

**AGENDA**  
**TRANSPORTATION ADVISORY COMMITTEE**  
**Monday, January 23, 2023 1:30 p.m.**  
**1<sup>st</sup> Floor Aspen & Birch Conference Room**  
**\*In-Person Meeting with Virtual Option for Public (via Zoom)**

1. Call to Order
2. Public Comment
3. December 19, 2022 TAC Meeting Summary  
(Attachment A)

**ACTION ITEMS**

4. FY 2022-2025 Transportation Improvement Program (TIP) Amendments  
(Attachment B) Josh Schwenk, Planner
5. Regional Transportation Operations and Technology (RTO&T) Strategic Plan Approval  
(Attachment C) Greg MacKinnon, Program Manager, Transportation Operations
6. Federal Performance Measures Targets  
(Attachment D) Alvan-Bidal Sanchez, Regional Transportation Program Manager

**INFORMATIONAL BRIEFING**

7. FY 2024-2025 Unified Planning Work Program (UPWP) Update  
(Attachment E) Ron Papsdorf, Director, Transportation Planning & Operations

**ADMINISTRATIVE ITEMS**

8. Member Comment/Other Matters
  - AMP Working Group Update
9. Next Meeting – February 27, 2023
10. Adjournment

Attendees can request additional aids or services, such as interpretation or assistive listening devices, by calling 303-480-6701 or emailing [ckennedy@drcog.org](mailto:ckennedy@drcog.org) Please notify DRCOG at least 48 hours in advance so we can coordinate your request.

**ATTACH A**

**ATTACHMENT A**  
**MEETING SUMMARY**  
**TRANSPORTATION ADVISORY COMMITTEE WORK SESSION**  
**Monday, December 19, 2022**  
**In-Person Meeting with Virtual Option for Public (via Zoom)**

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**MEMBERS (OR VOTING ALTERNATES) PRESENT:**

Kent Moorman	Adams County – City of Thornton
Ron Papsdorf	Denver Regional Council of Governments
Jennifer Bartlett (Alternate)	Denver, City & County
Justin Schmitz	Douglas County – City of Lone Tree
Art Griffith	Douglas County
Jim Katzer (Alternate)	Arapahoe County
Jeff Dankenbring	Arapahoe County – City of Centennial
Alex Hyde-Wright	Boulder County
Phil Greenwald	Boulder County – City of Longmont
Sarah Grant (Vice Chair)	Broomfield, City & County
Debra Baskett	Jefferson County – City of Westminster
Kevin Ash	Weld County – Town of Frederick
Bill Sirois	Regional Transportation District
David Sabados	Regional Air Quality Council
Rachel Hultin (Alternate)	TDM/Non-Motorized Special Interest Seat
Lisa Nguyen (Alternate)	Aviation Special Interest Seat
Hilary Simmons	Senior Special Interest Seat
Jim Eussen (Alternate)	CDOT R4
Aaron Bustow (Alternate)	FHWA (ex-officio)

**OTHERS (NON-VOTING OR VIRTUAL) PRESENT:**

Mike Whiteaker (Alternate)	Jefferson County – City of Lakewood
Chris Hudson (Alternate)	Douglas County – Town of Parker
Doug Rex (Alternate)	Denver Regional Council of Governments
Jan Rowe	CDOT DTR
Marissa Gaughan	CDOT DTD
Wally Weart	Freight Special Interest Seat
Maria D’Andrea (Alternate)	Jefferson County – City of Wheat Ridge
Kristin Kenyon (Alternate)	FTA (ex-officio)
Elizabeth Relford (Alternate)	Weld County
Mac Callison (Alternate)	Arapahoe County – City of Aurora

**Public:** William Keenan, Michael Penny, Deanna McIntosh, Jordan Rudel, Jen L., Bridget Hart, JoAnn Mattson, Eugene Howard, Allison Cutting, Chris Chovan, Danny Herrmann

**DRCOG staff:** Cam Kennedy, Steve Cook, Brad Williams, Josh Schwenk, Emily Kleinfelter, Robert Spotts, Alvan-Bidal Sanchez, Todd Cottrell, Matthew Helfant, Jacob Riger, Sang Gu Lee

Call to Order

Vice Chair Sarah Grant called the meeting to order at 1:31 p.m.

Public Comment

Mr. Jacob Riger welcomed Jennifer Bartlett as a new member for the City and County of Denver, and Christina Lane (Jefferson County) as a new member, and Maria D'Andrea (Wheat Ridge) as a new alternate, for Jefferson County.

November 14, 2022 TAC Meeting Summary

The summary was accepted.

**ACTION ITEMS**

Election of Officers

Jacob Riger, Manager, Multimodal Transportation Planning, reported that due to the departure of Chair Steve Durian, the Committee needs to elect a new Chair for the remainder of the current term through December 2023. A nominating panel was formed and recommended the following candidates for officers of the Transportation Advisory Committee for the remainder of the current term through December 2023:

- Chair: Sarah Grant, City and County of Broomfield
- Vice Chair: Phil Greenwald, City of Longmont

Mr. Kent Moorman MOVED to elect officers of the Transportation Advisory Committee for the remainder of the 2022-2023 term. The motion was seconded and passed unanimously.

FY 2022 First Year Transportation Improvement Program (TIP) Project Delays

Todd Cottrell, Project and Program Delivery Program Manager, informed the committee that at the end of FY 2022, DRCOG staff reviewed the implementation status of DRCOG-selected projects and project phases with CDOT and RTD. DRCOG staff met with project sponsors to discuss the delays and identify action plans demonstrating the sponsor's commitment to timely initiation. The TIP Project Delays Report for FY 2022 summarizes the reasons for each delay and actions proposed by sponsors to get the project or phase(s) initiated. The report includes DRCOG staff recommendations for committee and Board consideration.

Mr. Phil Greenwald MOVED to recommend to the Regional Transportation Committee the actions proposed by DRCOG staff regarding TIP project delays for Fiscal Year 2022. The motion was seconded and passed unanimously.

Transportation Advisory Committee (TAC) Committee Guidelines

Jacob Riger, Manager, Multimodal Transportation Planning, presented that based on discussion at the November TAC meeting and subsequent input from TAC members, staff is proposing the following additional revisions/clarifications:

- For counties with three local government representatives, one member would represent the County and two members would represent municipal jurisdictions within that county.
- The subregional transportation forums would appoint the local government members and alternates (instead of the current practice of members appointing their own alternates).
- Clarifying that Via Mobility would have standing TAC membership, replacing the Non-RTD Transit special interest seat, while aviation would continue to be a special interest seat.
- Adding a new provision for conducting an election whenever there is a TAC Chair or Vice Chair vacancy.
- Updating the requirements for a quorum and to carry an action.

Mr. Kent Moorman inquired why the quorum requirement would be twenty when Board has a quorum of a third. Mr. Riger responded that based on current committee guidelines for TAC, the quorum has been 50% of members plus one. Mr. Papsdorf added that this proposal keeps the same policy language that is in the guidelines.

Mr. Greenwald inquired if a loss of nimbleness would occur if members and alternates have to be selected by subregional forums which need to be more formalized rather than through the current system where the Board Chair appoints a member. Mr. Riger replied that this is reinforcing the practice he's currently been employing of asking the Forums to recommend a consensus candidate to nominate to the Board Chair. Additionally, the addition of a third member for most counties would help mitigate any temporary delay in filling a vacant seat by needing a Forum to convene and vote.

A question was raised regarding when these changes would go into effect and Mr. Riger responded that it would happen upon Board adoption, likely during the first part of 2023.

Mr. Alex Hyde-Wright inquired about the changes for alternates. Mr. Riger responded that these new recommendations allow for much more flexibility because the alternates could fill in for any member, rather than be tied to a specific member as is required now.

Ms. Rachel Hultin had a question about voting and nonvoting members. Mr. Riger replied that the representatives from the Federal Highway Administration and the Federal Transit Administration are the only non-voting members, and that would not change.

The conversation continued and three proposed amendments were brought forward to the committee.

- Mr. Hyde-Wright proposed an amendment that the Non-Motorized Transportation Special Interest Seat be renamed to Active Transportation Special Interest Seat. Six voted in favor and 13 voted against and the motion was rejected.
- Mr. Hyde-Wright proposed an amendment to maintain the Non-RTD Transit Special Interest Seat. Six voted in favor and 13 voted against and the motion was rejected.
- Mr. David Sabados proposed an amendment to allow members to participate in up to 6 meetings per year remotely and members with health, accessibility or other concerns may participate in additional meetings remotely with approval from the Chair. Six voted in favor and 13 voted against and the motion was rejected.

Mr. Art Griffith MOVED to recommend to the Regional Transportation Committee the proposed updates to the TAC section of the DRCOG Committee Guidelines. The motion was seconded and passed unanimously.

#### Transportation Planning Framework

Matthew Helfant, Senior Transportation Planner, explained that based on the proposed updates to DRCOG's Committee Guidelines for TAC and the Regional Transportation Committee (RTC), DRCOG staff has revised the section of the *Framework* describing the roles, responsibilities, and membership of TAC and RTC to be consistent with the proposed updated Committee Guidelines. This is the only change to the draft *Framework* document since the November TAC meeting.

Mr. Art Griffith MOVED to recommend to the Regional Transportation Committee approval of the *Transportation Planning Framework* document. The motion was seconded and passed unanimously.

### **INFORMATIONAL BRIEFINGS**

#### Annual Report on Traffic Congestion in the Denver Region

Robert Spotts, Program Manager, Mobility Analytics, provided an overview of the *2021 Annual Report on Roadway Traffic Congestion in the Denver Region*. Topics included vehicle miles traveled in the region, the continued impacts of the COVID-19 pandemic on travel and congestion, travel projections for 2050, and highlights of recently completed congestion mitigation projects.

#### Regional Transportation Operations and Technology (RTO&T) Strategic Plan

Greg MacKinnon, Program Manager, Transportation Operations, and Steve Cook, Manager, Mobility Analytics and Operations, noted that the purpose of the plan is to guide the DRCOG region's near-term efforts to deploy technology tools and coordinated system procedures for the multimodal transportation system. These efforts will assist transportation operations staff in serving daily travel demands across the region. The

plan envisions transportation systems serving all travel modes across the DRCOG region that are interconnected and collaboratively operated, managed, and maintained to optimize safe, reliable, and efficient travel for all system users, contributing to the region's economic prosperity and high quality of life.

Mr. Griffith asked about how the \$16 million for the RTO&T Set-Aside FY2024-2027 Call for Projects will be allocated over four years. Mr. MacKinnon replied that it will be one call for the four-year period, which will be initiated in 2023.

Mr. Papsdorf inquired about what other groups the RTO&T Strategic Plan been presented to. Mr. MacKinnon stated that this plan has been presented to the Regional Transportation Working Group and the Advanced Mobility Partnership. Both groups were able to provide comments on this draft and those comments helped influence the final draft that has been presented today.

### **INFORMATIONAL ITEM**

#### **FY 2022 Annual Listing of Obligated Projects (ALOP)**

Josh Schwenk, Planner, included the FY 2022 ALOP in the TAC packet for review. The enclosed report listed all transportation projects in the Denver region that received obligations of federal funds in federal Fiscal Year 2022 (October 1, 2021 – September 30, 2022). A net total of \$392.8 million of federal funds was obligated in FY 2022 for 91 transportation projects throughout the region.

### **ADMINISTRATIVE ITEMS**

#### **Member Comment/Other Matters**

- AMP Working Group update  
No update was provided this month.

Mr. Papsdorf took the opportunity to note that the Fiscal Year 2023 RAISE Grant Program NOFO was released by the U.S. Department of Transportation last week. \$1.5 billion will be available for funding across the country, at least \$75 million for eligible planning proposals, and at least \$15 million for projects located in Areas of Persistent Poverty and Historically Disadvantaged Communities. DRCOG will send out more information to our partner agencies and jurisdictions in the region and request the submission of a short informational form for any agency planning to submit an application to USDOT for the RAISE Grant Program.

#### **Next Meeting – January 23, 2023**

#### **Adjournment**

There were no additional comments from members. The meeting adjourned at 3:12 p.m.

**ATTACH B**



## ATTACHMENT B

To: Chair and Members of the Transportation Advisory Committee

From: Josh Schwenk, Planner, Transportation Planning and Operations Division  
303-480-6771 or [jschwenk@drcog.org](mailto:jschwenk@drcog.org)

Meeting Date	Agenda Category	Agenda Item #
January 23, 2023	Action	4

### SUBJECT

*FY 2022-2025 Transportation Improvement Program (TIP) Amendments*

### PROPOSED ACTION/RECOMMENDATIONS

DRCOG staff recommends approval of the proposed amendments because they comply with the current TIP amendment procedures, as contained within the Board-adopted [Policies for TIP Program Development](#).

### ACTION BY OTHERS

N/A

### SUMMARY

DRCOG's transportation planning process allows for Board-approved amendments to the current Transportation Improvement Program (TIP) on an as-needed basis. Typically, these amendments involve the addition or deletion of projects, or adjustments to existing projects and do not impact funding for other projects in the TIP.

The TIP projects to be amended are shown below and listed in Attachment 1. The proposed amendments to the [FY 2022-2025 Transportation Improvement Program](#) have been found to conform with the State Implementation Plan for Air Quality.

