COLORADO

Department of Transportation Q1 FY2016 Performance Evaluation (October 2015)

Strategic Policy Initiatives

The Colorado Department of Transportation (CDOT) has identified several Strategic Policy Initiatives (SPI's) for FY 2015-16 and beyond. For this performance evaluation, the Department has updated progress on initiatives in its Fiscal Year 2016 Performance Plan that capture the Department's strategic and operational priorities. The updates reflect data as of October 2015. Additional details on these initiatives are available in the Department's Performance Plan, which may be accessed here.

SPI 1

Safety: Move Colorado toward zero deaths by reducing traffic-related deaths by one-half by 2030. This includes reducing fatalities by 12 per year, from 548 in 2008 to 344 in 2025. CDOT aims to reduce fatalities to 452 for its one-year target (Dec. 31, 2016 target, or calendar year 2016 fatalities) and 428 for its three-year target (Dec. 31, 2018 target, or calendar year 2018 fatalities).

SPI 2

Pavement Condition: Attain High or Moderate Drivability Life for 80 percent of sampled lane miles of pavement on the state highway system by 2025, up from 73 percent in fiscal year 2014. CDOT plans to achieve 65 percent High/Moderate Drivability Life for its one-year target (June 30, 2016, target, or fiscal year 2016 pavement condition) and 69 percent for its three-year target (June 30, 2018, target, or fiscal year 2018 pavement condition).

SPI 3

Travel-Time Reliability: Slow the growth of congestion and achieve satisfactory travel-time reliability on Interstate 25 in the Front Range and in the Interstate 70 West Mountain Corridor. One- and three-year goals include:

- Reduce the average monthly Planning Time Index value on Northbound Interstate 25 from a projected 2.59 in calendar year 2016 to an actual 2016 value of 2.50. Achieve a PTI of 2.60 or below in 2018.
- Reduce the average monthly Planning Time Index value on Southbound Interstate 25 from a projected 2.74 for calendar year 2016 to an actual 2016 value of 2.70. Achieve a PTI of 2.80 or below in 2018.
- Reduce the average monthly Planning Time Index value on Eastbound Interstate 70 from a projected 1.93 for calendar year 2016 to an actual 2016 value of 1.90. Achieve a PTI of 2.00 or below in 2018.
- Reduce the average monthly Planning Time Index value on Westbound Interstate 70 from a projected 1.67 for calendar year 2016 to an actual 2016 value of 1.60. Achieve a PTI of 1.70 or below in 2018.

SPI 4

Maintenance: Maintain CDOT's roadways and facilities to minimize the need for replacement or rehabilitation in a constrained funding environment. This includes achieving an overall Maintenance Levels of Service (MLOS) grade of C for the state highway system in fiscal years 2016 and 2018, down from a B- in fiscal year 2014.



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Operational Measures

SPI 1—Safety: Move Colorado toward zero deaths by reducing traffic-related deaths by one-half by 2030. This includes reducing fatalities by 12 per year, from 548 in 2008 to 344 in 2025. CDOT aims to reduce fatalities to 452 for its one-year target (Dec. 31, 2016, target, or calendar year 2016 fatalities) and to 428 for its three-year target (Dec. 31, 2018, target, or calendar year 2018 fatalities).

Major Functional Area - Safety

Process – CDOT implements a variety of processes to mitigate injuries and fatalities on Colorado's roadways. For example, the Department qualifies, selects, advertises and awards Highway Safety Improvement Program projects. Projects that are selected address identified crash patterns, which are mitigated by the scope of the project and meet a minimum benefit/cost ratio of 1.0. CDOT's goal is to meet a program-wide benefit/cost ratio of 2.0.

Measure	CY12	CY13	CY14	Q1 CY15	Q2 CY15	Q3 CY15	CY16 Goal	CY18 Goal
	Actual	Actual	Actual					
Outcome: Fatalities on Colorado Roadways.	474	481	488	122 (YTD*)	255 (YTD)	415 (YTD)	452	428
Outcome: Fatalities per 100 million Vehicle Miles Traveled on Colorado roadways.	1.016	1.024	0.996	N/A**	N/A**	N/A**	0.94	0.90
Lead Metric 1: Average benefit/cost ratio for Highway Safety Improvement Projects.	N/A	N/A	N/A	1.68 (YTD)	2.26 (YTD)	Aug: 2.26 (YTD)	Minimum of 2.0	Not established
Lead Metric 2: Dedicated law enforcement contact hours for traffic safety enforcement.	50,880	67,808	75,689	14,452 (YTD)	45,457 (YTD)	65,856 (YTD)	65,000	65,000

Note: Fatalities and injuries statistics are subject to revision as new data become available.

SPI 2—Pavement Condition: Attain High or Moderate Drivability Life for 80 percent of sampled lane miles of pavement on the state highway system by 2025, up from 73 percent in fiscal year 2014. CDOT plans to achieve 65 percent High/Moderate Drivability Life for its one-year target (June 30, 2016 target, or fiscal year 2016 pavement condition) and 69 percent for its three-year target (June 30, 2018 target, or fiscal 2018 pavement condition).

Major Functional Area – Various, including Capital Construction; Operations and Maintenance; Safety; and Program and Project Support

Process – Operational processes related to pavement condition include preserving, resurfacing, and rehabilitating roads with the optimized application of cost-effective pavement treatments.

^{*}YTD = year-to-date

^{**}Official 2015 Vehicle Miles Traveled data will not be available until mid-2016.



