

#### **Strategic Policy Initiatives**

The Colorado Department of Transportation (CDOT) has identified several Strategic Policy Initiatives (SPIs) 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 available as of April 2016. Additional details on these initiatives are available in the Department's Performance Plan, which may be accessed <a href="here">here</a>.

#### 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 79 percent in fiscal year 2015. CDOT plans to achieve 74 percent High/Moderate Drivability Life for its one-year target (June 30, 2016, target, or fiscal year 2016 pavement condition) and 62 percent for its three-year target (June 30, 2018, target, or fiscal year 2018 pavement condition).

#### SPI<sub>3</sub>

**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 2015.



### **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 Actual	CY13 Actual	CY14 Actual	CY15 Actual	Q1 CY16	CY16 Goal	CY18 Goal
Outcome: Fatalities on Colorado Roadways.	474	481	488	545	84	452	428
Outcome: Fatalities per 100 million Vehicle Miles Traveled on Colorado roadways.	1.016	1.024	0.996	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	2.98	1.83	Minimum of 2.0	Not established
Lead Metric 2: Dedicated law enforcement contact hours for traffic safety enforcement.	50,880	67,808	75,689	84,146	25,519	75,000***	Not established***
Lead Metric 3: Percentage of advertised FASTER Safety projects that address Level of Safety Service 3 and 4 locations.	N/A	N/A	N/A	75%	100%	90%	Not established
Measure	FY12 Actual	FY13 Actual	FY14 Actual	FY15 Actual	FY16 Actual	FY16 Goal	FY18 Goal
Lead Metric 4: FASTER Safety Mitigation program dollars spent as a percentage of the program's fiscal-year allocation**	69%	79%	84%	159%	Q1: 57% Q2: 100% Q3: 132%	100%	100%

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

<sup>\*</sup>Official 2015 Vehicle Miles Traveled data will not be available until mid-2016.

<sup>\*\*</sup>Metric compares program dollars spent during the specified time period to current year's allocation. The dollars spent may be revenue accumulated in any year. From program inception through fiscal year 2015, 68 percent of dollars allocated to the program had been spent.

<sup>\*\*\*</sup>The 2016 goal has been raised to account for recent performance data. The previous target for 2016 was 65,000. A new 2018 goal has not been established.



**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 79 percent in fiscal year 2015. CDOT plans to achieve 74 percent High/Moderate Drivability Life for its one-year target (June 30, 2016, target, or fiscal year 2016 pavement condition) and 62 percent for its three-year target (June 30, 2018, target, or fiscal year 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.

Measure	FY12	FY13	FY14	FY15	Q1 FY16	Q2 FY16	Q3 FY16	FY16	FY18
	Actual	Actual	Actual	Actual				Goal	Goal
Outcome: Percentage of sampled lane miles of	N/A	82%	73%	79%	Annual	Annual	Annual	74%	62%
state highway pavement with High or Moderate					Metric	Metric	Metric		
Drivability Life.									
Lead Metric: Percentage of Surface Treatment program projects advertised for the fiscal year	N/A	N/A	N/A	77%	80% (YTD)	88% (YTD)	93% (YTD)	80%	80%
that match recommendations from CDOT's									
pavement management system.									

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. Based on new forecasts, CDOT in fall 2015 updated its one- and three-year targets for Drivability Life.



**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 Q1	CY16 Goal	CY18 Goal
	Actual	Actual	Actual	Actual			
Outcome A: Average monthly Planning Time Index	2.20	2.38	2.42	2.47	2.40	2.50	2.60
value on Northbound Interstate 25*							
Lead Measure 1: Average incident clearance time on	N/A	N/A	51	51 minutes	45 minutes	46 minutes	40 minutes
NB I-25.			minutes				
Lead Measure 2: Average monthly road closure time	41***	42***	61	50 minutes	42 minutes	55 minutes	48 minutes
on NB I-25.	minutes	minutes	minutes				
Outcome B: Average monthly Planning Time Index	2.20	2.38	2.41	2.62	2.45	2.70	2.80
value on Southbound Interstate 25							
Lead Measure 1: Average incident clearance time on	N/A	N/A	49	44 minutes	76 minutes	44 minutes	39 minutes
SB I-25.			minutes				
Lead Measure 2: Average monthly road closure time	39***	51***	58	47 minutes	97 minutes	52 minutes	46 minutes
on SB I-25.	minutes	minutes	minutes				
Outcome C: Average monthly Planning Time Index	1.74	1.76	2.13	1.78	1.95	1.90	2.00
value on Eastbound Interstate 70**							
Lead Measure 1: Average incident clearance time on	N/A	N/A	49	74 minutes	25 minutes	44 minutes	39 minutes
EB I-70.			minutes				
Lead Measure 2: Average monthly road closure time	N/A	N/A	278	124 minutes	20 minutes	250 minutes	222 minutes
on EB I-70.			minutes				
Outcome D: Average monthly Planning Time Index	1.32	1.42	1.76	1.45	1.77	1.60	1.70
value on Westbound Interstate 70							
Lead Measure 1: Average incident clearance time on	N/A	N/A	45	71 minutes	68 minutes	40 minutes	36 minutes
WB I-70.			minutes				
Lead Measure 2: Average monthly road closure time	N/A	N/A	166	163 minutes	155 minutes	149 minutes	133 minutes
on WB I-70.			minutes				

<sup>\*</sup>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 2015.

### 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	FY13	FY14	FY15	Q1 FY16	Q2 FY16	Q3 FY16	FY16 Goal	FY18 Goal
	Actual	Actual	Actual	Actual					
Outcome: Overall Maintenance Levels	B-	В	B-	B-	Annual	Annual	Annual	С	С
of Service Grade.					Metric	Metric	Metric		
Lead Measure 1: Snow and Ice Control	В	В	В	В	Annual	Annual	Annual	В	В
Grade.					Metric	Metric	Metric		
Lead Measure 2: Retro-reflectivity	N/A	N/A	N/A	April**:	July: 161	Oct: 195	Jan: 128	≥80	≥80
score for sampled long-line striping.*				146	Aug: 176	Nov: 178	Feb: 96	mcd/m²/lux***	mcd/m²/lux
				May: 173	Sept: 223	Dec: 135	Mar: 155		
				June: 166					

<sup>\*</sup>Aggregate numbers do not include yellow striping for Region 3. February 2016 results do not included Region 5. \*\*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. 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.