#### TIP Amendments:

TIP ID#	Sponsor	Title	Reason for Amendment	New/Removed Funding	Internal Funding Shifts
1997-084	RTD	RTD Preventive Maintenance: Transit Vehicle Overhaul and Maintenance	Add new funding – revised formula funding	Add \$46,800,000 federal Section 5307	N/A
1999-052	RTD	State of Good Repair	Add new funding – revised formula funding	Add \$32,010,000 – federal Section 5337	N/A
2020-068	Adams County	I-270 Corridor Improvements	Add new funding – bridge design	Add \$10,100,000 – state FASTER-Bridge Enterprise	N/A
2022-018	CDOT Region 4	SH-7/95th St. Intersection Improvements	Replace Regional Priority Project funding with Legislative-Transit funding	Remove \$6,719,000 – state Regional Priority Project, Add \$6,719,000 – state Legislative-Transit	N/A
New Project	CDOT Region 1	Region 1 Vision Zero Pool	Create new pool for Vision Zero projects	Add \$15,000,000 – state Legislative	N/A

New Project	CDOT Region 4	I-25 Segment 5: SH-66 to WCR 38	Create new project	Add \$12,200,000 - state Legislative	N/A
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**PREVIOUS DISCUSSIONS/ACTIONS**

N/A

**PROPOSED MOTION**

Move to recommend to the Regional Transportation Committee the attached project amendments to the *2022-2025 Transportation Improvement Program (TIP)*.

**ATTACHMENT**

1. Proposed TIP amendments

**ADDITIONAL INFORMATION**

If you need additional information, please contact Josh Schwenk, Planner, Transportation Planning and Operations Division at 303-480-6771 or [jschwenk@drcog.org](mailto:jschwenk@drcog.org).

**1997-084:** Add \$46,800,000 in federal Section 5307 (Denver-Aurora UZA) funding based on formula fund revisions

**Existing**

Title: **RTD Preventive Maintenance: Transit Vehicle Overhaul and Maintenance**

Project Type: **Transit Vehicles**

TIP-ID: **1997-084**

STIP-ID:

Open to Public:

Sponsor: **RTD**

**Project Scope**

Ongoing program: Overhaul and maintenance for transit vehicles. A portion of these 5307 funds will be applied to capital cost of contracting. RTD has privatized service on fixed-routes and private carriers provide capital maintenance in addition to fixed-route bus service. In addition to routine capital maintenance, RTD will apply 5307 capital maintenance funds to bus fuel cost and utility cost for LRT vehicles as a result of the Federal Transit Administration expanded definition of allowable cost.



Affected County(ies)
Regional

Performance Measures	
<input type="checkbox"/>	Bridge Condition
<input type="checkbox"/>	Congestion
<input type="checkbox"/>	Freight Reliability
<input type="checkbox"/>	Pavement Condition
<input type="checkbox"/>	Safety
<input checked="" type="checkbox"/>	Transit Assets
<input checked="" type="checkbox"/>	Transit Safety
<input type="checkbox"/>	Travel Time Reliability

Amounts in \$1,000s	Prior Funding	FY22	FY23	FY24	FY25	Future Funding	Total Funding
Federal (5307)		\$66,800	\$70,900	\$73,000	\$75,200		
State		\$0	\$0	\$0	\$0		
Local		\$26,900	\$29,400	\$30,300	\$31,200		
<b>Total</b>	<b>\$186,300</b>	<b>\$93,700</b>	<b>\$100,300</b>	<b>\$103,300</b>	<b>\$106,400</b>	<b>\$0</b>	<b>\$590,000</b>

**Revised Funding Table**

Amounts in \$1,000s	Prior Funding	FY22	FY23	FY24	FY25	Future Funding	Total Funding
Federal (5307)		\$80,000	\$81,600	\$83,200	\$84,900		
State		\$0	\$0	\$0	\$0		
Local		\$26,670	\$27,200	\$27,700	\$29,300		
<b>Total</b>	<b>\$186,300</b>	<b>\$106,670</b>	<b>\$108,800</b>	<b>\$110,900</b>	<b>\$114,200</b>	<b>\$0</b>	<b>\$626,870</b>

**1999-052:** Add \$32,010,000 in federal Section 5337 funding based on formula fund revisions

**Existing**

Title: **State of Good Repair**

Project Type: **Transit Operational Improvements**

TIP-ID: **1999-052**

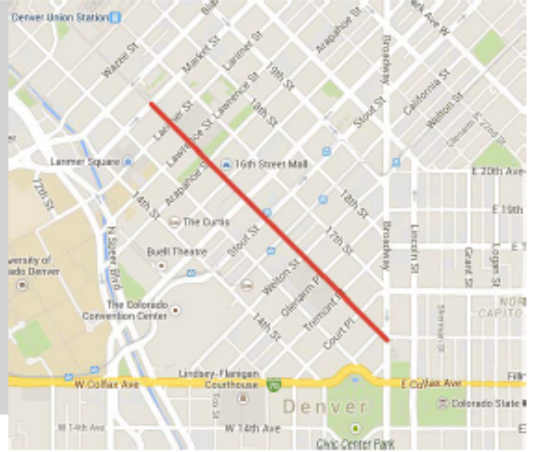
STIP-ID: **SST6740.010**

Open to Public:

Sponsor: **R T D**

**Project Scope**

Funds will be used for on-going maintenance of fixed guideways, track, rolling stock, electrical substations and rail stations.



Affected Municipality(ies)	Affected County(ies)
Denver	Denver

Performance Measures	
<input type="checkbox"/>	Bridge Condition
<input type="checkbox"/>	Congestion
<input type="checkbox"/>	Freight Reliability
<input type="checkbox"/>	Pavement Condition
<input type="checkbox"/>	Safety
<input checked="" type="checkbox"/>	Transit Assets
<input checked="" type="checkbox"/>	Transit Safety
<input type="checkbox"/>	Travel Time Reliability

Amounts in \$1,000s	Prior Funding	FY22	FY23	FY24	FY25	Future Funding	Total Funding
Federal (5337)		\$18,400	\$18,900	\$19,500	\$20,100		
State		\$0	\$0	\$0	\$0		
Local		\$4,600	\$4,750	\$4,900	\$5,100		
<b>Total</b>	<b>\$43,880</b>	<b>\$23,000</b>	<b>\$23,650</b>	<b>\$24,400</b>	<b>\$25,200</b>	<b>\$0</b>	<b>\$140,130</b>

**Revised Funding Table**

Amounts in \$1,000s	Prior Funding	FY22	FY23	FY24	FY25	Future Funding	Total Funding
Federal (5337)		\$26,410	\$26,950	\$27,500	\$28,050		
State		\$0	\$0	\$0	\$0		
Local		\$6,600	\$6,740	\$6,880	\$7,010		
<b>Total</b>	<b>\$43,880</b>	<b>\$33,010</b>	<b>\$33,690</b>	<b>\$34,380</b>	<b>\$35,060</b>	<b>\$0</b>	<b>\$180,020</b>

**2020-068:** Add \$10,100,000 in state FASTER-Bridge Enterprise funding for bridge design

**Existing**

Title: **I-270 Corridor Improvements**

Project Type: **Roadway Operational Improvements**

TIP-ID: **2020-068**

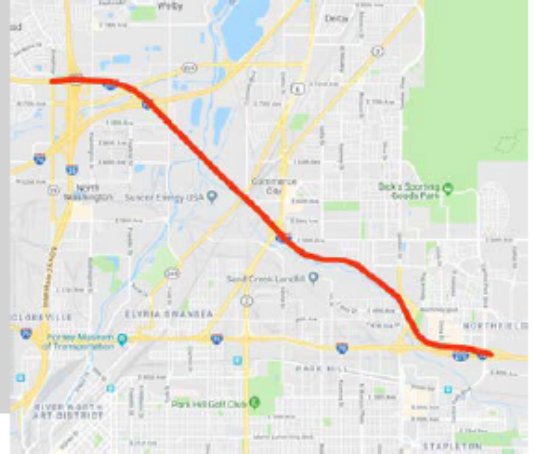
STIP-ID:

Open to Public:

Sponsor: **Adams County**

**Project Scope**

Environmental Assessment, preconstruction activities, and early action projects to address safety, reliability, and operational issues along the entire corridor.



**Affected Municipality(ies)**

- Commerce City
- Denver
- Unincorporated

**Affected County(ies)**

- Adams
- Denver

**Performance Measures**

- Bridge Condition
- Congestion
- Freight Reliability
- Pavement Condition
- Safety
- Transit Assets
- Transit Safety
- Travel Time Reliability

Amounts in \$1,000s	Prior Funding	FY22	FY23	FY24	FY25	Future Funding	Total Funding
Federal		\$0	\$0	\$0	\$0		
Federal (STBG)		\$0	\$0	\$0	\$0		
State		\$0	\$0	\$0	\$0		
State (Leg)		\$5,000	\$15,000	\$10,000	\$0		
Local		\$0	\$0	\$0	\$0		
<b>Total</b>	<b>\$5,300</b>	<b>\$5,000</b>	<b>\$15,000</b>	<b>\$10,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$35,300</b>

**Revised Funding Table**

Amounts in \$1,000s	Prior Funding	FY22	FY23	FY24	FY25	Future Funding	Total Funding
Federal		\$0	\$0	\$0	\$0		
Federal (STBG)		\$0	\$0	\$0	\$0		
State		\$0	\$0	\$0	\$0		
State (FASTER-B)		\$0	\$3,450	\$6,250	\$400		
State (Leg)		\$5,000	\$15,000	\$10,000	\$0		
Local		\$0	\$0	\$0	\$0		
<b>Total</b>	\$5,300	\$5,000	\$18,450	\$16,250	\$400	\$0	\$45,400

**2022-018:** Replace \$6,719,000 in Regional Priority Project funding with \$6,719,000 in Legislative-Transit funding

**Existing**

Title: **SH-7/95th St. Intersection Improvements**

Project Type: **Roadway Operational Improvements**

TIP-ID: **2022-018**

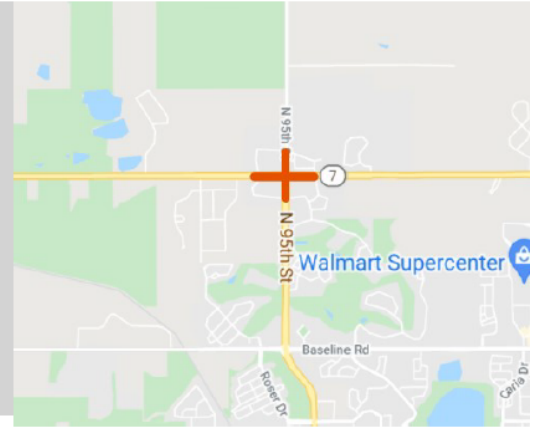
STIP-ID: **SR46600.099**

Open to Public:

Sponsor: **CDOT Region 4**

**Project Scope**

This project will construct an expanded SH-7 and SH-42 intersection, including new general purpose lanes, BAT lanes, transit stops, and multi-use path.



Affected Municipality(ies)

Affected County(ies)

Lafayette

Boulder

**Performance Measures**

- Bridge Condition
- Congestion
- Freight Reliability
- Pavement Condition
- Safety
- Transit Assets
- Transit Safety
- Travel Time Reliability

Amounts in \$1,000s	Prior Funding	FY22	FY23	FY24	FY25	Future Funding	Total Funding
Federal		\$0	\$0	\$0	\$0		
Federal (MMOF-ARPA)		\$0	\$2,400	\$0	\$0		
State		\$0	\$0	\$0	\$0		
State (Leg-T)		\$6,719	\$0	\$0	\$0		
State (MMOF)		\$0	\$0	\$2,800	\$0		
State (R P P)		\$6,719	\$0	\$0	\$0		
Local		\$0	\$3,802	\$4,436	\$0		
<b>Total</b>	<b>\$0</b>	<b>\$13,438</b>	<b>\$6,202</b>	<b>\$7,236</b>	<b>\$0</b>	<b>\$0</b>	<b>\$26,876</b>

**Revised Funding Table**

Amounts in \$1,000s	Prior Funding	FY22	FY23	FY24	FY25	Future Funding	Total Funding
Federal		\$0	\$0	\$0	\$0		
Federal (MMOF-ARPA)		\$0	\$2,400	\$0	\$0		
State		\$0	\$0	\$0	\$0		
State (Leg-T)		\$13,438	\$0	\$0	\$0		
State (MMOF)		\$0	\$0	\$2,800	\$0		
Local		\$0	\$3,802	\$4,436	\$0		
<b>Total</b>	\$0	\$13,438	\$6,202	\$7,236	\$0	\$0	\$26,876



**New Project:** Add new pool for Vision Zero improvements in CDOT Region 1

## New Project

Title: **Region 1 Vision Zero Pool**

Project Type: **Safety**

TIP-ID: **Request**

STIP-ID:

Open to Public:

Sponsor: **CDOT Region 1**

### Project Scope

CDOT Region 1 Vision Zero Pool. Funds improvements related to Vision Zero.



Affected County(ies)
Adams
Arapahoe
Broomfield
Denver
Douglas
Jefferson

Performance Measures	
<input type="checkbox"/>	Bridge Condition
<input type="checkbox"/>	Congestion
<input type="checkbox"/>	Freight Reliability
<input type="checkbox"/>	Pavement Condition
<input checked="" type="checkbox"/>	Safety
<input type="checkbox"/>	Transit Assets
<input type="checkbox"/>	Transit Safety
<input type="checkbox"/>	Travel Time Reliability

Amounts in \$1,000s	Prior Funding	FY22	FY23	FY24	FY25	Future Funding	Total Funding
Federal		\$0	\$0	\$0	\$0		
State (Leg)		\$0	\$10,000	\$0	\$5,000		
Local		\$0	\$0	\$0	\$0		
<b>Total</b>	\$0	\$0	\$10,000	\$0	\$5,000	\$0	\$15,000

**New Project:** Add new project for the portion of I-25 Segment 5 in the DRCOG region

## New Project

Title: I-25 Segment 5: SH-66 to WCR 38

Project Type: Roadway Capacity

TIP-ID: Request

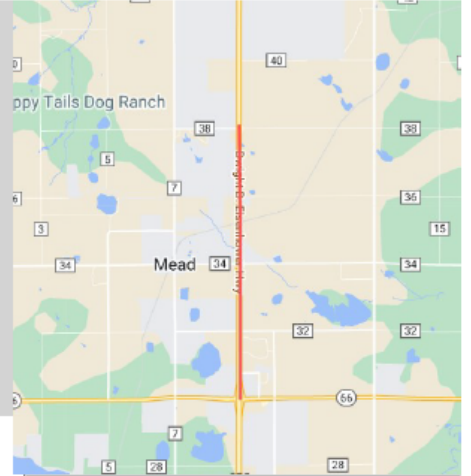
STIP-ID:

Open to Public:

Sponsor: CDOT Region 4

### Project Scope

Design and construct one new express lane in each direction on the DRCOG portion of Segment 5 (SH-66 to WCR 38). Project also includes replacement/rehabilitation of key bridges, ITS, transit & safety components, multimodal options, replacement of portions of existing facility, and interchange improvements.



