

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 available as of January 2016. Additional details on these initiatives are available in the Department's Performance Plan, which may be accessed <u>here</u>.

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 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 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	CY13	CY14	Q1 CY15	Q2 CY15	Q3 CY15	Q4 CY15/	CY16 Goal	CY18 Goal
	Actual	Actual	Actual	Actual	Actual	Actual	Annual		
Outcome: Fatalities on Colorado	474	481	488	123	259	428 (YTD,	545	452	428
Roadways.				(YTD*,	(YTD,	Rev.)	(YTD)		
				Rev.)	Rev.)				
Outcome: Fatalities per 100 million Vehicle Miles Traveled on Colorado roadways.	1.016	1.024	0.996	N/A**	N/A**	N/A**	N/A**	0.94	0.90
Lead Metric 1: Average benefit/cost ratio	N/A	N/A	N/A	1.68	2.33	2.31 (YTD,	2.98	Minimum	Not
for Highway Safety Improvement				(YTD)	(YTD,	Rev.)		of 2.0	established
Projects.					Rev.)				
Lead Metric 2: Dedicated law	50,880	67,808	75,689	14,452	45,457	65,856	84,146	65,000	65,000
enforcement contact hours for traffic				(YTD)	(YTD)	(YTD)	(YTD)		
safety enforcement.									
Lead Metric 3: Percentage of advertised	N/A	N/A	N/A	80%	77%	71%	75%	90%	Not
FASTER Safety projects that address Level				(YTD,	(YTD,	(YTD, Rev.)			established
of Safety Service 3 and 4 locations.				Rev.)	Rev.)				
Measure	FY12	FY13	FY14	FY15	Q1 FY16	Q2 FY16		FY16 Goal	FY18 Goal
	Actual	Actual	Actual	Actual	Actual	Actual			
Lead Metric 4: FASTER Safety Mitigation	69%	79%	84%	159%	57%	100%		100%	100%
program dollars spent as a percentage of					(YTD)	(YTD)			
the program's fiscal-year allocation***									

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

*YTD = year-to-date

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

***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.



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	FY16 Goal	FY18 Goal
	Actual	Actual	Actual	Actual				
Outcome: Percentage of sampled lane miles of state highway pavement with High or Moderate Drivability Life.	N/A	82%	73%	79%	Annual Metric	Annual Metric	74%	62%
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)	88% (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. 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 Goal	CY18 Goal
	Actual	Actual	Actual	Actual		
Outcome A: Average monthly Planning Time Index value on Northbound Interstate 25*	2.20	2.38	2.42	2.47	2.50	2.60
Lead Measure 1: Average incident clearance time on NB I-25.	N/A	N/A	51 minutes	51 minutes	46 minutes	40 minutes
Lead Measure 2: Average monthly road closure time on NB I-25.	41*** minutes	42*** minutes	61 minutes	50 minutes	55 minutes	48 minutes
Outcome B: Average monthly Planning Time Index value on Southbound Interstate 25	2.20	2.38	2.41	2.62	2.70	2.80
Lead Measure 1: Average incident clearance time on SB I-25.	N/A	N/A	49 minutes	44 minutes	44 minutes	39 minutes
Lead Measure 2: Average monthly road closure time on SB I-25.	39*** minutes	51*** minutes	58 minutes	47 minutes	52 minutes	46 minutes
<u>Outcome C</u> : Average monthly Planning Time Index value on Eastbound Interstate 70**	1.74	1.76	2.13	1.78	1.90	2.00
Lead Measure 1: Average incident clearance time on EB I-70.	N/A	N/A	49 minutes	74 minutes	44 minutes	39 minutes
Lead Measure 2: Average monthly road closure time on EB I-70.	N/A	N/A	278 minutes	124 minutes	250 minutes	222 minutes
<u>Outcome D</u> : Average monthly Planning Time Index value on Westbound Interstate 70	1.32	1.42	1.76	1.45	1.60	1.70
Lead Measure 1: Average incident clearance time on WB I-70.	N/A	N/A	45 minutes	71 minutes	40 minutes	36 minutes
Lead Measure 2: Average monthly road closure time on WB I-70.	N/A	N/A	166 minutes	163 minutes	149 minutes	133 minutes

*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 B-in 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 Actual	FY13 Actual	FY14 Actual	FY15 Actual	Q1 FY16	Q2 FY16	FY16 Goal	FY18 Goal
Outcome: Overall Maintenance Levels of Service Grade.	В-	В	В-	В-	Annual Metric	Annual Metric	С	С
Lead Measure 1: Snow and Ice Control Grade.	В	В	В	В	Annual Metric	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: 161 (Rev.) Aug: 176 (Rev.) Sept: 223 (Rev.)	Oct: 195 Nov: 178 Dec: 135	≥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. 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.