



TO: THE TRANSPORTATION COMMISSION
FROM: REBECCA WHITE - DIRECTOR, DIVISION OF TRANSPORTATION DEVELOPMENT
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DATE: MARCH 18, 2020
RE: POLICY DIRECTIVE 14.0 - PROPOSED OBJECTIVES FOR SAFETY & NATIONAL PERFORMANCE MEASURE TARGET ADJUSTMENTS

Purpose

This memorandum provides proposed objectives for the safety goals areas of Policy Directive 14 for review by the Transportation Commission. Staff will provide objectives for the asset management and mobility goal areas at a future Transportation Commission Workshop. After review by the Commission, the final Policy Directive 14 with the approved goal areas and objectives will be submitted for adoption. An additional topic for Commission review is a potential target adjustment for National Performance Measure (NPM) pavement targets. Staff will provide an overview of the current target this month and then brief on the proposed target change at the April Commission workshop.

Action

Using the framework and alignment of priorities discussed at the January 2020 Transportation Commission workshop, staff has developed a list of proposed, measurable, objectives in the safety goal area for review by the Transportation Commission. Staff will revise the objectives based on Commission feedback for adoption in a revised Policy Directive 14 at a future Commission meeting. No action required on NPM target adjustments for this month.

Background

Policy Directive 14

Staff presented a framework for annual review of Policy Directive 14, which will incorporate goals from the Department’s Wildly Important Goals (WIGs), the Transportation Commission Principles, the Governor’s “Bold Four” goals, and objectives required under the Fixing America’s Surface Transportation (FAST) Act of 2015.



This framework creates a cadence of review of the objectives in the policy directive to allow for continuous improvement of the main goals of the department, inform funding decisions and projects, and measure the success of these initiatives. Using this framework, and input provided by the Commission at the January 15, 2020 Transportation Commission workshop, staff has developed a list of proposed Policy Directive 14 objectives in the safety goal area for review.

National Performance Measures

As a requirement of the Fixing American’s Surface Transportation (FAST) Act of 2015, State DOTs were required to set targets and report on measures for safety, infrastructure condition, and system performance goal areas. The infrastructure condition metrics are set for a four-year performance period, starting in 2018, with the option of adjusting targets at the mid-point of the performance period. Any adjustments to any target is required by May 20, 2020.

Details

Policy Directive 14 - Proposed Safety Objectives

Staff has proposed the following objectives for the Safety Goal Area, which combines objectives from the Department’s soon to be published Strategic Transportation Safety Plan (STSP), objectives required under the FAST Act of 2015, and the Department’s “Wildly Important Goals”:

OBJECTIVE
NEW - Improve the safety of Colorado Transportation System by reducing the vehicle crash rate by 2 percent each year.
MODIFIED - Reduce the rate of traffic fatalities per 100 million vehicle miles traveled by 15 percent over the next four years, with an aspirational goal of zero.
MODIFIED - Reduce the rate of traffic related serious injuries per 100 million vehicle miles traveled by 15 percent over the next four years, with an aspirational goal of zero.
MODIFIED - Reduce the number of fatalities and serious injuries involving vulnerable users by 15 percent over the next four years, with an aspirational goal of zero.
NEW - Lead by example in establishing a culture of safety at CDOT in reducing vehicle crashes, traffic-related fatalities, and traffic-related serious injuries involving CDOT employees.

National Performance Measures - Pavement Metrics

The required metrics for measuring pavement condition differ from the current measure the Department uses for investment decisions and for PD-14, Drivability Life. When the initial targets for this 4-year performance period were set, data was limited, with some information not compatible for use in the FHWA methodology. Since the initial targets were set, the Department has collected data to determine current condition. The NPM pavement standard only measures condition on the Interstates and non-Interstate National Highway System (NHS), including locally owned (off-system) NHS roadways. Staff will provide recommendations at the next Commission workshop on potential pavement target adjustments.