Affected Municipality(ies)
Mead

Affected County(ies)
Weld

Performance Measures	
<input checked="" type="checkbox"/>	Bridge Condition
<input type="checkbox"/>	Congestion
<input checked="" type="checkbox"/>	Freight Reliability
<input checked="" type="checkbox"/>	Pavement Condition
<input type="checkbox"/>	Safety
<input type="checkbox"/>	Transit Assets
<input type="checkbox"/>	Transit Safety
<input checked="" type="checkbox"/>	Travel Time Reliability

Amounts in \$1,000s	Prior Funding	FY22	FY23	FY24	FY25	Future Funding	Total Funding
Federal		\$0	\$0	\$0	\$0		
State (Leg)		\$0	\$4,000	\$8,200	\$0		
Local		\$0	\$0	\$0	\$0		
<b>Total</b>	\$0	\$0	\$4,000	\$8,200	\$0	\$0	\$12,200

**ATTACH C**

## ATTACHMENT C

To: Chair and Members of the Transportation Advisory Committee

From: Greg MacKinnon, Program Manager Transportation Operations

Meeting Date	Agenda Category	Agenda Item #
January 23, 2023	Action	5

### SUBJECT

Regional Transportation Operations and Technology Strategic Plan

### PROPOSED ACTION/RECOMMENDATIONS

DRCOG staff recommends approval of the *Regional Transportation Operations and Technology Strategic Plan*.

### ACTION BY OTHERS

N/A

### SUMMARY

DRCOG, working with stakeholders from across the region, has developed a draft *Regional Transportation Operations & Technology Strategic Plan*. The purpose of the plan is to guide the DRCOG region's near-term efforts to deploy technology tools and coordinated system procedures for the multimodal transportation system. These efforts will assist transportation operations staff in serving daily travel demands across the region.

The plan envisions transportation systems serving all travel modes across the DRCOG region that are interconnected and collaboratively operated, managed, and maintained to optimize safe, reliable, and efficient travel for all system users, contributing to the region's economic prosperity and high quality of life. Ten objectives lay out the desired improvements to be monitored and measured to ensure progress towards meeting the vision.

This is an aspirational plan that provides guidance for the implementation of operational infrastructure and services to further strengthen the connections between transportation systems and improve the reliability of travel across the region. There are three main sections in the plan:

1. Current State of Regional Transportation Operations – A summary description of general responsibilities of the transportation system agencies across the region and the infrastructure they operate and maintain. Because of the complexity of multiple systems, services and stakeholders, the description is arranged into natural focus areas relevant to daily real-time transportation management.
2. Regional Transportation Operations Needs – An analysis comparing the current state of regional transportation operations against the plan's vision, goals and objectives. Generally, it is evident that operations are not well-connected between jurisdictions, agencies and travel modes. New strategies, processes and tools are needed to facilitate coordination between stakeholders to achieve the outcomes envisioned in the DRCOG Metro Vision Plan and the Mobility Choice Blueprint.

3. Action Plan – A list of initiatives organized into three groups: primary, secondary, and tertiary. The primary initiatives are critical to establishing the desired regional framework for operations data sharing upon which the secondary and tertiary initiatives can build.

This plan also provides guidance for the development of the upcoming call-for-projects for the RTO&T Set-Aside scheduled for early 2023.

#### PREVIOUS DISCUSSIONS/ACTIONS

- [April 25, 2022](#) – TAC Informational Briefing
- [December 19, 2022](#) – TAC Informational Briefing

#### PROPOSED MOTION

Move to recommend to the Regional Transportation Committee the attached *Regional Transportation Operations and Technology Strategic Plan*.

#### ATTACHMENTS

1. [Regional Transportation Operations and Technology Strategic Plan](#)
2. Staff presentation

#### ADDITIONAL INFORMATION

If you need additional information, please contact Greg MacKinnon, Transportation Operations Program Manager, at 303 480-5633 or [gmackinnon@drcog.org](mailto:gmackinnon@drcog.org).

# REGIONAL TRANSPORTATION OPERATIONS & TECHNOLOGY (RTO&T) STRATEGIC PLAN

DRCOG TAC

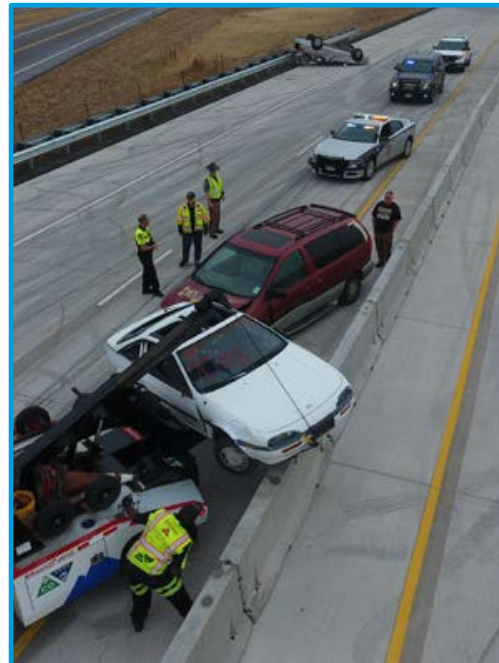
January 2023

Steve Cook, DRCOG  
Greg MacKinnon, DRCOG

# RTO&T STRATEGIC PLAN



- Presented to TAC in December
- Multimodal day-to-day operation of transportation system
- Guides upcoming call-for-projects



# KEY POINTS



- Real-time data is essential to operate, manage and maintain a safe and reliable transportation system
- Collaborative and integrated management approaches are needed
- Technology is a tool, not the answer
- Varying capabilities and needs by jurisdiction
- Regional management needed for key initiatives
- DRCOG has a key role and can assist with monitoring operations performance indicators

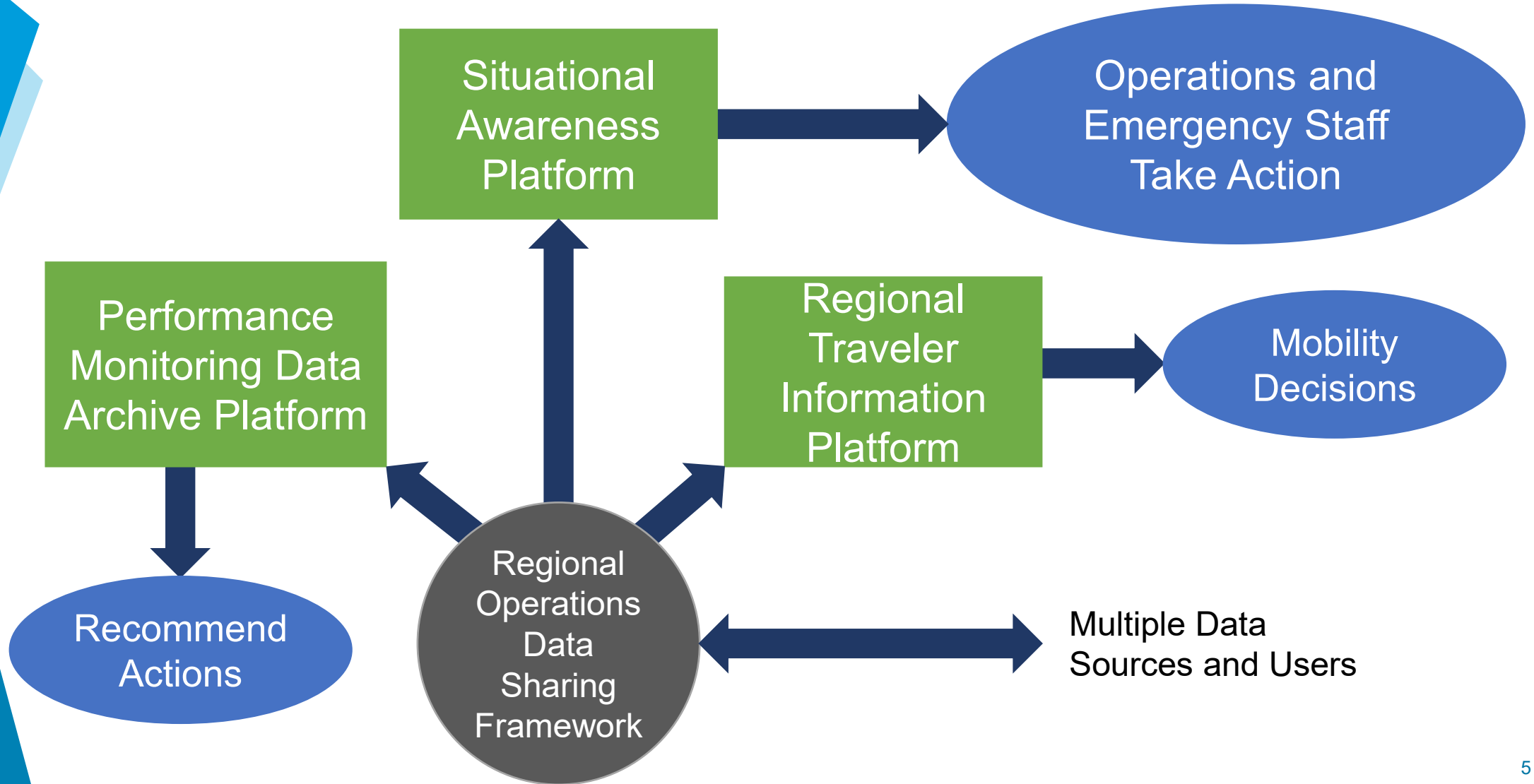


# RTO&T NEAR-TERM INITIATIVES



- Primary:
  - Situational awareness platform
  - Camera control sharing
  - Expand travel data collection and surveillance systems
  - Performance measures data platform
  - Strategies and processes to collaboratively manage operations
  - Traffic incident management operating procedures
  - Transit signal priority optimization procedures

# DATA & INFORMATION SHARING FRAMEWORK



# RTO&T NEAR-TERM INITIATIVES (2)



- Secondary:
  - Evacuation planning
  - Coordinate traveler information messaging
  - Work zone monitoring and coordination
  - Safety technology applications
- Tertiary:
  - Regional Multimodal Traveler Information Platform
  - Multimodal trip planner and payment system
  - Transportation Demand Management related support
  - Continuity of operations plans

# TAC ACTION



- Move to recommend to the Regional Transportation Committee the attached *Regional Transportation Operations and Technology Strategic Plan*.

**ATTACH D**

## ATTACHMENT D

To: Chair and Members of the Transportation Advisory Committee

From: Alvan-Bidal Sanchez, Program Manager, Regional Transportation Planning  
720-278-2341 or [ASanchez@drcog.org](mailto:ASanchez@drcog.org)

Meeting Date	Agenda Category	Agenda Item #
January 23, 2023	Action	6

### SUBJECT

Federal Performance Measures Targets

### PROPOSED ACTION/RECOMMENDATIONS

Staff recommends the proposed targets for the federal safety, infrastructure condition, travel time reliability and freight reliability performance measures.

### ACTION BY OTHERS

N/A

### SUMMARY

Federal regulations require state departments of transportation (DOTs) and metropolitan planning organizations (MPOs) to set targets and report on progress towards achieving the targets for several performance areas in support of a performance-based approach to transportation planning and programming. These areas include safety, infrastructure condition (pavement and bridge), system performance, transit asset management, and transit safety. Federal guidance encourages targets to be realistic and achievable as they are very short-term in nature.

For the performance areas described below, DRCOG has the option of supporting the state's targets established by the Colorado Department of Transportation or establishing its own targets for the DRCOG MPO area.

