



Strategic Policy Initiatives

The Colorado Department of Transportation (CDOT) has identified several Strategic Policy Initiatives (SPIs) for fiscal year 2017-18 and beyond. For this performance evaluation, the Department has updated progress on initiatives from its Fiscal Year 2018 Performance Plan¹ that capture the Department's strategic and operational priorities. The updates reflect data available in winter 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. Achieve 73 percent High/Moderate Drivability Life for fiscal year 2018 pavement condition, compared to 80 percent in fiscal year 2016. Achieve 64 percent High/Moderate Drivability Life for fiscal year 2020 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. (See specific targets in pages below.)

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 B- for the state highway system in fiscal year 2018 and a C for fiscal year 2020, compared to a C+ in fiscal year 2016.²

SPI 5

Workers' Compensation Claims: Create a high-performing culture of employee safety, reducing workers' compensation claims from 267 in 2016 to 249 in calendar year 2017.

¹ For calendar year metrics, the FY18 Performance Plan includes targets for calendar year 2018. Because data for that year is not yet available, CDOT in this report is using its current calendar year targets (2017) for those metrics.

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 416 for its three-year target (Dec. 31, 2019 target, or calendar year 2019 fatalities).³

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	Q4 CY17	CY17 Goal	CY20 Goal
Outcome: Fatalities on Colorado Roadways.	488	547	608	115 (rev.)	290 (rev.)	476 (rev.)	620	440	416
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 (rev.)	2.53	Minimum 2.0	Minimum 2.0
Lead Metric 2: Dedicated law enforcement contact hours for traffic safety enforcement.	75,689	84,146	119,762 (rev.)	24,663	52,633 (rev.)	73,826	88,535	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%	92.3%	95%	90%	90%
Measure	FY15 Actual	FY16 Actual	FY17 Actual	Q1 FY18	Q2 FY18	Q3 FY18	Q4 FY18	FY18 Goal	FY20 Goal
Lead Metric 4: FASTER Safety Mitigation program dollars spent as a percentage of the program's fiscal-year allocation ⁴	159%	160%	Data Not Provided	27%	47% ⁵			100%	100%

Note: Fatalities and injuries statistics are subject to frequent revision as new data become available. These data were current as of early January 2018

³ SPI uses 2016-17 goals until reporting for CY2018 begins with the Quarter 3 report.

⁴ 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.

⁵ Data as of November 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. Achieve 73 percent High/Moderate Drivability Life for fiscal year 2018 pavement condition, compared to 80 percent in fiscal year 2016. Achieve 64 percent High/Moderate Drivability Life for fiscal year 2020 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	FY15 Actual	FY16 Actual	FY17 Actual	Q1 FY18	Q2 FY18	Q3 FY18	Q4 FY18	FY18 Goal	FY20 Goal
Outcome: Percentage of sampled lane miles of state highway pavement with High or Moderate Drivability Life.	79%	80%	80%	Annual Metric	Annual Metric	Annual Metric	Annual Metric	73% (rev.)	64% (rev.)
Lead Metric: Percentage of Surface Treatment program projects advertised for the fiscal year that match recommendations from CDOT's pavement management system.	77%	90%	89%	100%	90%			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	Q3 CY17 Actual	Q4 CY17 Actual	CY17 Goal	CY19 Goal
Outcome A: Average monthly Planning Time Index value on Northbound Interstate 25 ⁶	2.42	2.47	2.45	Jan.: 2.65 Feb.: 2.49 March: 2.42	April: 2.5 May: 2.69 June: 2.65	July: 2.55 August: 2.72 Sept.: 2.46	Oct.: 2.63 Nov.: 2.62 Dec.: 2.69	2.50	2.70

⁶ Termini for Interstate 25 metrics are C- 470 and E-470. Results and goals are for daytime and early evening weekday hours.



Q2 FY2018 Performance Evaluation (January 2018)

