

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 2015-16 Performance Plan that capture the Department's strategic and operational priorities. The updates reflect data available in late October 2016. 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 to 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 an actual grade of B- in fiscal year 2015.

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 decrease 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.

Measure	CY12 Actual	CY13 Actual	CY14 Actual	CY15 Actual	Q1 CY16	Q2 CY16	CY16 Goal	CY18 Goal
Outcome: Fatalities on Colorado roadways	474	481	488	547 (rev.)	99 (rev.)	256 (rev., YTD)	452	428
Outcome: Fatalities per 100 million Vehicle Miles Traveled on Colorado roadways	1.02	1.02	1.00	1.08	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	2.44 (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	84,146	25,519	59,955 (YTD)	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%	85% (YTD)	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% Q4: 160%	100%	100%

Evaluation: Roadway fatalities in Colorado were 1 percent lower in the first six months of calendar year 2016 compared to the corresponding 2015 period. More recent months, however, are trending higher than comparable 2015 months. CDOT continues to employ strategies from its Strategic Highway Safety Plan to reduce roadway fatalities. The Department reconvened the plan's emphasis areas teams in summer and fall 2016 to review action plans related to addressing the areas and to provide progress updates. CDOT also has been coordinating an update to the state crash form from the Statewide Traffic Records Advisory Committee (STRAC), multiple agencies and other stakeholders. *Notes: Recent fatalities statistics are subject to frequent revision as new data become available. The goals for law-enforcement contact hours were updated in previous Performance Plan submissions to account for new performance data. The initial target for 2016 was 65,000.*

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.

Measure	FY12 Actual	FY13 Actual	FY14 Actual	FY15 Actual	Q1 FY16	Q2 FY16	Q3 FY16	Q4/Annual 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	Annual Metric	Annual Metric	80%	74% (rev. fall 2015)	62% (rev. fall 2015)
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)	93% (YTD)	90% (YTD)	80%	80%

Evaluation: CDOT exceeded its pavement condition goal for fiscal year 2016. Pavement condition for the year was higher than projected due to factors including slower-than-expected deterioration and updates to the Department's pavement management system.

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 the 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 closure times, training first responders, expanding the Interstate 25 Courtesy Patrol and more.

Measure	CY12 Actual	CY13 Actual	CY14 Actual	CY15 Actual	Q1 CY16	Q2 CY16	CY16 Goal	CY18 Goal
Outcome A: Average monthly Planning Time Index value on Northbound Interstate 25*	2.20	2.38	2.42	2.47	2.40 (YTD)	2.35 (YTD)	2.50	2.60
Lead Measure 1: Average incident clearance time on NB I-25	N/A	N/A	51 minutes	51 minutes	45 minutes (YTD)	52 minutes (YTD)	46 minutes	40 minutes
Lead Measure 2: Average road closure time on NB I-25	41*** minutes	42*** minutes	61 minutes	50 minutes	42 minutes (YTD)	22 minutes (YTD)	55 minutes	48 minutes
Outcome B: Average monthly Planning Time Index value on Southbound Interstate 25	2.20	2.38	2.41	2.62	2.45 (YTD)	2.30 (YTD)	2.70	2.80
Lead Measure 1: Average incident clearance time on SB I-25	N/A	N/A	49 minutes	44 minutes	76 minutes (YTD)	66 minutes (YTD)	44 minutes	39 minutes
Lead Measure 2: Average road closure time on SB I-25	39*** minutes	51*** minutes	58 minutes	47 minutes	97 minutes (YTD)	30 minutes (YTD)	52 minutes	46 minutes
Outcome C: Average monthly Planning Time Index value on Eastbound Interstate 70**	1.74	1.76	2.13	1.78	1.95 (YTD)	1.65 (YTD)	1.90	2.00
Lead Measure 1: Average incident clearance time on EB I-70	N/A	N/A	49 minutes	74 minutes	25 minutes (YTD)	40 minutes (YTD)	44 minutes	39 minutes
Lead Measure 2: Average road closure time on EB I-70	N/A	N/A	278 minutes	124 minutes	20 minutes (YTD)	23 minutes (YTD)	250 minutes	222 minutes
Outcome D: Average monthly Planning Time Index value on Westbound Interstate 70	1.32	1.42	1.76	1.45	1.77 (YTD)	1.56 (YTD)	1.60	1.70

Measure	CY12 Actual	CY13 Actual	CY14 Actual	CY15 Actual	Q1 CY16	Q2 CY16	CY16 Goal	CY18 Goal
Lead Measure 1: Average incident clearance time on WB I-70	N/A	N/A	45 minutes	71 minutes	68 minutes (YTD)	67 minutes (YTD)	40 minutes	36 minutes
Lead Measure 2: Average road closure time on WB I-70	N/A	N/A	166 minutes	163 minutes	155 minutes (YTD)	55 minutes (YTD)	149 minutes	133 minutes

Evaluation: For the year-to-date, CDOT is exceeding its 2016 goals for the planning time indices shown above. Factors improving mobility include the late 2015 opening of the I-70 Mountain Express Lane, an eastbound tolled shoulder lane that operates in peak congestion periods. Among many other activities to improve mobility, CDOT is coordinating with the Colorado State Patrol and others to increase Traffic Incident Management training.

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 an actual grade of 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	Q3 FY16	Q4/Annual FY16	FY16 Goal	FY18 Goal
Outcome: Overall Maintenance Levels of Service Grade	B-	B	B-	B-	Annual Metric	Annual Metric	Annual Metric	B-	C	C
Lead Measure 1: Snow and Ice Control Grade	B	B	B	B	Annual Metric	Annual Metric	Annual Metric	B-	B	B
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 Aug: 176 Sept: 223	Oct: 195 Nov: 178 Dec: 135	Jan: 128 Feb: 96 Mar: 155	Apr: 159 May: 194 June: 144	≥80 mcd/m ² /lux**	≥80 mcd/m ² /lux

Evaluation: CDOT achieved a B- for overall Maintenance Levels of Service for fiscal year 2016, surpassing its goal of a C.

*Tracked non-cumulatively. Aggregate numbers do not include yellow striping for Region 3. February 2016 results do not include Region 5. **CDOT’s 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.

Influence of Performance Plan on CDOT Operations

The metrics and associated performance results outlined in this document influence CDOT's operations in several ways. For example, CDOT's Transportation Commission and the Department's asset managers review asset condition metrics, such as the Drivability Life of highway pavement, to help determine annual budgets for asset programs. Grades each year for Maintenance Levels of Service and maintenance program areas, such as the Roadway Surface area, help the Department calculate the budgets needed to achieve future performance levels.