#### **PM1: Safety performance**

DRCOG must set the safety targets based on a 5-year rolling average. DRCOG has until February 27, 2023 to set the 2023 safety targets and then report them to CDOT. DRCOG staff recommends continuing the practice of setting targets specific to the MPO area. The proposed 2023 targets are:

Safety	Targets
Number of fatalities	256
Rate of fatalities per 100 million VMT	0.930
Number of serious injuries	1,584
Rate of serious injuries per 100 million VMT	5.730
Number of non-motorized fatalities and serious injuries	330

**PM2: Infrastructure condition**

Pavement condition

The four performance measures under Pavement Condition are the percent of pavement in good and poor condition on both the Interstate System and non-Interstate National Highway System within the MPO area. DRCOG must set 4-year targets for pavement condition by March 30, 2023. DRCOG staff recommend supporting CDOT's pavement condition targets shown in the table below:

Pavement Condition	Baseline	4-Year Targets
Percent of pavement in good condition (interstate)	43.5%	47.0%
Percent of pavement in poor condition (interstate)	3.9%	3.5%
Percent of pavement in good condition (non-interstate NHS)	39.3%	43.0%
Percent of pavement in poor condition (non-interstate NHS)	3.1%	3.5%

Bridge condition

Under this performance area, DRCOG must also set 4-year targets for good and poor bridge condition by deck area for the National Highway System (NHS) in the MPO area by March 30, 2023. DRCOG staff recommend supporting CDOT's bridge condition targets shown in the table below:

Bridge Condition	Baseline	4-Year Targets
Percent of bridges in good condition	38.2%	36.0%
Percent of bridges in poor condition	3.4%	4.0%

**PM3: System performance, freight, and CMAQ**

Travel time reliability

The two performance measures under Travel Time Reliability are the percent of person miles traveled on the interstate and non-interstate National Highway System that are reliable within the MPO area. DRCOG must set 4-year targets by March 30, 2023. DRCOG staff recommend supporting CDOT's travel time reliability targets shown in the table below:

Travel Time Reliability	Baseline	4-Year Target
Percent of the person-miles traveled on the interstate that are reliable	85.3%	79.0%
Percent of the person-miles traveled on the non-Interstate National Highway System that are reliable	94.7%	94.0%

Freight reliability

A separate measurement is required for travel time reliability for freight on the interstate system, the Truck Travel Time Reliability Index. It is broken down into five periods: morning peak, midday, and afternoon peak Monday – Friday, weekends, and overnight for each day. DRCOG must set 4-year targets by March 30, 2023. DRCOG staff recommend supporting CDOT's freight reliability targets shown in the table below:

Freight Reliability	Baseline	4-Year Target
Truck Travel Time Reliability Index (TTTR)	1.39	1.46

Staff will discuss progress toward achieving the previous period's targets, review the methodologies and rationale, and explain the proposed targets at the January TAC meeting.

#### PREVIOUS DISCUSSIONS/ACTIONS

N/A

#### PROPOSED MOTION

Move to recommend to the Regional Transportation Committee adoption of the 2023 safety targets and four-year pavement condition, bridge condition, travel time reliability and freight reliability targets for the DRCOG MPO area as part of federal performance-based planning and programming requirements.

#### ATTACHMENT

1. DRCOG Staff Presentation
2. CDOT Staff Presentation (information only)

#### ADDITIONAL INFORMATION

If you need additional information, please contact Alvan-Bidal Sanchez, Regional Transportation Planning Program Manager, at 720-278-2341 or [ASanchez@drcog.org](mailto:ASanchez@drcog.org).



# Federal Performance Measures and Targets

Transportation Advisory Committee  
January 23, 2023

**Alvan-Bidal Sanchez, AICP**  
he/him/el

# Federal performance areas



**PM1:** Safety performance



**PM2:** Infrastructure condition



**PM3:** System performance, freight, and CMAQ



**TAM:** Transit Asset Management



**PTASP:** Public Transportation Agency Safety Plan

Federal Highway Administration

Federal Transit Administration

# Status on achieving previous targets

Estimated 315 fatalities in 2021

Performance Measures	Desired Trend	2018 (2014-2018)	2019 (2015-2019)	2020 (2016-2020)	2021 (2017-2021)	2022 (2018-2022)
		Achieved	Achieved	Achieved	Achieved	Achieved
Fatalities	↘↘↘	✓	✗	✗	⌚	⌚
Fatality rate	↘↘↘	✓	✓	✗	⌚	⌚
Serious injuries	↘↘↘	✓	✓	✓	⌚	⌚
Serious injury rate	↘↘↘	✓	✓	✓	⌚	⌚
Non-motorized	↘↘↘	✗	✗	✗	⌚	⌚

# PM1: safety performance overview

- **Area** – Individual targets for **all public roads, developed and adopted annually**  
(Covers the DRCOG MPO Region only)
- **Data** – Provided by CDOT, CDOT geo-locates “on-system” data and DRCOG geo-locates “off-system” data
- **Performance measures** –
  - Number of fatalities
  - Rate of fatalities per 100 million vehicle miles traveled
  - Number of serious injuries
  - Rate of serious injuries per 100 million vehicle miles traveled
  - Number of non-motorized fatalities and serious injuries
- **Calculation** – 5-Year rolling average of 5 individual, consecutive points of data
- **Federal guidance** –
  - Targets should be realistic and achievable, not aspirational
  - DRCOG can support CDOT’s state targets or set our own for the region
- **Penalty** –
  - No financial penalty or funding restriction
  - Additional scrutiny into the planning process during the quadrennial federal certification

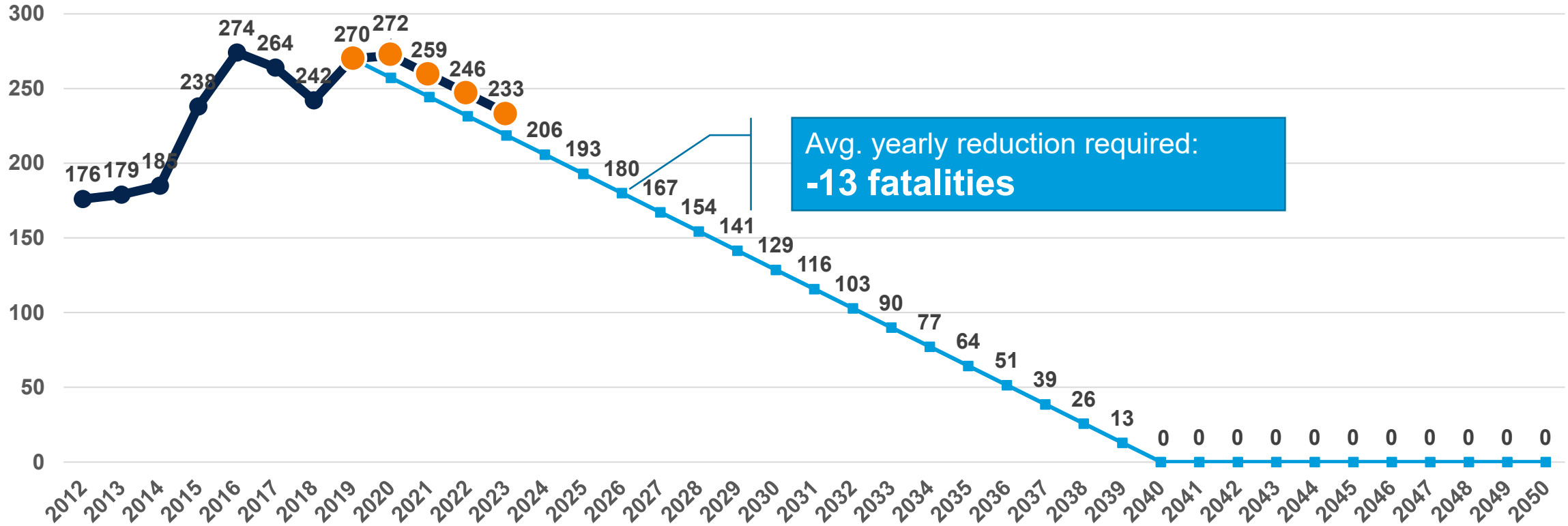


# Actions towards achieving safety targets

- Updating **Taking Action on Regional Vision Zero** in 2023
- Conducted **Regional Complete Streets Prioritization Analysis**
- 2022-25 TIP includes **182 TIP Projects at \$1.7 billion** that will improve safety
- Hired DRCOG's **first dedicated Safety Planner**
- Hosting ongoing **Regional Vision Zero Work Group** meetings
- Participant in the **Colorado Safe Routes to Schools Advisory Committee**
- CDOT Regions 1 and 4 completed **Bicycle-Pedestrian Safety Studies**
- Participating on multiple corridor **safety studies**
- Awarded a 405c grant to explore a **Regional Crash Data Consortium**
- Participant in the **FHWA Safe Systems in HSIP Pilot Program**
- Participating in a **Vision Zero Community Peer Exchange**
- Exploring opportunities to apply and leverage **BIL funding**



# Achieving zero fatalities by 2040

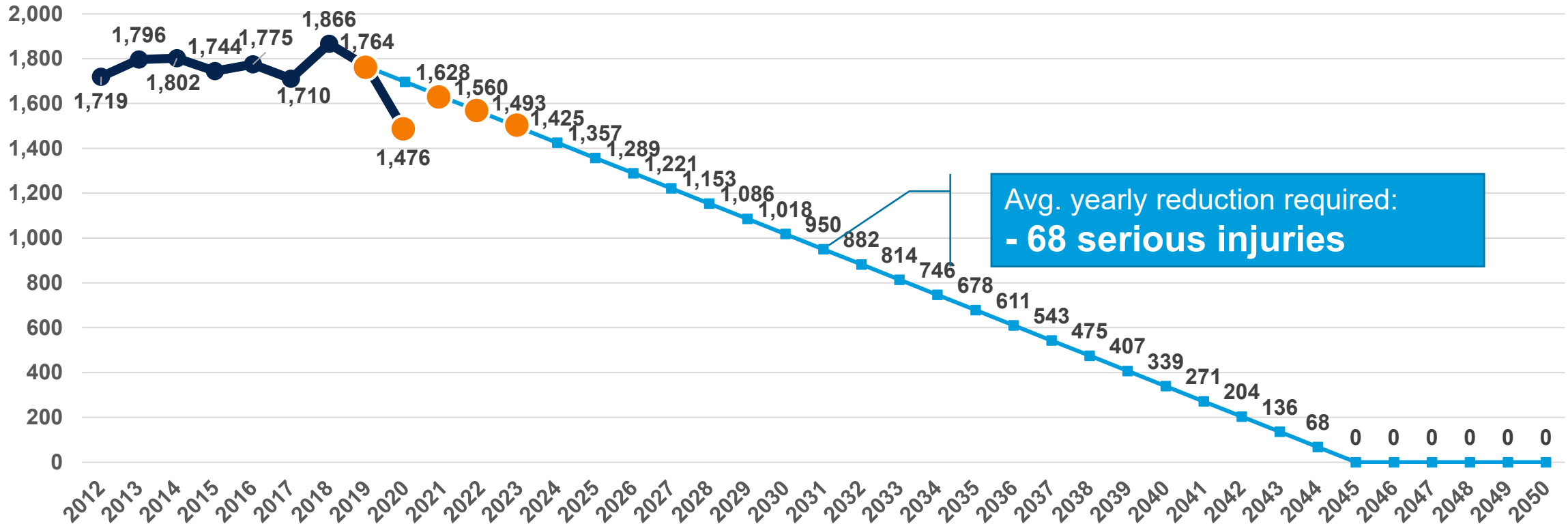


Year	2019	2020	2021	2022	2023	Calculating target
Number of fatalities	270	272	259	246	233	$(270+272+259+246+233)/5 = \mathbf{256}$

Observed

Forecast

# Achieving zero serious injuries by 2045

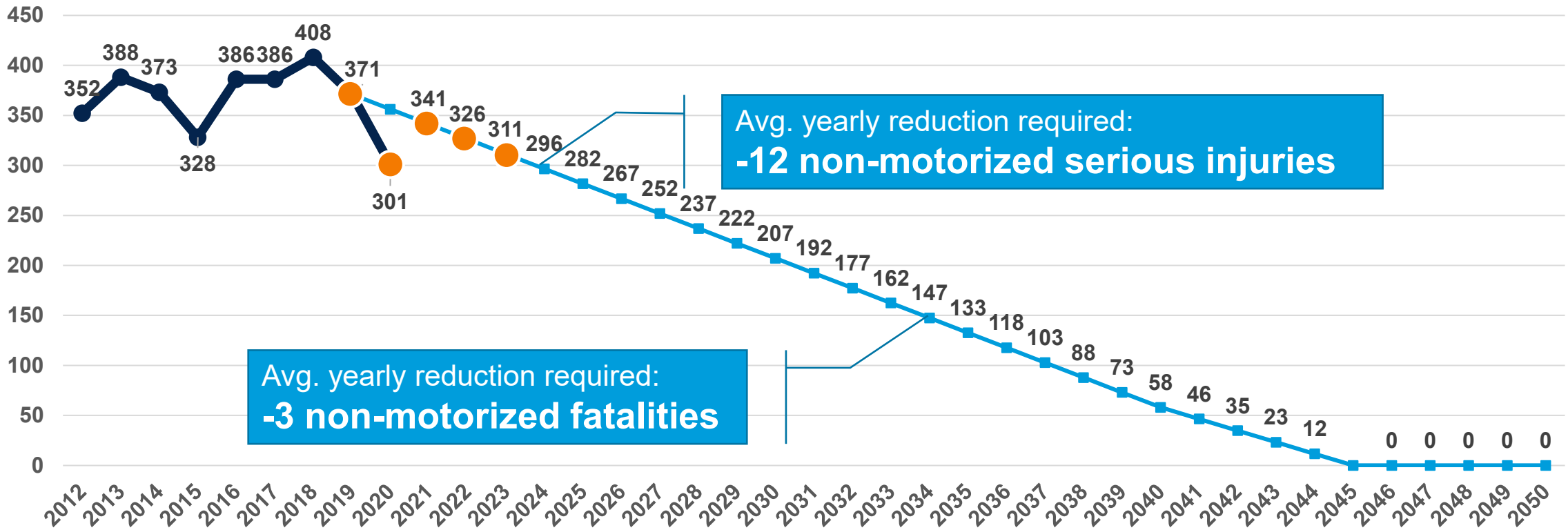


Year	2019	2020	2021	2022	2023	Calculating target
Number of serious injuries	1,764	1,476	1,628	1,560	1,493	$(1,764+1,476+1,628+1,560+1,493)/5 = \underline{1,584}$

Observed

Forecast

# Achieving zero non-motorized fatalities and serious injuries



Year	2019	2020	2021	2022	2023	Calculating target
Number of non-motorized fatalities & serious injuries	371	301	341	326	311	$(371+301+341+326+311)/5 = \mathbf{330}$

