compared to the base year. Performance target 1 was achieved, while Performance target 2 wasn't met. For detailed information about performance measure 9, please refer to page 62.



10. Maintain NDOT Facilities

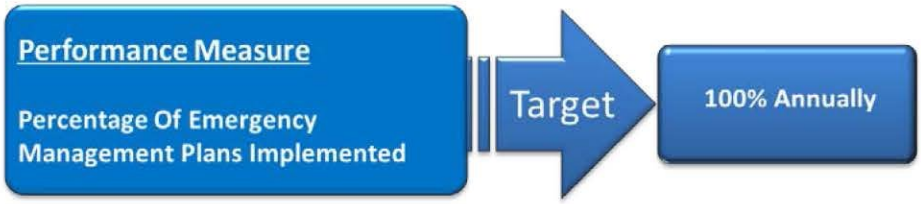
Executive Summary: State fiscal year (SFY) 2013 is considered the base year for this performance measure because that was when the NDOT adopted the new method to measure the performance of the "facilities condition" that includes finer details as compared to prior years. In SFY 2018 an overall performance of 63% facilities assessments and condition was achieved. This is 2% higher than the performance in 2017 therefore the target was achieved. For detailed information about performance measure 10, please refer to page 65.

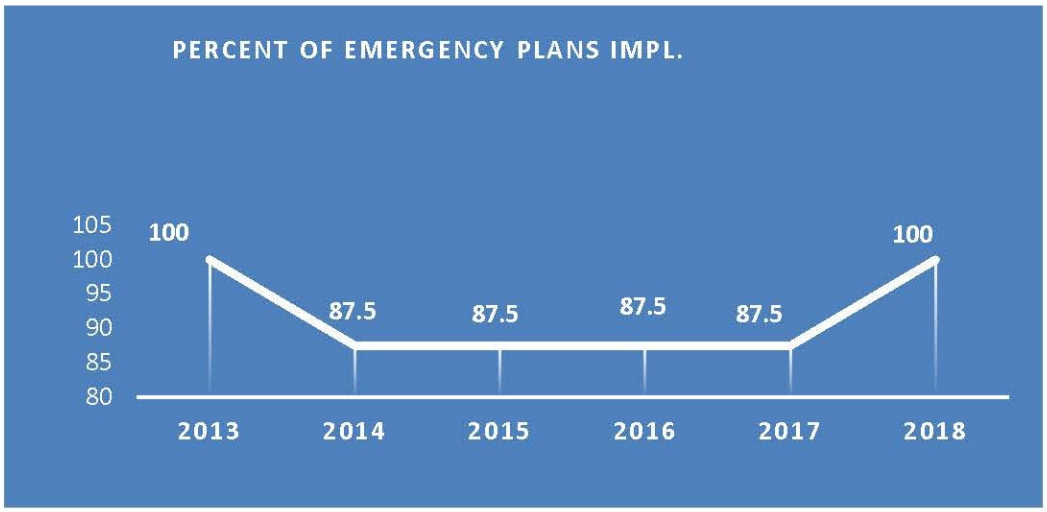




11. Emergency Management, Security, and Continuity of Operations

Executive Summary This performance measure involves tracking the percentage of emergency plans that have been completed, training and education provided to appropriate personnel, plans tested, exercised and updated. Training and updates are completed on a four cycle. In SFY 2018 NDOT achieved a 100% compliance level which met the established target. The main reason for achieving the target in 2018 was because the training and update cycle was changed from two to four years to account for time spent dealing with staffing and real emergency issues. For detailed information about performance measure 11, please refer to page 72.



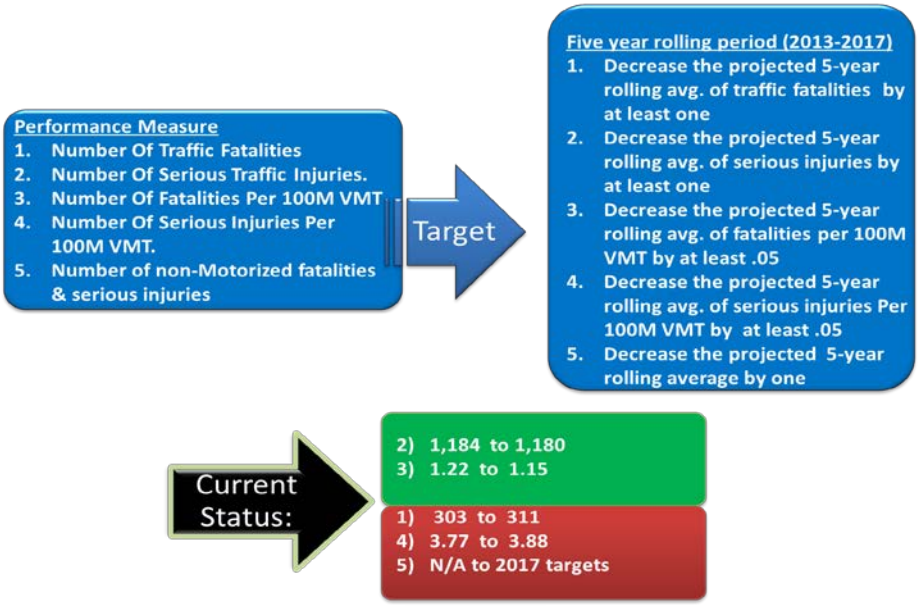


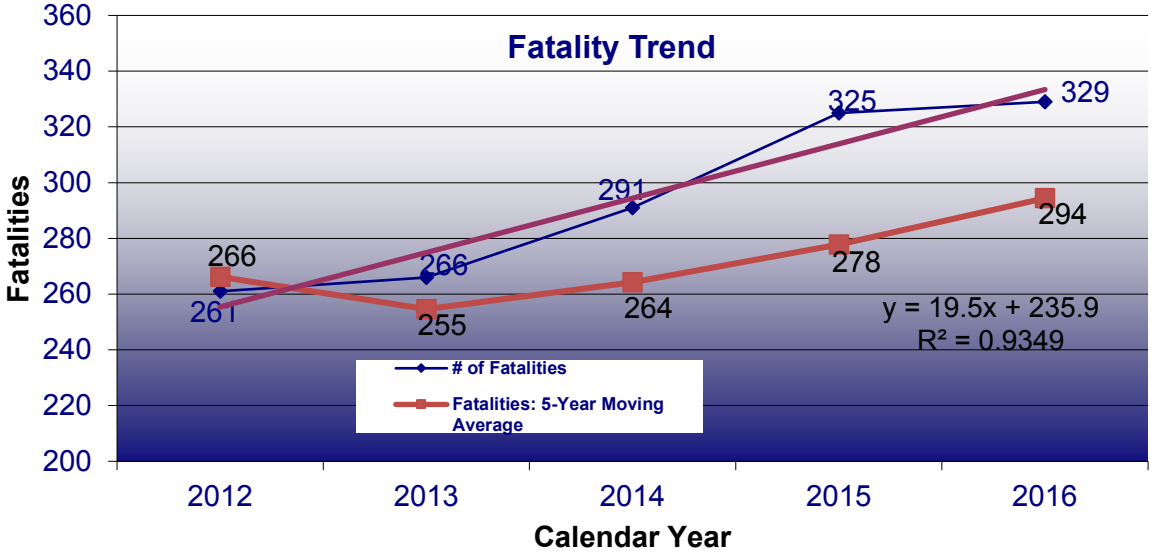
12. Reduce Fatal & Serious Injury Crashes

Executive Summary: There are five performance measures under this goal area. They have been modified to align with the reporting requirements by the Federal Highway Administration (FHWA) and the National Highway Traffic Safety Administration (NHTSA).

Information provided in this section utilizes data from 2012 to 2016 and the analysis uses projections and a five-year average.

Performance targets for measures 2 and 3 were achieved while performance targets for measures 1 and 4 were not achieved. Measure 5 was not evaluated because it was not required to be reported in 2017. For detailed information about performance measure 12, please refer to page 78.

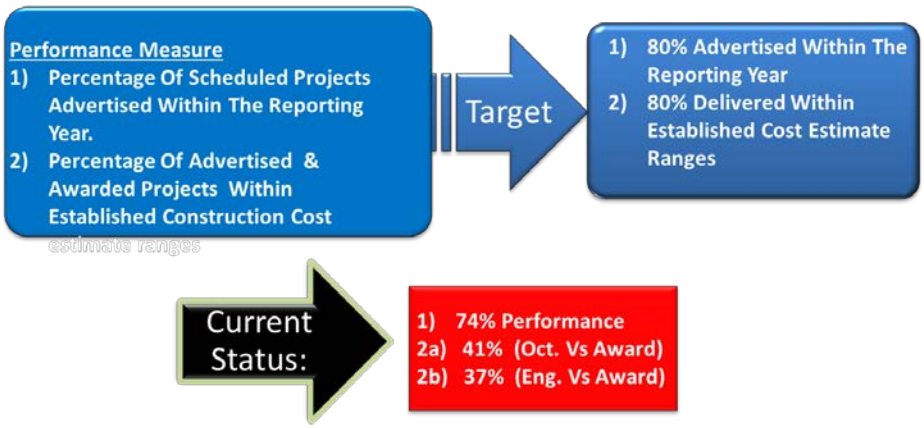


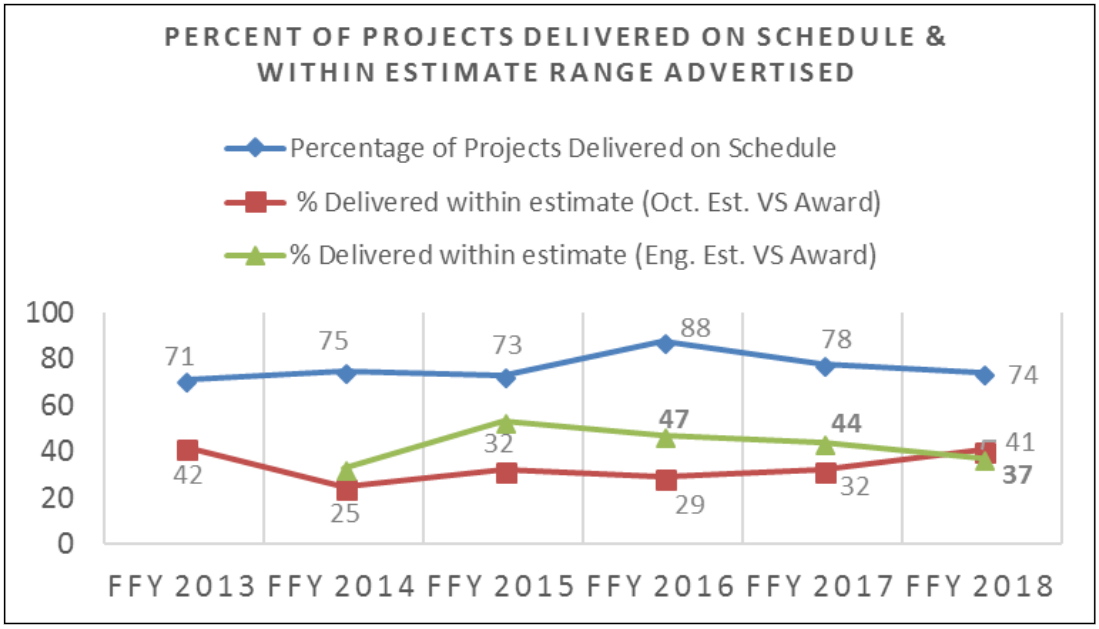


13. Streamline Project Delivery - Schedule and Estimate for Bid Advertisement

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 83.

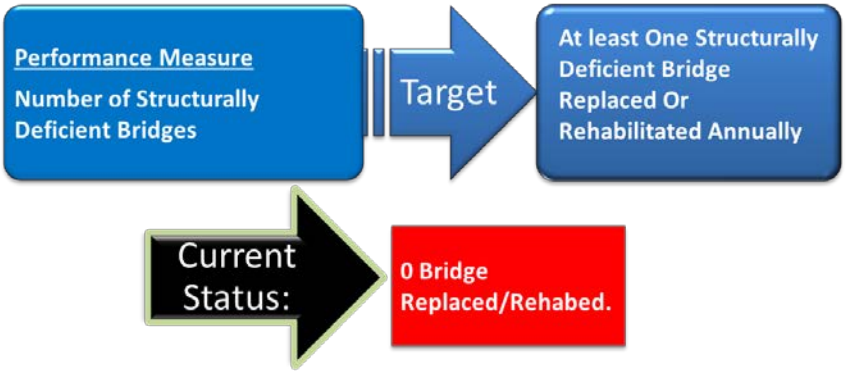


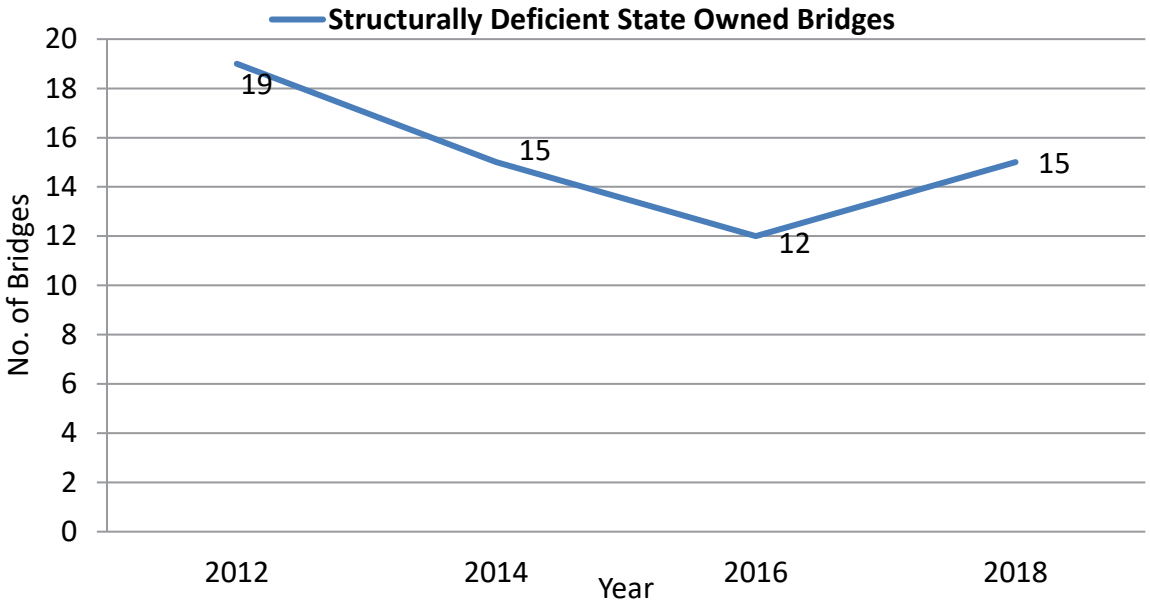


14. Maintain State Bridges

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 2017, NDOT didn't replace or rehabilitate any structurally deficient bridge. 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 88.

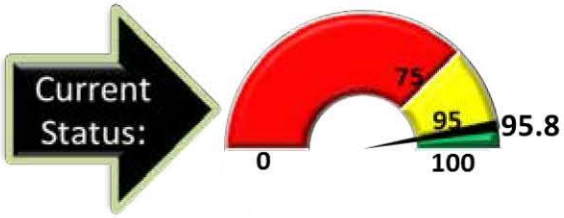




15. Streamline Permitting Process

Executive Summary: During state fiscal year 2018, the NDOT Right-Of-Way Division processed a total of 853 permits of which 817 were processed within 45 days. This translates to a 95.8% performance which is slightly above 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 93.

Target Met



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

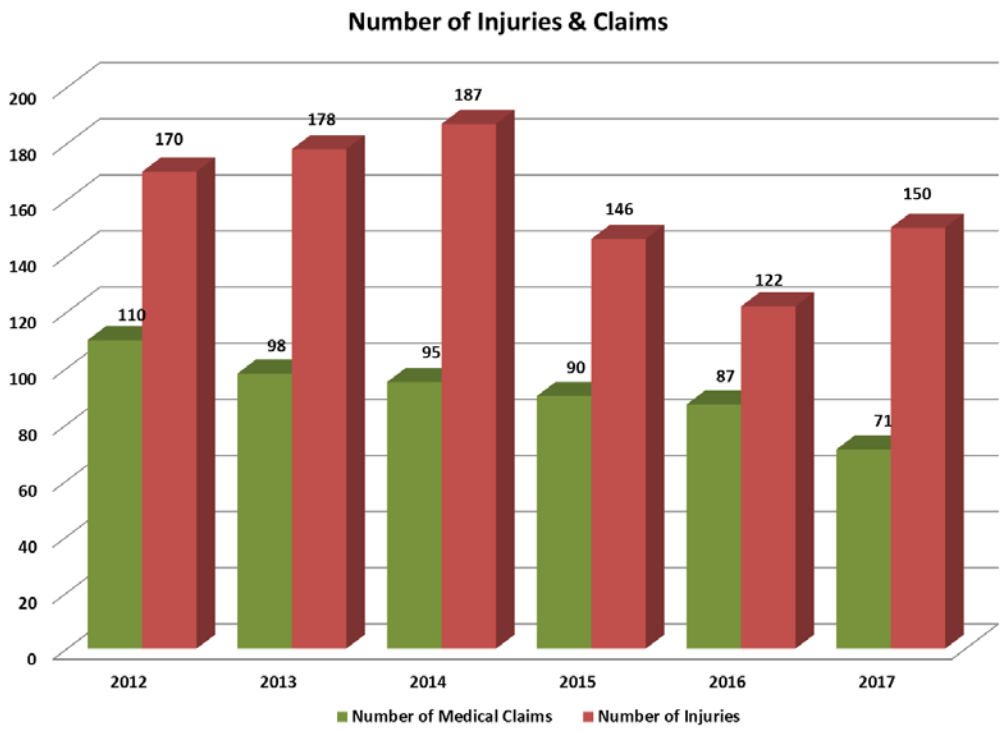
Champion:
Safety and Loss Control Section Manager
Human Resources Manager
Support Divisions: All

Strategy Plan Support:
Safety extends to all aspects of the Department from the roadways to the office. Identifying and reducing risk to the Department, employees, and the traveling public is an ongoing endeavor. This performance measure works towards meeting the Department of Transportation strategic plan goals - safety first, and, enhance organizational and workforce development.

Measurement and Supporting Data:

Calendar Year	2012	2013	2014	2015	2016	2017
Total # of Injuries	170	178	187	146	122	150
# Injuries/All Employees	9.61%	10%	10.68%	8.31%	7.10%	8.61%
Total # Medical Claims	110	98	95	90	87	71
Medical /Employees	6.2%	5.51%	5.43%	5.12%	5%	4.07%
Average Claim Cost	8,557.61	18,315.03	7,168.96	11,973.92	12,978.24	9,089.07
Average # Employees	1769	1777	1751	1757	1717	1743
Total Calendar Year Cost	907,106.77	1,794,872.89	724,064.89	1,149,496.09	1,329,390.07	1,430,173.53

Calendar Year	2012-2016 Avg.	2017
Total # Injuries	160.6	150
Injury rate (%)	9.14	8.61
Total # Medical Claims	96	71
Serious injury rate (%)	5.45	4.07
Claim cost	11,798.75	9,089.07



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.

