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CDOT's 3 Key Responsibilities

Initiatives

- Constant improvements
- Cost effectiveness
- Point to the future / Visionary

Construction & Engineering

- Limited funds for major projects
- Improve mobility / Increase options

Maintenance & Asset Mngmt

- 1st priority & foundational
- Keep the roads open





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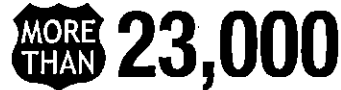
CDOT Responsibilities

MONITORS



278 of 522
AVALANCHE PATHS

**MAINTAINS,
& REPAIRS**



23,000
HIGHWAY LANE MILES

SPENDS
\$69 MILLION
PER YEAR ON



SNOW REMOVAL

KEEPS
35 **MOUNTAIN**
PASSES
OPEN YEAR-ROUND

ADMINISTERS
ABOUT \$30 **MILLION**
IN FEDERAL
GRANTS
FOR TRANSIT
OPERATORS



OVERSEES
\$53.7 MILLION
IN FEDERAL AVIATION
GRANTS FOR AIRPORTS



MAINTAINS
3,447
BRIDGES



OVERSEES
28 BILLION
ANNUAL VEHICLE
MILES TRAVELED



MANAGES
OVER \$8 **MILLION**
IN FEDERAL
GRANTS FOR
SAFE DRIVING
PROGRAMS





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Where Does Colorado Rank?



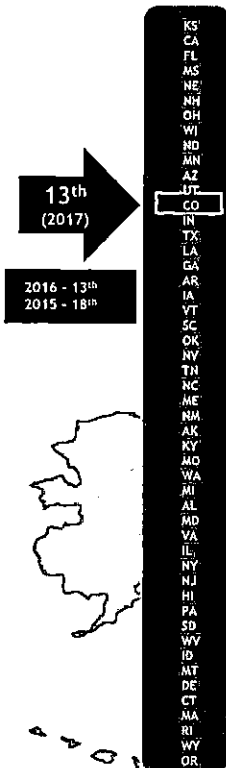
**Interstate/NHS
Pavement
Good Condition**



Source: Highway
Statistics; FHWA
2016

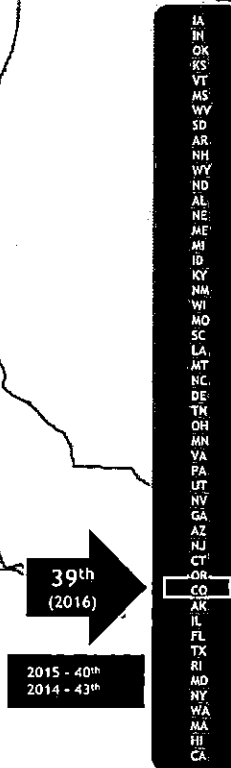
Updated:
November 2018

**Interstate/NHS
Bridge
Good Condition**



Source: National
Bridge Inventory
Data USDOT FHWA
2017

**Interstate/NHS
System
Reliability**



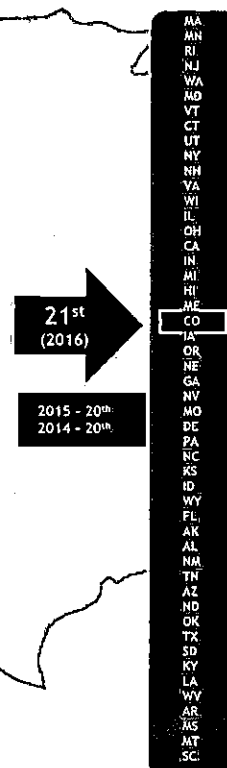
Source: NPMRDS HERE
(2012-2016) & NPMRDS
INRIX (2017) & FHWA HWY
Stats. 2016

**Interstate
Freight
Reliability**



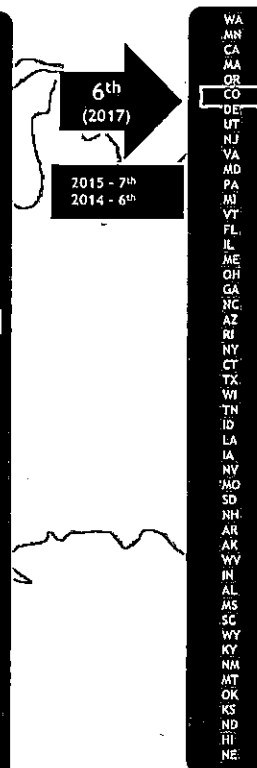
Source: NPMRDS HERE
(2012-2016) & NPMRDS
INRIX (2017)

