



Executive Committee

Steve Conklin, Chair
Wynne Shaw, Vice Chair
Jeff Baker, Secretary
Colleen Whitlow, Treasurer
Kevin Flynn, Immediate Past Chair
Douglas W. Rex, Executive Director

Transportation Advisory Committee

Monday, February 26, 2024
1:30 p.m.

1001 17th St, Denver, CO
1st Floor Aspen & Birch Conference Rooms

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Agenda

1. Call to Order
2. Public Comment
3. January 22, 2024 TAC Meeting Summary (Attachment A)

Action Items

4. Community-Based Transportation Planning Program Selection Recommendations (Attachment B) Nora Kern, Manager, Subarea and Project Planning Program

Discussion Items

5. Colorado Freight Plan (Attachment C) Cole Neder, Senior Transit Planner
6. Regional Housing Needs Assessment (Attachment D) Andy Taylor, Manager, Regional Planning and Analytics
7. Taking Action on Regional Vision Zero (Attachment E) Emily Kleinfelter, Safety/Regional Vision Zero Planner
8. Federal Greenhouse Gas Performance Measure (Attachment F) Alvan-Bidal Sanchez, Regional Transportation Program Manager
9. Rebuilding American Infrastructure with Sustainability and Equity Grants (Attachment G) Jacob Riger, Manager, Multimodal Transportation Planning

Administrative Items

10. Member Comment/Other Matters
 - Advanced Mobility Partnership Working Group Update
11. Next Meeting – March 25, 2024
12. Adjournment

ATTACH A

Attachment A
Meeting Summary
Transportation Advisory Committee
Monday, January 22, 2024

***In-person meeting with Virtual Option for Public (Via Zoom)**

Members (or Voting Alternates) Present:

Shawn Poe	Adams County – City of Commerce City
Kent Moorman	Adam County – City of Thornton
Mac Callison (Alternate)	Arapahoe County – City of Aurora
Brent Soderlin	Arapahoe County
Jeff Dankenbring	Arapahoe County – City of Centennial
Jean Sanson	Boulder County – City of Boulder
Alex Hyde-Wright	Boulder County
Angel Bond (Alternate)	Boulder County
Sarah Grant (Chair)	Broomfield, City & County
David Gaspers	Denver, City & County
Justin Begley	Denver, City & County
Jennifer Hillhouse	Denver, City & County
Art Griffith	Douglas County
Chris Hudson (Alternate)	Douglas County – Town of Parker
Christina Lane	Jefferson County
Mike Whiteaker	Jefferson County – City of Lakewood
Maria D’Andrea	Jefferson County – City of Wheat Ridge
Kevin Ash	Southwest Weld County – Town of Frederick
Brodie Ayers	Aviation Special Interest Seat
Rick Pilgrim	Environmental Special Interest Seat
Jeff Boyd	Housing Special Interest Seat
Hilary Simmons	Older Adults Special Interest Seat
Frank Bruno	Via Mobility
Jim Eussen (Alternate)	Colorado Department of Transportation Region 4
Jessica Myklebust	Colorado Department of Transportation Region 1
Ron Papsdorf	Denver Regional Council of Governments
Bill Sirois	Regional Transportation District
Tom Moore	Regional Air Quality Council
Carson Priest	Transportation Demand Management Special Interest Seat
Marrissa Gaughan (Alternate)	Colorado Department of Transportation Division of Transportation Development

Additional Alternates (Or Members and Alternates Attending Virtually) Present:

Jordan Rudel (Alternate)	Colorado Department of Transportation Region 1
Jonathan Webster (Alternate)	Denver, City & County
John Firouzi (Alternate)	Jefferson County – City of Arvada
Dawn Sluder (Alternate)	Via Mobility – Lakewood Rides
Justin Schmitz	Douglas County – City of Lone Tree
Wally Weart	Freight Special Interest Seat

Transportation Advisory Committee

January 22, 2024

Page 2

Aaron Bustow (Alternate)	Federal Highway Administration
Frank Gray	Business Special Interest Seat
Phil Greenwald (Vice Chair)	Boulder County – City of Longmont
Tom Reiff	Douglas County – City of Castle Rock

Public: Danny Herrmann, Allison Cutting, Eugene Howard, Walead Atiyeh, Michele Riccio, Jenny Young, Jon Girand, Deanna McIntosh, Josie Thomas, Steven Sherman, Josh Sender, Miriam Aranoff, Will Keenan, Chris Chovan, Classic Wagner, JoAnn Mattson, Myron Hora, Jeanne Shreve, Bridget Hart

DRCOG staff: Josh Schwenk, Cam Kennedy, Emily Kleinfelter, Jacob Riger, Brittney Compton, Ala Alnawaiseh, Nora Kern, Lauren Kirgis, Steve Cook, Pavlo Krokidis, Todd Cottrell, Sheila Lynch, Erik Braaten, Andy Taylor, Emily Lindsey, Sang Gu Lee, Kalie Fallon, Brad Williams, Aaron Villere

Call to Order

Chair Sarah Grant called the meeting to order at 1:30 p.m.