Next Steps

- Proposed, measureable, objectives presented for the Asset Management & Mobility Goal Areas for review - April/May 2020
- Review and adoption of target adjustments for NPM pavement condition metrics - April 2020
- Adoption of revised Policy Directive 14 with Commission approval of the goal areas and objectives - June 2020
- Reporting 2019 data and condition of objectives in revised Policy Directive 14 - September 2020
- Evaluation of PD-14 goals and objectives and refresh of the policy directive (if necessary) - October 2020
- Consideration of PD-14 objective performance in preparation for FY22 annual budget process - November 2020

Attachments

- Attachment A: PD-14 Briefing - Safety Proposed Objectives & National Performance Measures





COLORADO

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Policy Directive 14 Briefing

Proposed Objectives for Safety

March 10, 2020



PD-14 Goal Areas & Objectives

Alignment with Budget/Planning Structure & Objective Topics

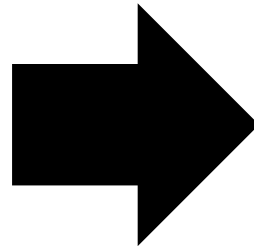
Previous Goal Areas

Safety

Infrastructure Condition

System Performance

Maintenance



Proposed Goal Areas

Safety

Asset Management

Mobility

OBJECTIVE TOPICS

- Vehicle Crashes
- Fatalities
- Serious Injuries
- Vulnerable Users

- Bridges
- Pavement
- Other CDOT Assets
- Maintenance
- Transit Assets

- Reliability & Congestion
- Sustainability
- ?

Focus for March's Meeting



Safety Goal Area

Current Goal & Objectives

SAFETY - Moving Colorado toward zero deaths by reducing traffic-related deaths and serious injuries by one-half by 2030.

Highway Safety								
PM#	Policy Directive 14 Objectives	Desired Trend	Results	Target	Target Met?	10-Year Trend (2009-2018)	FY2018 Budget	Dedicated Funding Sources
#338	Reduce fatalities by 12 per year from 548 in 2008 to 344 in 2025.	↓	632 ▼16	428	✗		\$124.9 million	<ul style="list-style-type: none"> - FASTER Safety - Projects - Highway Safety Improvement Program (HSIP) - Safety Education - Railway-Highway Crossings - Hot Spots
#329	Reduce the fatality rate per 100 million VMT by 0.02 per year from 1.03 in 2013 to 0.79 in 2025.	↓	1.17 ▼0.04	0.93	✗			
#355	Reduce serious injuries by 90 per year from 3,200 in 2013 to 2,120 in 2025.	↓	3,195 ▲165	2,750	✗			
#354	Reduce the serious injury rate by 0.2 per 100 million VMT per year from 6.86 in 2013 to 4.46 in 2025.	↓	5.92 ▲0.24	5.86	✗			
#751	Reduce economic impact of crashes annually by one percent over the previous calendar year.	↓	\$5.89B ▲\$0.26B	\$5.57B	✗			
Bike & Pedestrian Safety								
PM#	Policy Directive 14 Objectives	Desired Trend	Results	Target	Target Met?	10-Year Trend (2009-2018)	FY2018 Budget	Dedicated Funding Sources
#652	Reduce the number of bicyclist and pedestrian fatalities involving motorized vehicles from 67 in 2013 to 47 in 2025.	↓	112 ▲4	59	✗		N/A	N/A
#653	Reduce the number of bicyclist and pedestrian serious injuries involving motorized vehicles from 469 in 2013 to 311 in 2025.	↓	420 ▼21	403	✗			



Safety Goal Area

Proposed Goal & Objectives

SAFETY - The future of Colorado is zero deaths and serious injuries so all people using any transportation mode arrive at their destination safely.

Goal statement aligns with STSP Vision

OBJECTIVE

NEW - Improve the safety of Colorado's Transportation System by reducing the vehicle crash rate by 2% each year.

Aligns with Dept. WIGs

MODIFIED - Reduce rate of traffic fatalities per 100 million vehicle miles traveled by 15% over the next four years, with an aspirational goal of zero.

MODIFIED - Reduce the rate of traffic related serious injuries per 100 million vehicle miles traveled by 15% over the next four years, with an aspirational goal of zero.

Align objectives with STSP

MODIFIED - Reduce the number of traffic fatalities and serious injuries involving vulnerable users (pedestrians and bicyclists) by 15% over the next four years, with an aspirational goal of zero.

NEW - Lead by example in establishing a culture of safety at CDOT in reducing vehicle crashes, traffic-related fatalities, and traffic-related serious injuries involving CDOT employees.

Employee Safety

Safety goal area, objectives, and targets will align with Colorado Strategic Transportation Safety Plan (STSP).