Observed

Forecast



# Proposed 2023 safety targets

Performance measures	2023 targets (2019-2023)
Number of fatalities	256
Rate of fatalities per 100 million vehicle miles traveled	0.930
Number of serious injuries	1,584
Rate of serious injuries per 100 million vehicle miles traveled	5.730
Number of non-motorized fatalities and serious injuries	330



# Infrastructure condition



# Status on achieving previous targets

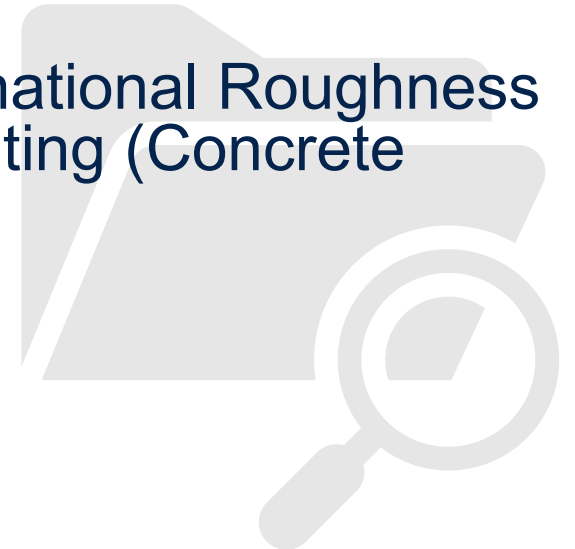
Pavement Condition	Desired Trend	Four-year targets	Four-year observations	Met target or better than baseline?
Percent of pavement in good condition (interstate)	▲▲▲	40.0%	43.5%	✓
Percent of pavement in poor condition (interstate)	▼▼▼	5.0%	3.9%	✓
Percent of pavement in good condition (non-interstate NHS)	▲▲▲	40.0%	39.3%	✗
Percent of pavement in poor condition (non-interstate NHS)	▼▼▼	5.0%	3.1%	✓

Bridge Condition	Desired Trend	Four-year targets	Four-year observations	Met target or better than baseline?
Percent of bridges in good condition	▲▲▲	44.0%	38.2%	✗
Percent of bridges in poor condition	▼▼▼	4.0%	3.4%	✓

# PM2: pavement condition overview

- **Area** – Individual state 2- & 4- Year targets for the **non-interstate NHS** and 4-year targets for the **interstate** (DRCOG: 4-year target only)
- **Data** – Highway Performance Monitoring System (HPMS)
- **Performance Measures** –
  - % of interstate pavements in Good condition
  - % of interstate pavements in Poor condition
  - % of non-Interstate NHS pavements in Good condition
  - % of non-Interstate NHS pavements in Poor condition
- **Calculation** – Good and Poor Condition Rating Areas: International Roughness Index (IRI), Cracking, Rutting (Asphalt pavements), and Faulting (Concrete pavements)
- **Federal Guidance** –
  - Targets should be realistic and achievable, not aspirational
  - DRCOG can support CDOT's state targets or set our own for the region



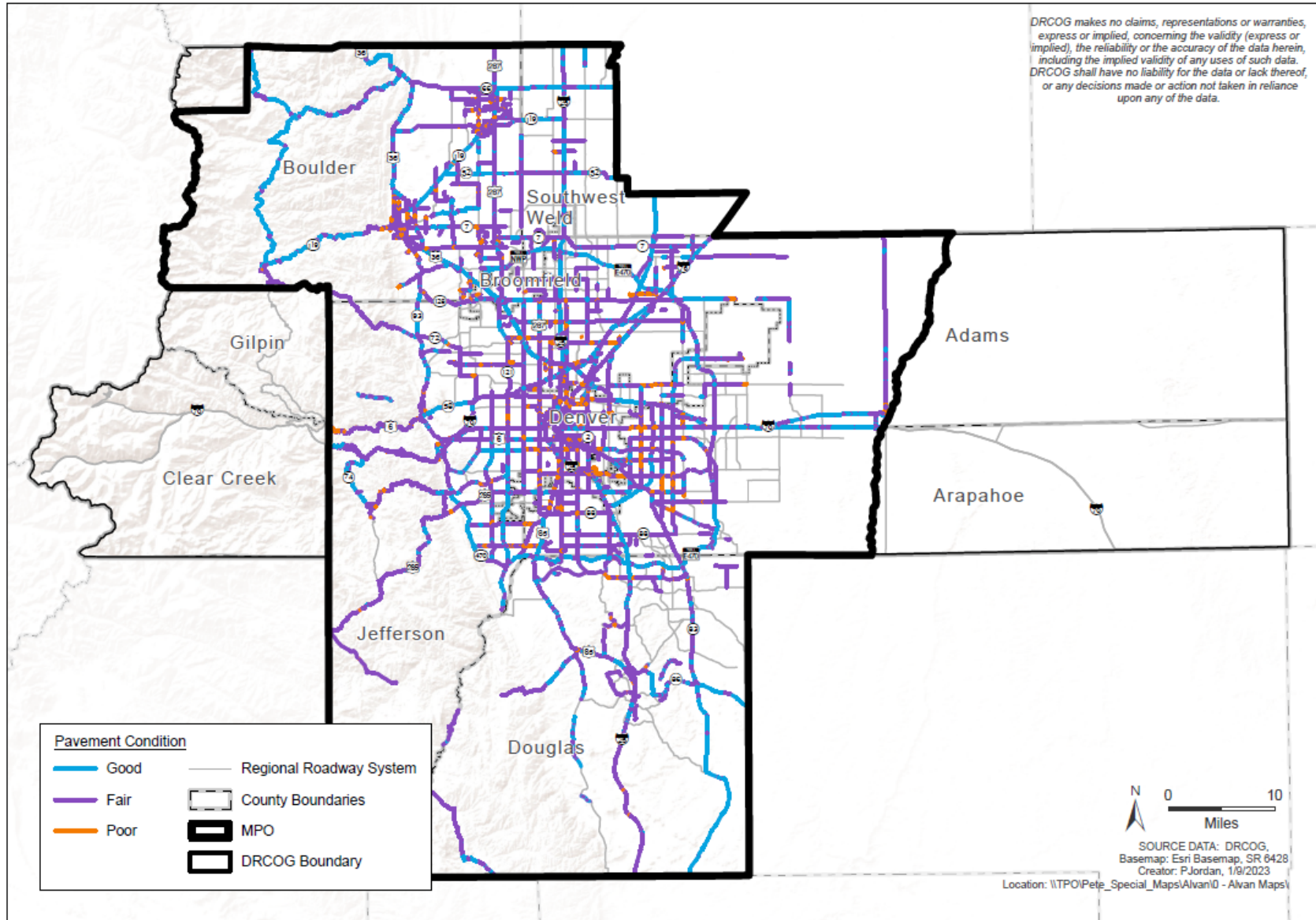
# Pavement metric threshold

Rating	Good	Fair	Poor
<b>IRI</b> <i>(inches/mile)</i>	<95	<b>95-170</b>	<b>&gt;170</b>
<b>PSR*</b> <i>(0.0-5.0 value)</i>	≥4.0	2.0-4.0	≤2.0
<b>Cracking Percent</b> <i>(%)</i>	<5	<i>CRCP: 5-10 Jointed: 5-15 Asphalt: 5-20</i>	<i>&gt;10 &gt;15 &gt;20</i>
<b>Rutting</b> <i>(inches)</i>	<0.20	0.20-0.40	>0.40
<b>Faulting</b> <i>(inches)</i>	<b>&lt;0.10</b>	0.10-0.15	>0.15

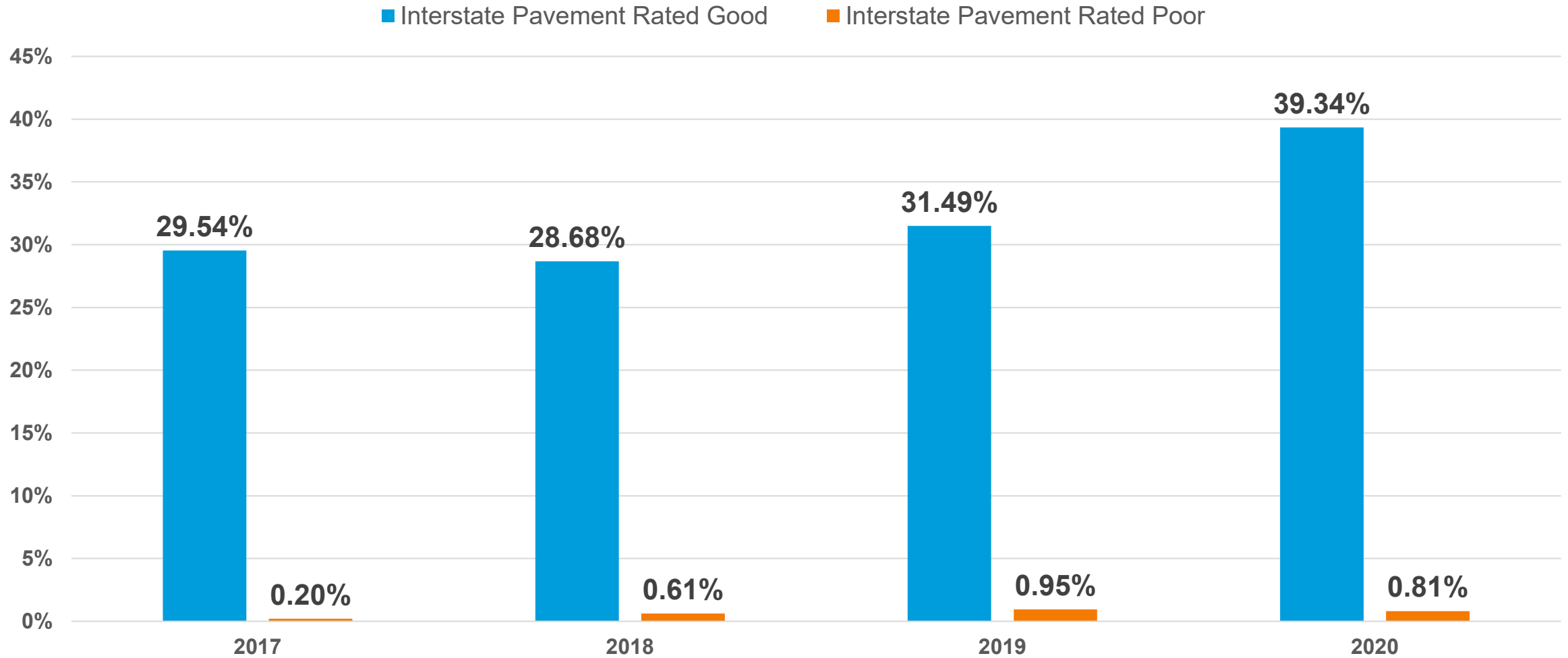
\*PSR may be used only on routes with posted speed limit < 40mph.