The baseline is the five-year average of 2012 through 2016 data. Data is reported on a calendar year basis pursuant to federal OSHA reporting requirement, and the number of employees is the average number of state 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. In CY 2017, the average claim cost was lower by about $3,000 per claim compared to the baseline. The injury rate in CY 2017 shows a reduction of 0.53% compared to the baseline therefor, the target of reducing the injury rate by 2% annually compared to the baseline was not met.

The serious injury rate, which is the rate of injuries/illnesses requiring medical attention per every 100 employees also did not meet the 2% annual reduction target. The rate in CY 2017 was 4.07% compared to the baseline of rate of 5.45%.

Strategies for Improvement Next Calendar Year

Short range to next reporting:

- Continue outreach workers' compensation training for all Districts and Divisions Claim costs has 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 the agencies employees and methods to control costs.
- Continue safety and health inspections agency wide to eliminate workplace hazards and reduce workplace injuries
- Continue OSHA safety and health classes to educate management, supervisors and employees to reduce workplace hazards and reduce workplace injuries
- Continue to conduct ergonomic evaluations for NDOT employees to reduce workplace injuries
- Equip NDOT Headquarters basement with new AEDs
- Continue to conduct Active Shooter Classes for NDOT Headquarters, Districts and Divisions
- Add new column for the measurements and supporting date to include the total calendar year workers' compensation costs
- Begin a worker safety and workers' compensation campaign

Long range:

- Continue identifying specific safety training that can be conducted by existing staff and take cooperative steps to insure courses are conducted, including Global Harmonization System, First Aid/CPR/AED, New Employee Safety Orientation, and OSHA mandated classes
- Implement an Employee Safety Survey to assess the agency's safety culture as it pertains to safety, and evaluate the responses to determine areas of need within the safety program and workers' compensation program
- Develop and implement a safety and health open house for NDOT employees
- Increase staff by two additional Agency Safety/Loss Control Coordinators to reduce workers' compensation claims, focus on workplace inspections, training, as well as assist Districts and Divisions with motor vehicle accident investigations
- Add one clerical support staff to perform clerical and data entry assignments
- Safety/Loss Control participates at all levels of project development to ensure the safety and health of all NDOT employees
- Build an Ergonomic Laboratory Room for the Ergonomic Specialist to conduct workstation ergonomic evaluations for NDOT employees to reduce repetitive hand motion injuries, neck injuries, mid back injuries, low back injuries, shoulder injuries and elbow injuries
- Propose to implement a five-day safety leadership academy for all employees to increase their safety and health awareness. District employees, division employees, crew employees, office employees, construction inspectors will be considered "Safety Leaders" for their respective departments

Evaluation of Performance Measure

Were the annual targets met?
No

Which 'Strategies for Improvement' were successful?
Increased workers' compensation training, safety inspections and safety training increased safety awareness and prompted an overwhelming input from workers that are committed to improving the safety program. The Safety/Loss Control Coordinator trained over two hundred employees in CPR/First Aid/Infant and AED. NDOT Headquarters basement was equipped with new AEDs.

Which 'Strategies for Improvement' were not successful and why?
The vehicle database continues to be maintained by the Safety and Loss Control Section as required by the Federal Motor Carrier Safety Administration.

The motor vehicle accident database in conjunction with the State of Nevada Risk Management Division database indicates that for the past three year's 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 pool vehicle accident deductible from 500.00 dollars to 700.00 dollars. The heavy equipment deductible will increase from 5,000.00 dollars to 7,000.00 dollars due to the number of at-fault employee accidents.

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.
There will be an increased cost to the Safety/Loss Control travel budget because additional workers' compensation training for all Districts and Divisions will be conducted quarterly agency wide. This will support the "New Approach" system in place for injured workers' to receive the best medical treatment and understanding of NDOT workers' compensation policies, Nevada Revised Statutes and Nevada Administrative Codes. In addition, the Agency Safety/Loss Control Coordinator and the Safety Trainer will continue to conduct inspections and training throughout the agency which will require more time.

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: 77% 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.

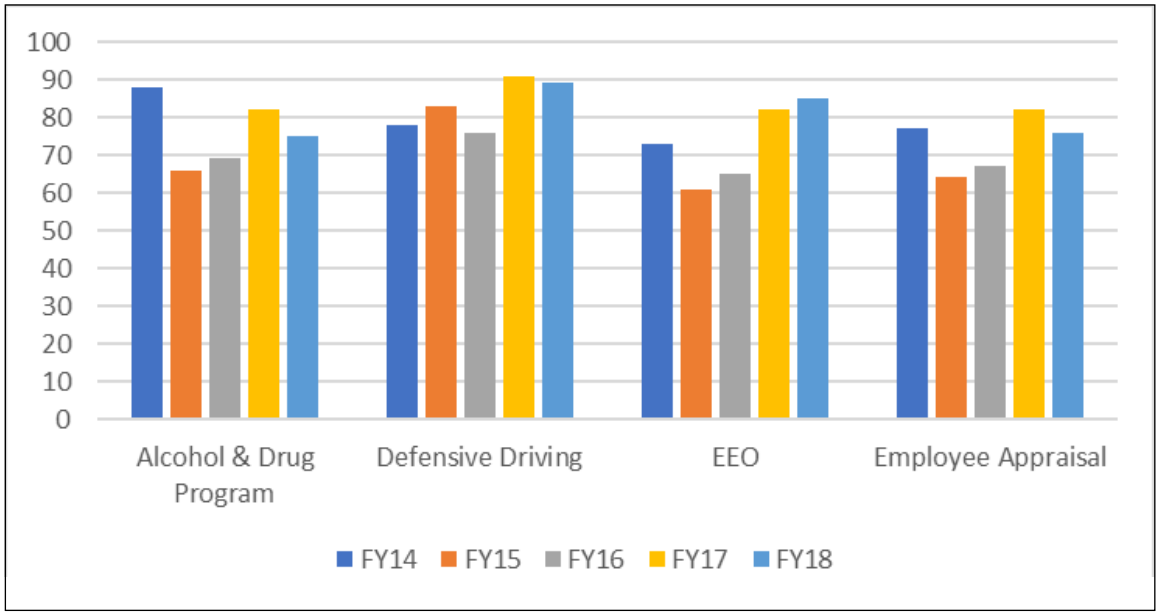
Department of Human Resource Management, Equal Employment Opportunity Section revised the requirement that supervisors take both an online portion of EEO and an instructor-led portion and have decided that supervisors only need to take one or the other. As a result, we are only tracking 11 classes now.

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 FY2018 compliance target was exceeded by 4% and was 2% lower than the previous year. The completion level demonstrates that the previous strategy of warning employees when they were about to go out of compliance was an effective strategy.

Measurement and Supporting Data:

Requirement	Total Employees Requiring Training*	% in compliance for FY					# Trained in FY 18
		2014	2015	2016	2017	2018	2018
Alcohol & Drug Program	494	88	66	69	82	75	163
Defensive Driving	1660	78	83	76	91	89	394
EEO	494	82	63	71	78	N/A	N/A
EEO -Online	494	73	61	65	82	85	154
Employee Appraisal	1660	77	64	67	82	76	171
Global Harmonization	1660	78	76	81	90	91	303
Grievance Procedures	494	80	67	70	81	80	200
Internet Security Awareness	1660	65	68	72	66	83	1484
Interviewing & Hiring	494	78	68	74	87	82	170
Progressive Discipline	1660	78	65	71	83	72	126
Sexual Harassment Prevention	1660	93	92	74	93	83	548
Work Performance Standards	494	77	64	67	80	78	182
Averages		79	70	71	83	81	

*Number of employees or supervisors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Alcohol & Drug Program
Defensive Driving
EEO
Employee Appraisal
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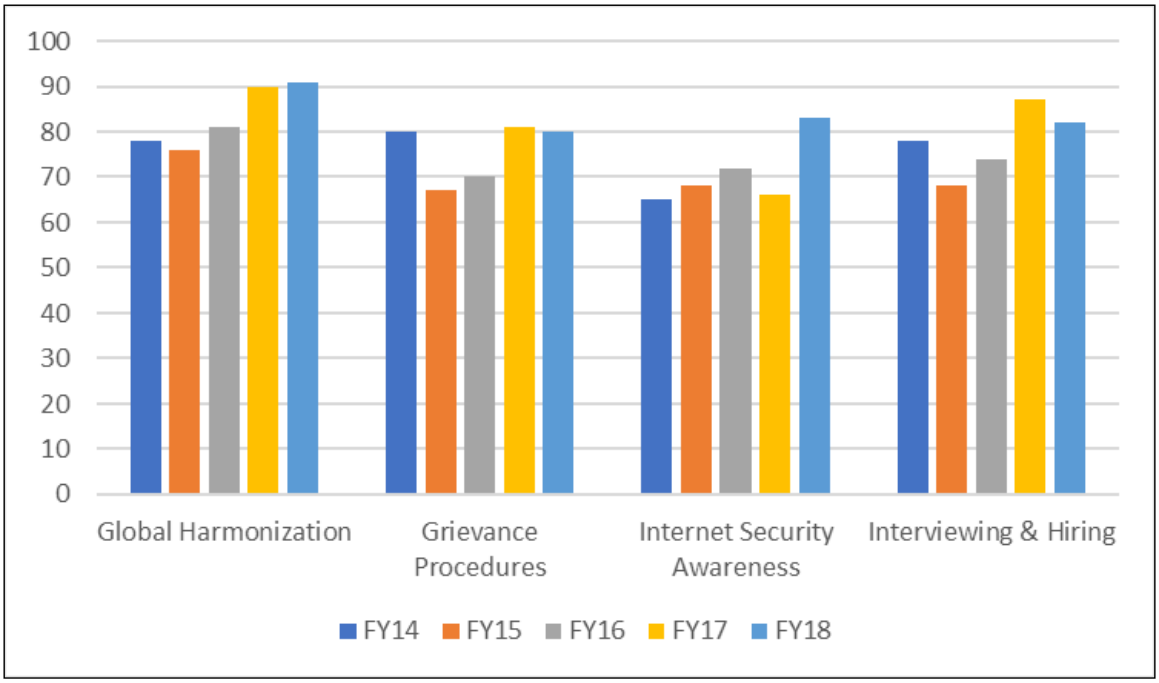
FY17
FY18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Global Harmonization
Grievance Procedures
Internet Security Awareness
Interviewing & Hiring
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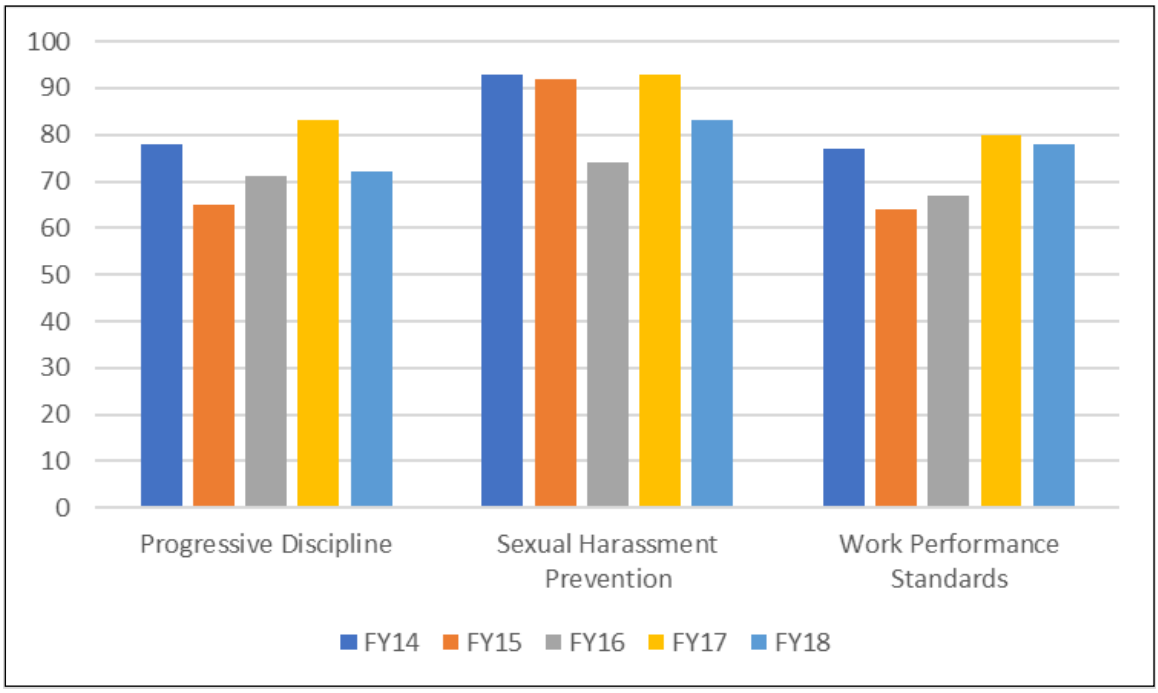
FY16
FY17
FY18



Evaluation of Performance Measure

The annual target for FY18 was 77% while the ultimate target is 100% compliance. The average for the 11 required classes was 81% which is a decrease of 2% from last fiscal year's average of 83%. However, it exceeded the FY18 target that was set by 4%. The levels of compliance decreased for all classes except for Internet Security and OSHA-GHS.

Was the annual target met?
Yes

Which "Strategies for Improvement" were successful?
Implementation of the eHR continues to motivate employees to achieve and maintain compliance with their training requirements. The eHR also allows supervisors and managers to review their employees' compliance. The online versions of every mandatory class also help employees take training when they need it. However, both advantages require employees and supervisors to go to eHR and search for the information. The Training section is working with the IT Division to adjust the eHR notifications back on so that the information goes to the employee instead of the employee having to go look for the information.

The Training section updated the online OSHA-GHS course which is one of two courses that had increased compliance this fiscal year.

Classes were offered that met crew needs (like evening classes for our night crews or classes offered at construction crew locations) to make the training more accessible and make less of a disruption to the work day.

There have been fewer "no shows" at classes but classes were still not full. 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.

Which "Strategies for Improvement" were not successful?
During FY18, effort was made to keep all training commitments despite being down one instructor. This took focus away from strategies that may have increased compliance including marketing our classes to build excitement for training instead of asking people to attend simply because the class is mandatory.

The strategy of cross training instructors and documenting instructor manuals so that another instructor could step in on short notice was also deferred. However, it was rare that a class was canceled because the instructor was unavailable. Instead, most cancellations were because of low enrollment, plane cancellations, or a higher priority for the meeting room.

What new "Strategies for Improvement" will be initiated in FY 2019?
Short range to next reporting:

- Continue to monitor the success of the e-HR system in generating stronger compliance numbers.
- Market classes based on the benefit to the employee instead of marketing solely on the fact that the class is mandatory.
- Use Yammer platform to market directly to employees.
- Do more promotional activities to remind people of the availability of classes and the need to complete required classes.
- Create supplementary modules to the DHRM online classes to offer NDOT-specific information.
- Make a stronger use of activities and case studies to make instructor-led classes more interesting.
- Adapt the "Flipped Classroom" philosophy to make better use of classroom "face time".

Long range:

- Add additional required classes as needed.
- Embed leadership principles in all required classes. These principles should reinforce the strategic plan.
- Learn and implement technology like videoconferencing, webinars, and Skype to keep classes when we have low enrollment, and plane is cancelled or there is a higher priority for the meeting room.
- Pair up HR professionals with trainers to include relevant examples in our training. Also, send trainers to the EMC for deeper/broader understanding of state policies.

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

Is there a better performance measure that should be considered?
Currently we report on compliance on eHR, for the Fact Book, and for Budget. The formula for Fact Book/eHR is different than the formula used for reporting compliance for the Budget. The method used here is most meaningful.

The Training Division would be learning the process for changing the Budget reporting methodology to match the methodology reported in the Annual Performance Report.

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 mitigated by employees' willingness to take classes online. Compliance should increase based on turning on the email notifications in eHR and by marketing the benefits of each class. Based on the average increase of 3% during the past four years, future annual targets are:
FY19: 80%
FY20: 83%
FY21 86%

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

Overview and 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%
2018FY	69%

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
2018	June 29	August 10	969

Table 2. Employee Satisfaction Survey Results

Key Question Response Comparison From 2017 to 2018			
Survey Category	2017 Percentage	2018 Percentage	Percentage of Increase/Decrease
Satisfaction of workplace safety.	77.2%	76.0%	1%
Satisfaction of workplace physical conditions.	68.9%	69.0%	0.1%
Satisfaction with ability to express concerns to their immediate supervisor.	79.9%	73.0%	6.9%
Satisfaction with ability to communicate effectively with their immediate supervisor.	72.5%	71.0%	1.5%
Satisfaction with their immediate supervisor recognizing when they go above and beyond their normal duties.	71.1%	68.0%	3.1%
Satisfaction with management applying policy decisions consistently.	49.4%	51.0%	1.6%
Satisfaction with ability to express concerns to their management.	62.4%	61.0%	1.4%
Satisfaction with flexibility of employees work hours.	83.4%	84.0%	0.6%
Percentage of employees who would recommend NDOT to a friend	58.3%	60.0%	1.7%

Evaluation of Performance Measure
Was the annual target met?
No
Sixty-nine percent (69%) 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 2018 percentage did increase by 2 compared to 2017.

Employee participation in fiscal year 2018 is the third highest employee participation since the survey began in 2008.

Which "strategies for improvement" were successful?
The strategy by upper management of emphasizing improved communication throughout the department seems to have had a positive impact. Also, the insistence of managers and supervisors to apply policies consistently was proven to have some positive response.

Which "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. While some increases were reported over 2017 percentages are still low. Respondents that were satisfied or very satisfied with their salary was 24% in 2017 and increased to 35% in 2018. Respondents satisfied with their benefits increased from 36% in 2017 to 40% in 2018. However, adjusting salary and benefits are not within the authority of NDOT.

What "strategies for improvement" will be initiated in FY2019?
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.