FEEDBACK AREAS:

- Are there additional areas the Commission would like to set objectives around?
- Is there an interest in tracking performance in rural and urban areas separately?
- Agreement to remove "economic impact of crashes measure?"



Next Steps

- Proposed Objectives for Commission Review - *March-May 2020*
- Adoption of Revised PD-14 with new objectives and goal areas - *June 2020*
- Reporting 2019 data and condition of new objectives - *September 2020*
- Evaluation of PD-14 Goals and Objectives and Refresh of PD (if necessary) - *October 2020*
- Consideration of PD-14 objective performance in preparation for FY22 annual budget process - *November 2020*





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National Performance Measures

Proposed Target Adjustments

March 10, 2020



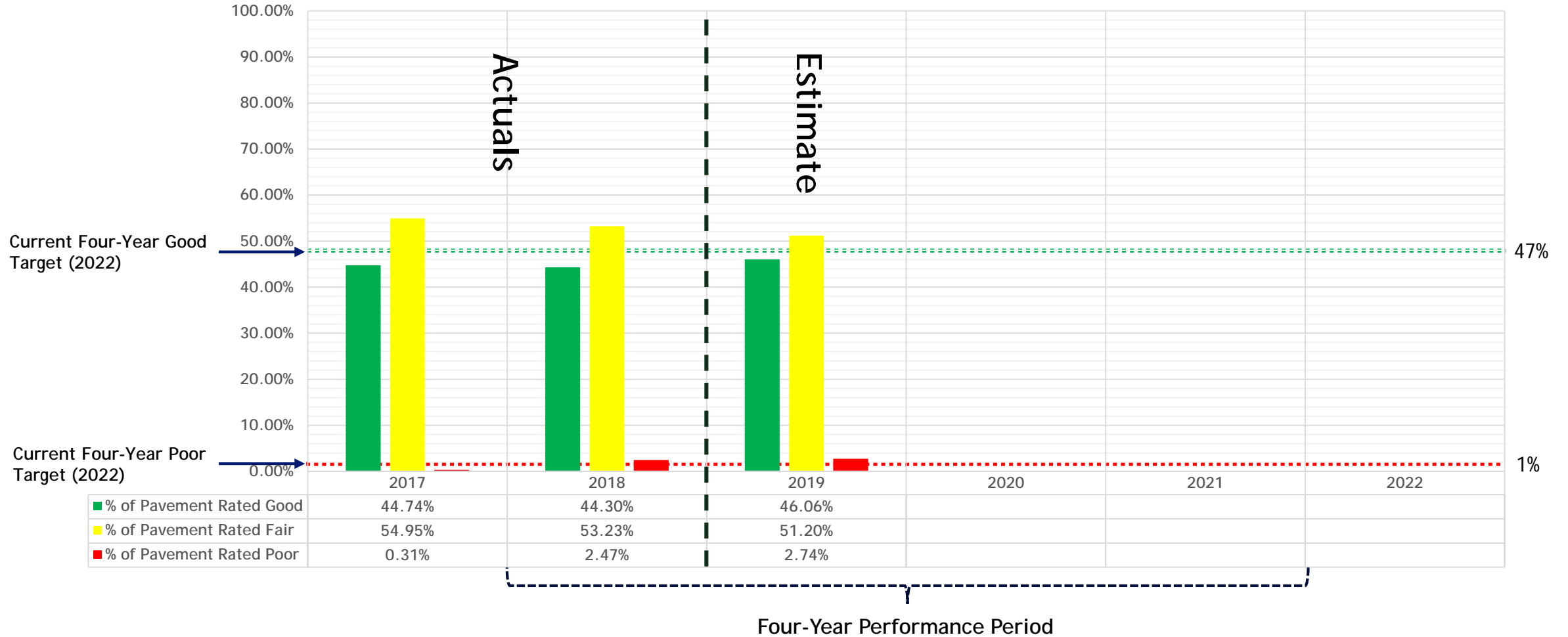
- The Fixing America's Surface Transportation (FAST) Act of 2015 required state DOTs to set targets and report on metrics to FHWA on the following subjects:
 - Safety
 - Infrastructure Condition
 - System Performance
- Measures for Infrastructure Condition are set on a 4-year performance period, with the option to adjust the 4-year targets at the mid-point of the performance period. **Adjustments are due on May 20, 2020.**
- Based on current analysis and modeling of data, the Department **is proposing to adjust** the 4-year National Performance Measure targets for Pavement:
 - *Percentage of Interstate pavements in Good Condition*
 - *Percentage of Interstate pavements in Poor Condition*
 - *Percentage of non-Interstate National Highway System pavements in Good Condition*
 - *Percentage of non-Interstate National Highway System pavements in Poor Condition*
- These metrics differ from the current measures used for pavement investment decisions and Policy Directive 14 - Drivability Life.



