

# **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 Plan<sup>1</sup> that capture the Department's strategic and operational priorities. The updates reflect data available in fall 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 increase in average travel times on Interstate 25, between Northwest Parkway and C-470, during peak weekday hours. Slow the increase in average travel times on Interstate 70, between Vail and C-470, during peak weekend hours. Specific targets can be found in the following pages.

### 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.<sup>2</sup>

### 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.

<sup>&</sup>lt;sup>1</sup> 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.

<sup>&</sup>lt;sup>2</sup> The overall Maintenance Levels of Service grade for fiscal year 2016 was revised to a C+ in late calendar year 2016.



# Department of Transportation Q1 FY2018 Performance Evaluation (Oct. 2017)

**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	Q4 CY17	CY17 Goal	CY19 Goal
Outcome: Fatalities on Colorado Roadways.	488	547 (rev.)	608 (rev.)	116 (rev.)	290 (rev.)	457		440	416
Outcome: Fatalities per 100 million Vehicle Miles Traveled on Colorado roadways.	0.996	1.09 (rev.)	N/A <sup>3</sup>	N/A <sup>3</sup>	N/A <sup>3</sup>	<b>N/A</b> <sup>3</sup>		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 (rev.)	2.51 (rev.)	2.58		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		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%		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 <sup>4</sup>	159%	160%	113%	27%				100%	100%

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

<sup>&</sup>lt;sup>3</sup> Official 2016 Vehicle Miles Traveled data will not be available until mid-2017, and 2017 data will be unavailable until mid-2018.

<sup>&</sup>lt;sup>4</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.



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%	N/A <sup>5</sup>	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%	N/A <sup>6</sup>				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 <sup>7</sup>	CY14 Actual		CY16 Actual	Q1 CY17 Actual	Q2 CY17 Actual	Q3 CY17 Actual	CY17 Goal	CY19 Goal
Outcome A: Average monthly travel time (in minutes) on Northbound Interstate 25 <sup>8</sup>	N/A	49	49	Jan.: 50 minutes Feb.: 50 minutes March: 48 minutes	April: 50 minutes May: 51 minutes June: 53 minutes	July: 52 minutes August: 51 minutes Sept.: 48 minutes	49	49

<sup>&</sup>lt;sup>5</sup> Results will be available in late fall 2017.

<sup>&</sup>lt;sup>6</sup> No projects were advertised in quarter 1 of fiscal year 2018.

<sup>&</sup>lt;sup>7</sup> For travel time reliability outcomes, the FY18 Performance Plan changed measures from Planning Time Index to average travel time. The table now aligns with the FY18 performance plan and Vision 2018 goals for economic development.

<sup>&</sup>lt;sup>8</sup> Termini for Interstate 25 metrics are C- 470 and E-470. Results and goals are for daytime and early evening weekday hours.