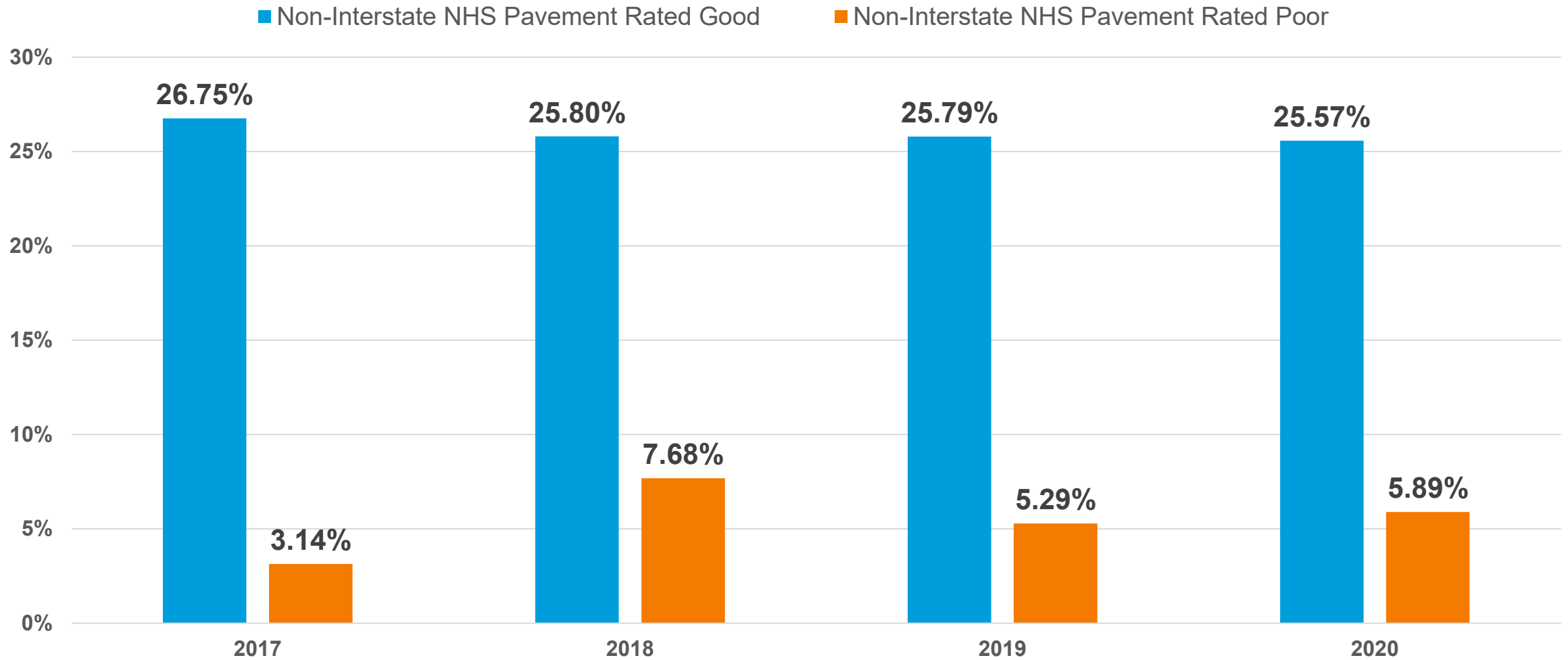
# Pavement Conditions



# Interstate pavement condition



# Non-interstate NHS pavement condition



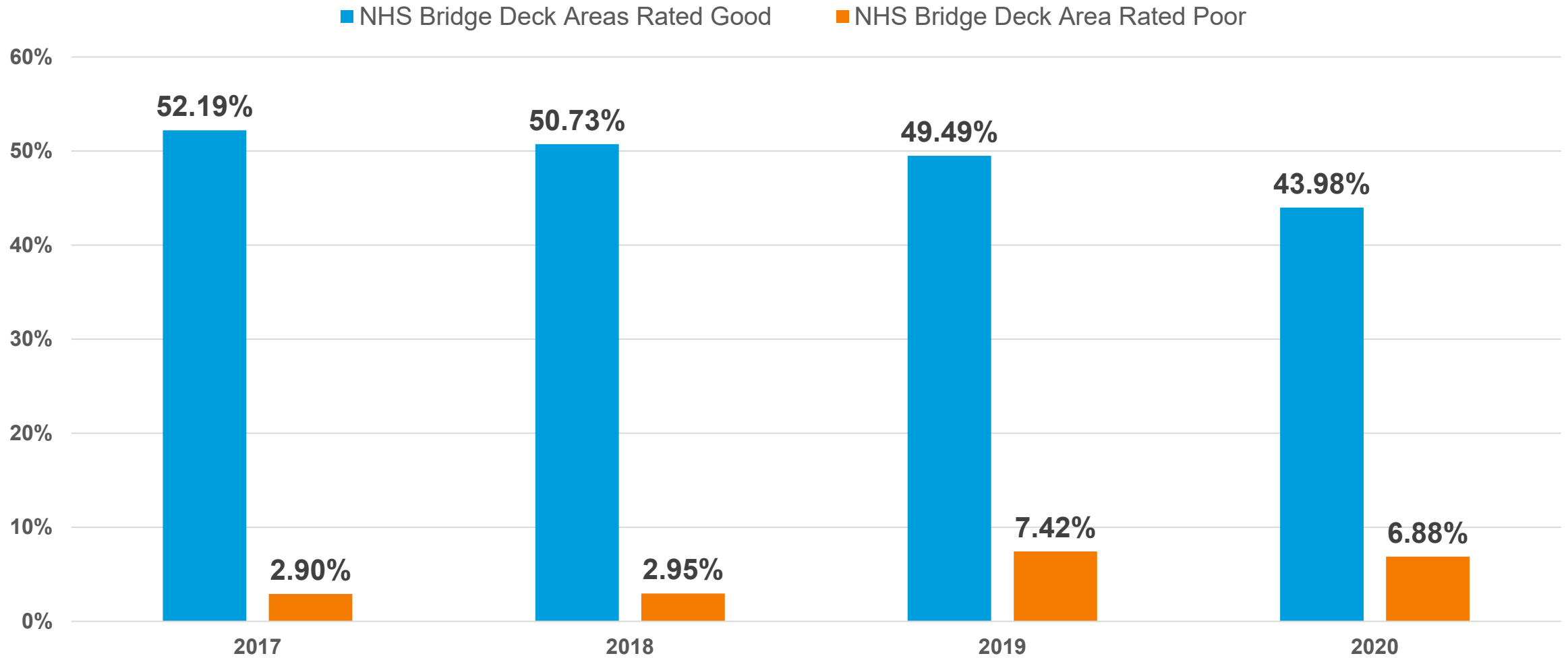


# PM2: bridge condition overview

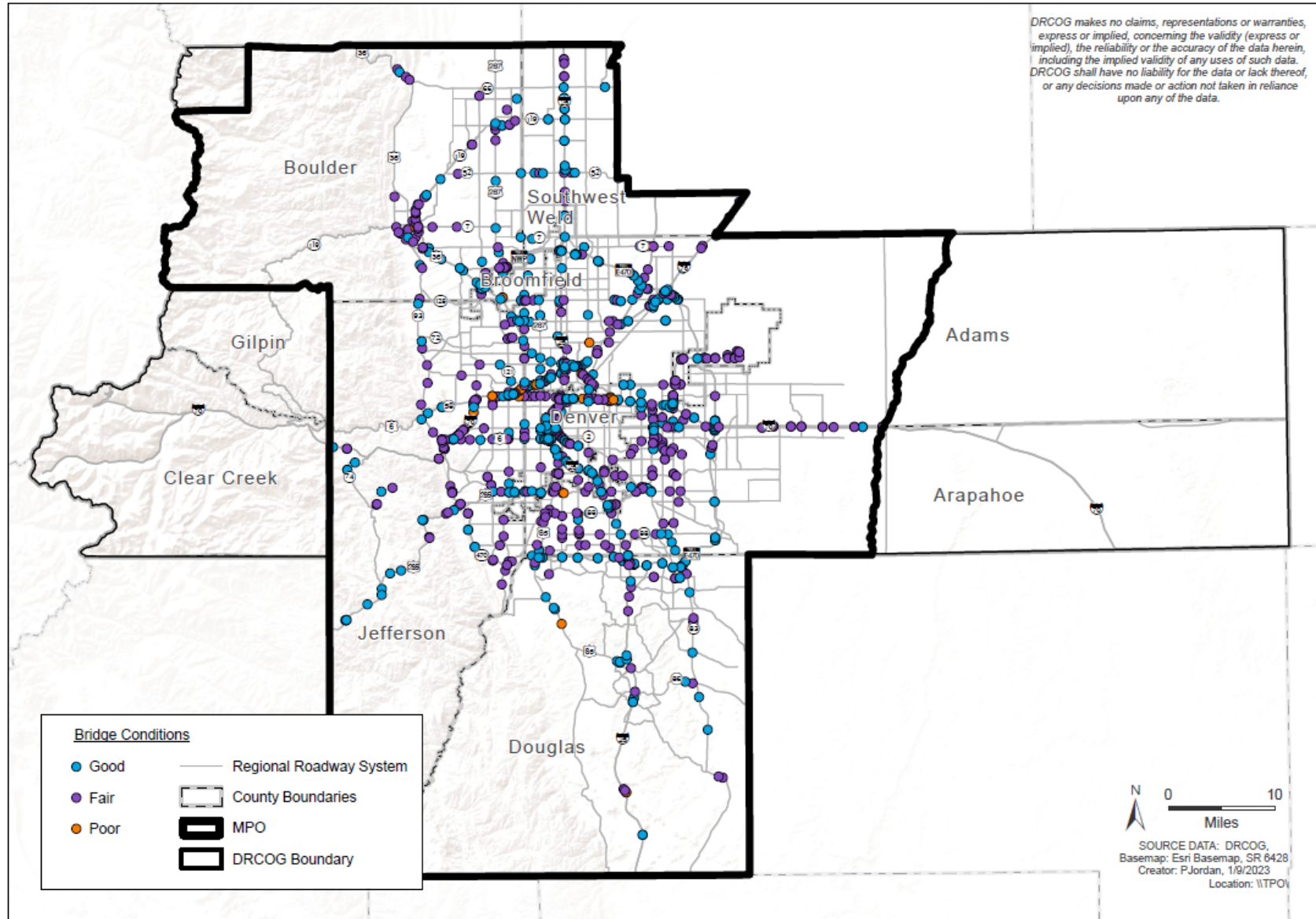
- **Area** – Individual state 2- & 4- year targets for **all bridges carrying the NHS**, including on- and off- ramps (DRCOG: 4-year target only)
- **Data** – National Bridge Inventory (NBI)
- **Performance Measures** –
  - % of NHS bridges by deck area classified as in Good condition
  - % of NHS bridges by deck area classified as in Poor condition
- **Calculation** – Good and Poor Condition Rating Areas: Deck, Superstructure, Substructure, and Culvert
- **Federal Guidance** –
  - Targets should be realistic and achievable, not aspirational
  - DRCOG can support CDOT's state targets or set our own for the region



# Bridge deck area condition









# Bridge Conditions



# Forecasting infrastructure condition

- CDOT staff uses infrastructure condition data and other assumptions (e.g., deterioration, treatment costs, inflation, etc.) to develop 10-year forecasts.
- Forecasts are generated through CDOT's Asset Investment Management System (AIMS), which is the Department's asset model. The forecasts incorporate the effects of recommended life-cycle investment strategies (i.e., a series of treatments, such as preventive maintenance, rehabilitations, and reconstructions) for both pavement and bridge.
- The Department generates forecasts based on anticipated budgets, as well as higher- and lower-than-expected budgets, to understand return on investment.
- Staff proposes infrastructure condition targets based on anticipated budgets and the resulting condition forecast to CDOT's Transportation Asset Management Oversight Committee.
- The targets are finalized through the approval of CDOT's Executive Director.

# Proposed infrastructure condition targets

Pavement Condition	Desired Trend	Baseline	4-Year Targets
Percent of pavement in good condition (interstate)		43.5%	47.0%
Percent of pavement in poor condition (interstate)		3.9%	3.5%
Percent of pavement in good condition (non-interstate NHS)		39.3%	43.0%
Percent of pavement in poor condition (non-interstate NHS)		3.1%	3.5%
Bridge Condition	Desired Trend	Baseline	4-Year Targets
Percent of bridges in good condition		38.2%	36.0%
Percent of bridges in poor condition		3.4%	4.0%



# Travel time reliability and freight reliability



# System performance, freight, and CMAQ



## Traffic congestion reduction

- Annual hours of peak hour excessive delay per capita
- % of non single occupancy vehicle travel



## On-road mobile source emissions

- Total emissions reduction (kg/day)
  - NOx
  - VOC
  - CO
  - PM10



## Travel time reliability

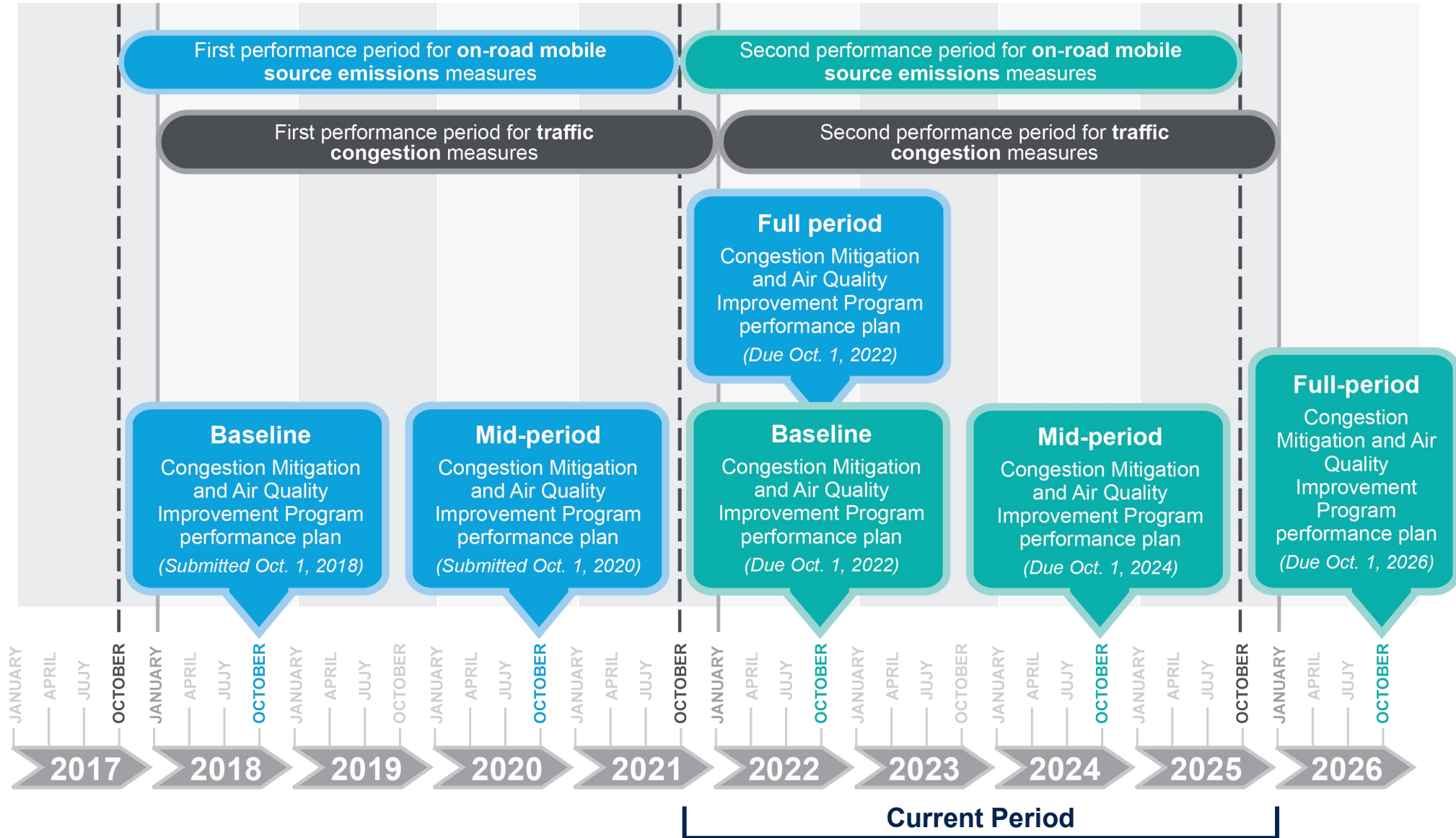
- % of PMT on the interstate that are reliable
- % of PMT on the non-interstate NHS that are reliable