**Statewide
Fatality Rate
Five-Year Avg.**



Source: FARS 2013-
2016 Final

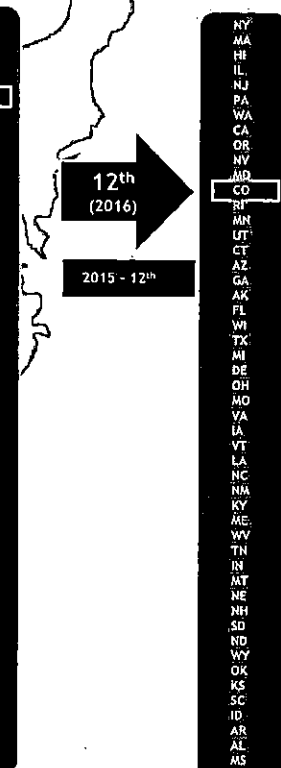
**Bike
Friendly**



Source: The League of
American Bicyclists 2017

*no 2016 report
available

**Transit
Utilization**

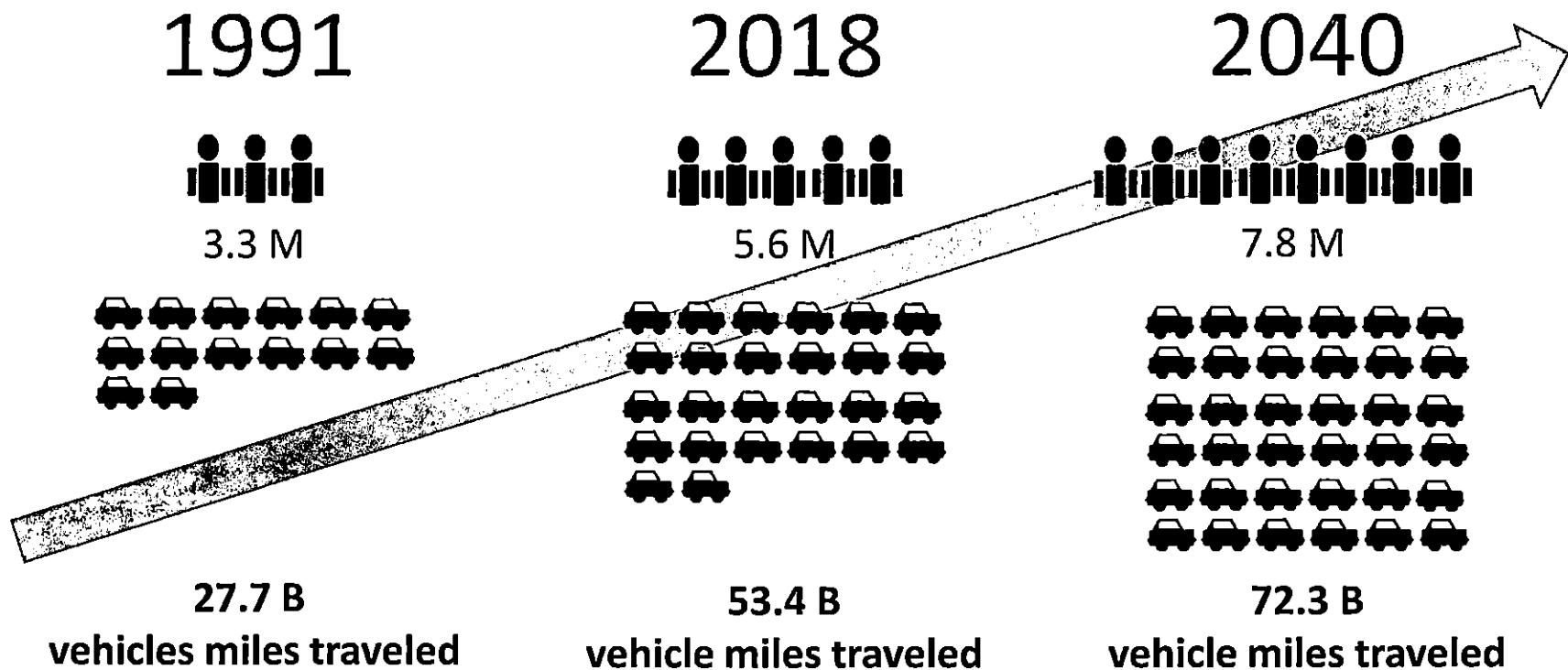


Source: National Transit
Database 2016 & FHWA
HWY Stats. 2016



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Our Challenge Continued Growth





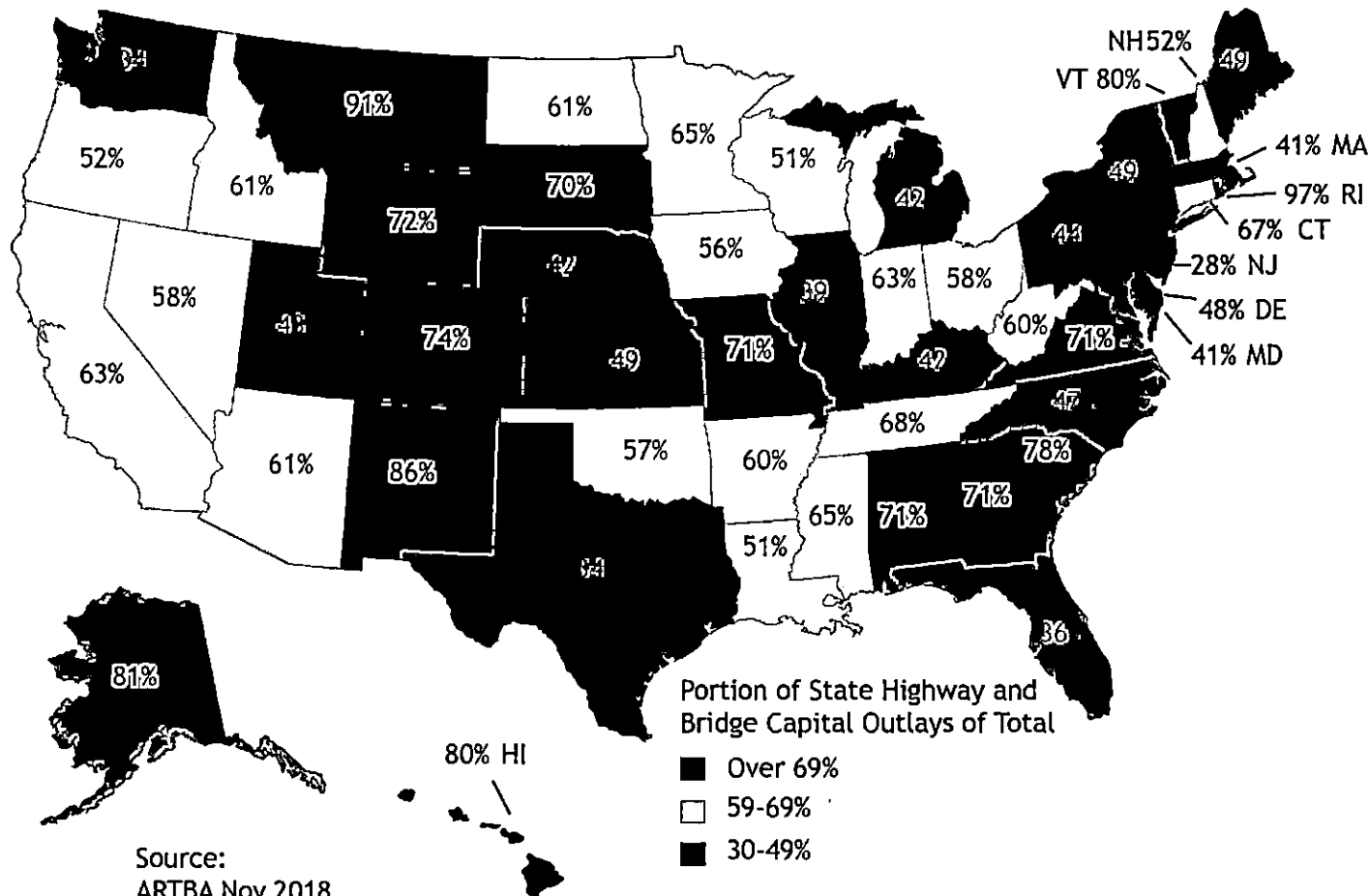
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Reliance On Federal Funds