Public Comment

There was no public comment.

December 4, 2023 Transportation Advisory Committee Meeting Summary

The summary was accepted.

Action Items

Transportation Improvement Program Policy Amendments

Josh Schwenk, Senior Transportation Planner, presented two amendments to the *Fiscal Year 2024-2027 Transportation Improvement Program* that have been found to comply with the current Transportation Improvement Program amendment procedures, as contained within the Board-adopted Policies for *Transportation Improvement Program Development* and conform with the State Implementation Plan for Air Quality.

Kent Moorman asked if funding was changing or was being reallocated. Josh Schwenk replied that funding is being reallocated, but the total funding amount remains the same.

Mike Whiteaker moved to recommend to the Regional Transportation Committee the attached project amendments to the *Fiscal Year 2024-2027 Transportation Improvement Program*. The motion was seconded and passed unanimously.

2024 Federal Safety Performance Measure Targets

Lauren Kirgis, Assistant Planner, explained the federal requirement to set annual safety targets for several required measures, and that the region has the option of supporting the state's targets established by the Colorado Department of Transportation or establishing its own targets for the metropolitan planning organization area. As in previous years, staff proposes establishing targets specific to the metropolitan planning organization area. When the Board of Directors adopted Taking Action on Regional Vision Zero in 2020, the region committed to a target of zero traffic fatalities and serious injuries. Staff have tied these short-term federal targets to the long-term Board-

established targets of zero fatalities by 2040 and zero serious injuries by 2045. The methodology for the proposed 2024 federal safety targets continues this practice.

Mac Callison inquired about differences in targets regarding non-motorized serious injuries and fatalities. Lauren Kirgis replied that numbers are combined for reporting purposes as required by federal regulations. Even so, staff tracks the data for each category.

Maria D'Andrea asked about the projections for estimating the targets. Lauren Kirgis stated that the projections are calculated based on the existing trendline and are not adjusted from year to year.

Rick Pilgrim inquired about the potential for campaigns to focus on changing the behavior of people who are not practicing safe driving habits. Jacob Riger replied that multiple agencies, including the Colorado Department of Transportation and the Denver Regional Council of Governments have worked on human behavior education campaigns to try and reverse the rising number of serious injuries and fatalities in the region and state, but there is more to do in this area as changing human behavior is extremely difficult.

Alex Hyde-Wright expressed misgivings regarding staff calculations and stated that the trajectory shown in the presentation was inaccurate as the last two years, 2021 and 2022, have had increasing fatalities. When setting the target, a steeper decline is needed to reflect the goal of getting to zero.

Alvan-Bidal Sanchez noted that when the Board adopted Taking Action on Regional Vision Zero, a straight-line forecast was anchored from the adoption of Taking Action on Regional Vision Zero in 2020 and assumed a constant annual reduction to achieve zero traffic fatalities by 2040. Staff recognize that the observed number of fatalities would be higher or lower than the forecast, but for consistency between years staff use the constant average reduction to set targets and not redo methodology each year. These short-term federally required targets are aligned with the long-term goal of zero traffic fatalities by 2040, using the best available data to show a reduction but remaining realistic.

Kent Moorman moved to recommend the Regional Transportation Committee adopt the 2024 safety targets for the metropolitan planning organization area as part of federal performance-based planning and programming requirements and adopt the horizon years of achieving zero fatalities by 2040 and zero serious injuries by 2045. The motion was seconded and passed with one abstention from Alex Hyde-Wright.

Discussion Items

Corridor Planning Pilot Program Update

Nora Kern, Manager, Subarea and Project Planning Program, discussed that the Denver Regional Council of Governments piloted the corridor planning program to

develop processes and lessons learned before the program was established as a set-aside in the 2024-2027 Transportation Improvement Program. A few notable lessons learned thus far are:

- The Denver Regional Council of Governments is in a unique position to bring together multiple agencies and jurisdictions on regional corridor studies that may be challenging for any one city or county to take the lead on.
- Additional resources and coordination are required for multi-jurisdictional studies, particularly for public engagement and developing implementation-orientated action items.
- Denver Regional Council of Governments staff have improved their understanding of procurement for this type of corridor study, which will facilitate future projects in the set-aside program.

