

Strategic Policy Initiatives

The Colorado Department of Transportation (CDOT) has identified several Strategic Policy Initiatives (SPIs) for fiscal year 2016-17 and beyond. For this performance evaluation, the Department has updated progress on initiatives from its Fiscal Year 2017 Performance Plan that capture the Department's strategic and operational priorities. The updates reflect data available in spring 2017. 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 440 for its one-year target (Dec. 31, 2017 target, or calendar year 2017 fatalities) and 416 for its three-year target (Dec. 31, 2019 target, or calendar year 2019 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. CDOT plans to achieve 79 percent¹ High/Moderate Drivability Life for its one-year target (June 30, 2017 target, or fiscal year 2017 pavement condition), down from 80 percent in fiscal year 2016. The three-year target is 69 percent (June 30, 2019 target, or fiscal year 2019 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 Planning Time Index for Northbound Interstate 25 from a projected average of 2.57 in calendar year 2017 to an actual average of 2.50. Achieve a PTI of 2.70 in 2019.
- Reduce the Planning Time Index for Southbound Interstate 25 from a projected average of 2.73 in calendar year 2017 to an actual average of 2.70. Achieve a PTI of 2.90 in 2019.
- Reduce the Planning Time Index for Westbound Interstate 70 from a projected average of 1.71 in calendar year 2017 to an actual average of 1.70. Achieve a PTI of 1.80 in 2019.
- Reduce the Planning Time Index for Eastbound Interstate 70 from a projected average of 1.82 in calendar year 2017 to an actual average of 1.80. Maintain a PTI of 1.80 in 2019.

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 year 2017 and a C for fiscal year 2019, compared to an actual grade of C+ in fiscal year 2016².

¹ The pavement targets for fiscal years 2017 and 2019 were updated in April 2017 to reflect new pavement condition information and new forecasts.

² The overall Maintenance Levels of Service grade for fiscal year 2016 was revised to a C+ in late calendar year 2016.



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 440 for its one-year target (Dec. 31, 2017 target, or calendar year 2017 fatalities) and to 416 for its three-year target (Dec. 31, 2019 target, or calendar year 2019 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	CY14 Actual	CY15 Actual	CY16 Actual	Q1 CY17	Q2 CY17	Q3 CY17		CY17 Goal	CY19 Goal
Outcome: Fatalities on Colorado Roadways.	488	547 (rev.)	608 (rev.)	109	263	457		440	416
Outcome: Fatalities per 100 million Vehicle Miles Traveled on Colorado roadways.	0.996	1.09 (rev.)	N/A ³	N/A ³	N/A ³	N/A ⁴		0.92	0.88
Lead Metric 1: Average benefit/cost ratio for Highway Safety Improvement Program projects.	N/A	2.98	2.85	2.19	2.51	2.58		Mini-mum 2.0	Mini-mum 2.0
Lead Metric 2: Dedicated law enforcement contact hours for traffic safety enforcement.	75,689	84,146	119,762	24,663	52,633 (rev.)	73,826		66,750	92,000
Lead Metric 3: Percentage of advertised FASTER Safety projects that address Level of Safety Service 3 and 4 locations.	N/A	75%	86%	86%	92%	92%		90%	90%
Measure	FY14 Actual	FY15 Actual	FY16 Actual	Q1 FY17	Q2 FY17	Q3 FY17	Q4 FY17	FY17 Goal	FY19 Goal
Lead Metric 4: FASTER Safety Mitigation program dollars spent as a percentage of the program's fiscal-year allocation ⁵	84%	159%	160%	30%	61%	81%	113% (YTD)	100%	100%

Note: Fatalities and injuries statistics are subject to frequent revision as new data become available. These data were current as of early July 2017

³ Official 2016 Vehicle Miles Traveled data will not be available until mid-2017, and 2017 data will be unavailable until mid-2018.

⁴ Official 2016 Vehicle Miles Traveled data will not be available until mid-2017, and 2017 data will be unavailable until mid-2018.

⁵ 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.



Year-End FY2017 Performance Evaluation (October 2017)

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. CDOT plans to achieve 79 percent High/Moderate Drivability Life for its one-year target (June 30, 2017 target, or fiscal year 2017 pavement condition), down from 80 percent in fiscal year 2016. The three-year target is 69 percent (June 30, 2019 target, or fiscal year 2019 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	FY14 Actual	FY15 Actual	FY16 Actual	Q1 FY17	Q2 FY17	Q3 FY17	Q4 FY17	FY17 Goal	FY19 Goal
Outcome: Percentage of sampled lane miles of state highway pavement with High or Moderate Drivability Life.	73%	79%	80%	Annual Metric	Annual Metric	Annual Metric	Annual Metric ⁶	79% (rev.)	69% (rev.)
Lead Metric: Percentage of Surface Treatment program projects advertised for the fiscal year that match recommendations from CDOT's pavement management system.	N/A	77%	90%	57% (Fiscal YTD)	80% (Fiscal YTD)	90% (Fiscal YTD)	89% (Fiscal YTD)	80%	80%

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 and training first responders.

Measure	CY14 Actual	CY15 Actual	CY16 Actual	Q1 CY17 Actual	Q2 CY17 Actual	CY17 Goal	CY19 Goal
Outcome A: Average monthly Planning Time Index value on Northbound Interstate 25 ⁷	2.42	2.47	2.45	Jan.: 2.65 Feb.: 2.49 March: 2.42	April: 2.5 May: 2.69 June: 2.65	2.50	2.70
Lead Measure 1: Average incident clearance time on NB I-25.	51 minutes	51 minutes	53 minutes	Jan.: 23 minutes Feb.: 23 minutes March: 32 minutes	April: 35 minutes May: 43 minutes June: 39 minutes	46 minutes	41 minutes

⁶ Data will be available in late November 2017 due to a change in the vendor who collects the pavement condition data.