Almost \$3 of Every \$4 for Capital Construction are Federal Funds

Federal funds, nationally, provide an average 52% of State DOT annual capital outlays for highway & bridge projects



Source:
ARTBA Nov 2018



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Performance Reporting Hierarchy

Governor's Vision

High-level goals for each executive department.
CDOT's Vision 2018 goal: travel time reliability, and reducing fatalities on roadways.

Tier 1: Three Peaks

CDOT Vision towards becoming the best DOT in the nation for our customers. Includes other mission and vision documentation.

Tier 2: Legislation Required Performance Reporting

Managing business processes and outcomes through performance measures.

Tier 3: Lagging & Leading Performance Indicators

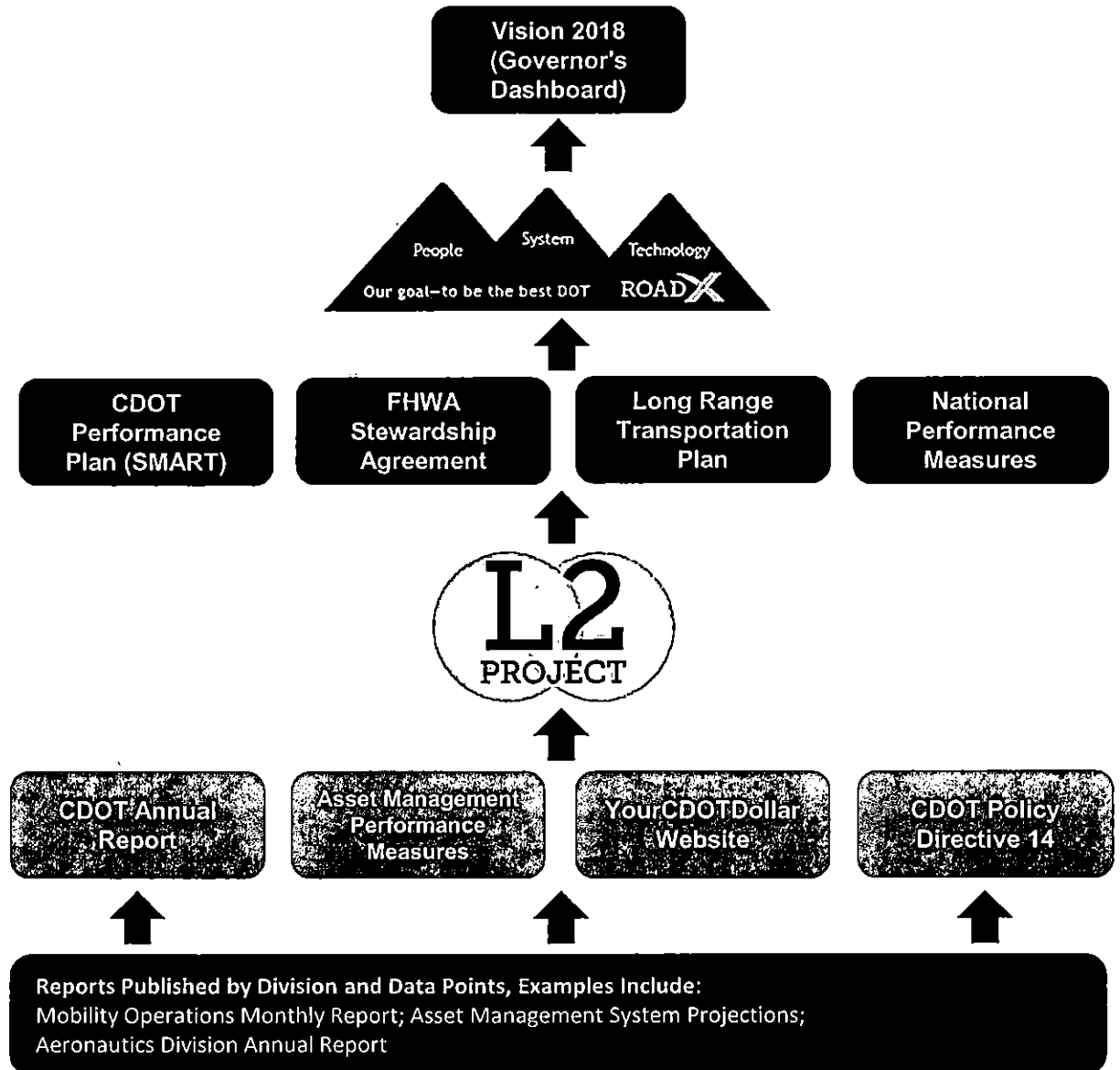
Managing business processes and outcomes through performance measures.