Regional Corridor Planning Webmap Update

Nora Kern, Manager, Subarea and Project Planning Program, mentioned that in 2022, the Denver Regional Council of Governments launched a new webmap tool to track ongoing corridor planning efforts around the region. The map shows current and recent studies across the region regardless of lead sponsor (such as CDOT or a local government). The regional corridor planning studies web map includes transit studies, bicycle and pedestrian studies, corridor studies, and environmental studies. The primary focus of this map is corridor studies on the regional roadway system.

Jennifer Hillhouse inquired about the methodology of the data. Nora Kern replied that staff gleaned the data from jurisdictional websites, but regular check-ins will be needed to ensure the information remains up to date.

Jessica Myklebust asked about how projects are differentiated, for example, a project could be relevant to transit planning but also in a federal project development phase. Nora Kern replied there is not a perfect methodology; the category is based on what seems to be the best fit for each project. For example, the Federal Boulevard Bus Rapid Transit project could fall into multiple categories given the nature and status of the project.

2050 Regional Transportation Plan 2024 Mitigation Action Plan Annual Report Overview

Jacob Riger, Manager, Multimodal Transportation Planning, explained to the committee the requirement to annually prepare a Mitigation Action Plan Report to comply with Colorado's Transportation Greenhouse Gas Transportation Planning Rule. Jacob emphasized that at the local government level, mitigation measures are voluntary, and the Mitigation Action Plan does not require any local jurisdiction to implement a mitigation measure in any specific location or within any specific timeframe. However, DRCOG is required to annually report on their implementation status. Additionally, the mitigation measures were specifically chosen to build on this region's foundation of

integrated transportation and land use planning, particularly around the region's existing and planned rapid transit system and urban centers.

As with the 2023 Report, the 2024 Report focuses on the broader framework of how to define the data, methodologies, processes, resources, and other elements of tracking the implementation of the mitigation measures over time.

Alex Hyde-Wright asked what the plan is to course-correct given that the mitigation measures are voluntary for local governments and significant changes will need to be made within the next six years to cut annual greenhouse gas emissions by about one million metric tons by 2030. Jacob Riger replied that a lot of factors will need to be considered, and that the Mitigation Action Plan is only one component of DRCOG's overall compliance framework.

Advanced Mobility Partnership Annual Update

Kalie Fallon, Emerging Mobility and Transportation Demand Management Planner notified the committee that in 2023, the Advanced Mobility Partnership Working Group convened to discuss innovative topics and share information on a variety of emerging trends. Topics discussed throughout 2023 included: curbside management; vehicle electrification and charging; state, federal, and regional innovative grant opportunities; the Regional Bus Rapid Transit Partnership and BRT network; microtransit programs; shared mobility data; e-bike programs; connected vehicles; and universal basic mobility pilots. Part of the discussion related to retaining Carson Priest in his role as the Transportation Advisory Committee's liaison to the Advanced Mobility Partnership Working Group, which the committee supported.

Administrative Items

Member Comment/Other Matters

Jacob Riger took the opportunity to remind the committee that the Rebuilding American Infrastructure with Sustainability and Equity Grant Informational Forms are due back to staff by February 15, 2024, for the February meeting. Jacob Riger also notified the committee about several date changes for Transportation Advisory Committee meetings later this year due to the public comment period and public hearing schedule for the Regional Transportation Plan amendments process, and holidays.

Next Meeting – February 26, 2024

Adjournment

There were no additional comments and the meeting adjourned at 3:04 p.m.

ATTACH B

Transportation Advisory Committee

Meeting date: February 26, 2024

Agenda Item #: 4 (Attachment B)

Community Based Transportation Planning: 2024-2025 Set Aside Project Recommendations

Agenda item type: Action

Summary

Project selection recommendation for the first two years (2024-2025) of funding through the Community Based Transportation Planning Transportation Improvement Program Set Aside.

Background

The Community Based Transportation Planning Set Aside is a Denver Regional Council of Governments planning program in the FY 2024-2027 Transportation Improvement Program (TIP). The goal of this program is to support transportation planning for historically marginalized or underserved communities in the region. Through this program, the Denver Regional Council of Governments funds and leads planning studies to support member governments in their efforts to improve mobility for these communities. An estimated \$2,500,000 is available for the full four-year set-aside program, with roughly \$1,250,000 available every two years.