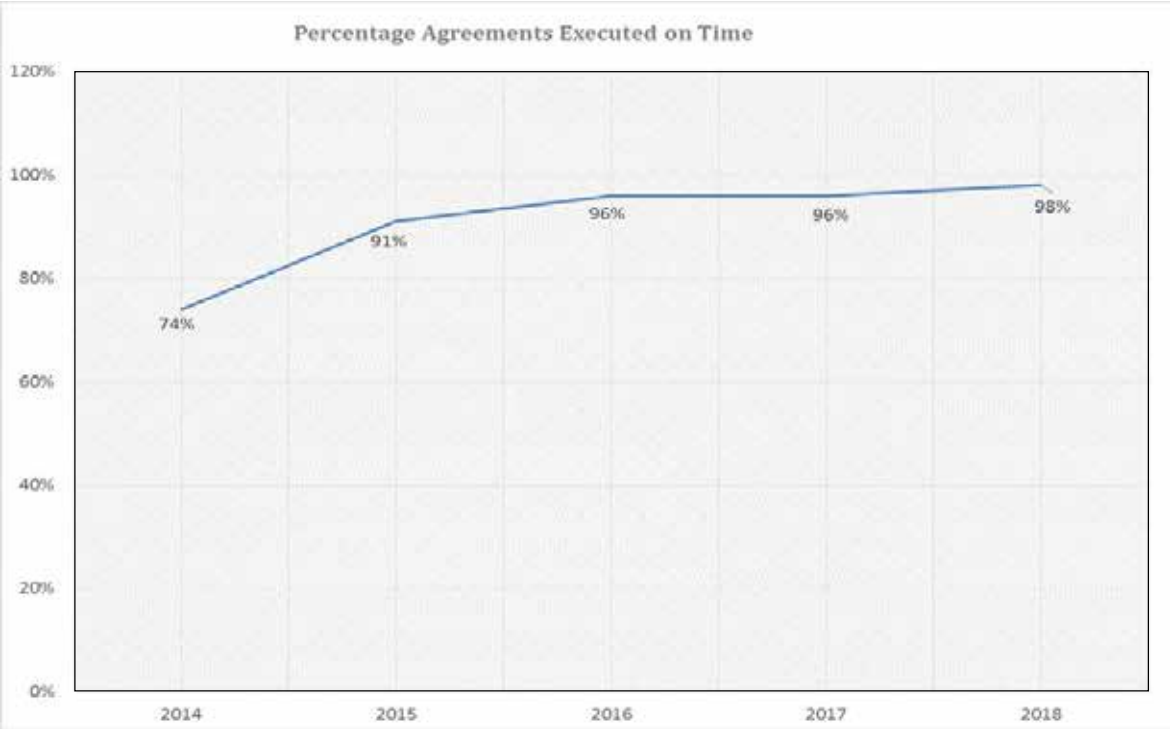
Summary:
For FY 2018, the average number of calendar days to execute agreements, measured from the time they were submitted to Agreement Services until the time of agreement execution but excluding the time the agreement was with the second party or awaiting Transportation Board approval, was 8 days. The Department executed 557 agreements during fiscal year 2018, and 545 of those were executed in 30 days or less. Therefore 98% of all agreements were executed within 30 days, exceeding the target of 90%. This is an improvement over fiscal year 2017 where the average number of days to execute agreements was 11 days and 96% of all agreements were executed within 30 days.

It is significant to note that of the 12 agreements not executed within 30 days, over 58% of them (7 agreements) were with other public entities. These include Cooperative, Interlocal, and Grantee agreement types. These types of agreements often require extensive coordination with the other public entities, and items often must be formally discussed with a policy-making body, such as a Boards of

Directors, as well as other authorities within an entity/agency. 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 2018	557	545	98%	8



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. The viability of this option will be further explored in 2019.

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 which is critical to maintaining the success of this performance measure.

Were the targets met?
Yes

Which "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.

Which "strategies for improvement" were not successful and why?
Processing LPA agreements via DocuSign has not yet been successful. With three to five signatures required for the LPA's (which includes presentations to and possible approval by formal policy-making and governing bodies), routing for execution is cumbersome and time consuming. The Agreement Services Section staff has identified a potential solution using a DocuSign routing method that could expedite the execution of LPA agreements. Testing this option in FY 2019 will determine whether this alternate routing method is a viable solution.

What new "strategies for improvement" will be initiated in FY2019?
Short range to next reporting:
The current targets are being exceeded, and the process is working well. The short-range strategy will be to continue ensuring all Agreement Services Section staff understand the performance measure, what is measured, and how each stage of processing an agreement affects the measure. The Division Chief and Section Manager will provide quarterly feedback to staff about the current processing time, and discuss strategies for improving execution of all agreements, including LPA agreements, if applicable.

Long range strategy:
The current targets are being exceeded, and the process is working well. The long-range strategy will be to continue regular assessment of the current performance measure, data collected and its 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. Collectively, this will result in overall cost savings.

5. IMPROVE CUSTOMER & PUBLIC OUTREACH

Performance Measure:
Improve Customer & Public Outreach.

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

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

Overview and Plan Support:
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. This performance measure works toward meeting the NDOT core value goal of communicating with transparency and responsiveness both internally and externally.

Measurement and Supporting Data:
NDOT 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. Measurable goals were created for each communication channel that are reported on quarterly and annually.

Evaluation of Performance Measure:
Social Media

- Increase Facebook likes to 10,000 by the end of fiscal year 2018 – **Goal met. Total Facebook likes as of June 30, 2018 = 10,057.**
- Increase Twitter followers to 25,000 and increase retweets by 10% by the end of fiscal year 2018 – **One goal met. As of June 30, 2018, the total number of followers was 26,671. The retweet goal was not met. NDOT received just over 3,700 retweets in fiscal year 2018, compared to approximately 6,700 retweets in fiscal year 2017. This accounts for an approximate 45% decrease, likely due to major weather and roadway flooding events in fiscal year 2017 which spurred activity and interest in our Twitter account for weather-related information.**
- Increase YouTube views by 10% by the end of fiscal year 2018 – **Goal not met. Total YouTube video views in fiscal year 2017 added up to 78,589. Total YouTube video views in fiscal year 2018 was 78,316. YouTube views remained relatively steady, with a 0.3% decrease between fiscal years 2017 and 2018.**

- Increase the number of Instagram followers to 1,000 by the end of fiscal year 2018. **Goal met. The total Instagram followers as of June 30, 2018 was 1,158.**

Website

- Remind content editors to update/archive information quarterly with tips and suggestions to maintain the validity of information found on division pages. **Goal met – quarterly reminder sent out.**

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

- Respond to all simple requests from reporters immediately. Provide answers to more complex questions within one business day. **Goal met – Simple questions from reporters were answered immediately and more complex requests were followed up on within one business day.**

Public Involvement

- Utilize social media platforms to allow for participation in public events without physical attendance, such as Facebook Live video, in at least five public involvement activities by end of fiscal year 2018. **Goal met – NDOT conducted five public meetings with Facebook Live in fiscal year 2018: the Reno Spaghetti Bowl on September 13 and 14, Project Neon on January 24, the 1-15/Tropicana Interchange on January 30, and the I-11 Northern Nevada Alternatives Analysis on March 29.**
- Increase public meeting attendance by 10% by including those watching the presentations online or on social media by end of fiscal year 2018. **Goal met – There were five Facebook Live sessions conducted in fiscal year 2018. The total in-person attendance at these meetings was 258, while the number of people that watched the presentations online totaled 4,217. This totaled a 1534% increase.**

Customer Service

- Achieve 75% positive satisfaction level on NDOT satisfaction survey from all customer service survey participants by end of fiscal year 2018. **Goal met – a "how we did" customer satisfaction survey was sent out to everyone who interacted with the NDOT public information office. The survey results indicated that 77% of NDOT customers were extremely satisfied with how NDOT handled their request.**

Annual target status (Met/Did not meet)

NDOT public information is happy to report that nine out of the 11 measurement goals for fiscal year 2018 were met.

Which strategies for improvement were successful:

The nine goals that were met. Facebook Live was wildly successful, allowing members of the public to participate in a public meeting online instead of physically having to attend. NDOT's social media followers grew substantially, providing yet another avenue for the public to receive information and get answers to their questions. NDOT also receives good media coverage through the relationships that the public information officers have developed with reporters. The customer service goal was exceeded

as well, which means that most people who contact NDOT are happy with the answers that are provided. The NDOT website is another great source of information for the public, and the internal newsletter has been an invaluable resource for NDOT employees.

Which strategies for improvement were not successful:
The two goals that were not met. Regarding the Twitter retweet goal, NDOT received just over 3,700 retweets in fiscal year 2018, compared to approximately 6,700 retweets in fiscal year 2017. This accounts for an approximate 45 percent decrease in retweets from fiscal year 2017 to fiscal year 2018, likely due in large part to major weather and roadway flooding events in fiscal year 2017 which spurred activity and interest in NDOT's Twitter account for weather-related information. YouTube views, the other goal that wasn't met, remained relatively steady, with a 0.3% decrease between fiscal years 2017 and 2018.

What strategies for improvement will be implemented in 2019:
Short range to next reporting period and long range -
Social media changes so rapidly, public information staff must react quickly, which usually means that goals need to be adjusted. The YouTube goal will stay the same; however, the Twitter retweet goal will be changed to an average engagement rate, which is a new industry standard to measure social media effectiveness. Some of the other goals, including media relations, internal communications and the website, will be adjusted so the goals are more measurable.

Does this performance measure effectively measure what is desired?
It does because the NDOT communications plan matches up with the NDOT performance measures, which match up with the NDOT mission, vision, core values, and goals and the work performance standards of the public information employees.

Is there a better Performance Measure that should be considered?
A couple years ago, a statewide customer service survey was conducted annually to gauge the public perception of NDOT. This was ended due to the high cost of the survey. A new effort has been launched at a much lower cost to measure the public's opinion of NDOT statewide every four years.

Would meeting next year's target incur additional fiscal impact? If so, explain.
Yes, a request for proposal will be issued soon to hire a firm to conduct this survey. This cost has been included in the public information budget for fiscal year 2018-19 and will need to be considered again every four years.

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 in Nevada urbanized areas
4. Percent of non-single occupancy vehicle travel in Nevada urbanized areas

Annual Target:

Percent of Reliable Person-Miles Traveled on Nevada Interstates: 85%
Percent of Reliable Person-Miles Traveled on Nevada Non-Interstate NHS: 65%
Annual hours of Peak Hour Excessive Delay per capita in Nevada urbanized areas: 12-Hours
Percent of Non-Single Occupancy Vehicle Travel in Nevada urbanized areas: 20%

Ultimate Target for System Performance:

Percent of Reliable Person-Miles Traveled on Nevada Interstates: 90% or greater
Percent of Reliable Person-Miles Traveled on Nevada Non-Interstate NHS: 70% or greater
Annual hours of Peak Hour Excessive Delay per capita in urbanized areas: 10-Hours or less
Percent of Non-Single Occupancy Vehicle Travel in Nevada urbanized areas: 25% or greater

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.

The peak hour excessive delay is an indication of the annual delay hours per capita and is specific to urbanized population areas greater than 1 million people (e.g. Clark County). The methodology used to track the performance metric of PHED and assess the measure in this report is based on the Travel Time.

The percent of non-single occupancy vehicle (non-SOV) travel performance metric is specific to urbanized population areas greater than 1 million people. This measurement may include travel via carpool, van, public transportation, commuter rail, walking, or bicycling as well as telecommuting. The methodology used to track and asses non-SOV in this report is based on the American Community Survey (ACS) Commuting (Journey to Work) data from the U.S. Census Bureau.

Strategy and 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, operating, and preserving a transportation system that enhances safety, quality of life and economic development through innovation, environmental stewardship and a dedicated workforce 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 2017 data, 86.8% of person-miles traveled on Nevada Interstate NHS were reliable, while 86.8% of person-miles traveled on Nevada Non-Interstate NHS roads were also reliable.

Targets of 85% on the interstate, and 65% of non-interstate NHS roads were set to have a Level of Travel Time Reliability (LTTR) for person-miles of travel at a threshold of 1.5. All calculations were based on the new version of the NPMRDS data set which may contain some inaccurate information as well as missing geometric and traffic information for certain roadway segments. Furthermore, since the percent of person-miles traveled on the Non-Interstate NHS changed drastically from previous year data (from 66.0% to 86.8%), the Department is holding-off on establishing a new ultimate target (currently 75% or greater) until it can establish a trendline from multiple years with the new version of NPMRDS.

The NPMRDS was also used to track and measure performance of the metropolitan area of southern Nevada annual hours of Peak Hour Excessive Delay (PHED) per capita. Only the southern urbanized area was tracked for this measure because a threshold of 1 million population or more was used. Based on the analysis using calendar year 2017 data, there were 11.0 annual hours of PHED per capita. A target of 12 hours or less has been established with peak travel periods defined from 6am-10pm for weekday mornings; and 3pm-7pm for weekday afternoon periods.

The American Community Survey (ACS) provided by RTC of Southern Nevada was used to track and measure performance of ride share travel in Nevada urbanized areas with population greater than 1 million people. Using 2012 through 2016 data, the trendline indicates that 21.5% of travel is Non-SOV for the Clark County region. A target of 20% or greater has been established using the American Community Survey method.

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

The NDOT Congestion Measuring System is an evolving process. Refinements will be made continually as 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 Virtual Traffic Management Center, the FHWA Transportation System Management and Operations Tool Kit, and more.

NPMRDS data, and INRIX/RITIS analytical tools make up the engine that drives the system in identifying and analyzing 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

Is there a better Performance Measure that should be considered?
No. These performance measures capture most aspects affecting mobility which is an indication of how well the network is performing. They also align with MAP-21 system performance requirements.

Will meeting the next yearly target have a fiscal impact?
Yes. Maintaining and enhancing the current Congestion Measuring and Reporting system require 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.

Annual Target:
- 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

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

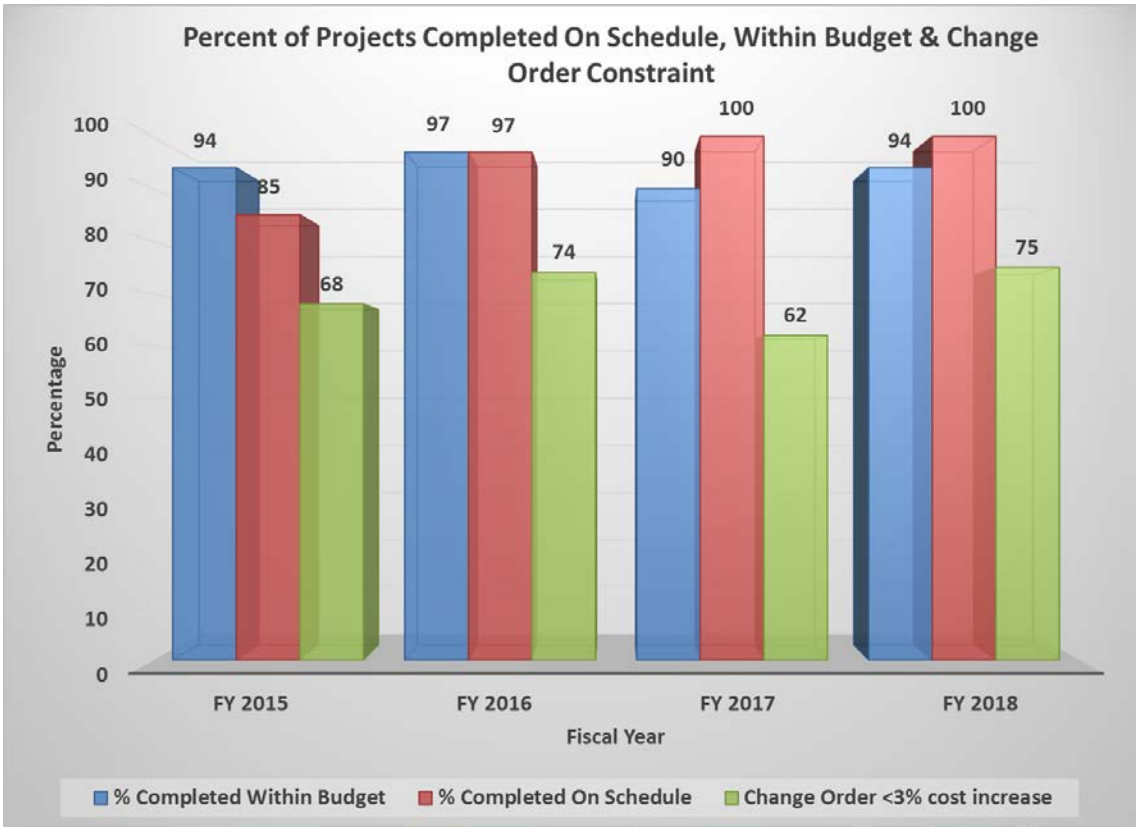
Champion:
Chief Construction Engineer

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 for Fiscal Year 2018

FY 2018	Number of Completed Contracts	Completed Contracts Within Budget	Completed Contracts Within Schedule	Completed Contracts with Change Orders Less than 3% cost increase
1st Quarter	9	100%	100%	78%
2nd Quarter	10	90%	100%	80%
3rd Quarter	4	100%	100%	75%
4th Quarter	13	92%	100%	69%
Yearly Average	36	94%	100%	75%



Evaluation of Performance Measure:

FY 2018 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.

FY 2018 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.

FY 2018 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.

Annual target status (Met/Did not meet)
The Performance Measures targets for budget and schedule were met and/or exceeded. However, the Performance Measure target 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 however 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.

Which strategies for improvement were successful:
Performance for budget and change orders improved in the last fiscal year. Budget performance improved from 90% in FY 17 to 94% in FY 18 and change order performance improved from 62% in FY 17 to 75% in FY 18. The strategies for success, as identified in the FY 17 Annual Report include:

- Continued 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.
- Continued 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.
- Continued 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.

Which strategies for improvement were not successful:

N/A

What strategies for improvement will be implemented in 2019:
Short range and long-range strategies for the next reporting periods will not change from FY 18 and will consist of:

- Continued 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.
- Continued 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.
- Continued 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.

Does this performance measure effectively measure what is desired?
Yes

Is there a better Performance Measure that should be considered?
No

Would meeting next year's target incur additional fiscal impact? If so, explain
No

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 5,435 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. 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 that have been established for the condition of the roads. For the 2017 data collection period, 5,175 miles of the total 5,435 miles of the roadway network were surveyed and are reported in this table.

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	69.7% 369	42.9% 398	24.7% 296	6.5% 56	0.5% 8	**21.8%** **1,127**
Good	3.99 to 3.50	24.5% 130	29.9% 278	45.3% 544	29.8% 255	12.9% 214	**27.4%** **1,420**
Fair	3.49 to 3.00	3.8% 20	13.3% 123	23.8% 285	36.4% 312	26.3% 437	**22.8%** **1,178**
Mediocre	2.99 to 2.50	1.6% 9	7.5% 69	4.6% 55	19.5% 168	29.1% 483	**15.1%** **783**
Poor	2.49 to 2.00	0.3% 2.00	3.5% 33	1.1% 13	6.4% 55	16.6% 276	**7.3%** **378**
Very Poor	< 2.00	0.0% 0	3.0% 27	0.5% 6	1.4% 12	14.6% 242	**5.6%** **289**
Total Miles:		**529**	**928**	**1,200**	**858**	**1,659**	**5,175**
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		**98.1%**	**86.1%**	**93.8%**	**72.6%**	**39.7%**	**----**
Does the current condition meet the condition goal?		**YES**	**NO**	**NO**	**NO**	**NO**	**----**

*2017 PSI calculated using 2017 PMS segments

Pavement Preservation Repair Work for the State-Maintained Road Network

During fiscal year 2018, NDOT advertised approximately $129.5 million worth of contract maintenance and rehabilitation pavement repair work. These expenditures addressed the preservation needs for approximately 293 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 fiscal year 2018 along with the corresponding amount of mileage that was improved.