Tier 4: CDOT Reports (non-statute required)

Used for decision making and reporting outcomes to our customers and the Transportation Commission.

Tier 5: Division Reports & Data:

Published on specific divisions and programs.





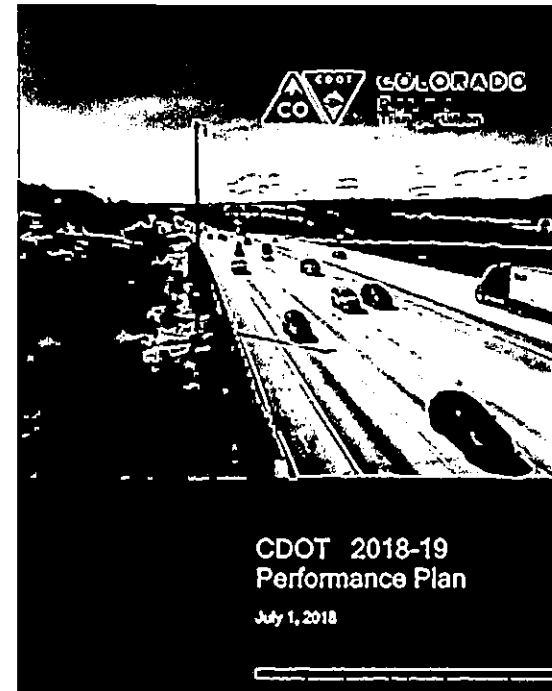
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FY 2018-19 PERFORMANCE PLAN

Key elements: Five Strategic Policy Initiatives (SPI) and supporting operational metrics

- **Safety**
 - Roadway Fatalities
 - Workers' Compensation Claims
- **Customer Service**
- **Travel Time**
- **Pavement Condition**
- **Maintenance**





Safety (Roadway Fatalities)

Strategies

(Sample Lead Measures)

- Fund 75,000 law-enforcement contact hours in 2019 to enforce traffic safety (Example: “Heat Is On” campaigns).
- Ensure 90% of FASTER safety projects address high-priority locations (10% address proactive safety issues).



Goals

(Lag Measure)

Limit roadway fatalities to:

- 728 = calendar year 2019 limit
- 808 = calendar year 2021 limit

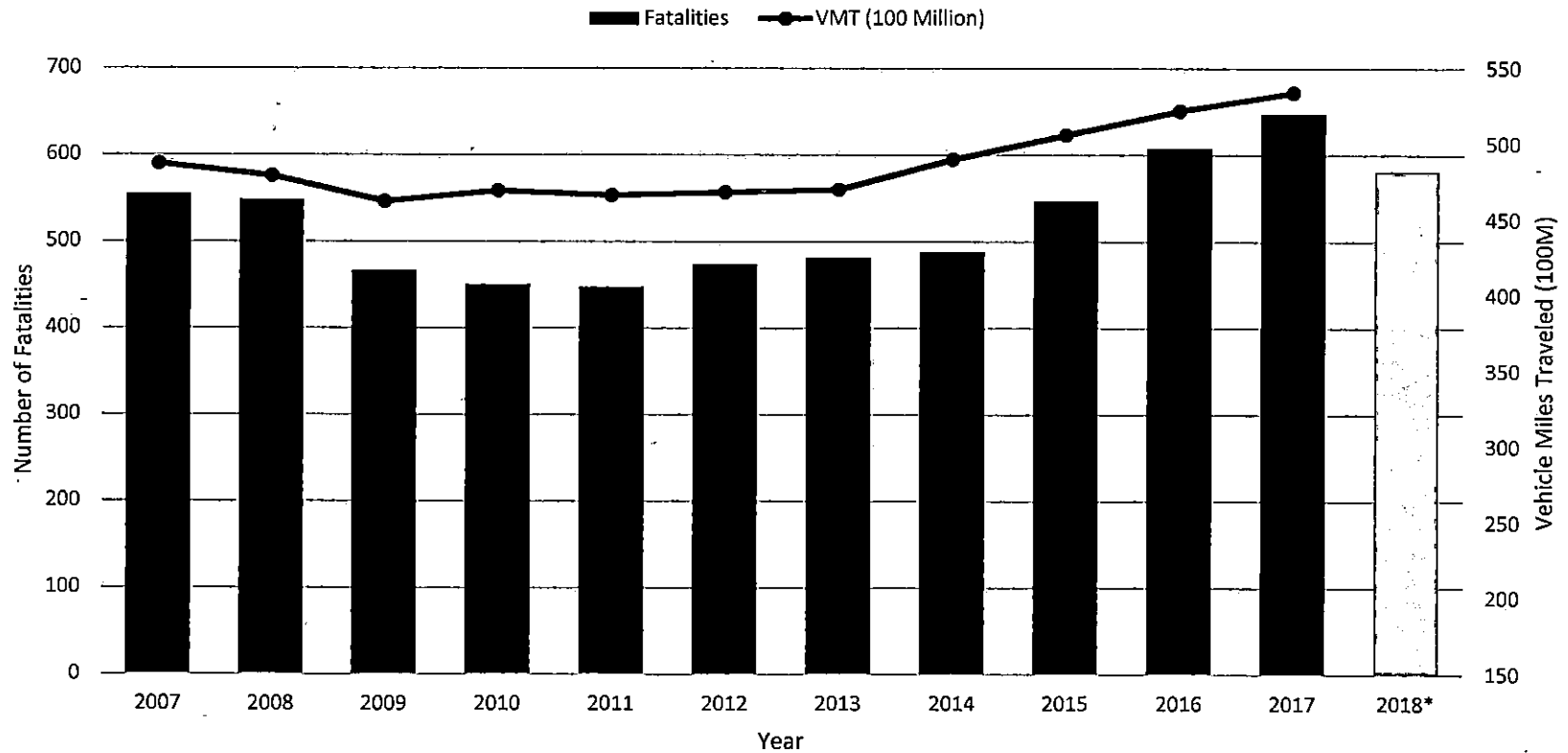
CY18 forecasted fatalities: 800

CY18 actual fatalities: 582 (as of December 18, 2018)



Safety (Roadway Fatalities)

Colorado Roadway Fatalities, 2007-2018



* Through Dec. 18, 2018



Workers' Compensation Claims

Strategies

(Sample Lead Measures)

- Conduct 10,000 Safety Engagements in 2019.
- Recognize 125 Safety Leaders and 900 Safety Champions in 2019.