The Denver Regional Council of Governments hosted a call for letters of interest for the first two years of funding for the Community Based Planning Set Aside in November and December 2023. Ten letters of interest were submitted. A summary of the letters received is below:

Agency	Project or community description
Adams County	Multimodal Corridor Study of Pecos
Town of Lyons	Multimodal Safety / Mobility study of US36 through town
City of Brighton Public Works	Microtransit feasibility study
City of Brighton Public Works	Core City Circulation Plan
Jefferson County/ Golden	Traffic & Multimodal corridor study of South Golden Road
Federal Heights	Corridor Study of 92nd Avenue
Commerce City	Microtransit feasibility study
Denver	Cherry Creek Employee TDM Action Plan
DEN Airport	Freight Workforce Mobility Study
Trust for Public Land	Advancing 303 Artway and the Montbello Loop



A selection committee composed of staff from the Denver Regional Council of Governments, Regional Transportation District, and the Colorado Department of Transportation reviewed and scored all ten letters of interest. Three follow-up conversations were hosted to solicit additional information. The selection committee considered five criteria to evaluate the projects: alignment with Metro Vision, alignment with the 2050 Regional Transportation Plan, community need or level of disadvantage, project readiness, and planning need.

The selection committee is recommending five of the ten projects for the community-based transportation planning program in 2024-2025.

Each project nomination provided an estimated budget in their letter of interest. DRCOG is proposing several budget adjustments to ensure as many projects as possible can be funded and align the budgets with DRCOG’s recent experience on similar types of projects. The potential budgets listed below are estimates. Final budgets will be set during the procurement phase after DRCOG staff work with stakeholders for each selected project to develop specific scopes of work and outline the expertise needed.

Selection committee recommendation

Rank	Agency	Project summary	Recommended Budget	Recommendation
1	Trust for Public Land	Advancing 303 Artway and the Montbello Loop	\$250,000.00	Fund
2	Commerce City	Microtransit feasibility study	\$150,000.00	Fund
3	Federal Heights	Corridor Study of 92nd Avenue	\$250,000.00	Fund
4	Adams County	Multimodal Corridor Study of Pecos	\$450,000.00	Fund
5	City of Brighton Public Works	Core City Circulation Plan	\$250,000.00	Fund
6	City of Brighton Public Works	Microtransit feasibility study	\$125,000.00	Not selected
7	DOTI: Cherry Creek	Cherry Creek Employee TDM Action Plan	\$200,000.00	Not selected
8	Jefferson County/ Golden	Traffic & Multimodal corridor study of South Golden Road	\$500,000.00	Not selected
8	DEN Airport	Freight Workforce Mobility Study	\$125,000.00	Not selected
10	Town of Lyons	Multimodal Safety / Mobility study of US36 through town	\$300,000.00	Not selected

Action by others

None

Previous discussion/action

[October 23, 2023](#) – Community-Based Transportation Plan Call for Letters of Interest



Recommendation

Move to recommend to the Regional Transportation Committee funding five community-based planning projects through the first two years of the Community Based Planning Program Set Aside, as recommended by the selection committee.

Attachment

Community Based Transportation Planning Set Aside, 2024-2025 Selection Presentation

For more information

If you need additional information, please contact Nora Kern, Subarea and Project Planning Program Manager, at 303-480-5622 or nkern@drcog.org.





**Community Based Transportation Planning: 2024-2025 Set Aside
Project Recommendations
DRCOG Technical Advisory Committee, February 26, 2024**



Community-Based Transportation Planning

- Set Aside program in 2024-2027 Transportation Improvement Program
- \$2,500,000 split into two, two-year cycles (\$1,250,000 each cycle)
- **Goals:**
 - Technical assistance
 - Improve mobility for disproportionately impacted and historically marginalized communities



Selection Process

- **Letters of interest window:** November – December 2023
- **Selection Panel:** DRCOG Transportation, Regional Planning, and Engagement Staff; RTD, and CDOT
- **Evaluation factors:**
 - Alignment with Metro Vision
 - Alignment with the 2050 Regional Transportation Plan
 - Community need or level of disadvantage
 - Project readiness
 - Planning need

Letters of Interest Received, \$2.5 million

Submitted by, Agency	Name of Community	Scope, briefly	Estimated Budget
Adams County	Pecos St between W 62nd Pkwy and 84th	Multimodal Corridor Study of Pecos	\$500,000
City of Brighton Public Works	Half mile of historic downtown Brighton	Core City Circulation Plan	\$175k-\$225k
Federal Heights	City of Federal Heights	Corridor Study of 92nd Avenue	\$300,000
Commerce City	City of Commerce City	Microtransit feasibility study	\$175,000
Denver	Low Income workers in Cherry Creek	Cherry Creek Employee TDM Action Plan	\$200,000
DEN Airport	Freight workers around DEN	Freight Workforce Mobility Study	\$125,000
Town of Lyons	Town of Lyons	Multimodal Safety / Mobility study of US36 through town	\$275k - \$300k
Jefferson County/ Golden	West Pleasant View	Traffic & Multimodal corridor study of South Golden Road	\$400k - \$500k
City of Brighton Public Works	Most of Brighton	Microtransit feasibility study	\$75k - \$125k
Trust for Public Land	Northeast Park Hill and Montbello	Advancing 303 Artway and the Montbello Loop	\$300,000