TABLE 2. Advertised Pavement Repair Work for Fiscal Year 2018

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
2018	$16,193,070	$113,329,774	$129,522,844
	215 Miles	78 Miles	293 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 beyond 5% that are below the red line by the estimated cost of rehabilitating those roads. The total backlog cost based on 2017 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	82.8	14.5	192	917.8
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	$107.6	$10.2M	$115.2M	$458.9M
Total Backlog of Pavement Rehabilitation Work	**$691.9M**				

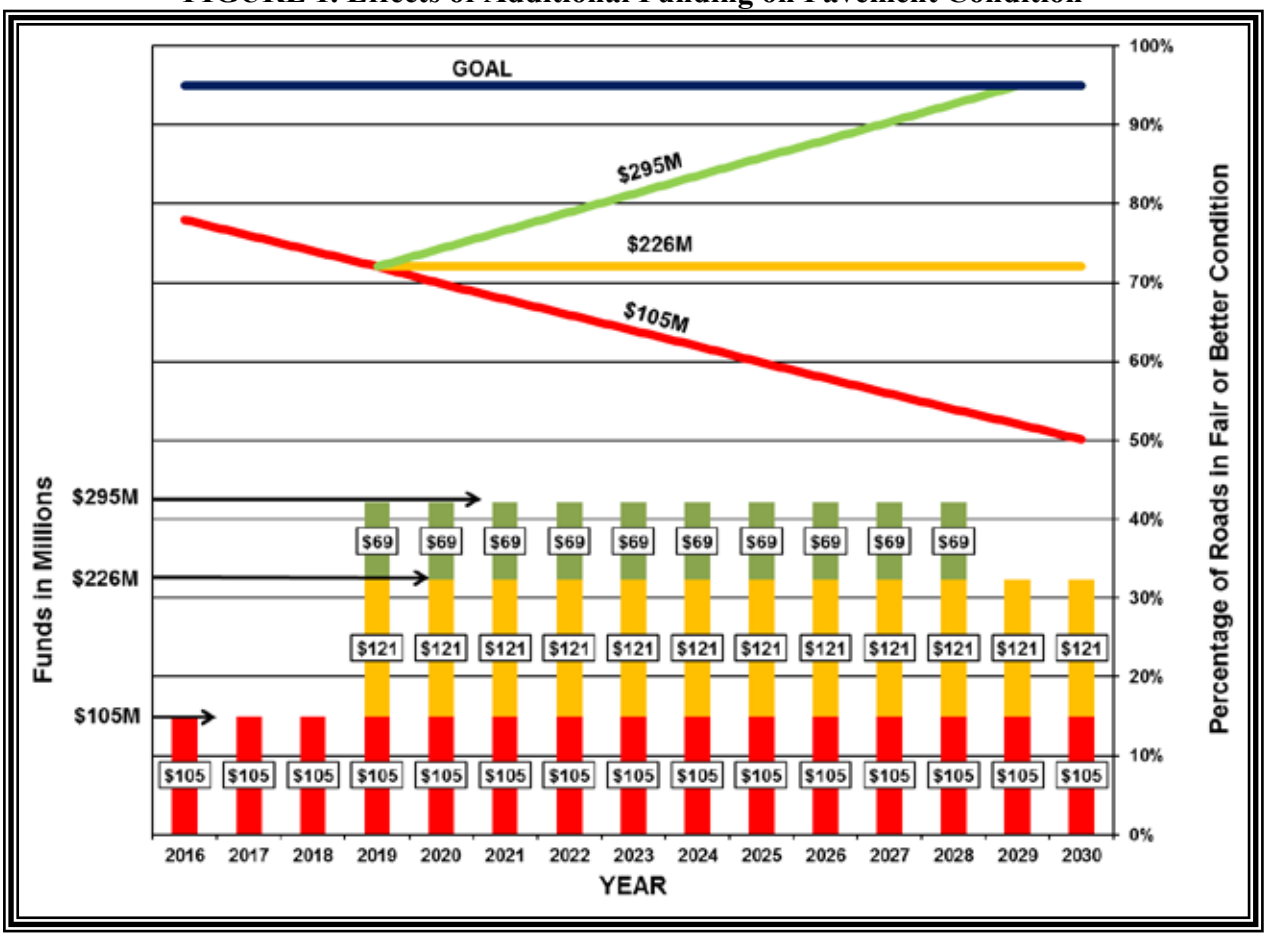
Effects of Future Funding on Backlog and Pavement Condition

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 $105 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 72% of the state-owned roadway network is in fair or better condition. It has been estimated that an additional $121 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 $691 million, divided across ten years, would need to be spent to eliminate the backlog, for a total of $295 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 $121 million and $69 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

The state-maintained roadway network consists of 5,435 centerline miles of roads. So that the network may be more easily managed, it is classified into five separate road prioritization categories. These road 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 similar timing for maintenance and rehabilitation repair 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 Category	[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	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.

NDOT uses a pavement condition rating system called the Present Serviceability Index (PSI) to objectively measure important roadway attributes such as travelers' responses to motion and appearance as demonstrated by a smooth riding surface that is without cracking, rutting, patching, or potholes.

The PSI pavement condition rating system uses a value that is 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. Pavement rated from four to five is interpreted as pavement in new or very good condition with a smooth surface that is without distress or irregularities. Pavement rated less than two is interpreted as pavement in very poor or failed condition with the roughest of surface conditions and no longer navigable at the posted speed limit. The PSI pavement condition rating system is used to quantify the pavement condition for each road 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. PSI Rating System and Corresponding Pavement Condition

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.

Evaluation of Performance Measure

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

Which "strategies for improvement" were successful?
Previous performance measure strategies for improvement such as focusing on high volume roads have resulted in road category 1 meeting the targets for pavement condition. This is important due to the amount of traffic and the cost to rehabilitate those roads. More category 2, 3, 4, and 5 roads will 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.

Which "strategies for improvement" were not successful?

None

What new "strategies for improvement" will be implemented in 2019?

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 – they also 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:

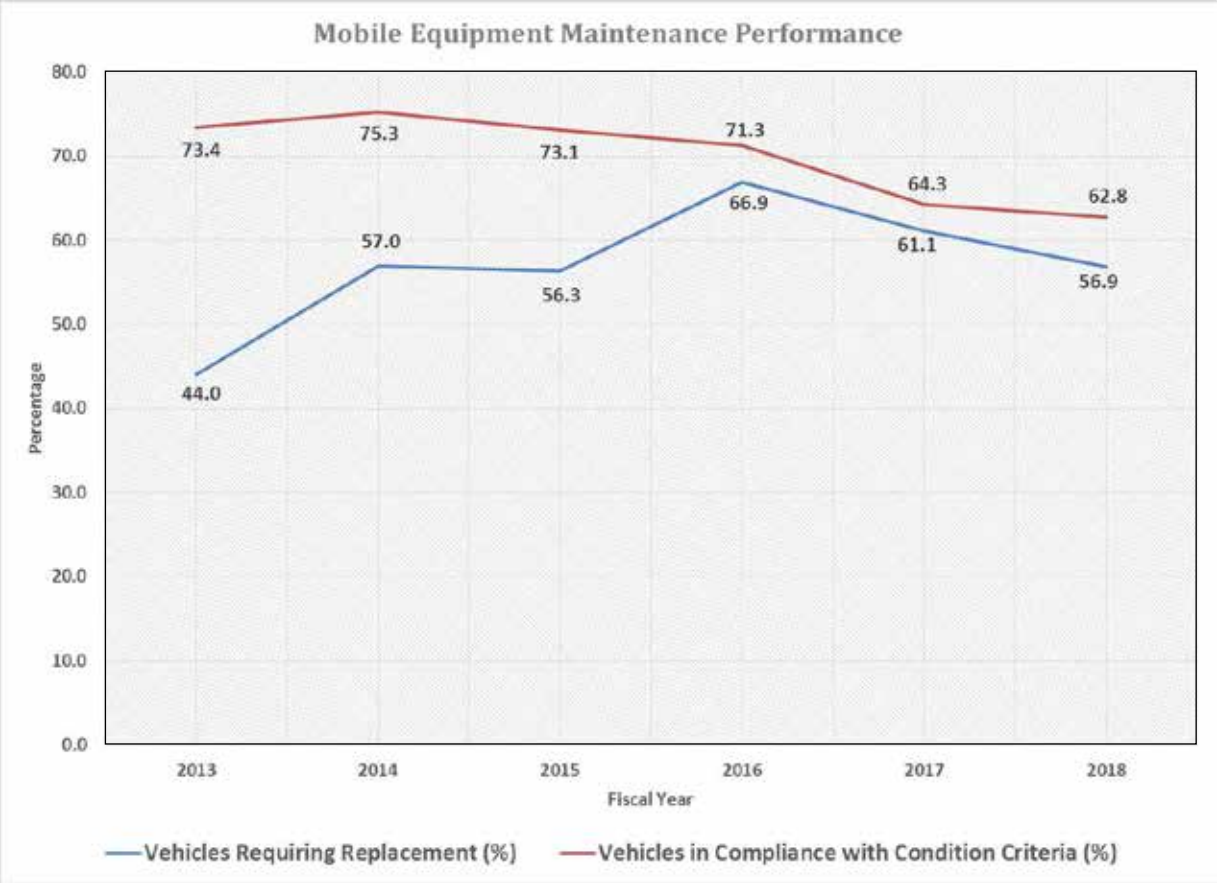
1) Declining rate of 1% per year
2) Increasing rate of 1% per year

Ultimate Target:

1) 10%
2) 95% rate of compliance for mileage/hourly requirements

Measurement and Supporting Data:

	Replacement Criteria Measured Annually	Condition Criteria	Change	
FY 2007	38.65 %	60.30 %		
FY 2008	34.96%	62.55 %	-3.69%	+2.25 %
FY 2009	39.18 %	66.30 %	+.53 %	+3.8%
FY 2010	49.01%	68.84 %	+9.83%	+2.54 %
FY 2011	48.88%	65.42%	-.13%	-3.42%
FY 2012	52.86 %	69.86 %	+3.98%	+4.44 %
FY 2013	44.00 %	73.41 %	-8.86%	+3.55%
FY 2014	56.99%	75.28%	+12.99%	+1.87%
FY 2015	56.29%	73.11%	-.7%	-2.17%
FY 2016	66.91%	71.31%	+10.62%	-1.8%
FY 2017	61.07%	64.26%	-5.84%	-7.05%
FY 2018	56.86%	62.77%	-4.21%	-1.49%



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

EVALUATION OF PERFORMANCE MEASURE

Was the annual target met?

Yes on 1. No on 2.

Which "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

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

1) As of 2013 NDOT has been able to replace Aging and overused vehicles
2) A Predictive Maintenance Program is not financial feasible for NDOT. This type of program would prove to be costly and the fleet does not meet the criteria for such a program

What new "strategies for improvement" will be initiated in FY 2019?

Short range to next reporting:

1) Continue to purchase new replacement vehicles
2) Rebuild specialized equipment
3) Improve the notification process for timely preventive maintenance

Long range:

1) Maintain fleet size through utilization assessments

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 completion of facility assessments, and priority facilities work.

Annual Target: Increase by 2%

Ultimate Target: 100%

Champion:
Chief Maintenance Engineer

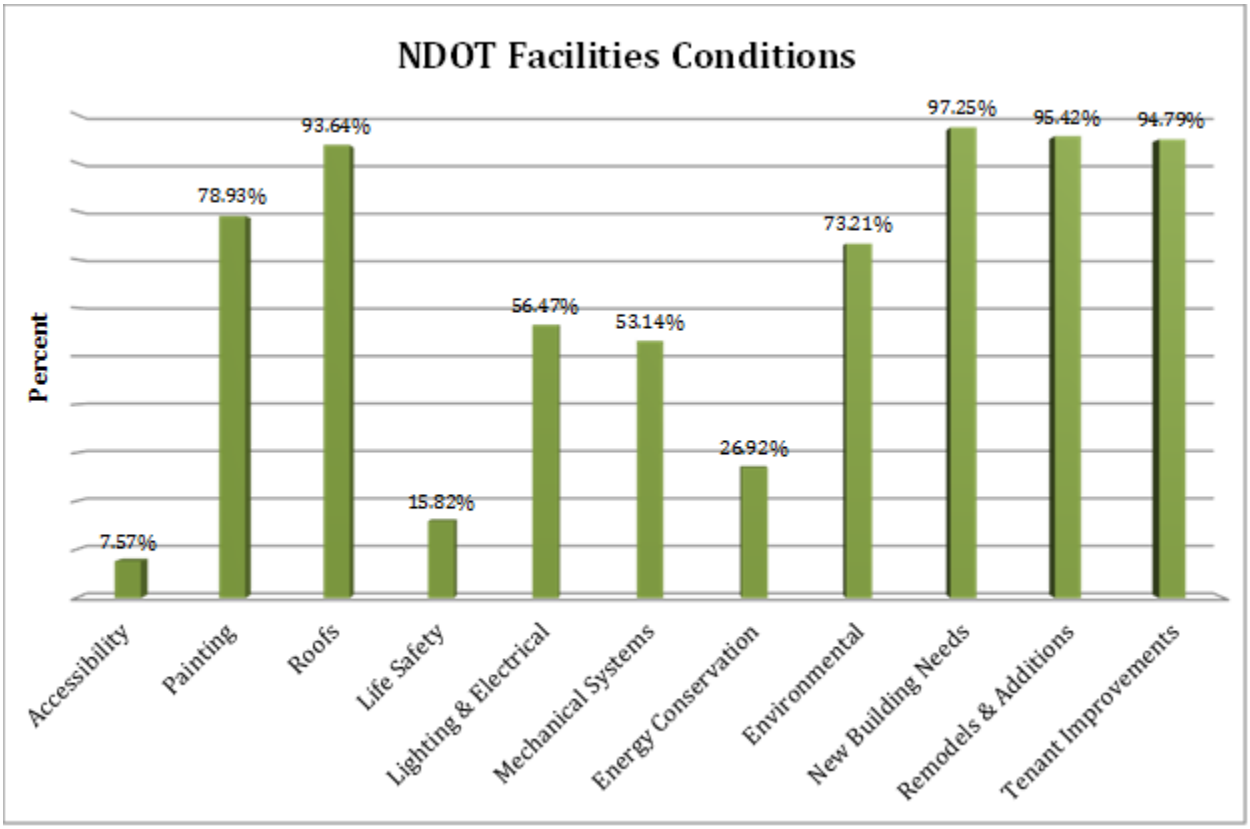
Support Divisions:
Districts, Administrative Services
State Fiscal Year 2018

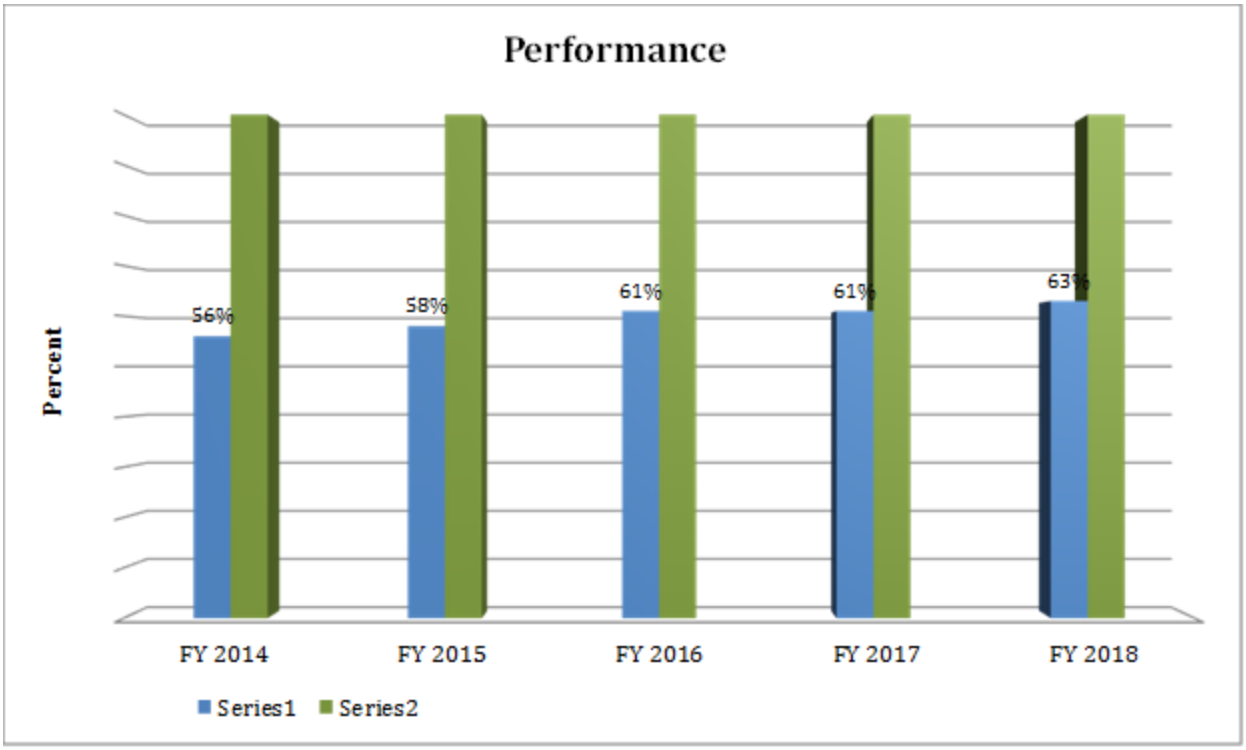
Strategy Plan Support:
Facility Condition Analysis (FCA) reports will ensure NDOT buildings comply with building and safety codes and are safe and properly maintained. Each Department owned and maintained facility will be evaluated on a seven-year cycle. Completion of the priority work items will return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

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 2014	56%
SFY 2015	58%
SFY 2016	61%
SFY 2017	61%
SFY 2018	63%
SFY 2019 (Prediction)	65%


NDOT Facilities Conditions
Percent
7.57%
78.93%
93.64%
15.82%
56.47%
53.14%
26.92%
73.21%
97.25%
95.42%
94.79%
Accessibility
Painting
Roofs
Life Safety
Lighting & Electrical
Mechanical Systems
Energy Conservation
Environmental
New Building Needs
Remodels & Additions
Tenant Improvements


Performance
Percent
56%
58%
61%
61%
63%
FY 2014
FY 2015
FY 2016
FY 2017
FY 2018
Series1
Series2

Strategies for Improvement:

Short range to next reporting:
A budget program will be submitted in addition to stand-alone projects. Anticipated programs to be submitted include statewide roofing, painting, HVAC, and possibly ADA. The statewide inventory of salt/sand canopies will also be increased.

The Architecture section worked throughout the year to collaborate with the Administrative Services section to implement the informal consultant selection procedure as provided for in NRS/NAC 341. The Architecture section will continue to demand that the Department (NDOT) implement the informal consultant selection procedure for smaller consulting contracts. This is critical to the ability of Architecture to deliver responsive designs and inspections, control costs by mobilizing consultants out of the most logical locations, and, increase competitiveness by employing consultants that want to work with NDOT but are not willing to respond to the continual RFQ's that NDOT issues.

During planning and construction, the Architecture section must acquire numerous building, safety, zoning, environmental, and operating permits to construct, occupy and operate capital assets. Many of these permits come from agencies from which NDOT seldom procures permits and it is therefore not equitable to go through the time and effort to create an interlocal agreement. In these cases, the only method available to pay for permits was for the consultant to pay, and to subsequently have NDOT reimburse the consultant at a rate of 115% of the permit cost. This process depletes the available budgetary authority on the consulting contracts to no good purpose. Architecture worked with Financial Management and Accounting divisions to provide a means to pay permit fees without need for an interlocal agreement.

Long range:
The project manager III will continue to develop a true long-range work plan. The project manager II will help to ensure that the staff PM's are working on the long-range plan and are accountable for their workloads. A critical part of the long-range plan is increased staffing for the Architecture section.

Architecture has begun work on creating a statewide roofing program. Roofs around the state are failing rapidly. Investment in the condition of these roofs is critical. The current goal is to have this program ready for funding in the 2019 legislative session. Staff shortages will be a challenge to this program. It is the opinion of the project manager 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 NDOT needs. Presently, the work program is almost entirely reactive, rather than planned. Deferred maintenance needs, Stormwater program needs, electric vehicle service 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 specialized 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. Please refer to the Unsuccessful Strategies section of this report regarding staffing.