Goals

(Lag Measure)

Reduce workers' compensation claims to:

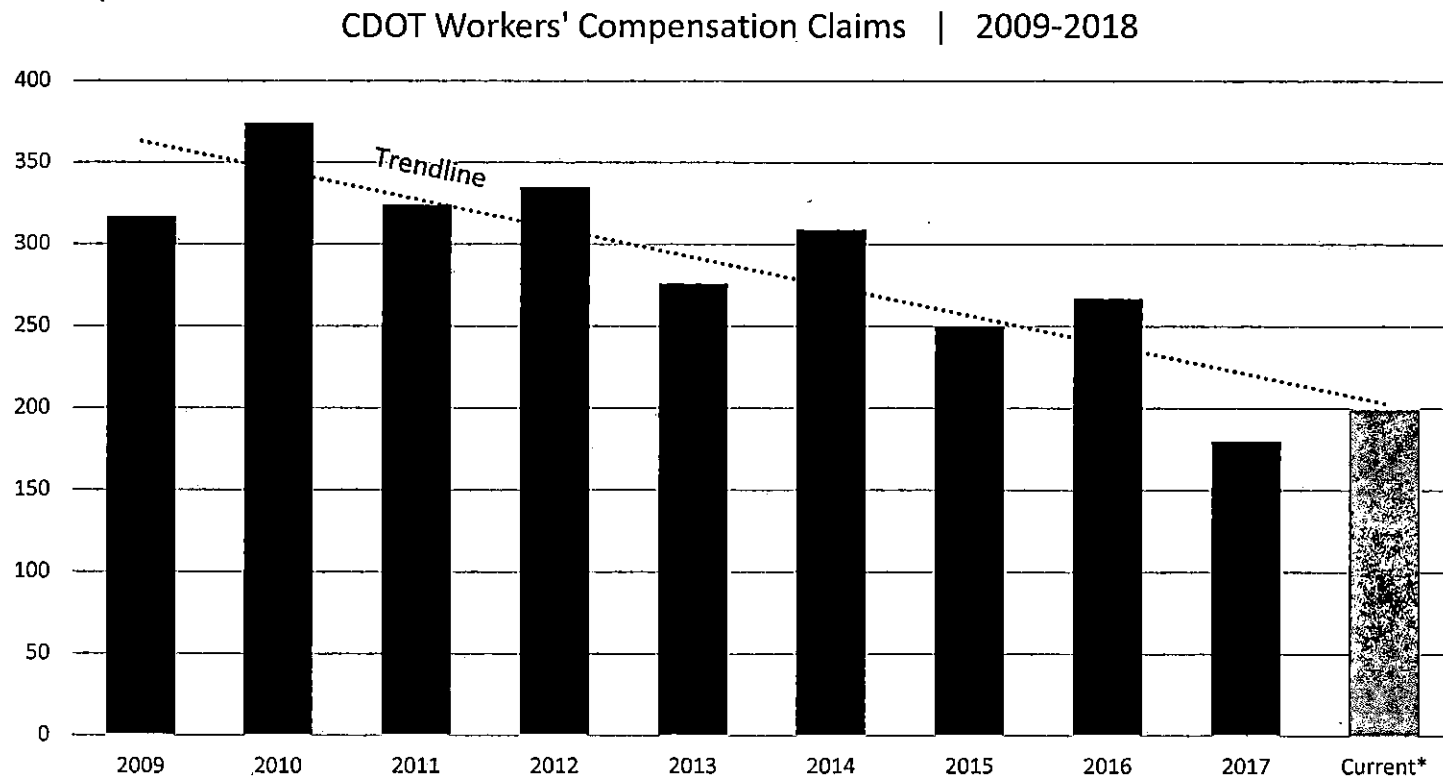
- 228 = calendar 2019 goal
- 206 = calendar 2021 goal

2017 actual claims: 180

2018 actual claims: 199 (through November 30, 2018)



Workers' Compensation Claims



* 2018 - Through November



Customer Service

Strategies

(Sample Lead Measures)

- 100% of customer inquiries responded to in 48 hours
- Ensure that 90% of customers who were assisted by CDOT's Courtesy Patrol service were satisfied with the service provided.



Goals

(Lag Measure)

- Achieve a Customer Service Satisfaction percentage of:
 - 85% for CY18
 - 87% for CY20
- CY17 Actual Satisfaction: 87%



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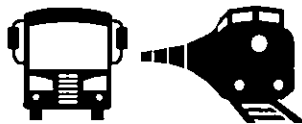
Some Of Our Customers And How We Serve Them



THE TRAVELING
PUBLIC

Grew customer service hotline with nearly 10,000 public contacts and customer satisfaction rates of 75%

TRANSIT/
RAIL



Over 9 million page views for codot.gov



BIKE/PED

Over 18 million visits to Cotrip.org

FREIGHT/
TRUCKING



Over half a million calls to 511



AGRICULTURE

Grew social and media engagements by 25%

AVIATION



Reached 3.4 million talking about transportation, funding, projects through social media, telephone town halls, events with Together We Go



TOURISM



Travel Time

Strategies

(Sample Lead Measures)

- Reduce average incident clearance times in 2018
- Increase the percentage of first responders trained in Traffic Incident Management to 50 percent in 2019.