Selection Committee Scoring & Recommendation

Submitted by	Project summary	Recommended Budget (Draft)	Recommendation	Average Score
Trust for Public Land	Advancing 303 Artway and the Montbello Loop	\$250,000.00	Selected for program	706.67
Commerce City	Microtransit feasibility study	\$150,000.00	Selected for program	632.92
Federal Heights	Corridor Study of 92nd Avenue	\$250,000.00	Selected for program	630.63
Adams County	Multimodal Corridor Study of Pecos	\$450,000.00	Selected for program	618.13
City of Brighton Public Works	Core City Circulation Plan	\$250,000.00	Selected for program	603.54
City of Brighton Public Works	Microtransit feasibility study	\$125,000.00	Not selected	554.58
DOTI: Cherry Creek	Cherry Creek Employee TDM Action Plan	\$200,000.00	Not selected	551.25
Jefferson County/ Golden	Traffic & Multimodal corridor study of South Golden Road	\$500,000.00	Not selected	539.17
DEN Airport	Freight Workforce Mobility Study	\$125,000.00	Not selected	533.33
Town of Lyons	Multimodal Safety / Mobility study of US36 through town	\$300,000.00	Not selected	502.92

Recommended Motion

Move to recommend to the Regional Transportation Committee funding five community-based planning projects through the first two years of the Community Based Planning Program Set Aside, as recommended by the selection committee.

ATTACH C

Transportation Advisory Committee

Meeting date: February 26, 2024

Agenda Item #: 5 (Attachment C)

Colorado Freight Plan Update

Agenda item type: Discussion

Summary

The Colorado Department of Transportation (CDOT) Freight Mobility and Safety Branch will provide an update on the new Colorado Freight Plan.

Background

Over the past year, CDOT has been conducting workshops, research, and stakeholder outreach activities to update the Colorado Freight Plan. This work includes updates to key outcomes, guiding principles, and the plan's approach to engagement and outreach. New mobility and safety strategies, infrastructure conditions, and economic approaches are included in the plan update as well. CDOT staff will provide an overview of the plan at the February Transportation Advisory Committee meeting.

Action by others

None

Previous discussion/action

None

Recommendation

None

Attachment

CDOT Presentation

For more information

If you need additional information, please contact Cole Neder, Senior Transit Planner, at (309) 373-4940 or cneder@drcog.org.