The RFQ for the statewide facility condition analysis is complete and negotiations over the proposal are complete. The proposed agreement will be forwarded to the Transportation Board for approval at the soonest available meeting. The FCA is planned to be significantly expanded over the scope of

previous FCA's. The expanded scope will provide a substantial amount of 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 NDOT were to instead add a compliance threshold – perhaps something like 90% compliant as the threshold to be recorded as compliant in the performance measure – then it is believed 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 it 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.

Current and future budget requests from Architecture will include large and costly projects to a much greater extent than requests from the recent past. Office space for staff in Carson City is critically short. Many of the maintenance stations have exceeded their design lives and usefulness to an unsustainable extent. To take on this workload, the staffing request and facilities analysis will be indispensable.

EVALUATION OF PERFORMANCE MEASURE

Was the annual target met?

Yes, the annual target was met in fiscal year 2018. Although the target was met, it is noteworthy that most of the projects on NDOT's work program, though meaningful, 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 a "no" for accessibility compliance. For reference, projects in the lists below which will not effect change to performance measure 10 upon completion are highlighted in bold. Highlighted projects account for the bulk of the current workload.

The following projects have been completed since the previous report:

1. CIR 159, 214 – Exterior improvements to Orovada and Quinn River residences
2. **CIR 277** – Reconfigure Roop Survey Services and Appraisal Review sections
3. **CIR 312A** – Reconfigure 101, 101A, and 102
4. **CIR 337** – Renovate the old Flight Operations office in the East Annex Building for new hires
5. **CIR 309** – Connect an emergency generator to select circuits in the shop
6. **CIR 335** – Fix the day tank on SMS generator
7. **NO CIR** – C-cure class for various district personnel
8. NO CIR – Replace exterior lighting at Southern Nevada Visitors' Center
9. **(CIR 81 ~ ONGOING)** – Elko fuel station replacement completed
10. **NO CIR** – Phase II of damaged Sprung repairs at Kingsbury and Comanche

The following projects were completed in quarter one through quarter three:

1. **(CIR 81 ~ ONGOING)** – Replacement of fuel stations at Alamo, Mina, Virginia City, and Winnemucca
2. CIR 159 – Exterior envelope improvements to the residences at Orovada maintenance station
3. **CIR 174** – Remodel Carson City asphalt lab
4. **CIR 195B** – Installation of A/V wall in room 109 (new training room) at Hot Springs
5. CIR 203 – Installation of salt/sand Sprung structure at Alamo maintenance station

6. **CIR 232** – Installation of electric vehicle service station at Veterans' Memorial Park in Hawthorne
7. **CIR 258** – Reconfigure Lou Holland's work station
8. **CIR 276** – Installation of drain vault at Carson Headquarters near basement stockroom
9. CIR 278 – Reconfigure Traffic Information in East Annex Building
10. **CIR 282** – Replace all locks on NMS campus
11. CIR 294 – Upgrade electrical service at C920 field lab
12. **CIR 295** – Repair vehicle impact damage to well shack at Amargosa Valley rest area
13. **CIR 296** – Furniture reconfiguration in Carson Headquarters Room 113
14. **CIR 311** – Replace chiller at Las Vegas materials lab
15. **CIR 313** – Furniture for various Equipment Division offices
16. **CIR 328** – Reconfiguration in Hot Springs Maintenance and Asset Management division
17. NO CIR – Installation of trench drain at truck bays to prevent flooding in Hot Springs warehouse
18. **NO CIR** – Lighting for Sunnyside rest area
19. **NO CIR** – Draft CIR for long-range plan at Hot Springs
20. NO CIR – Complete Mt. Charleston electrical upgrade
21. **NO CIR** – Lighting upgrade at Schellbourne rest area

The following is the current Architecture workload:

1. District I
   a. CIR 57, 65, 191, 215 – Las Vegas north maintenance station site rehabilitation and new vehicle wash
   b. CIR 69 – Tonopah maintenance station 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 204** – Install salt/sand canopy at Panaca
   f. CIR 310 – Mountain Springs residence re-siding
   g. CIR 317 – Boiler replacement in Tonopah equipment shop
   h. CIR 343 – Exterior lighting at Mesquite Visitors' Center and Southern Nevada Visitors' Center
   i. CIR 345 – Carpet for the FAST building
   j. **NO CIR** – Request for qualifications for feasibility study to relocate Las Vegas north maintenance station to Shaumber Road in northwest Las Vegas

2. District II
   a. CIR 9, 303 – Virginia City maintenance station site rehabilitation
   b. **CIR 82A** – Complete water and sewer services to Logging Road crew room
   c. **CIR 86** – Wellington salt/sand structure and retaining walls
   d. **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
   e. CIR 187B, 187C, 193 – Fire alarm, elevator, and HVAC for Galletti administrative building
   f. **CIR 205** – C-cure sliding gate at Fallon north entrance
   g. **CIR 210** – Move Fallon Harrigan safety/training manufactured building
   h. **CIR 320** – Repairs to and lifecycle replacement of the Gazex avalanche control system
   i. **CIR 327** – Silver Springs maintenance station water rights

3. District III
   a. CIR 133, 140 – 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

4. Carson Headquarters
   a. **CIR 26 –** Reconfigure Design Division fourth floor area
   b. **CIR 186 –** Replace elevators in main administrative building
   c. **CIR 195** – Backup power for training room so it can be used as an alternate EOC (restroom scope is complete)
   d. **CIR 288** – Reconfigure Location office at NMS
   e. **CIR 289 –** Active scrum study for IT
   f. CIR 304 – Re-roof main administrative building
   g. **CIR 318 & 326** – Reconfigure Stormwater & Multimodal divisions
   h. **CIR 323** – Fix makeup air handler at materials lab paint testing area
   i. **CIR 333** – Replace sinks, faucet, eyewash, and plumbing in sections of materials lab at the Carson City complex
   j. **CIR 338** – Add private office to trailer Q1 at NMS
   k. CIR 339 – Fix wet cure room in Materials lab at NMS
   l. **CIR 340** – Install video wall at Hot Springs main training room
   m. **CIR 347** – Reconfigure three work stations at Charleston lease space for Risk Management
   n. CIR 351 – Fix under-sized HVAC system serving the radio room and computer training room 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 243** – New Hidden Springs electric vehicle service station in Tonopah near US 6 / US 95 junction
   b. **CIR 332** – Electric vehicle service equipment at Carson Headquarters

7. Statewide programs
   a. **CIR 81** – Statewide fuel replacement
   b. **CIR 298** – Sprung repair on-call contractor agreement
   c. CIR 306 – Replace various boilers statewide
   d. **CIR 322** – Multi-site security audit
   e. **CIR 349** – Design task order for sander racks at locations to be determined
   f. **C-cure** as occurs
   g. Statewide painting
   h. **New on-call consultant contracts** for civil, architectural, structural, electrical, mechanical, and utility locating
   i. Statewide facility condition analysis (RFQ phase is complete)
   j. **Design task order** for stockpile canopies at locations to be determined
   k. Statewide roofing program

Which '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 project managers more as a team, rather than a collection of

individuals. The work program has also been successful in holding project managers accountable for the projects on which they are expected to be working.

Collaboration with Financial Management and Accounting to craft a way to pay permit fees without need for an interlocal agreement was successful near the end of the fiscal year.

Which 'Strategies for Improvement' were not successful?
A staffing request was submitted to the Director's office during the year. This request included the creation of a dedicated design squad, a building inspector, additional project management personnel, and reorganization of Buildings and Grounds under the Architecture section. This would have allowed Architecture to increase its workload and responsiveness to those making capital requests and maintenance requests. The request was rejected outright during quarter four. This was the second time an Architecture staffing request has been rejected.

The staffing level of Architecture continues to restrict the amount of work that can be performed. As of today, there are 183 open capital requests in the log with an estimated total value of approximately $195 million. As noted in the long-range strategies, the number of projects, and especially the project valuations, are expected to substantially increase beginning with the 2019 legislature and indefinitely thereafter. Increasing the number of Architecture staff and assigning Buildings and Grounds staff to Architecture (as proposed in the most recent staffing request) would have been critical for Architecture to be responsive to NDOT's needs and to tackle the large projects that NDOT has deferred for many years.

Attempted collaboration with Administrative Services to implement the informal consultant selection process (see short-range strategies above) has been unsuccessful. The current method of requiring an RFQ for all consultant work causes Architecture to lose outside committee members due to burnout, dramatically increases consultant costs for no good purpose, limits competitiveness among consulting firms, and significantly slows project delivery. If the informal selection process is not implemented soon, A&E design production from Architecture will all but cease by the end of fiscal year 2019.

What new "strategies for improvement" will be initiated in FY 2019?
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" section 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:
Percentage of emergency plans that have completed, and, 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 within a four-year period. 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 first
- 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 2017 – June 2018
As mentioned in the quarterly reports, northern Nevada experienced significant flooding during January and February of 2017. NDOT Emergency Operations staff worked very closely with federal, state and local agencies to deal with the after effects of these flooding events. Reimbursement submittal packages were sent to FHWA and FEMA last year. The total for eligible damages was about $18 million combined between FHWA and FEMA. These submittals were approved by FHWA and FEMA. NDOT will receive the money over the coming months and possibly several years. FHWA has already sent NDOT $12 million, with another $3 million outstanding. This section is continuing to work with the Nevada Division of Emergency Management and FEMA on submitting quarterly progress reports that are required for this reimbursement money. This section is also working very closely with NDOT Accounting and Financial Management to ensure that these funds are properly allocated. Post-disaster recovery can last for years, so this section will continue to maintain detailed notes and documentation relating to the flooding events of 2017, as FHWA and FEMA will audit NDOT later to ensure that NDOT has complied with all federal regulations relating to the reimbursement submittals.

In July 2017, NDOT was contacted by a FEMA representative concerning Washoe County and possible road damages from the floods of January 2017. The FEMA representative stated that Washoe County claimed to have damages to their infrastructure. NDOT contacted FHWA immediately regarding this claim. It was decided that Washoe County had missed the submittal window. All Local Public Agencies (LPAs) were notified back in January and February of 2017, that if they had damages, they were to

notify NDOT immediately if they believed their roadways were federal aid roads. Washoe County did not contact NDOT or FHWA at that time. They decided to reach out to NDOT in July 2017, well beyond the submittal window period. After discussing with FHWA, it was decided that Washoe County would be allowed to submit proof that they did sustain damages. NDOT also conducted a field review of their damages. After the field review, FHWA and NDOT agreed that most of the damages NDOT was claiming were not significant enough and does not meet FHWA's threshold requirements. FHWA and NDOT repeatedly told the Washoe County engineering director that they must submit proof of damages through photos, reports, and documentation, proving that the damages were related to the January and February 2017 flood events. After months of sending emails and making phone calls to Washoe County with no response back, FHWA decided that since Washoe County could not prove their damages and did not meet FHWA requirements for submittal, FHWA would not accept their submittal.

Storey County sustained damages during the floods of 2017 and NDOT worked with the County from January 2017 to June 2017 to ensure that they provided all the necessary documentation proving their damages met FHWA submittal threshold guidelines. After reviewing and conducting a field review of the damages, FHWA approved their claim for reimbursement. NDOT sent an email to the NDOT LPA administrator in late June 2017 authorizing her to begin working with Storey County on design, advertisement, etc., and requiring her to follow all federal guidelines for this project for the permanent work. Apparently, the LPA administrator never followed through with Storey County and retired in October 2017. The NDOT representative dealing with this was out on medical leave from October 2017 through February 2018. Upon return, this person contacted Storey County and NDOT LPA regarding progress on this and they both said that nothing had been started on this project. FHWA ER manual guidelines state that all permanent repair work must begin within a reasonable period. NDOT informed FHWA of this in early March 2018 and they stated that the fact that they had not begun any of the work in over one year was not acceptable. In June 2018, FHWA sent out a meeting invite to Storey County and NDOT LPA requiring them to explain why this work had not begun. At the meeting, the Storey County Public Works director and the Storey County public information officer were upset at FHWA, stating that they were a small county and understaffed. FHWA told them that regardless, this project should have been moved forward by this point. At the end of the meeting, Storey County stated that they would provide FHWA with the needed information they requested, as well as a reasonable project schedule and timeline. At the end of June 2018, an email was forwarded to NDOT from Storey County in which they stated that they were no longer interested in pursuing permanent repair funds for their damages from the flooding of January 2017. However, they did request to see if they could still be reimbursed for the emergency repair funds. The request was submitted to FHWA and a decision has not been made yet.

In mid-September 2017, FEMA approved the costs associated with the culvert placements for US50 and US95 near the Lahontan Dam from the spring 2017 snow melt runoff. This was a monumental undertaking by NDOT in submitting this to FEMA, as they originally denied the request. It was sent to their attorneys in Washington D.C. NDOT originally tried to submit this through the FHWA, however; it is stated in the FHWA ER manual that costs can only be reimbursed if damages did in fact occur. This situation was unique as NDOT was acting proactively by placing these culverts in anticipation of the massive amount of snow melt runoff coming from the Sierra Nevada mountains. The submitted costs to FEMA were about $2 million.

On October 1, 2017, the City of Las Vegas experienced a multi-casualty shooting incident. It was the largest in America's history. NDOT Emergency Operations staff participated in the response efforts. NDOT was requested, by the Nevada Division of Emergency Management, to assist by coordinating the placement of portable DMS near a family assistance center. The family assistance center provided counseling services to persons who were impacted by this incident.

After a series of thefts occurred at the District II Reno yard last year, it was decided that a Request for Proposal (RFP) be developed for a security analysis audit of the Reno, Elko, Las Vegas, Ely, Winnemucca and Tonopah district yards. This audit highlighted areas for improving physical security, along with a strategy for implementation. This section worked with the Maintenance & Asset Management Division to finalize the RFP for advertisement. There was a delay relating to the advertisement of this RFP due to an NDOT Administrative Services request that, as part of the RFP, detailed image maps highlighting the boundaries of the district yards, along with labels indicating specific buildings on the locations, be included. That request was completed and submitted to NDOT Administrative Services. This RFP should go out for advertisement probably around August 2019.

In late October 2017, Chris Joncas departed on an unexpected medical leave and did not return until March 1, 2018. Chris' absence during the second and third quarters did set this section back. However, Rob Palmer filled in while Joncas was away and did a very good job maintaining mandatory deadlines. An engineering tech III also left this section on March 1 for a job in the private sector. Kendall Reid was hired to fill that vacancy and began with this section on June 18th. In early May 2018, Rob Palmer announced he would be retiring in August 2018. An overlap position was requested for the position and of this report, the position was announced, and interviews were scheduled for July 12th. The plan is to have that new person begin at the end of July and work with Palmer on familiarizing the new person to this section's duties. On July 24th, Joncas will be departing again on a medical leave and will be returning at the end of August.

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

July 11 - Chris Joncas and Anita Bush attended the Road Weather CMF workshop, put on by FHWA.

July 25– Chris Joncas, Rob Palmer and Kiana Eldredge attended Fusion Center Training relating to terrorism liaison requirements for the Nevada Threat Analysis Center (NTAC).

August 24 – Kiana Eldredge attended active shooter training.

September 11 – Chris Joncas, Rob Palmer and Kiana Eldredge attended the National Weather Service coordination conference regarding NWS and District II Road Operations for winter 2018 preparation.

October 31 - November 1- Kiana Eldredge attended a FEMA MGT 310 Jurisdictional Threat & Hazard Identification & Risk Assessment course.

November 2 - Rob Palmer and Kiana Eldredge attended a FEMA MGT-414 Advanced Critical Infrastructure Protection course.

November 6, 13, 20 - Rob Palmer and Kiana Eldredge attended and completed the "Seven Habits of Highly Effective People" signature program.

November 8 - Kiana Eldredge attended a G-191 ICS EOC Interface course at the Nevada Division of Emergency Management.

December 5 - Kiana Eldredge completed a FEMA IS 120a online course.

January 23 – Rob Palmer and Kiana Eldredge conducted an after-action meeting for NDOT staff regarding the October 1, 2017 Las Vegas shooting incident, which took place at the NDOT District I Maintenance offices.

February - 7, 8 and 9 - Rob Palmer attended a Nevada Preparedness Summit in Pahrump. This summit focused on emergency management events of 2017.

April 25 - Chris Joncas & Rob Palmer attended a Web-EOC training at the State Emergency Operations Center.

April 26 - Chris Joncas attended a National Counterterrorism Center meeting/seminar at the Nevada Division of Emergency Management.

June 20 – Chris Joncas and Kendall Reid attended a Las Vegas in Crisis presentation, regarding the October 1, 2017 mass casualty shooting.

Exercises:
During this quarter, the following exercises were provided or attended by NDOT personnel:

August 31 - Chris Joncas and Kiana Eldredge attended a continuity of operations training exercise at NDEM.

October 28 - Rob Palmer and Kiana Eldredge participated in a training and exercise planning workshop hosted by NDEM. The purpose of the workshop was to assist NDEM to plan exercises for 2018.

December 6 - Rob Palmer, Kiana Eldredge and Bill Walter participated in an NDEM full scale exercise continuity of operations exercise for a simulated earthquake in Elko, Nevada. NDEM was testing their ability to move to and operate out of their designated alternate emergency operations center. Kiana and Bill manned the ESF-1 position and Rob participated as an exercise evaluator.

February 13 - Rob Palmer attended a "CHEMPACK" midterm planning conference in Minden.

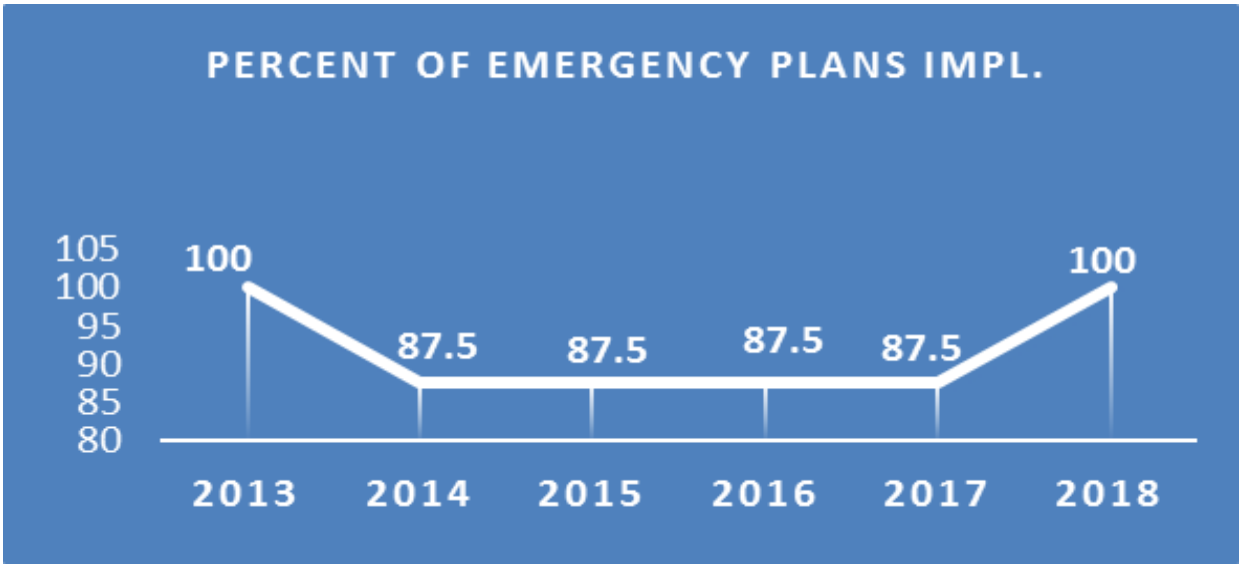
March 27 – Mylinh Lidder attended a drill for the Arizona National Mass Care Exercise, in preparation for a May 22nd large scale exercise.