Goals

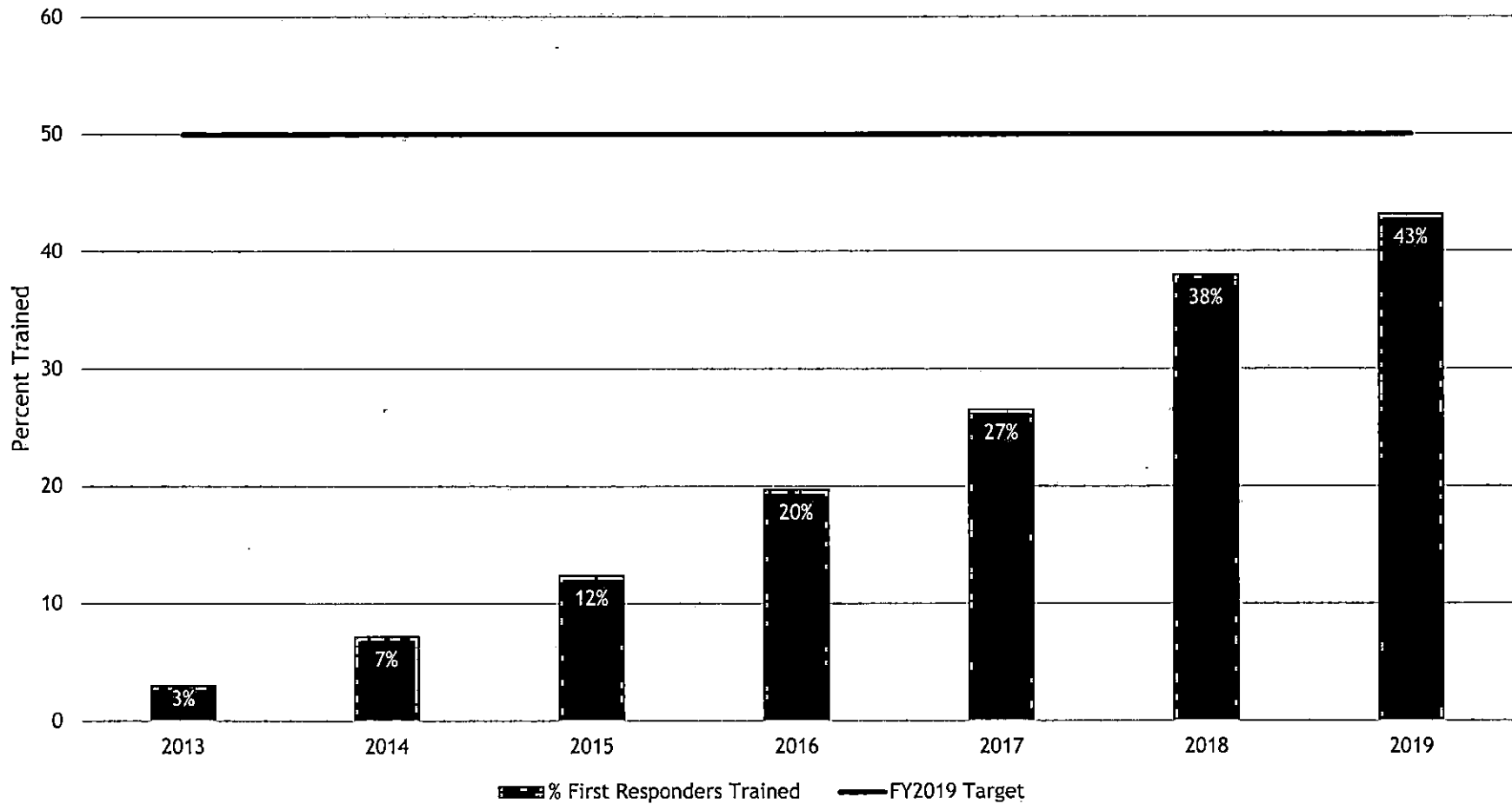
(Lag Measure)

Interstate	2017 Time	2019 Goal	2021 Goal
EB I-70 Mountain	96 min.	95 min.	90 min.
WB I-70 Mountain	92 min.	93 min.	91 min.
NB I-25 Metro	51 min.	49 min.	48 min.
SB I-25 Metro	50 min.	49 min.	48 min.