COLORADO
Department of Transportation
Freight Mobility & Safety Branch

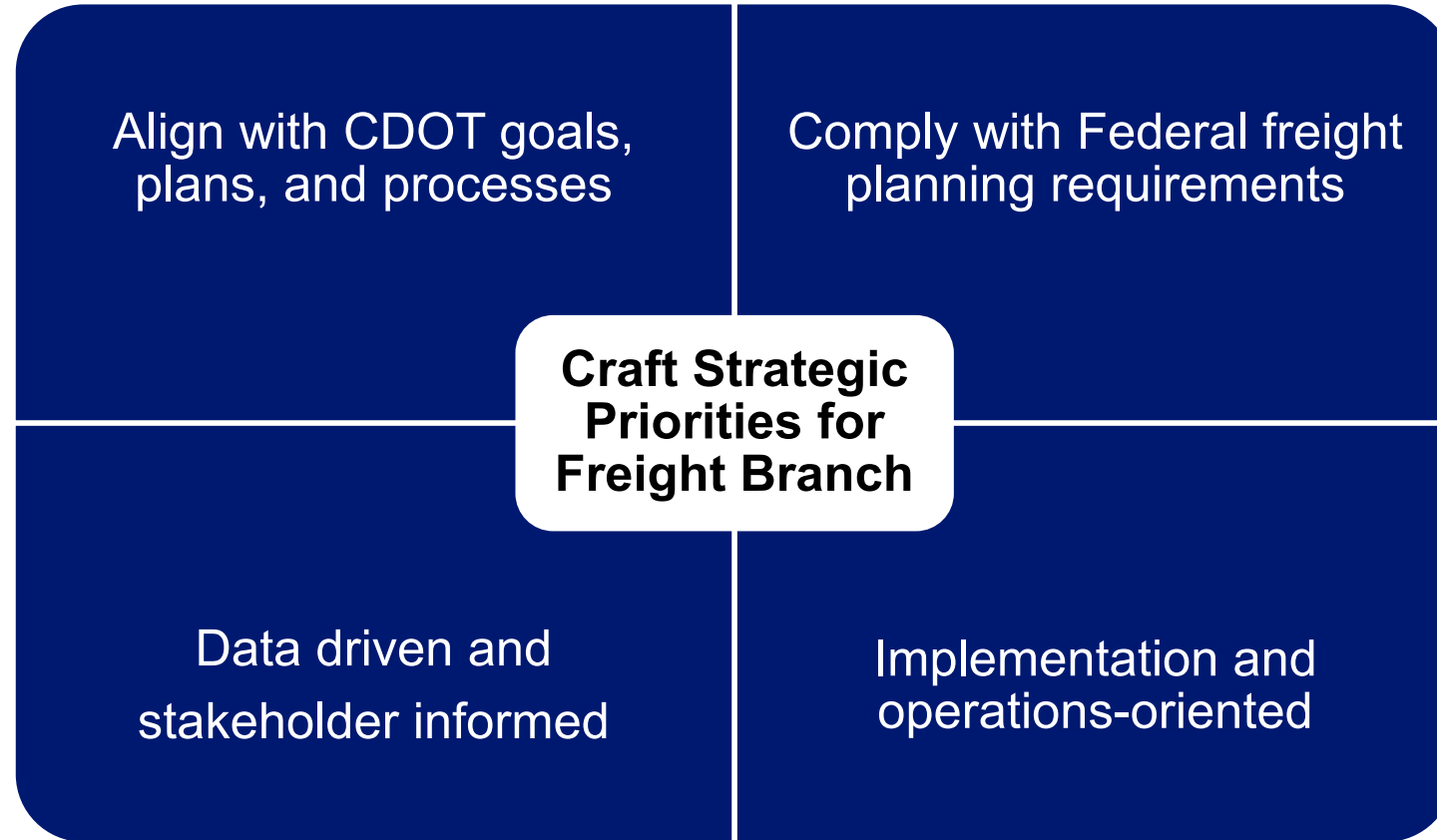


Colorado Freight Plan: DRCOG

Freight Plan Purpose



Guiding Principles and Key Outcomes

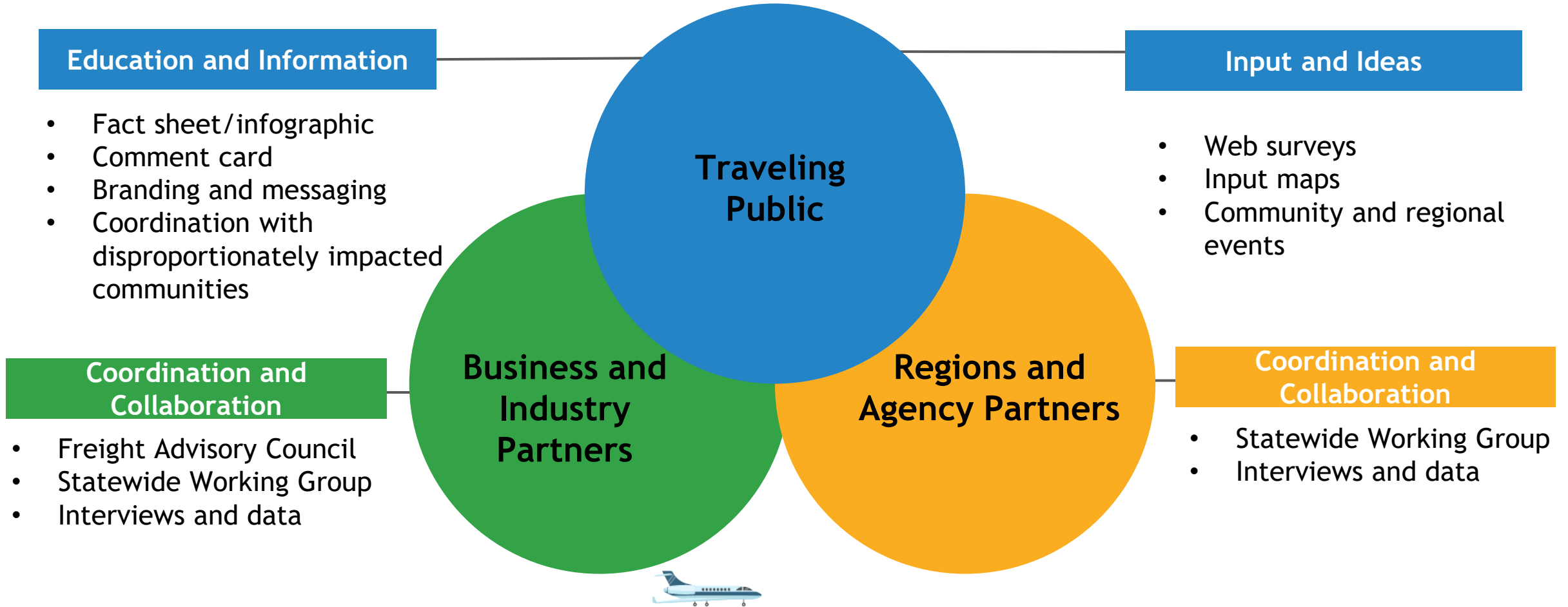


Alignment State and Federal Goals

Colorado Freight Plan Goals	Safety & Security	Mobility	Maintenance	Economic Vitality	Sustainability & Resiliency
National Freight Goals	<ul style="list-style-type: none"> • Safety and security 	<ul style="list-style-type: none"> • Congestion • Reliability • Goods Movement • Innovation and Technology 	<ul style="list-style-type: none"> • State of Good Repair 	<ul style="list-style-type: none"> • Economic Efficiency and Productivity • Multi-State Planning 	<ul style="list-style-type: none"> • Resiliency • Environmental
Colorado Wildly Important Goals	Advancing Transportation Safety	Accountability and Transparency		Statewide Transit	Clean Transportation







Engagement and Outreach Approach





Public Outreach Results

In-Person Events

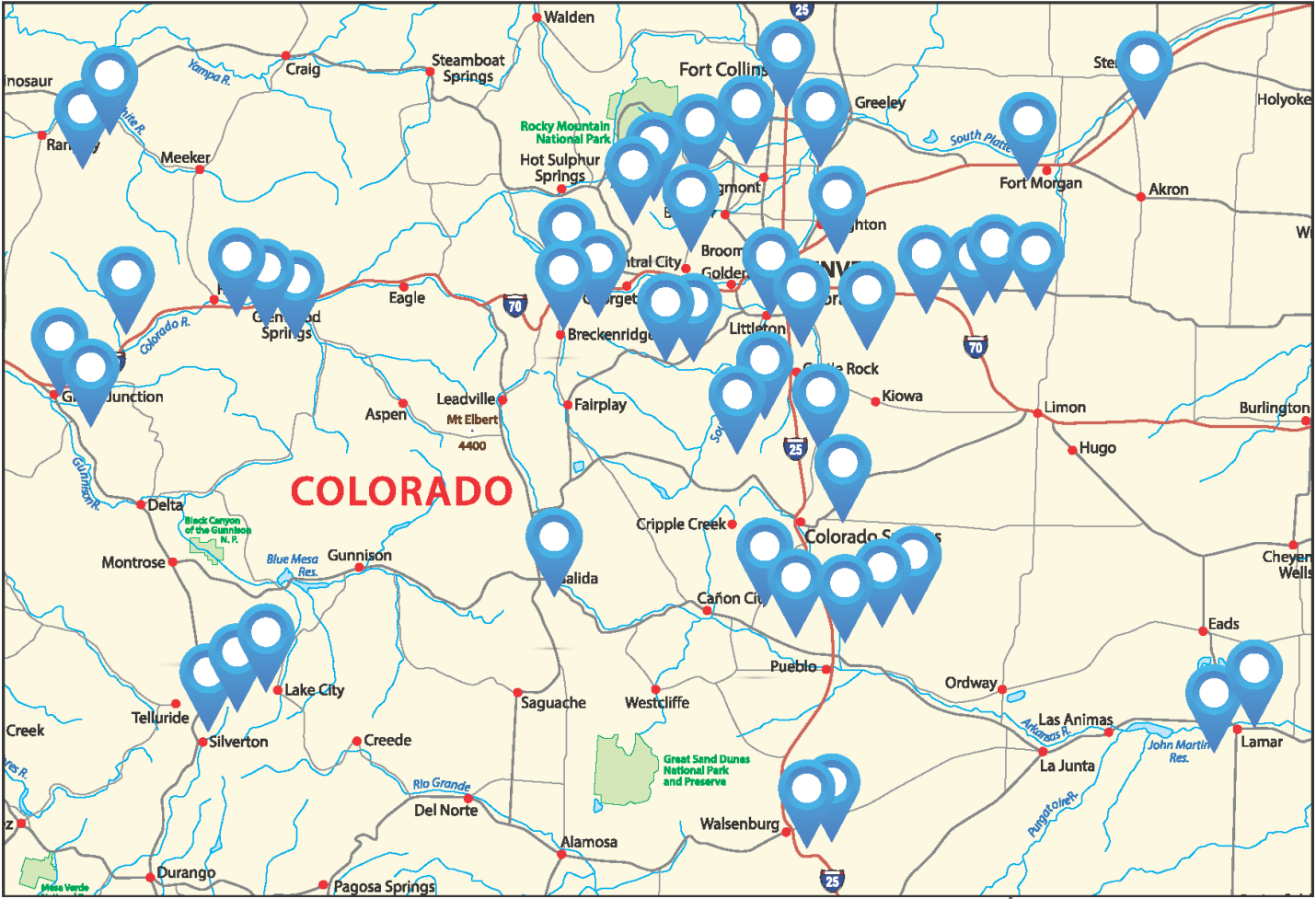
-  100+ Individual Conversations
-  200+ Collateral Distributed (Fact Sheets, Infographics, Stickers)
-  Regional Statistics Created and Presented at Each Event with Environmental Justice map overlay
-  Sites Visited: Colorado Springs, Grand Junction, Lamar, Sheridan