April 10 - Chris Joncas, Rob Palmer and Jason Crosby attended a mass evacuation drill at the State Emergency Operations Center.

May 22 - Chris Joncas, Rob Palmer and Jason Crosby attended a national mass care exercise at the State Emergency Operations Center.

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

Staff began making updates for essential functions and contact information for the Continuity of Operations Plan (COOP).



Strategies for Improvement:
Short range:
- Complete the NDOT security plan update

Long range:
Once the security plan update is complete it will need to be exercised. NDOT Emergency Management will then work with the districts on scheduling a series of Table Top Exercises (TTXs).

Were the targets met?
Yes

Which "strategies for improvement" were successful?
Conducting exercises successfully tests and provides training for NDOT personnel on disaster/security response activities. It also provides valuable feedback needed to update plans and procedures. Regular exercises will remain a fundamental part of our strategy. Training is also being supplied to the districts at an accelerated pace, based on their requests and feedback received from the exercises.

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

Which "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 2019?
Short range:
- The strategies implemented to date have been successful in achieving the performance measures. NDOT Emergency Management will continue to update and refine, as determined to be necessary, the NDOT emergency operations plan and NDOT security plan.

Long range strategy:
- Complete the security plan for approval and distribution. Award an RFP to a consultant for a security analysis audit for the Reno, Elko, Las Vegas, Tonopah, Ely and Winnemucca

yards. Once awarded, the consultant will have six months to develop a report for implementation of the practical security recommendations.

- Exercise, test, and update plans as required by this performance measure.

Does this performance measure effectively measure what is desired?
Yes

Is there a better performance measure that should be considered?
No, based on years of performing this function and the experience, NDOT feels that what is currently being measured 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 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.

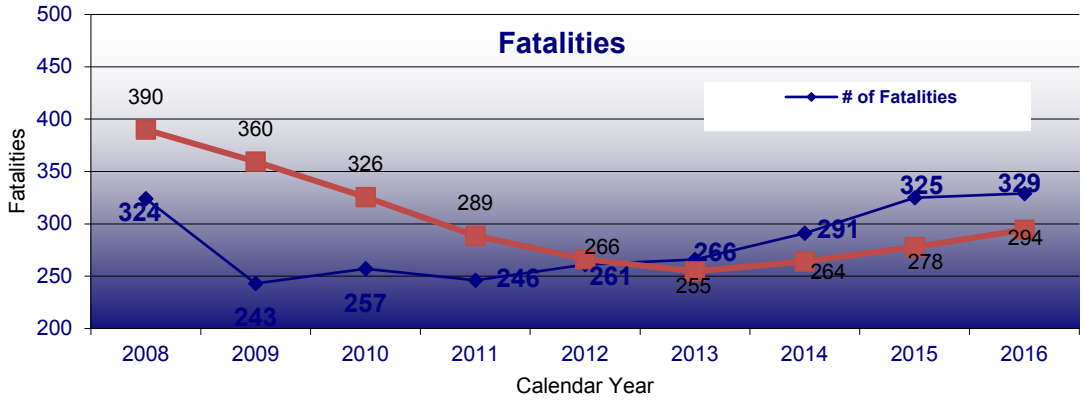
Will meeting the next yearly target have a fiscal impact? If so, explain.
No fiscal impact is anticipated.

12. REDUCE FATAL & SERIOUS INJURY CRASHES

Performance Measures:
Number of fatalities, fatality rate, number of serious injuries, serious injury rate, and the number of non-motorized fatalities and serious injuries on Nevada's streets and highways.

Annual Target: The methodology of how we calculate our targets has changed to reflect the current upward trend on most of the performance measures. For each performance measure the current trend for the last four or five years of data was reviewed, and the more statistically significant trend was used to project forward to the end of 2017. Realizing that before we can start reducing the number of annual fatalities that number will hit an upward plateau, we have set the 2017 target to be one less than the projected number for the five-year moving average in 2017. After this target is reached the downward trend will continue towards the 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 seen an increase in fatalities on the state roadways since 2012. These yearly increases have impacted the five-year rolling average as well.



Measurement and Supporting Data:
These measurements are in line with the FHWA and the 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 was a new performance measure introduced in 2017 and target was not set.

Strategies for Improvement
Short range to next reporting:

- The 2016-2020 SHSP was approved by the NECTS and we are operating under the new document
- Because of funding loss due to the FAST Act, the Zero Fatalities campaign (the Fifth E of Safety; Everyone) sponsored by NDOT in cooperation with the Office of Traffic Safety will be limited by the available funds. This will set the Zero Fatalities program backwards as momentum, public awareness and acceptance will be hampered. (www.zerofatalitiesnv.com, Media, and Grassroots Marketing)
- The next Safety Summit will take place in Las Vegas from October 16 to 18, 2018
- Continue the Road Safety Assessment (RSA) program by completing the mitigations database and tracking tools associated with the RSA program. We are also 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 at intersections and along corridors
  - Expand the systemic safety program beyond centerline rumble strips
    - Flashing Yellow Arrows, median cable barrier rail projects, shoulder widening and slope flattening, truck climbing and passing lanes, turn pockets on state routes with posted speeds over 55MPH
  - Develop Safety Management Plans which are corridor safety studies that focus on the safety of all users. It incorporates access management techniques, public and stakeholder input, crash analysis, roadways engineering, as well as the applications of the Highway Safety Manual (HSM) methods to reduce crashes
  - Implement geometric intersection improvements
    - Roundabouts, compact roundabouts, redesign of sweeping free right-hand turn lanes.
- Continue cooperation and coordination with the Office of Traffic Safety in their efforts with public education programs, and the "Joining Forces" campaign with Law Enforcement to increase safety awareness of the public
- Continue the Safety Capacity Building initiative to grow the safety discipline throughout Nevada by (a) developing stronger ties to the state's universities, and (b) Publicizing and encouraging the use of the Highway Safety Manual by transportation safety professionals throughout the state
- Implement more pedestrian enhancement projects with the additional $10,000,000 of state funds
- NDOT Traffic Safety Engineering continues to implement the states Railway-Highway Crossing program by:
  - Identifying existing asphalt, timber, and dirt crossing surfaces and prioritizing a list of projects
  - Identifying existing passive crossings for potential improvements to active crossings.
  - Analyzing the newly developed hazard index
  - Continuing to work with Cities, Counties, Railroad Companies, State and Federal Agencies to ensure all crossings have the correct signage and markings

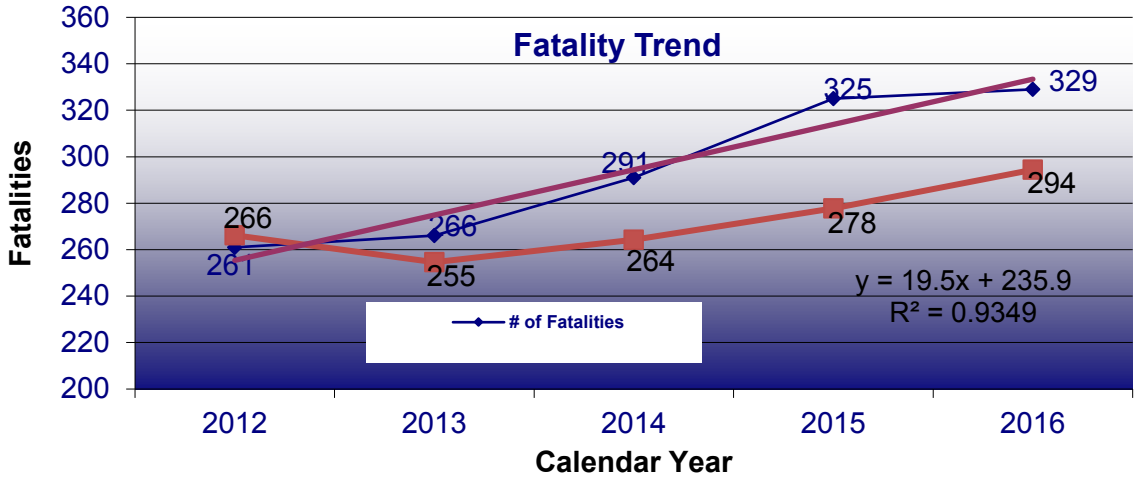
Long range:

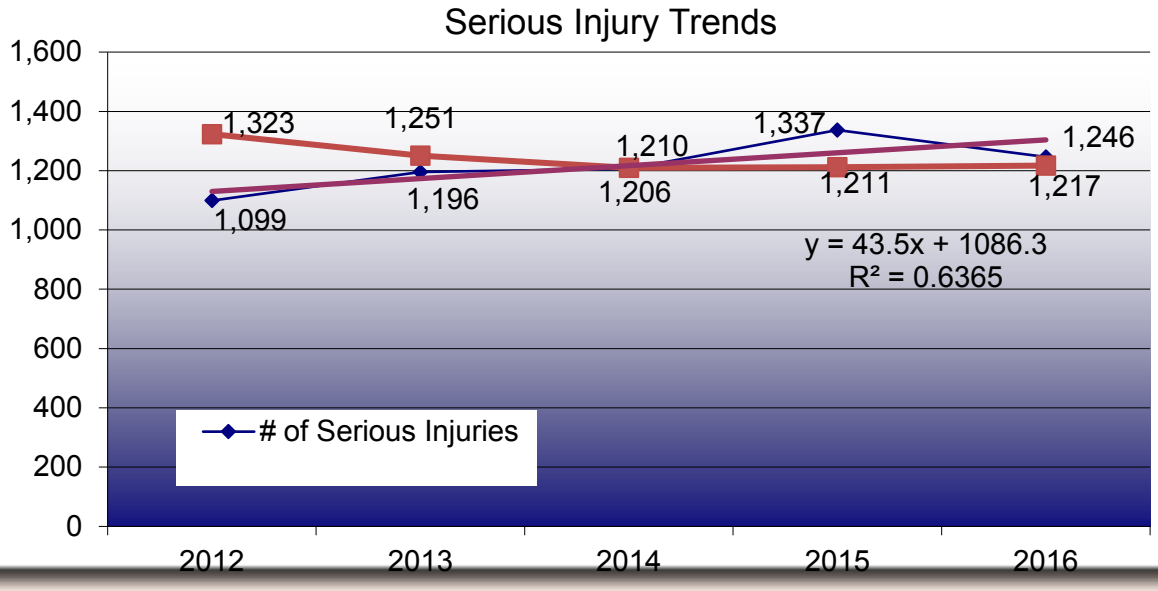
- Introduce new safety mitigations to Nevada for assessment and adoption into policy
- Participate in the development and expansion of the Traffic Incident Management program to efficiently manage traffic crashes
- Bring safety into the planning process as a quantitative measure.
- Keep Nevada at the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

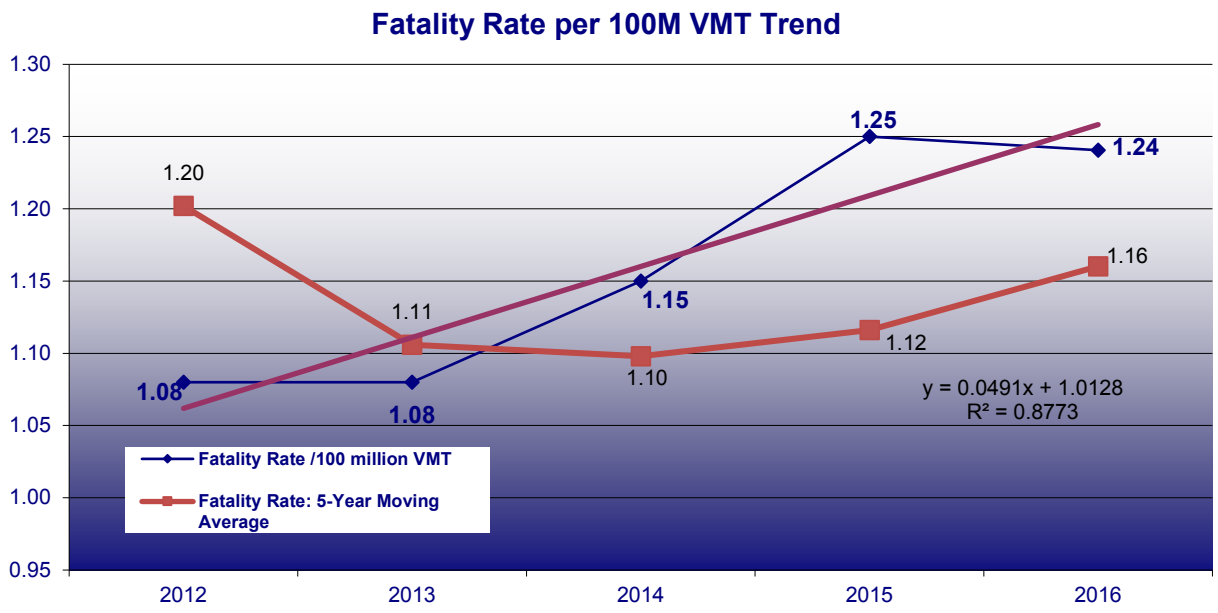
Was the annual target met?

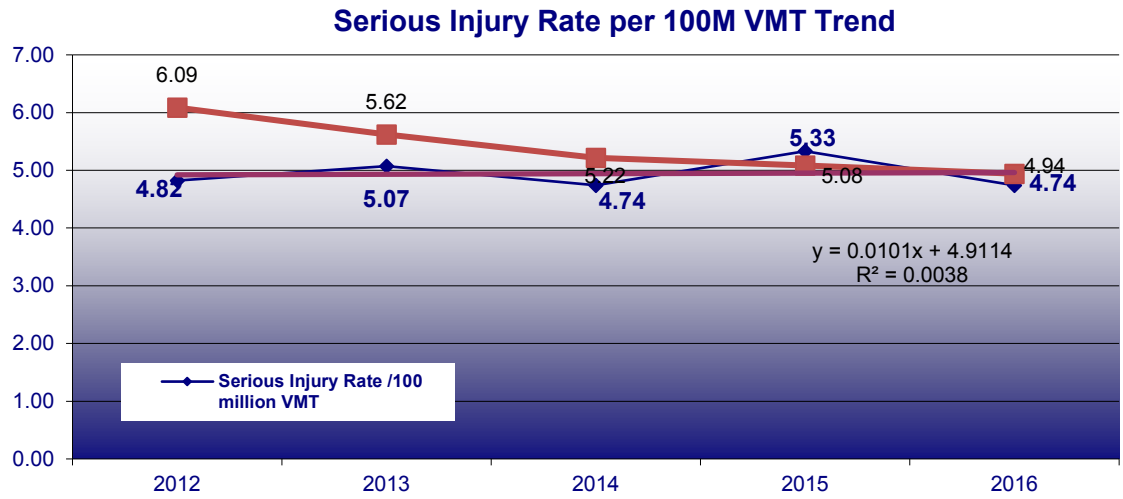
Measures 2 & 3 met their targets, while measures 1 & 4 did not meet target. A target was not set for measure 5 in 2017.

NDOT Safety Engineering Division in coordination with the Office of Traffic Safety of the Nevada Department of Public Safety adopted a new methodology for setting targets and calculating the metrics for safety performance measures. The target for the five-year rolling period ending 2017 was set based on projection using trend analyses from baseline data.









Which "strategies for improvement" were successful?

NDOT has been targeting run-off-the-road crashes and found success in coordinating safety improvements with NDOT roadway projects by, (a) incorporating median cable barrier installation into NDOT projects under design, (b) identifying safety improvements in the planning process through NDOT's Road Safety Assessment program, (c) identifying slope flattening locations for future projects, and (d) 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 also underway in northern Nevada. Safety messages are now coordinated statewide through the SHSP Communications Liaison Safety partners. The state has a "messaging calendar" so each partner is speaking about the same issues at the same time thereby amplifying the message.

Which "strategies for improvement" were not successful and why?
It is difficult to determine the reason for the increase in fatalities and which strategies are not working. There has been a shift in the types of crashes with increase in pedestrian and motorcycle fatalities, and a decrease in other types of crashes such as lane departures. Certain mitigation strategies that have been implemented to address those crashes appear to be effective, while others like the primary seatbelt law was not approved by the legislature and therefore cannot be implemented as identified in the SHSP. However, the primary seat belt law will be re-introduced in the legislature in 2019.

Automated Enforcement is one strategy that needs to be in the tool box but has not yet been introduced at the legislature because there are no willing champions to bring it up. Also, staffing resources at the agency is a challenge as it makes it difficult to quickly, comprehensively, and effectively implement strategies.

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 with our safety program, and, can be directly influenced by NDOT should be considered such as measuring only crashes on 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 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.

Calendar Year 2018 Targets
Performance measure 1 (# of fatalities) – **333**
Performance measure 2 (# of serious injuries) – **1,183**
Performance measure 3 (Fatality rate) – **1.25**
Performance measure 4 (Serious injury rate) – **4.89**
Performance measure 5 (# of non-motorized fatalities and serious injuries) - **300**

*Achievement of these targets will be reported in the 2019 Performance Management Report.

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: 80% **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, 57 projects were planned/scheduled for delivery, which 42 were delivered.
Over the course of the reporting period a total of 56 (planned & not planned) projects were delivered.