Measure	CY14 Actual	CY15 Actual	CY16 Actual	Q1 CY17 Actual	Q2 CY17 Actual	Q3 CY17 Actual	Q4 CY17 Actual	CY17 Goal	CY19 Goal
Lead Measure 1: Average incident clearance time on NB I-25.	51 min.	51 min.	53 min.	Jan.: 23 min. Feb.: 23 min. March: 32 min.	April: 35 min. May: 43 min. June: 39 min.	July: 50 min. August: 61 min Sept.: 57 min.	Oct.: 42 min. Nov.: 56 min. Dec.: 48 min	46 min.	41 min.
Outcome B: Average monthly Planning Time Index value on Southbound Interstate 25 ⁷	2.41	2.62	2.29	Jan.: 2.35 Feb.: 2.21 March: 2.00	April: 2.27 May: 2.41 June: 2.51	July: 2.43 August: 2.4 Sept.: 2.37	Oct.: 2.33 Nov.: 2.42 Dec.: 2.44	2.70	2.90
Lead Measure 1: Average incident clearance time on SB I-25.	49 min.	44 min.	49 min.	Jan.: 25 min. Feb.: 21 min. March: 23 min.	April: 29 min. May: 34 min. June: 3 min.	July: 42 min. August: 53 min. Sept.: 67 min	Oct.: 61 min. Nov.: 39 min. Dec.: 41 min.	40 min.	35 min.
Outcome C: Average monthly Planning Time Index value on Eastbound Interstate 70 ⁸	2.13	1.78	1.64	Jan.: 1.07 Feb.: 1.05 March: 1.13	April: 1.41 May: 1.16 June: 1.19	July: No Data August: 1.47 Sept.: 1.26	Oct.: 1.3 Nov.: 1.19 Dec.: 1.63	1.80	1.80
Lead Measure 1: Average incident clearance time on EB I-70.	49 min.	74 min.	52 min.	Jan.: 31 min. Feb.: 30 min. March: 18 min.	April: 32 min. May: 38 min. June: 107 min.	July: 94 min. August: 72 min. Sept.: 28 min.	Oct.: 56 min. Nov.: 31 min. Dec.: 33 min.	67 min.	59 min.
Outcome D: Average monthly Planning Time Index value on Westbound Interstate 70	1.76	1.45	1.54	Jan.: 1.08 Feb.: 1.05 March: 1.39	April: 1.4 May: 1.28 June: 1.49	July: 1.67 August: 1.33 Sept.: 1.40	Oct.: 1.21 Nov.: 1.48 Dec.: 1.55	1.70	1.80
Lead Measure 1: Average incident clearance time on WB I-70.	45 min.	71 min.	64 min.	Jan.: 36 min. Feb.: 32 min. March: 41 min.	April: 18 min. May: 54 min. June: 85 min	July: 124 min. August: 93 min. Sept.: 108 min.	Oct.: 38 min. Nov.: 56 min. Dec.: 41 min.	64 min.	57 min.

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

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,

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

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



repairing expansion joints and patching bridge decks. The Snow and Ice Control area includes plowing snow and taking avalanche control measures.

Measure	FY15 Actual	FY16 Actual	FY 17 Actual	Q1 FY18	Q2 FY18	Q3 FY18	Q4 FY18	FY18 Goal	FY20 Goal
Outcome: Overall Maintenance Levels of Service Grade.	B-	C+	C+	Annual Metric	Annual Metric	Annual Metric	Annual Metric ⁹	C+	C
Lead Measure 1: Snow and Ice Control Grade.	B	B-	C+	Annual Metric	Annual Metric	Annual Metric	Annual Metric ¹⁰	B	B
Lead Measure 2: Retro-reflectivity score for sampled long-line striping.	April: 146 ¹¹ 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 June: 131	July: 144 Aug.: 144 Sept.: 161 Oct.: 181 Nov.: 193 Dec.: 202 Jan.: 135 Feb.: 112 March: 138 April: 152 May: 169 June: 201	July: 182 Aug: 230 Sept: 215	Oct: 256 Nov.: N/A Dec.: N/A			≥80 mcd/m ² /l ux ¹²	≥80 mcd/m ² /l ux

SPI 5—Workers' Compensation Claims: Create a high-performing culture of employee safety, reducing workers' compensation claims from 267 in 2016 to 249 in calendar year 2017.

Major Functional Area - Safety

Process - CDOT uses safety engagements between supervisors and employees as an operational process that can reduce injuries and result in workers' compensation claims.

⁹ FY18 grade will be available in fall 2018.

¹⁰ FY18 grade will be available in fall 2018.

¹¹ First month of reporting with current methodology.

¹² 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.



Measure	CY14 Actual	CY15 Actual	CY16 Actual	Q1 CY17	Q2 CY17	Q3 CY17	Q4 CY17	CY17 Goal	CY19 Goal
<u>Outcome:</u> Number of workers' compensation claims	309	250	267	60	94	141	180	249	227
Lead Measure 1: Number of safety engagements performed	10,455	13,689	8,859	2,708	6,350	10,567	16,108	10,000	10,500