**Travel-time goals based on reductions from projected times.*



Training in Traffic Incident Management Colorado First Responders



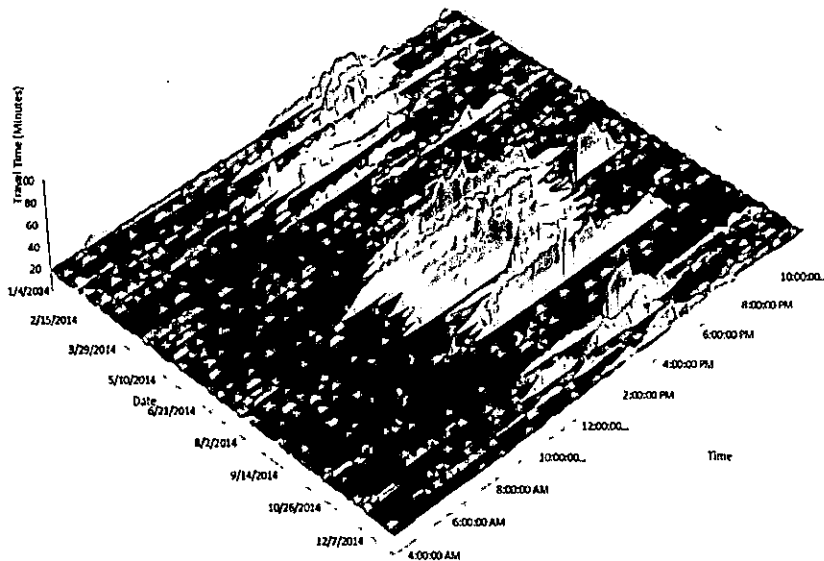


Travel Time - I-70 MEXL East

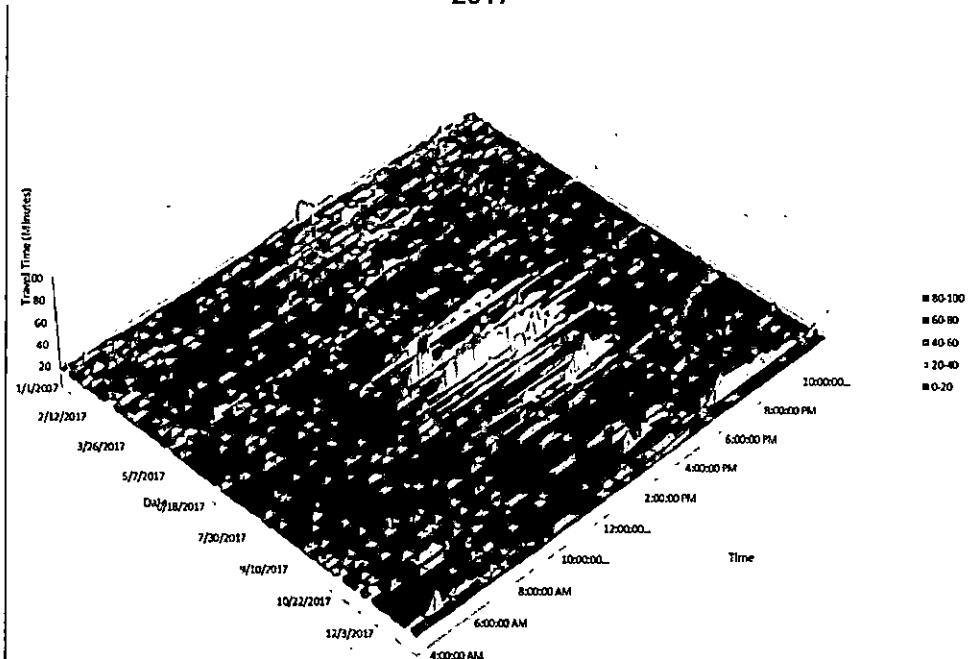
Corridor Performance Improvement

- Peak-period lane only operational when warranted
- Winter travel time spikes > 30 min nearly eliminated
- Summer travel time delay still present, but intensity and duration of peak greatly reduced
- Only weekend data used for I-70 MEXL analysis

2014



2017



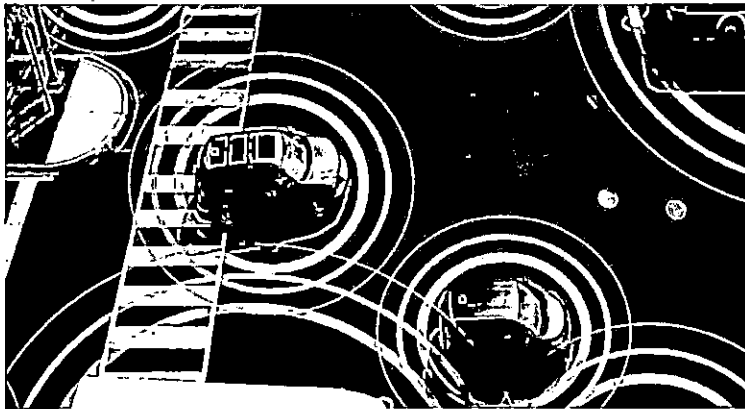
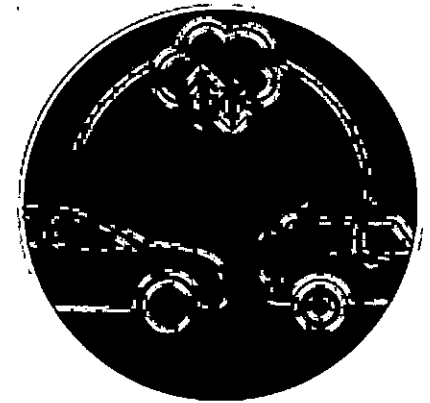


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Technology Reducing Travel Time

Active Projects

- Ramp metering on I-25 south through Colorado Springs
- 12 ramp meters on I-25 through central Denver
- Smart truck parking in four locations throughout state.
- New operations center in Pueblo to manage traffic & maintenance response in SW CO
- Adaptive traffic signals in Greeley and other locations
- Smart work zone projects to enhance safety
- Optimized snow plow route planning and deployment
- Increased safety patrol services to provide motorist assistance on I-25 and I-70



Upcoming Projects

- Building statewide connected vehicle ecosystem and Internet of Roads including 90 miles of connected vehicle infrastructure on I-70 from Denver to Vail, more on C-470, I-25 North, and I-25 Gap
- Smart 25 project with intelligent ramp metering on NB I-25 from Ridgeway to University
- Building Data Analytics Intelligence System to create effective traffic management, weather, fleet vehicle and other data analysis vehicle ecosystem.



Pavement Condition

Strategies

(Sample Lead Measure)

Ensure 80% of advertised pavement projects match recommendations from CDOT's pavement management system.