- 42 were planned for delivery at the beginning of the reporting period
- 14 were not planned
  - 14 were delivered early due to changes in program priorities and additional federal funding

Project Estimate Data:

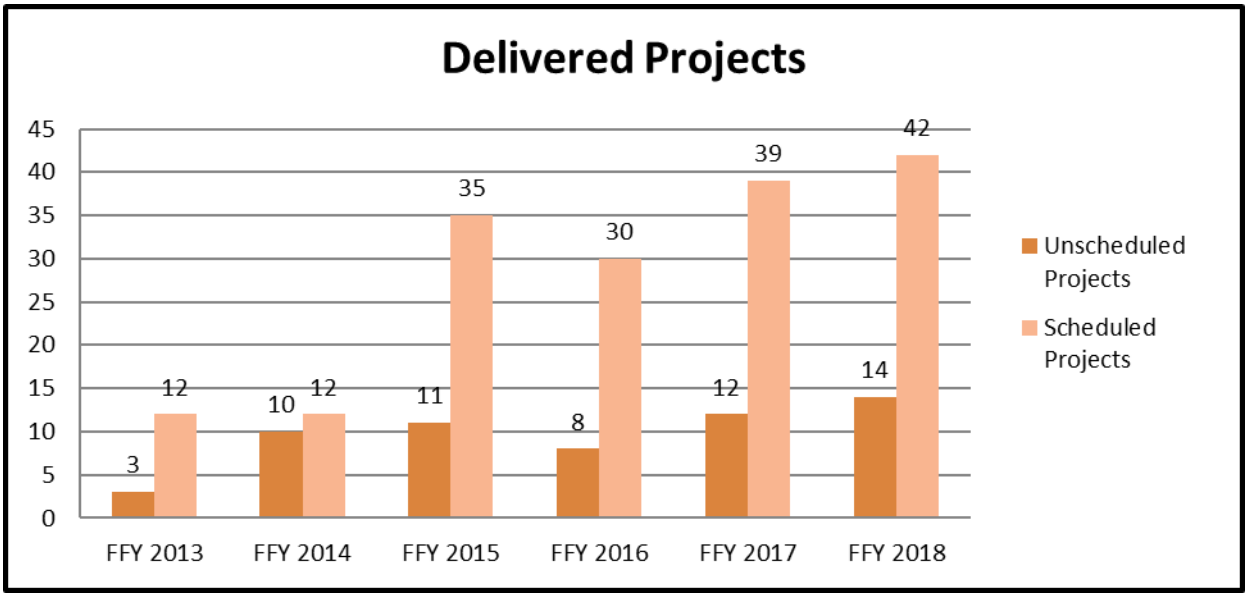
Over the course of the reporting period, 37 projects out of the 42* planned projects delivered were measured for performance within the established construction cost estimate range between the October estimate and the award costs, of which:

- 15 project award costs were within the +/- 15% range
- 22 project award costs were **not** within the +/- 15% range
- 5 project award cost had not been determined at time of reporting

*The 14 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, 51 projects out of the 56 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:

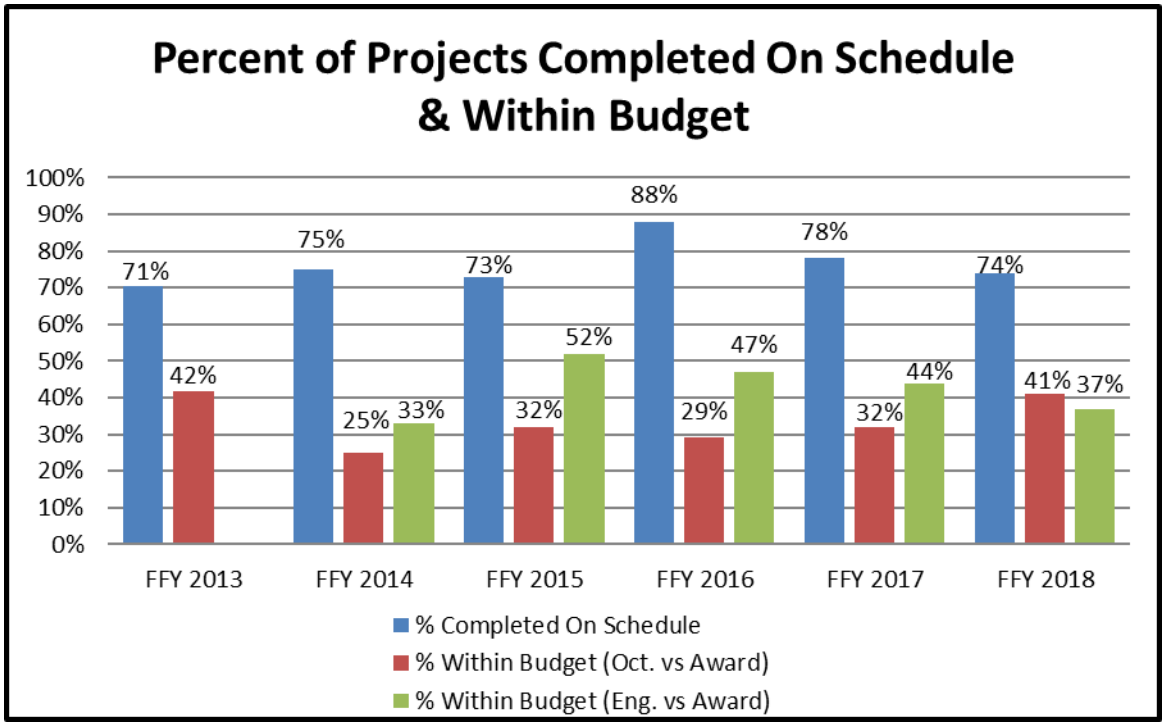
- 19 project award costs were within the +/- 10% range
- 32 project award costs were **not** within the +/- 10% range
- 5 projects were not measured:
    - 5 project award costs had not been determined at time of reporting



Measurement and Supporting Data:
The established list of scheduled projects included 57 projects. Of the 57 projects, 42 (74%) scheduled/planned projects were advertised within the reporting year.

Of the 42 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, 15 (41%) of the project's award costs fell within +/- 15% of the October cost estimate.

Out of the 56 projects delivered during reporting year, 51 have been awarded or had an apparent low bid at the time of reporting. Of the 51 projects, 19 (37%) 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 80% of scheduled projects was not met this year with a performance of 74%.

The awarded construction cost estimate target of 80% of delivered projects within +/- 15% of the October cost estimate was not met this year with a performance of 41%.

The awarded construction cost estimate target of 80% of delivered projects within +/- 10% of the engineer's estimate at bid was not met this year with a performance of 37%.

The projects that failed delivery 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) 2017 we successfully met our increased annual delivery target of 75% and increased the target to 80% to align with our ultimate target. Since we did not reach our target this year, we must look at new strategies to increase our percentage of planned projects delivered within the federal fiscal year and to successfully meet our goal of 80%.

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 at this time 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.

For a more even comparison between the October baseline and awarded estimate, last year we implemented a new tracking process where we report on the intermediate design submittal cost estimate for the October baseline projects rather than report on the project's estimate varying at design stages. This allows the department to make a more even comparison for cost estimates and further allows us to identify early cost estimating issues. This upcoming FFY 2019 will continue with this new tracking process to further help us reach our target 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 were 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 #/Award Date	Description of Work/Comments
2009	Yes/1	H-788	CL	3366BD	Replacement of Wm Springs Br. (FO)
2010	No	-	-	-	-
2011	No	-	-	-	3476 bid rejected
2012	Yes/4	G-884 E/W G-885 E/W	EU	3525	Rehab & Seismic retrofit
2013	Yes /2	B-1066 E/W	EL	3540	Carlin Retrofit- remove from FO list.
2014	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	No	-	-	-	-
2018	Yes/1	B-474	DO	3707-2/12/18	Replace SD bridge on SR757
	Yes/1	B-1392E	PE	3725-7/11/18	Replace SD bridge on I-80
	Expect Yes/1	I-1899	CL	Adv. 9/18	Replace SD bridge on SR582
	Expect Yes/1	B-425	MI	3735-Adv. 7/11/18	Replace SD bridge on SR361
	Expect Yes/1	B-639	EL	Adv. 12/18	Replace SD bridge on SR226
	Expect Yes/1	B-242	CH	3738-Adv. 8/15/18	Replace SD bridge on Maine St, Fallon
2019	Expect Yes/2	B-28	PE	-	Replace SD bridge on SR396
		B-478	EU	-	Replace SD bridge on SR278

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

Year	# of Bridges	Owner	Structure #'s	County	Contract #/Award Date	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

Year	# of Bridges	Owner	Structure #'s	County	Contract #/Award Date	Description of Work/Comments
						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	1	HU	B-1658	HU	3713-3/30/18	Replace 1 SD bridge
2019	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	LY	B-1615	LY	-	Replace 1 SD bridge

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

	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 of putting safety first and efficiently operating and maintaining the transportation system in Nevada. These goals can be met in the following ways: safety for the motoring public will be optimized by replacing structurally deficient bridges. The Bridge Division will seek and implement innovative solutions to the challenges faced by the Bridge Program. The Division will deliver timely and beneficial bridge projects and programs. Meeting this performance measure will help to efficiently preserve and manage Department assets.

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:
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.

EVALUATION OF PERFORMANCE MEASURE

Was the annual target met?
No

Which '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.

Which 'Strategies for Improvement' were not successful?
N/A

What strategies for improvement will be implemented in 2019?
Short range to next reporting:
Additional short-range strategies beyond those stated have not been identified.

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

Does this performance measure effectively measure what is desired?
Yes. The performance measure does allow tracking of the state-owned SD bridges.

Is there a better performance measure that should be considered?
To reflect newly established federal guidelines related to bridge condition, the addition of total percentage of bridge deck area classified as "good" and "poor" may be included in future reports. This would correspond with the Department's goals, as established in the Transportation Asset Management Plan (TAMP), of maintaining an inventory with >35% of bridges in "good" and <7% in "poor" condition.

Will meeting the next yearly target have a fiscal impact?
Not presently. 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. STREAMLINE PERMITTING PROCESS

Performance Measure:
Percentage of permits issued or rejected within 45 days of receipt.

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

Measurement and Supporting Data:

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.

Were the quarterly targets met?
Yes. As stated above, 96.22% of all permits processed were done within 45 days or less. The fourth quarter performance measure for each district is as follows: District 1 achieved 100%, processing 220 permits, District 2 achieved 81.48% while processing 54 permits, and District 3 achieved 100.00% while processing 16 permits. District 1 accepted 292 permits, District 2 accepted 209 permits, and District 3 accepted 52 permits.

Was the annual target met?
Yes. All three Districts annual reporting reflects a 95.78% of all permits processed were done within 45 days or less. The annual performance measure for each district is as follows: District 1 achieved 99.34%, processing 610 permits, District 2 achieved 85.20% while processing 196 permits, and District 3 achieved 95.74% while processing 47 permits. District 1 accepted 1,035 permits, District 2 accepted 847 permits, and District 3 accepted 170 permits.

Which '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.

Is there a better performance measure that should be considered?
No, during our recent economic downturn the state has 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:
FY19: 95%
FY20: 95%
FY21: 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 2018 revenues into the State Highway Fund were approximately $1.24 billion while the second table contains the total FY 2018 actual expenditures of approximately $1.28 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 $528,473,009 in FY 2017. This balance is higher compared to FY 2016 balance of $518,618,772 million.

Revenue

State of Nevada Highway Special Revenue Fund Schedule Of Revenues And Receipts - Budgetary Basis For The Years Ended June 30, 2018 and 2017 (In thousands)		
	2018	2017
State user taxes		
Gasoline taxes	$ 215,444	$ 205,670
Motor vehicle fees and taxes		
Vehicle registration & bicycle safety fees	120,532	116,079
Basic government services tax	60,757	38,567
Motor carrier fees	43,013	41,378
Drivers license fees	24,541	26,743
Special fuel taxes	95,199	88,445
Total motor vehicle fees and taxes	344,042	311,212
Total state revenue	559,486	516,882
Federal Aid reimbursement		
Department of Interior	-	-
Federal Aviation Administration	118	38
Federal Emergency Management Administration	220	-
Federal Highway Administration	373,072	357,769
Federal Rail Administration	-	-
Federal Transit Administration	7,357	10,825
Total Federal Aid	380,767	368,632
Miscellaneous receipts		
Departments of Motor Vehicles & Public Safety authorized revenue	77,934	111,938
Appropriations from other funds	149	175
Proceeds from sale of bonds	135,005	185,001
Agreement income	31,092	9,907
Interest	7,846	5,182
Sale of surplus property	-	1,265
AB595 property tax	22,569	21,499
AB595 bond revenue	192	16,988
Other sales & reimbursements	27,582	20,768
Total miscellaneous receipts	302,369	372,723
Total revenue and receipts - budgetary basis	$ 1,242,622	$ 1,258,237

State of Nevada
Highway Special Revenue Fund
Comparative Schedule of Expenditures and Disbursements - Budgetary Basis
For the Fiscal Year Ending June 30, 2018 and 2017
(In thousands)

	2018			2017
	Budgeted	Actual Using Budgetary Basis	Variance Favorable (Unfavorable)	Actual Using Budgetary Basis
Department of Transportation				
Labor	$ 148,221	$ 139,081	$ 9,140	$ 139,309
Travel	3,180	2,572	608	2,427
Operating	76,862	75,785	1,077	71,232
Equipment	25,036	11,455	13,581	9,051
Capital improvements	668,407	534,483	133,924	541,434
Bond expenditures	332,903	220,996	111,907	179,766
Other programs	18,660	10,539	8,121	9,983
Total operations	1,273,269	994,911	278,358	953,202
Cost of fuel sold to other agencies	2,303	2,270	33	2,143
Total Department of Transportation	1,275,572	997,181	278,391	955,345
Department of Motor Vehicles (see Note 2)	167,713	116,514	51,199	119,447
Department of Public Safety (see Note 2)	96,604	82,728	13,876	78,304
	264,317	199,242	65,075	197,751
Appropriations to other funds				
Board of Examiners	-	-	-	-
Department of Administration	-	-	-	3,900
Transportation Services Authority	2,532	2,435	97	2,450
Public Works Board	633	621	12	3,083
Traffic Safety	270	233	37	259
Investigations	403	403	-	375
DMV Training Division	1,190	998	192	754
DMV Emergence Response	1,660	1,660	-	780
Govs Office of Finance IT Proj	114	114	-	-
Fleet Services Capital Purchase	-	-	-	-
Legislative Counsel Bureau	2,741	2,736	5	10,360
Dept of Information Technology	-	-	-	-
Total appropriations to other funds	9,543	9,200	343	21,961
Other disbursements				
Transfer to bond fund	84,000	74,524	9,476	78,896
Total other disbursements	84,000	74,524	9,476	78,896
Total expenditures & disbursements				
- Budgetary basis	$ 1,633,432	$ 1,280,147	$ 353,285	$ 1,253,953

STATE HIGHWAY FUND BALANCE (BUDGETARY BASIS)			
STATE FISCAL YEARS 2015 - 2017			
	ACTUAL FY 2015	ACTUAL FY 2016	ACTUAL FY 2017
BEGINNING 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 BEGINNING FUND BALANCE:	**$333,446,000**	**$317,361,548**	**$518,618,772**
ADD:			
REVENUES	$861,159,660	$1,091,421,933	$1,072,487,605
BOND PROCEEDS	$0	$200,007,547	$185,750,314
TOTAL ADDITIONS:	**$861,159,660**	**$1,291,429,480**	**$1,258,237,919**
DEDUCT:			
DEPT OF TRANS. NON-BOND EXPENDITURES	$588,711,452	$733,843,798	$775,446,692
DEPT OF TRANS. BOND EXPENDITURES	$39,901,579	$65,008,555	$179,766,027
EXP. & APPROP TO OTHER AGENCIES	$241,676,159	$271,517,511	$298,740,675
TOTAL DEDUCTIONS:	**$870,289,190**	**$1,070,369,864**	**$1,253,953,394**
ADJUSTING ENTRIES:			
CONTROLLERS OFFICE CAFR ADJUSTMENTS	-$6,954,923	-$19,802,391	$5,569,711
TOTAL ADJUSTING ENTRIES:	**-$6,954,923**	**-$19,802,391**	**$5,569,711**
ENDING FUND BALANCE:			
GENERAL OBLIGATION BONDS	$54,189,233	$189,188,225	$195,172,512
RESTRICTED FUNDS	$17,967,597	$34,949,101	$66,728,791
OTHER HIGHWAY FUND	$245,204,718	$294,481,446	$266,571,705
TOTAL ENDING FUND BALANCE:	**$317,361,548**	**$518,618,772**	**$528,473,009**

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 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 – Durango Drive to Kyle Canyon Road
US-95 Northwest Phase 3C – CC 215 Beltway Interchange
US-95 Northwest Phase 3D/E – CC 215 Beltway Interchange

Northern Nevada Projects

I-80/ I580/ US 395 Reno Spaghetti Bowl System Interchange
Pyramid Highway - US 395 Connection
US-395 Carson City Freeway Phase 2B – S. Carson Street to Fairview Drive

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:
Complete

Project Cost Range:

Engineering:
$ 2.10 M
Right of Way:
$ 0.25 M
Construction:
$ 38.50 M
Total Project Cost:
$ 40.85 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?

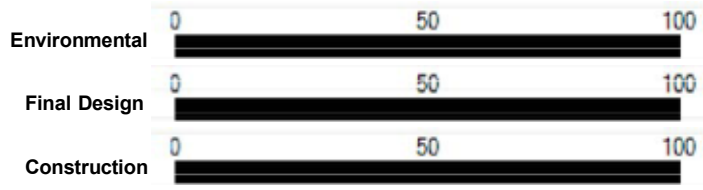
- Scope: No change
- Schedule: No Change
- Cost: No change

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: $ 38,498,505
- Total funding expended for Design: $ 2,351,529
- Total funding expended for the Environmental Phase for all packages: $875,000



October 2018

2

I 15 North - Phase 3

Speedway Boulevard to Garnet Interchange

Project Sponsor: NDOT

Project Manager: Dwayne Wilkinson, P.E.

(702) 671-8879

Project Description:

- This will be the last phase of improvements associated with the I-15 Corridor Environmental Assessment between US 95 and Apex.
- The project has been expanded from I-15 N between Speedway and Apex Interchanges to be between the Speedway and Garnet Interchanges.
- The location of the new interchange is now between Apex and Garnet Interchanges instead of Speedway and Apex.
- Widen I-15 from four to six lanes from Speedway Boulevard Interchange to the Garnet Interchange
- Project length has increased from 4.6 miles to 10.7 miles.

Schedule:

Planning:

Complete

Environmental Phase:

2018 -2020

Final Design:

2020- 2022

Construction:

2022 - 2024

Project Cost Range:

Engineering:

$6.5 - $8.0 million

Right-of-Way:

$0.1 - $3.6 million

Construction:

$70.1 - $83.2 million

Total Project Cost:

$76.7 - $94.8 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 - Project extended and new interchange location moved
- Schedule - Environmental added and Final design and Construction moved ahead one year
- Cost - Changed to reflect new scope

Project risks:

- Timely completion of environmental
- Timely completion of the Developer Agreement associated with the new interchange
- Timely completion of design
- Availability of construction funds

Financial Fine Points (Key Assumptions):

- Total funding expended for phase 3: $0 (design phase not started)
- Total funding expended for Environmental phase: $92,000

Environmental complete 0 50 100

Design Complete 0 50 100

October 2018

0 50 100

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 one of four phases of improvements to the I-15 North Corridor between US 95 and Apex Interchange (15 miles)
- Construct new direct connect ramps to upgrade the I-15 & CC 215 (Las Vegas Beltway) Interchange
- Construct I-15 SB ramps & reconstruct I-15 NB ramps for the I-15 & Tropical Parkway Interchange
- Reconstruct local streets to match Interchange reconfigurations
- Provide Landscape & Aesthetic enhancements in accordance with the I-15 Landscape & Aesthetics Corridor Plan
- Improvements will be constructed generally within the existing I-15 and CC-215 Rights-of-Way. However, approximately 3 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:

$9.7 - $10.1 million

Right-of-Way:

$7.0 - $7.4 million

Construction:

$96.2 - $ 101.0 million

Total Project Cost:

$112.9 - $118.5 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 - No Change
- Cost - Updated

Project risks:

- Cost and schedule impact of structure design
- Cost and schedule impact of utility relocations
- Timely completion of preliminary engineering
- Timely completions of UPRR permits & agreements
- Availability of construction funds
- Acquisition of approximately 3.8 acres to construct the project

Financial Fine Points (Key Assumptions):

- Total funding expended for preliminary engineering: $6,407,000
- Total funding expended for I-15 North environmental phase: $875,000
- NDOT Average Escalation Rates applied
- Construction funding has not been identified

% Environmental Complete 0 50 100

% Design Complete 0 50 100

Environmental Re-Assessment Documentation 0 50 100

October 2018

0 50 100

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: $513,000,000
- Transportation Board approved the authority to bond for the Project.