# Department of Transportation Q1 FY2018 Performance Evaluation (Oct. 2017)

Measure	<b>CY14</b>	CY15	CY16	Q1 CY17	Q2 CY17	Q3 CY17	CY17	CY19
Ivitasui c	Actual	Actual	Actual	Actual	Actual	Actual	Goal	Goal
Lead Measure 1: Average incident clearance time on NB I-25.	N/A	N/A	54 minutes	Jan.: 35 minutes Feb.: 58 minutes March: 54 minutes	April: 44 minutes May: 55 minutes June: 39 minutes	July: 50 minutes August: 61 minutes September: N/A <sup>9</sup>	51 minutes	45 minutes
<b>Outcome B</b> : Average monthly travel time (in minutes) on Southbound Interstate 25 <sup>10</sup>	N/A	52 minutes	49 minutes	Jan.: 49 minutes Feb.: 49 minutes March: 45 minutes	April: 49 minutes May: 51 minutes June: 53 minutes	July: 49 minutes August: 50 minutes Sept.: 49 minutes	50 minutes	50 minutes
Lead Measure 1: Average incident clearance time on SB I-25.	N/A	N/A	50 minutes	Jan.: 32 minutes Feb.: 24 minutes March: 24 minutes	April: 30 minutes May: 34 minutes June: 34 minutes	July: 43 minutes August: 53 minutes September: N/A	47 minutes	42 minutes
<b>Outcome C</b> : Average monthly travel time (in minutes) on Eastbound Interstate 70 <sup>11</sup>	N/A	106 minutes	100 minutes	Jan.: 122 minutes Feb.: 113 minutes March: 89 minutes	April: 88 minutes May: 86 minutes June: 95 minutes	July: 128 minutes August: 94 minutes Sept.: 86 minutes	101 minutes	95 minutes
Lead Measure 1: Average incident clearance time on EB I-70.	N/A	N/A	58 minutes	Jan.: 95 minutes Feb.: 150 minutes March: 81 minutes	April: 33 minutes May: 36 minutes June: 85 minutes	July: 94 minutes August: 72 minutes September: N/A	57 minutes	54 minutes
<u>Outcome D</u> : Average monthly Planning Time Index value on Westbound Interstate 70 <sup>12</sup>	N/A	93 minutes	95 minutes	Jan.: 112 minutes Feb.: 101 minutes March: 87 minutes	April: 89 minutes May: 87 minutes June: 86 minutes	July: 96 minutes August: 86 minutes Sept.: 87 minutes	95 minutes	93 minutes
Lead Measure 1: Average incident clearance time on WB I-70.	N/A	N/A	45 minutes	Jan.: 39 minutes Feb.: 41 minutes March: 31 minutes	April: 29 minutes May: 40 minutes June: 107 minutes	July: 124 minutes August: 93 minutes September: N/A	43 minutes	<b>39</b> minutes

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

Measure	FY15	FY16	FY17	Q1	Q2	Q3	Q4	FY18	FY20
	Actual	Actual	Actual	FY18	FY18	FY18	FY18	Goal	Goal
Lead Measure 2: Percent of first responders trained in traffic incident management (TIM) statewide. <sup>13</sup>	12.4%	19.7%	27.2%	27.6%				50% (rev.) <sup>14</sup>	N/A

<sup>&</sup>lt;sup>9</sup> September incident clearance data for all corridors will be available in late October 2017.

<sup>&</sup>lt;sup>10</sup> Termini for Interstate 25 metrics are C- 470 and E-470. Results and goals are for daytime and early evening weekday hours.

<sup>&</sup>lt;sup>11</sup> Termini for Interstate 70 metrics are Vail and C-470. Results and goals are for daytime and early evening weekend hours.

<sup>&</sup>lt;sup>12</sup> Termini for Interstate 70 metrics are Vail and C-470. Results and goals are for daytime and early evening weekend hours.

<sup>&</sup>lt;sup>13</sup> TIM Training lead metric applies to all travel time reliability outcomes. The percent trained is based on 19,894 first responders statewide.

<sup>&</sup>lt;sup>14</sup> The fiscal year 2018 goal is a joint goal between CDOT and CDPS, pending approval with the Colorado State Patrol.



**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	FY15	FY16	FY 17	Q1	Q2	Q3	Q4	<b>FY18</b>	<b>FY20</b>
wieasure	Actual	Actual	Actual	<b>FY18</b>	<b>FY18</b>	<b>FY18</b>	FY18	Goal	Goal
Outcome: Overall Maintenance Levels of Service Grade.	В-	C+ (rev.)	N/A <sup>15</sup>	Annual Metric	Annual Metric	Annual Metric	Annual Metric	B-	С
Lead Measure 1: Snow and Ice Control Grade.	В	В-	N/A <sup>16</sup>	Annual Metric	Annual Metric	Annual Metric	Annual Metric	В	В
Lead Measure 2: Retro-reflectivity score for sampled long-line striping. <sup>17</sup>	April: 146 <sup>18</sup> 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	213 <sup>19</sup>				≥80 mcd/m²/l ux	≥80 mcd/m²/l ux

<sup>&</sup>lt;sup>15</sup> FY17 grade will be available in late fall 2017.

<sup>&</sup>lt;sup>16</sup> FY17 grade will be available in late fall 2017.

<sup>&</sup>lt;sup>17</sup> 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. Q1 data does not include Region 2.

<sup>&</sup>lt;sup>18</sup> First month of reporting with previous methodology.

<sup>&</sup>lt;sup>19</sup> CDOT will begin a new striping reporting methodology which will track striping luminosity quarterly, with approximately 140 standard locations throughout the state. The data is anticipated to be available quarterly in fiscal year 2018.



**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.

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