Goals

(Lag Measure)

Achieve high/moderate Drivability Life* for:

- 75% of lane miles (FY19 goal)
- 65% of lane miles (FY21 goal)

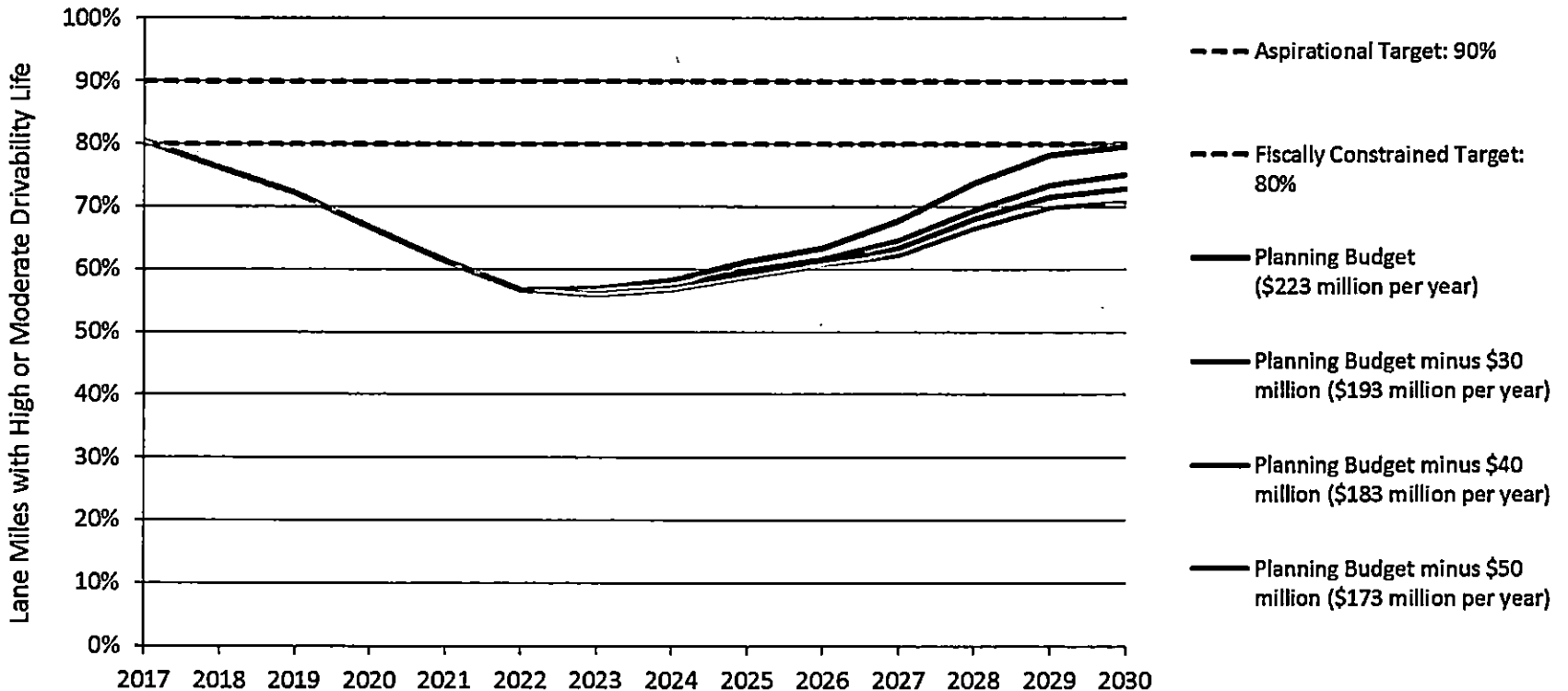
FY18 actual condition = 80%

Drivability Life is a measurement in years of how long a stretch of highway will have acceptable driving conditions.*



Pavement Condition

Percentage of Lane Miles with High or Moderate Drivability Life
Fiscally Constrained Target is 80%





Maintenance

Strategies

(Sample Lead Measures)

- Achieve a B in snow and ice control for FY 19.
- Ensure that striping achieves 67% minimum reflectivity score.



Goals

(Lag Measure)

Achieve* a Maintenance Levels of Service (MLOS) grade for the state highway system of:

- B- (FY19 goal)
- B- (FY21 goal)

FY18 actual grade = B

**Goal based on fiscal constraints*



Maintenance Levels of Service (MLOS) by Program Area

Maintenance Program Area Description	FY 18-19 Budget	FY 16-17 Actual	FY 17-18 Actual
Planning, Training and Scheduling	\$17.8M	N/A	N/A
Roadway Surfacing	\$37.5M	B	B+
Roadside Facilities	\$25.0M	C-	B+
Roadside Appearance	\$11.0M	D-	B-
Traffic Services	\$67.2M	C+	B
Bridges & Structures	\$6.3M	B-	B+
Snow & Ice	\$81.3M	B-	B
Service Equipment, Buildings & Grounds	\$18.2M	N/A	N/A
Tunnels	\$6.1M	N/A	N/A
US 36 (mtc. contract)	\$2.4M	N/A	N/A
OVERALL MLOS	\$272.8M	C+	B



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Process Improvements

TECHNOLOGY

- CDOT R4 (NE CO): “2D hydraulic modeling” during the structural analysis phase of transportation projects saved \$4.4 million; planned implementation in other Regions

HEALTHY MULTI-MODAL SYSTEM

- Friction sensor technology on some Colorado highways has led to the more-precise application of deicers, saving over \$180,000 annually.

TECHNOLOGY

- Streamlining of the Utility Permitting process has reduced permitting time by over 38%

PEOPLE

- CDOT’s engagement of frontline employees for Lean Everyday Ideas was recognized as a “2018 Top-25 Innovation in American Government” by Harvard’s Ash Center for Democratic Governance and Innovation



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Legislative & Regulatory Agendas

Bills:

- **Repeal obsolete aeronautics report**

Budget Requests:

- **Allocate SB 1 multimodal funding**
- **Allocate SW Chief/Front Range Rail funding (\$2.5m)**
- **SB267 and SB1 funding**

Planned Rule Revisions

Law Enforcement Assistance Fund

- *Updating rules with non-substantive changes.*

Chain Law

- *Clarify use of cables and chains for passenger vehicles.*

State Highway Utility Accommodation Code

- *Review of rules in its entirety to reflect updated practices and legal requirements.*

Outdoor Advertising

- *Address any changes or improvements in process and seek to simplify existing rules.*

<https://www.codot.gov/business/rules>



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Questions?