## Freight reliability





- Truck travel time reliability index

# Performance periods







# Status on achieving previous targets

Travel Time Reliability	Desired Trend	Four-year targets	Four-year observations	Met target or better than baseline?
Percent of the person-miles traveled on the interstate that are reliable		81.0%	85.3%	
Percent of the person-miles traveled on the non-Interstate NHS that are reliable		64.0%	94.7%	

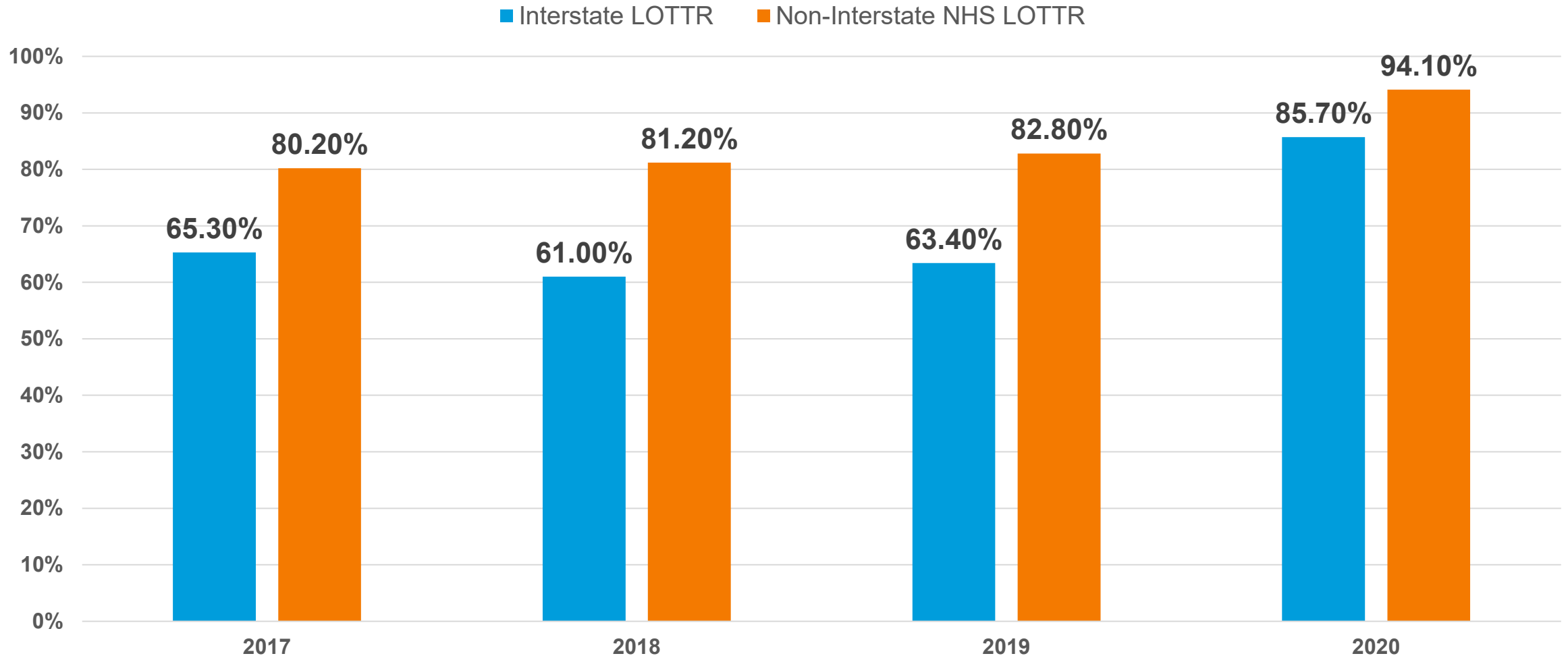
Freight Reliability	Desired Trend	Four-year targets	Four-year observations	Met target or better than baseline?
Truck Travel Time Reliability Index (TTTR)		1.50	1.39	

# PM3: Travel time reliability overview

- **Area** – Individual state 2- & 4- year targets for the **interstate** and 4-year targets for the **non-interstate NHS** (DRCOG: 4-year target only)
- **Data** – National Performance Management Research Data Set (**NPMRDS**) & Highway Performance Monitoring System (**HPMS**)
- **Performance Measures** –
  - Percent of the person miles traveled on the interstate that are reliable
  - Percent of the person miles traveled on the non-interstate NHS that are reliable
- **Calculation** –
  - $Level\ of\ Travel\ Time\ Reliability = \frac{80th\ Percentile\ Travel\ Time}{50th\ Percentile\ Travel\ Time}$ 
    - Level of Travel Time Reliability (LOTTR) for the reporting segment must be less than 1.50 to be considered reliable
- **Federal Guidance** –
  - Targets should be realistic and achievable, not aspirational
  - DRCOG can support CDOT's state targets or set our own for the region



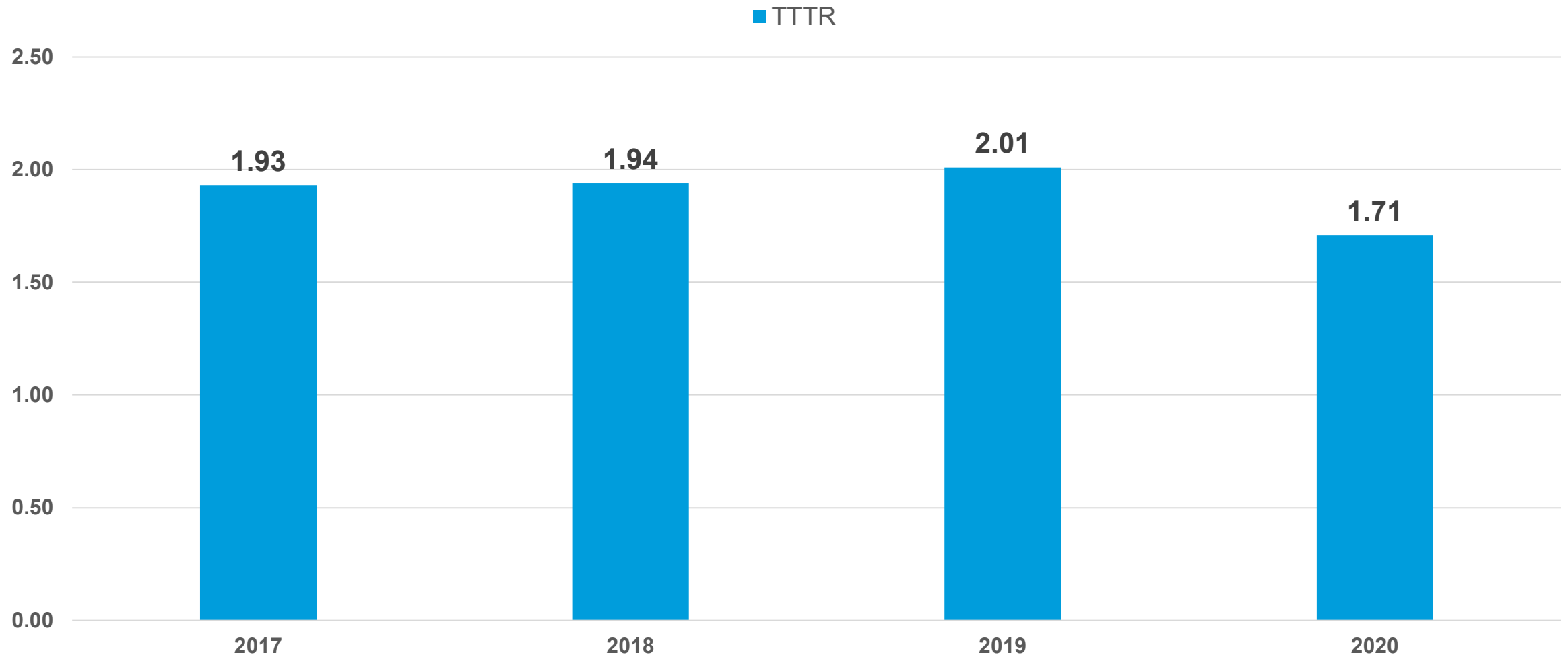
# Travel time reliability



- **Area** – Individual state 2- & 4- year targets (DRCOG: 4-year target only)
- **Data** – National Performance Management Research Data Set (NPMRDS)
- **Performance Measures** –
  - Truck Travel Time Reliability Index: Percent of the interstate system mileage providing for reliable truck travel times
- **Calculation** –
  - $$\text{Truck Travel Time Reliability} = \frac{95\text{th Percentile Travel Time}}{50\text{th Percentile Travel Time}}$$
- **Federal Guidance** –
  - Targets should be realistic and achievable, not aspirational
  - DRCOG can support CDOT's state targets or set our own for the region





# Truck Travel Time Reliability Index




- Future levels of system reliability were forecasted using predictive modeling. The following data elements were used in the predictive model:
  - “Point Data” - Data used in Travel Demand model shows location for each establishment, school and home in the state.
  - Population Data
  - Loveland Pass Transit Data - Data used from the Travel Demand model, which looks at long distance travel in the state.
  - Historic System Reliability data from NPMRDS

# Proposed travel time and freight reliability targets

Travel Time Reliability	Desired Trend	Baseline	4-Year Targets
Percent of the person-miles traveled on the interstate that are reliable		85.3%	79.0%
Percent of the person-miles traveled on the non-Interstate NHS that are reliable		94.7%	94.0%

Freight Reliability	Desired Trend	Baseline	4-Year Targets
Truck Travel Time Reliability Index (TTTR)		1.39	1.46

# Performance targets schedule

- Transportation Advisory Committee: **Jan 23** 
- Regional Transportation Committee: **Feb 14**
- Board of Directors: **Feb 15**
- **Deadlines:**
  - **Feb 27** (Safety)
  - **Mar 30** (Infrastructure condition and reliability)





# Requested motion

Move to recommend to the Regional Transportation Committee adoption of the 2023 safety targets and four-year pavement condition, bridge condition, travel time reliability and freight reliability targets for the DRCOG MPO area as part of federal performance-based planning and programming requirements.





**Thank you!**  
**Questions?**

**Alvan-Bidal Sanchez, AICP**  
*Program manager*  
**direct: (720) 278-2341**  
**email: [asanchez@drcog.org](mailto:asanchez@drcog.org)**



**COLORADO**

Department of Transportation

# CDOT PM2 and PM3 Target Setting



# Establishing Targets

## PM2 - Infrastructure Condition

- CDOT staff uses infrastructure condition data and other assumptions (e.g., deterioration, treatment costs, inflation, etc.) to develop 10-year forecasts.
- Forecasts are generated through CDOT's Asset Investment Management System (AIMS), which is the Department's asset model. The forecasts incorporate the effects of recommended life-cycle investment strategies (i.e., a series of treatments, such as preventive maintenance, rehabilitations, and reconstructions) for both pavement and bridge.
- The Department generates forecasts based on anticipated budgets, as well as higher- and lower-than-expected budgets, to understand return on investment.
- Staff proposes infrastructure condition targets based on anticipated budgets and the resulting condition forecast to CDOT's Transportation Asset Management Oversight Committee.
- The targets are finalized through the approval of CDOT's Executive Director.
- MPOs must establish targets no later than 180 days after the State - March 30, 2023
  - agreeing to support the State target; *OR*
  - establishing their own targets



# PM2 Performance and Targets

## First Performance Period Results (2018-2021)

Pavement Condition	2021 Target	2021 Results
Percentage of pavements of the Interstate System in Good condition	40.0%	43.5%
Percentage of pavements of the Interstate System in Poor condition	5.0%	3.9%
Percentage of pavements of the non-Interstate NHS in Good condition	40.0%	39.3%
Percentage of pavements of the non-Interstate NHS in Poor condition	5.0%	3.1%

## Second Performance Period Targets (2022-2025)

Pavement Condition (PM2)	2023 Target	2025 Target
Percentage of pavements of the Interstate System in Good condition	45.0%	47.0%
Percentage of pavements of the Interstate System in Poor condition	4.0%	3.5%
Percentage of pavements of the non-Interstate NHS in Good condition	42.0%	43.0%
Percentage of pavements of the non-Interstate NHS in Poor condition	3.5%	3.5%

Bridge Condition	2021 Target	2021 Results
Percentage of National Highway System Bridges, by Deck Area, Classified in Good Condition	44.0%	38.2%
Percentage of National Highway System Bridges, by Deck Area, Classified in Poor Condition	4.0%	3.4%

Bridge Condition (PM2)	2023 Target	2025 Target
Percentage of National Highway System Bridges, by Deck Area, Classified in Good Condition	36.0%	36.0%
Percentage of National Highway System Bridges, by Deck Area, Classified in Poor Condition	4.0%	4.0%



# PM2 Significant Progress Determination

- The FHWA will determine that a State DOT has made significant progress toward the achievement of each 2- or 4-year applicable target if either:
  - The actual condition/performance level is better than the baseline condition/performance; or
  - The actual condition/performance level is equal to or better than the established target.
- If FHWA determines that a State DOT has not made significant progress
  - The State DOT shall include as part of the next performance target report, a description of the actions the State DOT will undertake to achieve the targets related to the measure in which significant progress was not achieved.
- Financial Restrictions
  - If more than 5 percent of Interstate pavements are classified as Poor.
  - if more than 10 percent of NHS bridge-deck area is classified as Poor



# Interstate Pavement Performance

2021 Interstate Pavement Condition						
Region	Good	Trend		Poor	Trend	
CO	43.5%			3.9%		
DRCOG	35.9%			0.5%		
NFRMPO	55.0%			1.5%		
PPACG	52.9%			1.8%		
PACOG	44.2%			5.0%		
GVMPO	76.7%			0.0%		