⁷ Termini for Interstate 25 metrics are C- 470 and E-470. Results and goals are for daytime and early evening weekday hours.



Year-End FY2017 Performance Evaluation (October 2017)

Measure	CY14 Actual	CY15 Actual	CY16 Actual	Q1 CY17 Actual	Q2 CY17 Actual	CY17 Goal	CY19 Goal
Lead Measure 2: Average monthly road closure time on NB I-25.	61 minutes	50 minutes	51 minutes	Jan.: 32 minutes Feb.: 50 minutes March: 20 minutes	April: 41 minutes May: 50 minutes June: 41 minutes	45 minutes	40 minutes
Outcome B: Average monthly Planning Time Index value on Southbound Interstate 25 ⁵	2.41	2.62	2.29	Jan.: 2.35 Feb.: 2.21 March: 2.00	April: 2.27 May: 2.41 June: 2.51	2.70	2.90
Lead Measure 1: Average incident clearance time on SB I-25.	49 minutes	44 minutes	49 minutes	Jan.: 25 minutes Feb.: 21 minutes March: 23 minutes	April: 29 minutes May: 34 minutes June: 34 minutes	40 minutes	35 minutes
Lead Measure 2: Average monthly road closure time on SB I-25.	58 minutes	47 minutes	49 minutes	Jan.: 33 minutes Feb.: 33 minutes March: 42 minutes	April: 35 minutes May: 43 minutes June: 39 minutes	42 minutes	38 minutes
Outcome C: Average monthly Planning Time Index value on Eastbound Interstate 70 ⁸	2.13	1.78	1.64	Jan.: 1.07 (rev.) Feb.: 1.05 (rev.) March: 1.13 (rev.)	April: 1.41 (rev.) May: 1.16 (rev.) June: 1.19	1.80	1.80
Lead Measure 1: Average incident clearance time on EB I-70.	49 minutes	74 minutes	52 minutes	Jan.: 31 minutes Feb.: 30 minutes March: 18 minutes	April: 32 minutes May: 38 minutes June: 107 minutes	67 minutes	59 minutes
Lead Measure 2: Average monthly road closure time on EB I-70.	278 minutes	124 minutes	75 minutes	Jan.: 55 min. (rev.) Feb.: 55 min. March: 49 min. (rev.)	April: 32 minutes May: 39 minutes June: 51 minutes	112 minutes	99 minutes
Outcome D: Average monthly Planning Time Index value on Westbound Interstate 70 ⁶	1.76	1.45	1.54	Jan.: 1.08 (rev.) Feb.: 1.05 (rev.) March: 1.39 (rev.)	April: 1.4 May: 1.28 June: 1.49	1.70	1.80
Lead Measure 1: Average incident clearance time on WB I-70.	45 minutes	71 minutes	64 minutes	Jan.: 36 minutes Feb.: 32 minutes March: 41 minutes	April: 18 minutes May: 54 minutes June: 85 minutes	64 minutes	57 minutes
Lead Measure 2: Average monthly road closure time on WB I-70.	166 minutes	163 minutes	92 minutes	Jan.: 48 minutes Feb.: 61 minutes March: 25 minutes	April: 44 minutes May: 45 minutes June: 128 minutes	147 minutes	130 minutes

NOTE: CDOT has revised the presentation of the metrics above to reflect performance for individual months, rather than year-to-date performance

⁵Termini for Interstate 25 metrics are C- 470 and E-470. Results and goals are for daytime and early evening weekday hours.

⁸Termini for Interstate 70 metrics are Vail and C-470. Results and goals are for daytime and early evening weekend hours.



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 year 2017 and a C for fiscal year 2019, compared to an actual grade of C+ in fiscal year 2016.

Major Functional Area - Operations and Maintenance

Process - Under nine Maintenance Program Areas, CDOT performs many processes to maintain the state highway system. For example, the Roadway Surface area includes 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	FY14 Actual	FY15 Actual	FY16 Actual	Q1 FY17	Q2 FY17	Q3 FY17	Q4 FY17	FY17 Goal	FY19 Goal
Outcome: Overall Maintenance Levels of Service Grade.	B-	B-	C+ (rev.)	Annual Metric	Annual Metric	Annual Metric	Annual Metric ⁹	C+	C
Lead Measure 1: Snow and Ice Control Grade.	B	B	B-	Annual Metric	Annual Metric	Annual Metric	Annual Metric ¹⁰	B	B
Lead Measure 2: Retro-reflectivity score for sampled long-line striping. ¹¹	N/A	April: 146 ¹² May: 173 June: 166	July: 161 Aug.: 176 Sept.: 223 Oct.: 195 Nov.: 178 Dec.: 135 Jan.: 128 Feb.: 96 March: 155 April: 159 May: 135 (rev.) June: 131	July: 144 Aug: 144 Sept: 161	Oct.: 181 Nov.: 193 Dec.: 202	Jan.: 135 Feb.: 112 March: 138	Apr.: 152 May: 169 June: 201	≥80 mcd/m ² /lux ¹³	≥80 mcd/m ² /lux

⁹ FY17 grade not yet available due to issues with new system that calculates the overall grade.

¹⁰ FY17 grade not yet available due to issues with new system that calculates the overall grade.

¹¹ Aggregate numbers do not include yellow striping for Region 3. February 2016 results do not include Region 5. Data since June 2016 do not include Region 1. December 2016 data do not include white striping in Region 3

¹² First month of reporting with current methodology.

¹³ 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.