Interstate Pavement Condition

Actuals(2017-2018) & 2019 Estimate

Interstate Pavement Condition Summary
National Performance Metric Methodology

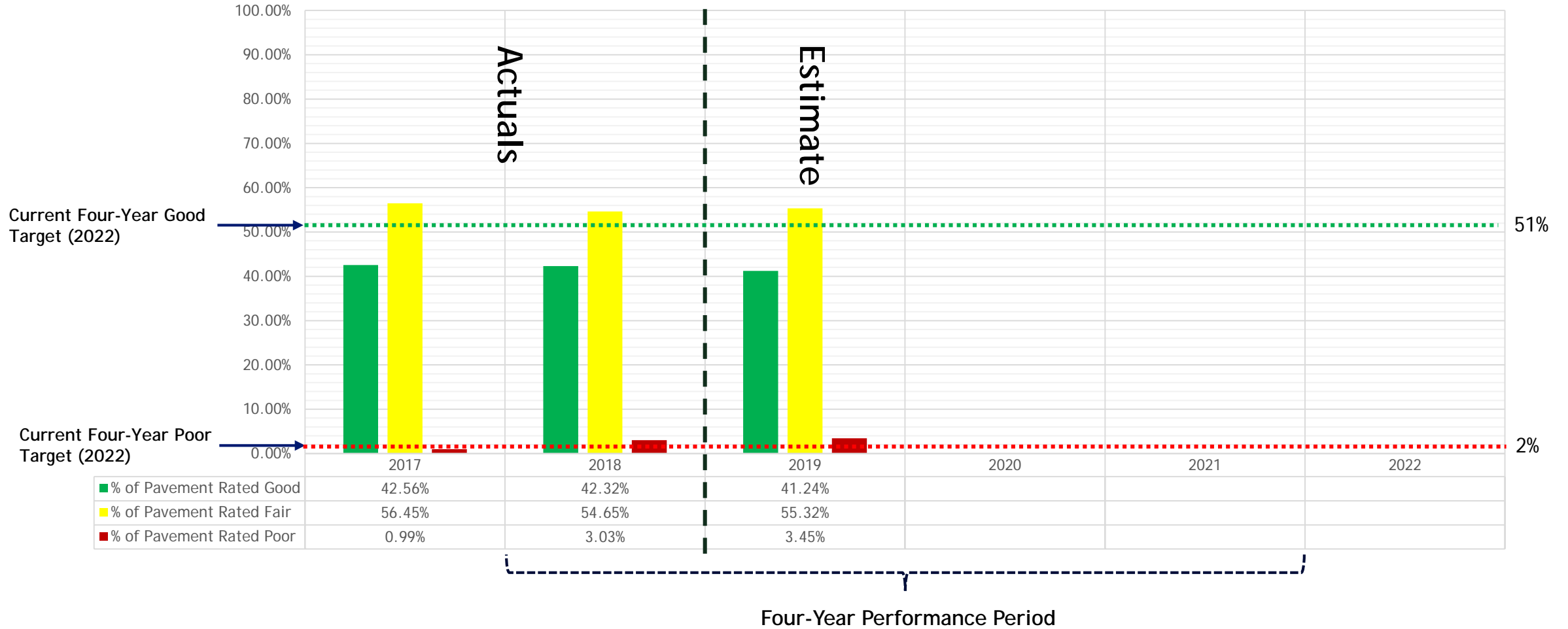




Non-Interstate NHS Pavement Condition

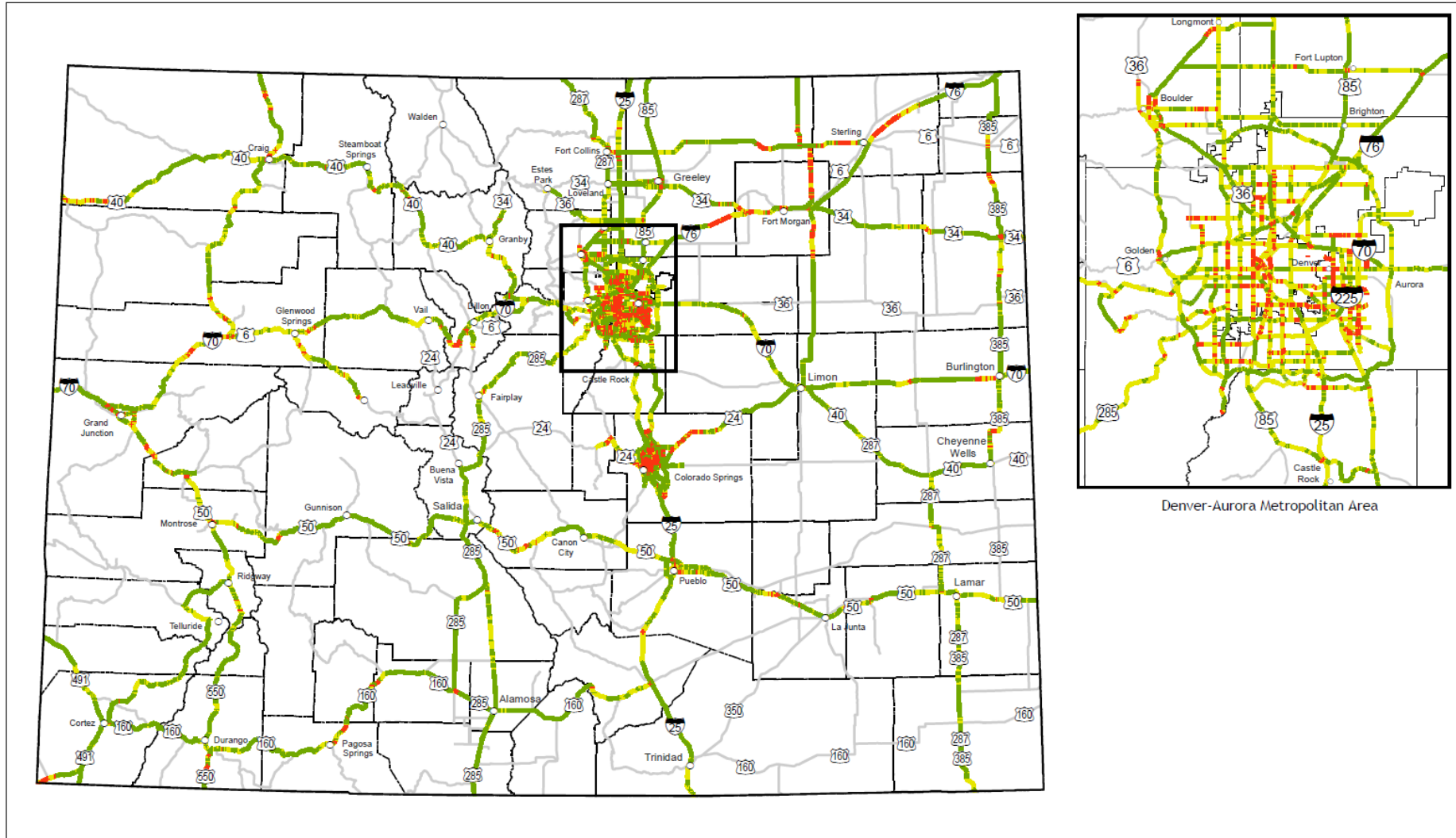
Actuals(2017-2018) & 2019 Estimate

Non-Interstate NHS Pavement Condition Summary
National Performance Measure Methodology



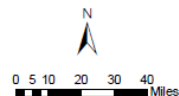


Interstate & NHS Pavement 2018 Condition Map



March 10, 2020

Data Source: CDOT 2018
Created: December 2019



**Pavement Condition of the National Highway System
Colorado
2018**

- NPM Pavement Condition Methodology**
- Good
 - Fair
 - Poor
 - Not on NHS
 - Cities/Towns
 - Highway
 - Counties



Next Steps

- Review of new pavement targets options for national performance measures in conjunction with review of Asset Management goal area for Policy Directive 14 in April.
- Resolution of adoption for adjusted pavement targets in April.
- Adjusted targets for pavement condition reported to FHWA on May 20, 2020.