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Measure	FY12 Actual	FY13 Actual	FY14 Actual	FY15 Actual	Q1 FY16	FY16 Goal	FY18 Goal
Outcome: Percentage of sampled lane miles of state highway pavement with High or Moderate Drivability Life.	N/A	82%	73%	79%	Annual Metric	65%	69%
Lead Metric: Percentage of Surface Treatment program projects advertised for the fiscal year that match recommendations from CDOT's pavement management system.	N/A	N/A	N/A	77%	80% (YTD)	80%	80%

Note: Seventy-nine percent of sampled lane miles of pavement on the state highway system had High or Moderate Drivability Life in fiscal year 2015. Drivability Life is an indication of how long a stretch of highway will have acceptable driving conditions. The percentage of pavement in the High or Moderate category in 2015 was higher than had been forecast due to recent updates in the pavement management model. Specifically, CDOT has updated the evaluation scale used for pavement smoothness, which is one component of the Drivability Life metric used by the model to determine pavement condition. This change was made to better align the model with how smoothness is described in CDOT construction specifications and federal definitions. CDOT in fall 2015 will be updating its forecasts for Drivability Life, which will likely result in revised performance targets.

SPI 3—Travel-Time Reliability: Slow the growth of congestion and achieve satisfactory travel-time reliability on Interstate 25 in the Front Range and in the Interstate 70 West Mountain Corridor. (See specific targets in chart below.)

Major Functional Area – Operations and Maintenance

Process – Various processes will be used to achieve this goal, such as improving incident management, decreasing road closures, training first responders, expanding the Interstate 25 Courtesy Patrol, and more.

Measure	CY12	CY13	CY14	CY15	CY16 Goal	CY18 Goal
	Actual	Actual	Actual	Actual		
Outcome A: Average monthly Planning Time Index value on	2.20	2.38	2.42	2.46	2.50	2.60
Northbound Interstate 25*				(JanAug.)		
Lead Measure 1: Average incident clearance time on NB I-25.	N/A	N/A	51	48 minutes	46 minutes	40 minutes
			minutes	(JanAug.)		
Lead Measure 2: Average monthly road closure time on NB I-25.	41***	42***	61	49 minutes	55 minutes	48 minutes
	minutes	minutes	minutes	(JanAug.)		
Outcome B: Average monthly Planning Time Index value on	2.20	2.38	2.41	2.59	2.70	2.80
Southbound Interstate 25				(JanAug.)		
Lead Measure 1: Average incident clearance time on SB I-25.	N/A	N/A	49	40 minutes	44 minutes	39 minutes
			minutes	(JanAug.)		
Lead Measure 2: Average monthly road closure time on SB I-25.	39***	51***	58	48 minutes	52 minutes	46 minutes
	minutes	minutes	minutes	(JanAug.)		



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Measure	CY12	CY13	CY14	CY15	CY16 Goal	CY18 Goal
	Actual	Actual	Actual	Actual		
Outcome C: Average monthly Planning Time Index value on	1.74	1.76	2.13	1.83	1.90	2.00
Eastbound Interstate 70**				(JanAug.)		
Lead Measure 1: Average incident clearance time on EB I-70.	N/A	N/A	49	71 minutes	44 minutes	39 minutes
			minutes	(JanAug.)		
Lead Measure 2: Average monthly road closure time on EB I-70.	N/A	N/A	278	147 minutes	250 minutes	222 minutes
			minutes	(JanAug.)		
Outcome D: Average monthly Planning Time Index value on	1.32	1.42	1.76	1.43	1.60	1.70
Westbound Interstate 70				(JanAug.)		
Lead Measure 1: Average incident clearance time on WB I-70.	N/A	N/A	45	62 minutes	40 minutes	36 minutes
			minutes	(JanAug.)		
Lead Measure 2: Average monthly road closure time on WB I-70.	N/A	N/A	166	196 minutes	149 minutes	133 minutes
			minutes	(JanAug.)		

^{*}Termini for Interstate 25 metrics are C-470 and E-470. Results and goals are for daytime and early evening weekday hours. **Termini for Interstate 70 metrics are Vail and C-470. Results and goals are for daytime and early evening weekend hours. ***CY 2012 and 2013 results for I-25 include at least nine months of data. Data does not contain a full calendar year.

SPI 4—Maintenance: Maintain CDOT's roadways and facilities to minimize the need for replacement or rehabilitation in a constrained funding environment. This includes achieving an overall Maintenance Levels of Service (MLOS) grade of C for the state highway system in fiscal years 2016 and 2018, down from a Bin fiscal year 2014.

Major Functional Area – Operations and Maintenance

Process – Under nine Maintenance Program Areas, CDOT performs an array of processes to maintain the state highway system. For example, the Roadway Surface area includes patching and sealing potholes and blading unpaved surfaces. The Structure Maintenance area includes painting bridges, repairing expansion joints and patching bridge decks. The Snow and Ice Control area includes plowing snow and taking avalanche control measures.

Measure	FY12 Actual	FY13 Actual	FY14 Actual	FY15 Actual	Q1 FY16	FY16 Goal	FY18 Goal
Outcome: Overall Maintenance Levels of Service Grade.	B-	В	B-	B-	Annual Metric	С	С
Lead Measure 1: Snow and Ice Control Grade.	В	В	В	В	Annual Metric	В	В
Lead Measure 2: Retro-reflectivity score for sampled long-line striping.	N/A	N/A	N/A	April*: 146 May: 173 June: 166	July: 181 Aug: 176 Sept: 223	≥80 mcd/m²/lux**	≥80 mcd/m²/lux

^{*}First month of reporting with current methodology. **The goal is to achieve, at minimum, a retro-reflectivity score for longitudinal pavement markings of 80 mcd/m²/lux (millicandelas per square meter per lux), a measure of luminous intensity. Monthly retro-reflectivity values are taken at randomly sampled locations. Properly implemented and maintained longitudinal pavement markings convey directional information, location of the road center and edges, the presence of passing or no-passing zones, and an indication that a driver is occupying the correct lane.