# Non-Interstate NHS Pavement Performance

## 2021 Non-Interstate NHS Pavement Condition

Region	Good	Trend	Poor	Trend
CO	39.3%		3.1%	
DRCOG	24.2%		4.6%	
NFRMPO	42.0%		2.3%	
PPACG	27.0%		5.4%	
PACOG	37.8%		0.8%	
GVMPO	20.5%		4.4%	





# NHS Bridge Performance

## 2022 NHS Bridge-Deck Area Condition

Region	Good	Trend	Poor	Trend
CO	38.2%		3.4%	
DRCOG	41.7%		3.5%	
NFRMPO	45.2%		7.6%	
PPACG	39.5%		2.2%	
PACOG	44.1%		7.0%	
GVMPO	18.9%		0.7%	



# Establishing Targets

## PM3 - System Reliability

- Future levels of system reliability were forecasted using predictive modeling. The following data elements were used in the predictive model:
  - “Point Data” - Data used in Travel Demand model shows location for each establishment, school and home in the state.
  - Population Data
  - Loveland Pass Transit Data - Data used from the Travel Demand model, which looks at long distance travel in the state.
  - Historic System Reliability data from NPMRDS
- MPOs must establish targets no later than 180 days after the State establishes targets.
  - March 30, 2023.
  - agreeing to support the State target; *OR*
  - establishing their own four-year targets (if the DOT chooses to modify targets at the mid-year evaluation, the MPO has 180 day to keep or change the four-year target)

**First Performance Period Results (2018-2021)**

System Reliability	2021 Target	2021 Results
Percent of person-miles traveled on the Interstate that are reliable	81.0%	85.3%
Percent of person-miles traveled on the non-Interstate National Highway System (NHS) that are reliable	64.0%	94.7%
Truck Travel Time Reliability (TTTR) Index	1.50	1.39

**Second Performance Period Targets (2022-2025)**

System Reliability	2023 Target	2025 Target
Percent of person-miles traveled on the Interstate that are reliable	81.0%	79.0%
Percent of person-miles traveled on the non-Interstate National Highway System (NHS) that are reliable	93.0%	94.0%
Truck Travel Time Reliability (TTTR) Index	1.46	1.46



# PM 3 Significant Progress Determination

- The FHWA will determine that a State DOT has made significant progress toward the achievement of each 2- or 4-year applicable target if either:
  - The actual condition/performance level is better than the baseline condition/performance; or
  - The actual condition/performance level is equal to or better than the established target.
- If FHWA determines that a State DOT has not made significant progress
  - The State DOT shall include as part of the next performance target report, a description of the actions the State DOT will undertake to achieve the targets related to the measure in which significant progress was not achieved.
- Financial Restrictions
  - N/A



# Interstate LOTTR Performance

Interstate LOTTR						
Region	2021	2020	2019	2018	2017	Trend
Statewide	85.3%	91.5%	78.8%	77.8%	80.3%	
DRCOG	74.6%	85.7%	63.4%	61.0%	65.3%	
NFRMPO	100.0%	100.0%	93.7%	100.0%	100.00%	
PPACG	93.2%	97.2%	90.1%	90.6%	94.4%	
PACOG	98.5%	100.0%	100.0%	100.0%	100.0%	
GVMPO	100.0%	100.0%	100.0%	100.0%	100.0%	



# Non-Interstate NHS LOTTR Performance

Non-Interstate NHS LOTTR						
Region	2021	2020	2019	2018	2017	Trend
Statewide	94.7%	94.3%	87.6%	86.5%	85.9%	
DRCOG	94.3%	94.1%	82.8%	81.2%	80.2%	
NFRMPO	98.8%	97.9%	97.8%	98.0%	97.8%	
PPACG	91.9%	88.2%	85.1%	84.7%	85.4%	
PACOG	96.0%	96.2%	95.1%	90.3%	93.0%	
GVMPO	96.9%	96.7%	96.8%	97.2%	94.1%	



# Interstate TTTR Index Performance

Interstate TTTR Index						
Region	2021	2020	2019	2018	2017	Trend
Statewide	1.39	1.42	1.45	1.38	1.37	
DRCOG	1.84	1.71	2.01	1.94	1.93	
NFRMPO	1.54	1.35	1.69	1.48	1.53	
PPACG	1.44	1.30	1.46	1.41	1.36	
PACOG	1.20	1.16	1.24	1.22	1.18	
GVMPO	1.17	1.17	1.18	1.17	1.16	



- Federal Highway Administration (FHWA)
  - [FHWA TPM Website](#)
- Colorado Department of Transportation (CDOT)
  - [CDOT NPM Website](#)
- Asset Condition Performance Dashboards
  - [Bridge Condition Dashboard](#)
  - [Pavement Condition Dashboard](#)
- National Performance Management Research Data Set (NPMRDS)
  - [NPMRDS Analytics](#)



For questions or comments on this presentation, please contact:

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**ATTACHE**

## ATTACHMENT E

To: Chair and Members of the Transportation Advisory Committee  
From: Ron Papsdorf, Director, Transportation Planning and Operations  
303-480-6747 or [rpapsdorf@drcog.org](mailto:rpapsdorf@drcog.org)

Meeting Date	Agenda Category	Agenda Item #
January 23, 2023	Informational Briefing	7

### SUBJECT

*FY 2024- 2025 Unified Planning Work Program (UPWP) Update*

### PROPOSED ACTION/RECOMMENDATIONS

No action requested. This item is an informational briefing.

### ACTION BY OTHERS

N/A

### SUMMARY

Metropolitan Planning Organizations (MPOs) must adopt a *Unified Planning Work Program* (UPWP) that outlines and serves as the tool for scheduling, budgeting, and monitoring the metropolitan transportation planning tasks and activities of participating entities conducted within the region with federal transportation planning funds. The document also lists other major planning activities performed by local governments.

DRCOG staff has begun discussions around major activities to be conducted from October 1, 2023 through September 30, 2025 for the FY 2024-FY 2025 UPWP. Many activities will continue from the current [FY 2022-FY 2023 UPWP](#). Staff will discuss the federal context for the UPWP and required planning activities. DRCOG seeks TAC input on ideas and regional priorities that could be considered for 2024 and 2025.

### PREVIOUS DISCUSSIONS/ACTIONS

N/A

### PROPOSED MOTION

N/A

### ATTACHMENT

1. Staff presentation

### ADDITIONAL INFORMATION

If you need additional information, please contact Ron Papsdorf, Director, Transportation Planning and Operations Division at 303-480-6747 or [rpapsdorf@drcog.org](mailto:rpapsdorf@drcog.org) or Todd Cottrell, Project and Program Delivery Manager, Transportation Planning and Operations at 303-480-6737 or [tcottrell@drcog.org](mailto:tcottrell@drcog.org).

# **FY 2024 & 2025 UNIFIED PLANNING WORK PLAN DEVELOPMENT**

**DRCOG Transportation Advisory Committee**

**January 23, 2023**

**Ron Papsdorf, Director, Transportation Planning & Operations**

- MPO/Metropolitan Transportation Planning Overview
- UPWP Overview
- Menti Exercise
- Process/Next Steps for FY 2024 - FY 2025 UPWP Development

- **Purpose** – carry out a **continuing, cooperative, and comprehensive** performance-based **multimodal** transportation planning process, including the development of a **metropolitan transportation plan** and a **TIP**.
- **Interested parties, participation and consultation** – shall develop and use a documented participation plan that defines a process for providing interested parties with reasonable opportunities to be involved in the metropolitan transportation planning process.

- **Scope** – consider and implement projects, strategies, and services that address the following factors:
  - Economic vitality
  - Safety
  - Security
  - Accessibility and Mobility
  - Environment, energy conservation, quality of life, and consistency between transportation improvements and planned growth and E.D.
  - System and modal integration and connectivity
  - System management and operation
  - System preservation
  - Resiliency and reliability and reduce or mitigate stormwater impacts
  - Enhance travel and tourism
- provide for performance-based approach and support national goals
- be consistent with the development of regional ITS architectures
- prepare coordinated public transit-human services transportation plan

- **Scope** – identify and develop tasks addressing the current federal emphasis areas:
  - Help achieve national **GHG goals** and achieve climate resilience
  - Advance **racial equity** and support for **underserved and disadvantaged communities**
  - Plan for safe **Complete Streets**
  - Utilize meaningful, early, effective, and continuous **public involvement**
  - Coordinate with Dept. of Defense on the **Strategic Highway Network**
  - Coordinate with **Federal Land Management Agencies** on transportation on federal lands
  - Use **Planning and Environmental Linkages (PELs) studies** as part of the transportation planning process
  - Incorporate **data sharing principles and data management** into the transportation planning process

- **Congestion management process** – shall address congestion management that provides for safe and effective integrated management and operation of the multimodal system
- **Metropolitan transportation plan** – shall develop a 20-year transportation plan that considers the planning factors
  - Long-range and short-range strategies/actions
  - Review and update at least every 4 years
  - Coordinate with the process for developing TCMs in a SIP
- **Transportation Improvement Program (TIP) and Annual listing of obligated projects (ALOP)**



- **Unified Planning Work Program** – shall develop a UPWP that includes a discussion of the planning priorities facing the metropolitan planning area.
  - Identify work proposed for the next 1- or 2-year period **with federal planning funds** by major activity and task, including activities that address the federal planning factors:
    - Who will perform work
    - Schedule for completing the work
    - Resulting products
    - Proposed funding by activity/task
    - Summary of total amounts and sources of federal and matching funds

# THE STUFF WE HAVE TO DO

- Operate and maintain the continuing **transportation planning process** within the Metropolitan Planning Area
- Federal **law/regulatory compliance**-maintain eligibility for federal funding
- Unified Planning Work Program (UPWP)
- Regional Transportation Plan (RTP)
- Transportation Improvement Program (TIP)
- Transportation Performance Measures
- Congestion Management Process
- Air Quality conformity

# THE STUFF THAT SUPPORTS THAT STUFF

- Regional Data
- Land use modeling
- Transportation modeling/local area planning/project support
- Technical assistance
- Scenario planning
- Local transportation plan support
- Traffic Operations Program: signal coordination
- Transportation Demand Management Program
- Regional Traffic Count Program Database

- Corridor planning
- Community-based transportation plans
- Greenhouse Gas Emissions and RTP Review
- Housing coordination process/plan
- Local agency TIP project support and monitoring
- Vision Zero/Safety initiatives
- IIJA Programs
  - Congestion Relief
  - Healthy Streets – AQ/heat islands
  - Reconnecting Communities
  - Safe Streets & Roads for All
  - SMART - technology
- Local transportation/land use best practices
  - Transit-Oriented Development
  - Transit design standards

- Growing population and employment
- Aging population
- Equity and inclusion
- Leveraging transportation and land use for better outcomes
- Transportation technology
- Transit system optimization/future of mobility
- Mobility as a service
- Greenhouse gas emissions/air quality
- Complete streets & multimodal safety
- Micromobility
- Future of TDM and telework
- 2020 census and TMA/UZA boundaries
- Funding limitations

## **Seven Objectives:**

- 1. Program Administration and Coordination**
- 2. Planning Coordination and Outreach**
- 3. Long Range and Multimodal Planning**
- 4. Project Programming**
- 5. Transportation Systems Operations**
- 6. Public Transportation Planning**
- 7. Planning Data and Modeling**

## 1.0 - Program Administration and Coordination

Administer the core Metropolitan Planning Organization (MPO) transportation planning program.

- Facilitate staff development and training
- Maintain and update the UPWP
- Ensure compliance with state and federal laws and regulations

## 2.0 - Planning Coordination and Outreach

Increase participation and support of the public in the planning process and engage with the transportation planning activities of partner agencies to address the transportation and development issues of the region and ensure outcomes that are consistent with Metro Vision goals and policies.

- Implement the Public Engagement Plan to engage the public
- Coordinate with federal, state, and local partners



## 3.0 - Long Range and Multimodal Planning

Develop, refine, and implement the region's long-range plans – Metro Vision and the Metro Vision Regional Transportation Plan – as well as the various modal plans which help to implement their principles, to enhance and improve the quality of life in the DRCOG region

- Maintain, update, and implement Metro Vision
- Maintain, update and implement the MVRTP
- Conduct active transportation and TDM planning
- Conduct freight planning
- Conduct corridor and community-based transportation planning
- Conduct Complete Streets planning

## 4.0 - Project Programming

Identify and implement priorities within the metropolitan area by effectively developing and managing the Transportation Improvement Program.

- Maintain and update the TIP, including holding calls for projects for the TIP and set-asides

## 5.0 - Transportation Systems Operations

Implement regional priorities through strategies to improve the safety and effectiveness of the existing transportation system, explore innovative solutions, and protect air quality.

- Administer the Congestion Management Process
- Conduct ITS planning and deployment
- Conduct security planning
- Conduct safety planning
- Conduct innovative mobility planning

## 6.0 - Public Transportation Planning

Plan and operate rapid transit corridors, the regional bus network, and transit facilities.

- Conduct RTD-led transit facility and service planning
- Conduct DRCOG-led transit-related planning (Coordinated Transit Plan, FTA Section 5310 Program)

## 7.0 – Planning Data and Modeling

Acquire and maintain critical data and forecasting tools to support the region's transportation and land use planning activities.

- Conduct travel and land use modeling
- Maintain and update the Regional Data Catalog
- Collect traffic counts
- Develop data products for partners

- Menti exercise

- March 27: Update to TAC on major anticipated activities and draft list of tasks and deliverables in 2024-2025
- June 14-July 14: Public comment period on draft 2024-2025 UPWP
- July 24: TAC recommendation
- August 15: RTC recommendation
- August 16: Board action



**THANK YOU!**  
**QUESTIONS?**

**Ron Papsdorf**

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Operations**

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