% Environmental Complete 0 50 100

Design Complete 0 50 100

Construction 0 50 100

October 2018

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 0 50 100

% Design Complete 0 50 100

October 2018

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 0 50 100

% Design Complete 0 50 100

October 2018

0 50 100

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?

- Project Awarded to Las Vegas Paving at bid of $33.7 Million
- Ground breaking event held Nov 30, 2017
- I-15 SB & NB realignment installed April 2018 to construct the new bridge.
- Storm Drain box under new Starr Ave from Las Vegas Blvd to I-15 is completed
- Fill placed for bridge. Bridge construction underway, bridge deck pour completed.

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 and state funds

% Environmental Complete 0 50 100

% Design Complete 0 50 100

% Construction Complete 0 50 100

October 2018

0 50 100

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)

% Environmental Complete 0 50 100

% Design Complete 0 50 100

% Construction Complete 0 50 100

October 2018

0 50 100

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

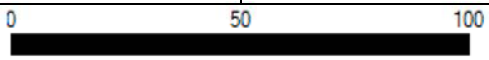
Project risks:

- 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

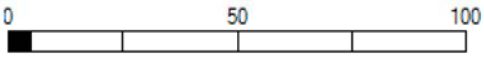
Financial Fine Points (Key Assumptions):

- 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.

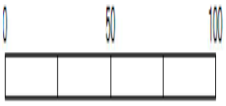
Environmental Complete



Design Complete



October 2018



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 2018

0 50 100

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 2018

0 50 100

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 tracks separated by US 93
- Project length: 2.5 miles

Schedule:

Planning:

Complete

Environmental:

Complete

Final Design:

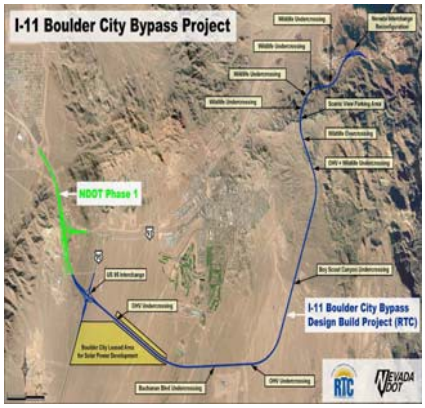
Complete

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
- Traffic is utilizing northbound and southbound new I-11 alignments.
- Traffic is open utilizing the new I-11 alignment. Final punchlis items continue to be completed.

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 amendments

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)

% Design Complete 0 50 100

% Row Complete 0 50 100

% Construction Complete 0 50 100

October 2018

0 50 100

I 11 Phase 2

Silverline Road north of US 95 to the Nevada Interchange

Project Sponsor: Nevada Department of Transportation

Project Partner: Regional Transportation Commission 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:

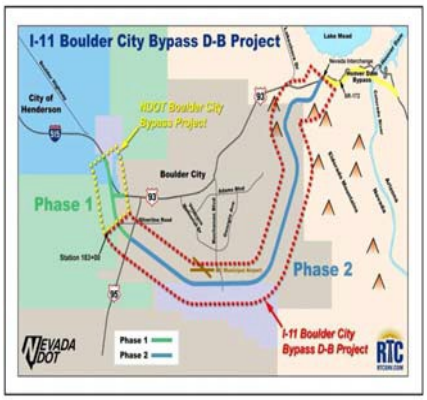
Complete

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
- I-11 alignment opened on August 8, 2018. Punchlist items are continuing to be completed.

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

% Design Complete 0 50 100

% ROW Complete 0 50 100

% Construction Complete 0 50 100

October 2018

0 50 100

US 95 Northwest - Phase 2B/5

Durango Drive to Kyle Canyon Road and at Kyle Canyon Road

Project Sponsor: NDOT

Project Manager: Jenica Keller, P.E.

(775) 888-7592

Project Description:

- This is the second and fifth 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
- Provide new and improved freeway connections to improve regional connectivity, consistent with land use planning
- Construct new interchange at Kyle Canyon Road
- Project length: 2.45 miles

Schedule:

Planning:

Complete

Environmental:

Complete

Final Design:

Complete

Advertise:

Complete

Construction:

Start January 2018

Construction:

Complete 3rd Quarter 2020

Project Cost Range:

(Construction Phase Estimates):

Engineering (All Phases):

$6 - $7 million

Right of Way (All Phases):

$0, No acquisitions required

Construction (All Phases):

$103 - $116 million

Construction (2B/5):

$65 - $78 million

Total Project Cost (All Phases):

$109 - $123 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: $78.88 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/5:
- Federal: $42.4 million
- State: $2.2 million
- Local: $33.4 million

% Design complete 0 50 100

Construction 0 50 100

October 2018

0 50 100

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

Advertise:

Complete

Construction:

Start 3rd Quarter 2019

Construction:

End 1st Quarter 2021

Project Cost Range:

(Final Design Phase Estimates):

Engineering (All Phases):

$14 - $15 million

Right of Way (All Phases):

$0 - $1 million

Construction (All Phases):

$197 - $233million

Construction (3C):

$61 - $73 million

Total Project Cost (All Phases):

$211 - $249 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 - Notice to Proceed delayed per Contractor
- Cost - Updated based on bid prices

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: $58.68 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:
- Federal: $19 million
- State: $54 million

% Design Complete 0 50 100

% Construction Complete 0 50 100

October 2018

0 50 100

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 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 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:

2018-2020

Project Cost Range: (Design Phase Estimates): Engineering (All Phases):

$14 - $15 million

Right of Way (All Phases):

$0 - $1 million

Construction (All Phases):

$197 - $233 million

Construction (3D/E):

$126 - $150 million

Total Project Cost (All Phases):

$211 - $249 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 - Local multi-use path and utility relocation added
- Schedule - No change
- Cost - Local multi-use path and utility relocation added

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: $58.63 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 2018

0 50 100

The Reno Spaghetti Bowl

180/ I580/ US 395 System Interchange

Project Sponsor: NDOT

Project Manager: Dale Keller, PE

775-888-7603

Project Description:

- Freeway capacity, safety, and operational improvements to and surrounding the spaghetti bowl interchange
- Freeway access management improvements
- Service interchanges modifications
- I80 limits: Virginia/Sierra/Center Street Interchange to Pyramid Highway Interchange
- I 580/US 395 limits: McCarran/Clear Acre Interchange to Virginia/Kietzke Interchange

Schedule:

Environmental:

2017 - 2020

Design and Right of Way:

2020 - 2025

Construction:

2025 and Later

Project Cost Range:

Engineering:

TBD

Right of Way:

TBD

Construction:

TBD

Total Project Costs:

TBD

Project Benefits:

- Improve freeway safety and operations
- Reduce existing freeway congestion
- Accommodate current and future travel demands
- Improved freeway maintenance

What's Changed Since Last Update?

- Scope - No changes
- Schedule - No changes
- Budget - No changes

Project risks:

- Complex access management strategies
- Railroad
- Truckee River
- Socio-economic environment
- Fragmented Local Network
- Right of Way
- Historical and cultural impacts
- 4f and 6f impacts

Financial Fine Points (Key Assumptions):

- N/A

Environmental (NEPA Phase) 0 50 100

October 2018

0 50 100

Pyramid Highway/US 395 Connection

Project Sponsor: Washoe County RTC and NDOT

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

NDOT Project Manager: Jae Pullen, P.E., PTOE

www.pyramidus395connection.com

Phone: (775) 888-7589

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):

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 0 50 100

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0 50 100

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):

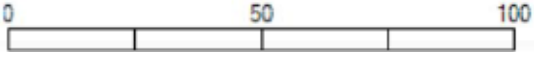
- Total funding expended: $195 million
- Construction funding source for Phase 2B-4: TBD

% Design Complete

% ROW Complete

% Construction Complete 2B-1, 2B-2, 2B-3

% Construction Complete 2B-4



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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 be 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 for FY 2011 to present. The following table reports the B/C ratio results of a total of 28 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
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 Street	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

Major Projects	B/C Ratio	Fiscal Year
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-15 North Phase 4 – I-15/CC-215 Interchange – Alternative 1	1.37	2015
I-15 North Phase 4 – I-15/CC-215 Interchange – Alternative 2	1.66	2015
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
I-15/US 93 Interchange (Garnet Interchange) Reconstruction and US 93 Capacity Improvements	2.64	2017
I-515 Alternatives Development Study - Project 1	2.9	2017
I-515 Alternatives Development Study - Project 2	0.4	2017
I-515 Alternatives Development Study - Project 3	2.8	2017
I-515 Alternatives Development Study - Project 4	6.8	2017
I-515 Alternatives Development Study - Project 5	0.3	2017
I-515 Alternatives Development Study - Project 6	1.2	2017

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 cost 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 2017. A 50% fringe was used because it was an average of several labor groups. Table E-1 lists the travel costs at different areas including Metropolitan Statistical Areas (MSA). Vehicle occupancy rates are shown in Table E-2.

Table E-1 Travel Costs

Statistical Area	Mean Wage ($/hour)	Median Wage ($/hour)	Personal Travel ($/hour)	Business Travel ($/hour)
Nevada	21.65	16.79	8.40	32.48
Las Vegas – Paradise MSA	21.37	16.54	8.27	32.06
Reno – Sparks MSA	22.28	17.09	8.55	33.42
Carson City MSA	23.42	19.32	9.66	35.13
West Central Counties	21.29	16.92	8.46	31.94

Source: Occupational employment statistics survey for Nevada conducted by the Research and Analysis Bureau of the Department of Employment, Training, and Rehabilitation in 2017, http://nevadaworkforce.com/OES#last.

Table E-2 Vehicle Occupancy

Vehicle Type	Occupancy
Passenger vehicles	1.39
Trucks	1.00

Source: Federal Highway Administration Highway Statistics 2016, Table VM1.

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 Tables E-3 and E-4.

Table E-3 Nevada Crash Severity Numbers of the Larger Counties (FY 2017)

Location	Traffic Crashes Percentage	Number of Crashes	PDO[1]	Injury	Fatal	Crash Rates[2]
Clark County	74.60%	36730	19776	18205	185	163.01
Washoe County	15.41%	7589	4938	2821	43	191.81
Carson City / Douglas County	3.09%	1521	1073	439	9	159.17

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-4 FY 2017 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	861	1.75%	428,863,897	1.60%	55,945	200.76
CHURCHILL	424	0.86%	339,248,498	1.27%	26,048	124.98
CLARK	36730	74.60%	18,313,380,695	68.43%	2,126,098	200.56
DOUGLAS	660	1.34%	471,997,650	1.76%	48,171	139.83
ELKO	906	1.84%	780,289,942	2.92%	55,294	116.11
ESMERALDA	68	0.14%	115,876,893	0.43%	1,044	58.68
EUREKA	67	0.14%	140,368,506	0.52%	1,930	47.73
HUMBOLDT	262	0.53%	354,942,947	1.33%	18,159	73.81
LANDER	91	0.18%	144,168,879	0.54%	6,778	63.12
LINCOLN	163	0.33%	137,032,589	0.51%	5,099	118.95
LYON	446	0.91%	509,740,570	1.90%	55,404	87.50
MINERAL	89	0.18%	129,222,782	0.48%	4,404	68.87
NYE	540	1.10%	579,948,258	2.17%	46,004	93.11
PERSHING	81	0.16%	267,057,721	1.00%	6,830	30.33
STOREY	141	0.29%	66,517,352	0.25%	4,009	211.97
WASHOE	7589	15.41%	3,796,017,954	14.18%	459,142	199.92
WHITE PINE	121	0.25%	189,415,732	0.71%	10,295	63.88
TOTAL	**49239**	**100.00%**	**26,764,090,865**	**100.00%**	**2,930,654**	**183.97**

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, 2016 - June 30, 2017.

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 2017-dollar value. Table E-5 shows the values obtained as 2017 CPI adjusted human capital and comprehensive societal crash costs. Table E-6 lists crash costs by the Maximum Abbreviated Injury Scale (MAIS) levels from the benefit-cost analyses guidance for transportation investment grant applications.

Table E-5 Crash Cost Assumptions (2017 USD)

Crash Severity	2001 Human Capital Costs	2001 Comprehensive Societal Costs	2017 Adjusted Comprehensive Societal Costs
Fatal (K)	$1,245,600	$4,008,900	$6,012,688.71
Suspected Serious (A)	$111,400	$216,000	$316,465.23
Suspected Minor (B)	$41,900	$79,000	$115,548.40
Possibly/Claimed (C)	$28,400	$44,900	$64,895.90
Property Damage Only (PDO)	$6,400	$7,400	$10,404.40

Source: NDOT Traffic Safety Division.

Table E-6 Crash Cost Assumptions (2017 USD)

MAIS Level	Severity	Unit value
MAIS 1	Minor	$28,800
MAIS 2	Moderate	$451,200
MAIS 3	Serious	$1,008,000
MAIS 4	Severe	$2,553,600
MAIS 5	Critical	$5,692,800
MAIS 6	Not-survivable	$9,600,000

1. Source: Benefit-Cost Analysis Guidance for Discretionary Grant Programs, USDOT, June 2018
2. Use Table E-6 for TIGER, BUILD, FASTLANE, or INFRA grant applications

Motor Vehicle Emissions and Costs:

The most common local air pollutants generated by transportation activities are sulfur dioxide (SO_2), nitrogen oxides (NO_X), fine particulate matter (PM), and volatile organic compounds (VOC_S). The recommended economic values for reducing emissions of various pollutants are shown in Table E-7.

USDOT does not currently have recommended unit values for reductions in carbon dioxide (CO2) emissions and other greenhouse gases. Any such estimates provided in a BCA, however, should be discounted at the same rate as costs and other benefits quantified in the BCA, and should be based on the domestic damages of such emissions, rather than using global values.

Table E-7 Damage Costs for Pollutant Emissions (2017 USD)

Emission Type	$ / short ton*
Carbon dioxide (CO_2)	**
Particulate matter (PM)	$343,442
Nitrogen oxides (NO_X)	$7,508
Sulfur dioxide (SO_2)	$43,600
Volatile Organic Compounds (VOC_S)	$1,905

1. Source: Benefit-Cost Analysis Guidance for Discretionary Grant Programs, USDOT, June 2018
2. * A metric ton is equal to 1.1015 short tons.
3. **USDOT does not currently have a recommended value for the damage costs of CO_2 emissions. Refer the Guidance on how such a value might be included in a BCA.

Vehicle Operating Costs:
Local data is encouraged to use on vehicle operating costs where available, appropriately documenting sources and assumptions. For analyses where such data is not available, standard national-level per-mile values for marginal vehicle operating costs from the American Automobile Association (AAA) for light duty vehicles and from the American Transportation Research Institute for commercial trucks in Table E-8. These values include operating costs that vary with vehicle miles traveled such as fuel, maintenance and repair, tires, depreciation, and additionally, in the case of trucks, truck/trailer lease or purchase payments, insurance premiums, and permits and licenses. The values exclude other ownership costs that are generally fixed or that would be considered transfer payments, such as tolls, taxes, annual insurance, license, financing charges, and registration fees. For commercial trucks, the values also exclude driver wages and benefits (which are already included in the value of travel time savings).

Table E-8 Vehicle Operating Costs (2017 USD)

Vehicle Operating Costs	Cost Per Mile ($)
Light Duty Vehicles[1]	0.39
Commercial Trucks[2]	0.90

1. Source: American Automobile Association, Your Driving Costs – 2017 Edition (2017), Assuming an average of 15,000 miles driven per year, https://exchange.aaa.com/automotive/driving-costs/#.Wt9eRojwa72
2. Source: American Transportation Research Institute, An Analysis of the Operational Costs of Trucking: 2017 Update (2017),http://atri-online.org/wp-content/uploads/2017/10/ATRI-Operational-Costs-of-Trucking-2017-10-2017.pdf

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.

Costs per gallon of mid-grade fuel and diesel fuel can refer to AAA Daily Fuel Gauge Report at local area, http://gasprices.aaa.com/?state=NV.

Capital Expenditures:
The capital cost of a project is the sum of the monetary resources needed to build the project (or program of projects). Capital costs generally include the cost of land, labor, material and equipment rentals used in the project's construction. In addition to direct construction costs, capital costs may include costs for project planning and design, environmental reviews, land acquisition, utility relocation, or transaction costs for securing financing. Costs should be recorded in the year in which they are expected to be incurred, regardless of when payment is made for those expenses.

Operating and Maintenance Expenditures:
Operating and maintenance (O&M) costs cover a wide array of costs required on a continuing basis to support core transportation functions. The ongoing O&M costs of the project throughout the entire analysis period should be included in the BCA and should be directly related to the proposed service plans for the project. O&M costs should be projected for both the no-build baseline and with proposed

improvement project. For projects involving the construction of new infrastructure, total O&M costs will generally be positive, reflecting the ongoing expenditures needed to maintain the new asset over its lifecycle. For projects intended to replace, reconstruct, or rehabilitate existing infrastructure, however, the net change in O&M costs under the proposed project will often be negative, as newer infrastructure requires less frequent and less costly maintenance to keep it in service than would an aging, deteriorating asset. Note also that more frequent maintenance under the baseline could also involve work zone impacts that could be reflected in projected user cost savings associated with the project.

Residual Value and Remaining Service Life:
The analysis period used in BCA is tied to the expected useful life of the infrastructure asset constructed or improved by the project. Where some or all project assets have several years of useful service life remaining at the end of the analysis period, a "residual value" may be calculated for the project at that point in time. This could apply to both assets with expected service lives longer than the analysis period, and shorter-lived assets that might be assumed to have been replaced within the analysis period. A simple method in estimating the residual value of an asset is assuming that its original value depreciates in a linear manner over its service life. Those residual values would then be discounted to their present value using the discount rate applied elsewhere in the analysis. The projected residual value of a project should be added to the numerator when calculating a benefit-cost ratio for a project.

Discussions and 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.

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.

Nationally, discount rates vary from zero to 7% and sometimes higher. 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. All monetized values used in a BCA should be expressed in a common base year, with the effects of inflation netted out. OMB Circular A-94 and OMB Circular A-4 recommend using the Gross Domestic Product (GDP) Deflator as a general method of converting nominal dollars into real dollars. The GDP Deflator captures the changes in the value of a dollar over time by considering changes in the prices of all goods and services in the U.S. economy. If the method of Consumer Price Index is used as the deflator, it should be explicitly indicated, and the index values used to make the adjustments should be provided in the BCA.

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 2062 bridges in the Nevada DOT bridge inventory. Of these, 1208 are owned and maintained by the department, 783 bridges are maintained by Nevada Counties and Cities, 48 are maintained by other local agencies. There are 17 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 5,435 centerline 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 $226 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 five 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, 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: 77 % **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. 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:
Meet goals set forth in NDOT's communications plan

Ultimate Target:
Exceed goals set forth in NDOT communications plan

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 because it signals that the department is 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 is 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 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.

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. It is critical as how effective and efficient the department is in implementing highway projects.

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.

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 and provides safe and secure tools 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, plans have been tested, exercised, and updated to accommodate changes in departmental processes, federal guidelines, etc. Training and updates should be completed on a four-year 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:

- 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 reduced and even 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: 80%

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 the work program.

Annual Target: Replace or Rehabilitate at least one Department owned structurally deficient bridge annually. 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 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 maintain 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. Most 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	$ 19,804,573

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

Reimbursement received associated with pedestrian bridge escalators noted above equals approx. $19.8M

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

Rudy Malfabon, P.E.
Director

Brian Sandoval
Governor