Other Outreach Activities

-  **Public Survey:** Digital distribution reached 380 people and resulted in 283 comments. **Industry Survey:** Distributed to Economic Development Council of Colorado members.
-  **Disproportionately Impacted Community Outreach:** English & Spanish surveys distributed statewide to 16 public/private partnerships serving various diverse and low-to-moderate income residents.



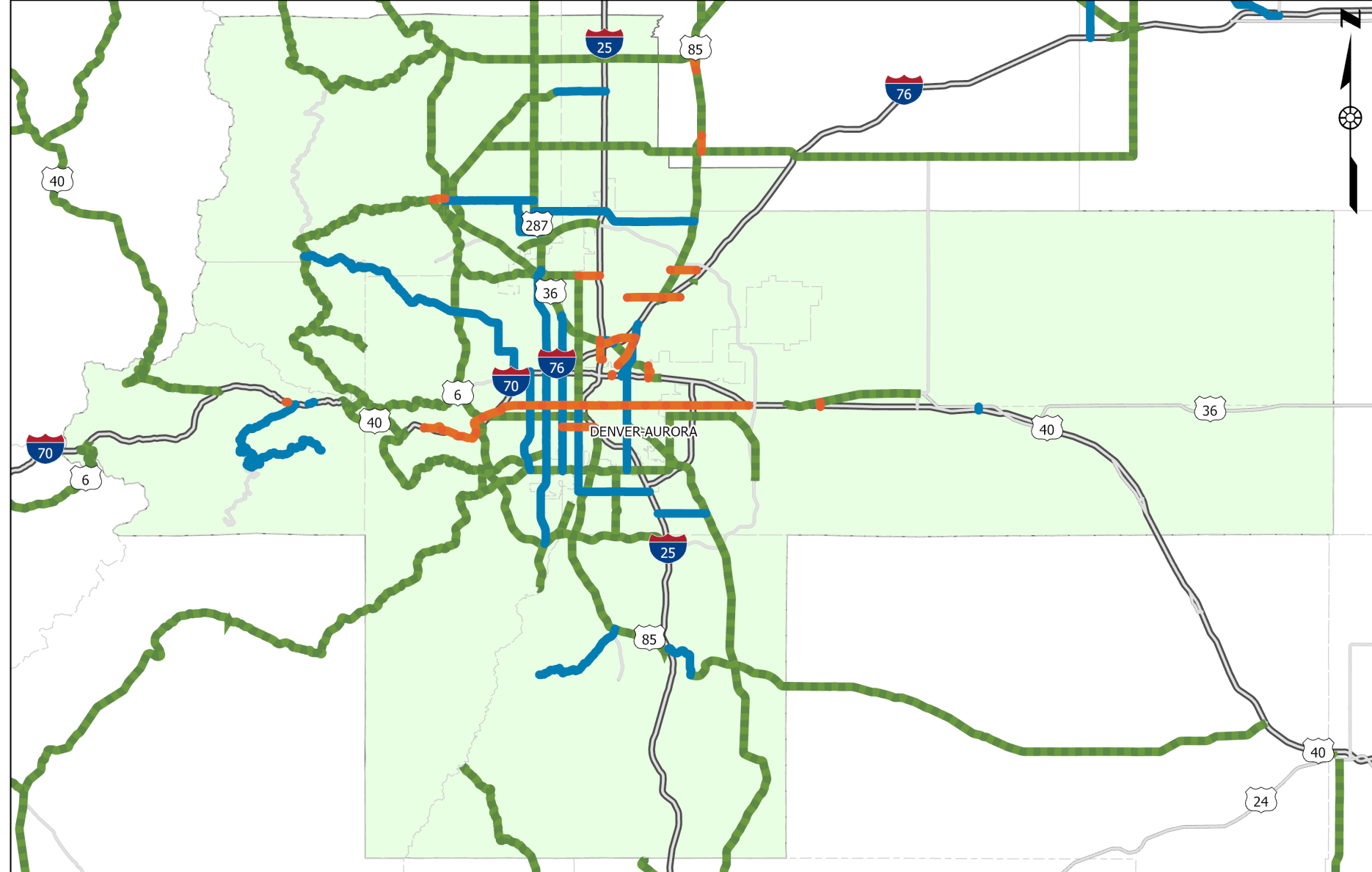
Freight Plan Survey Participants



Safety and Security



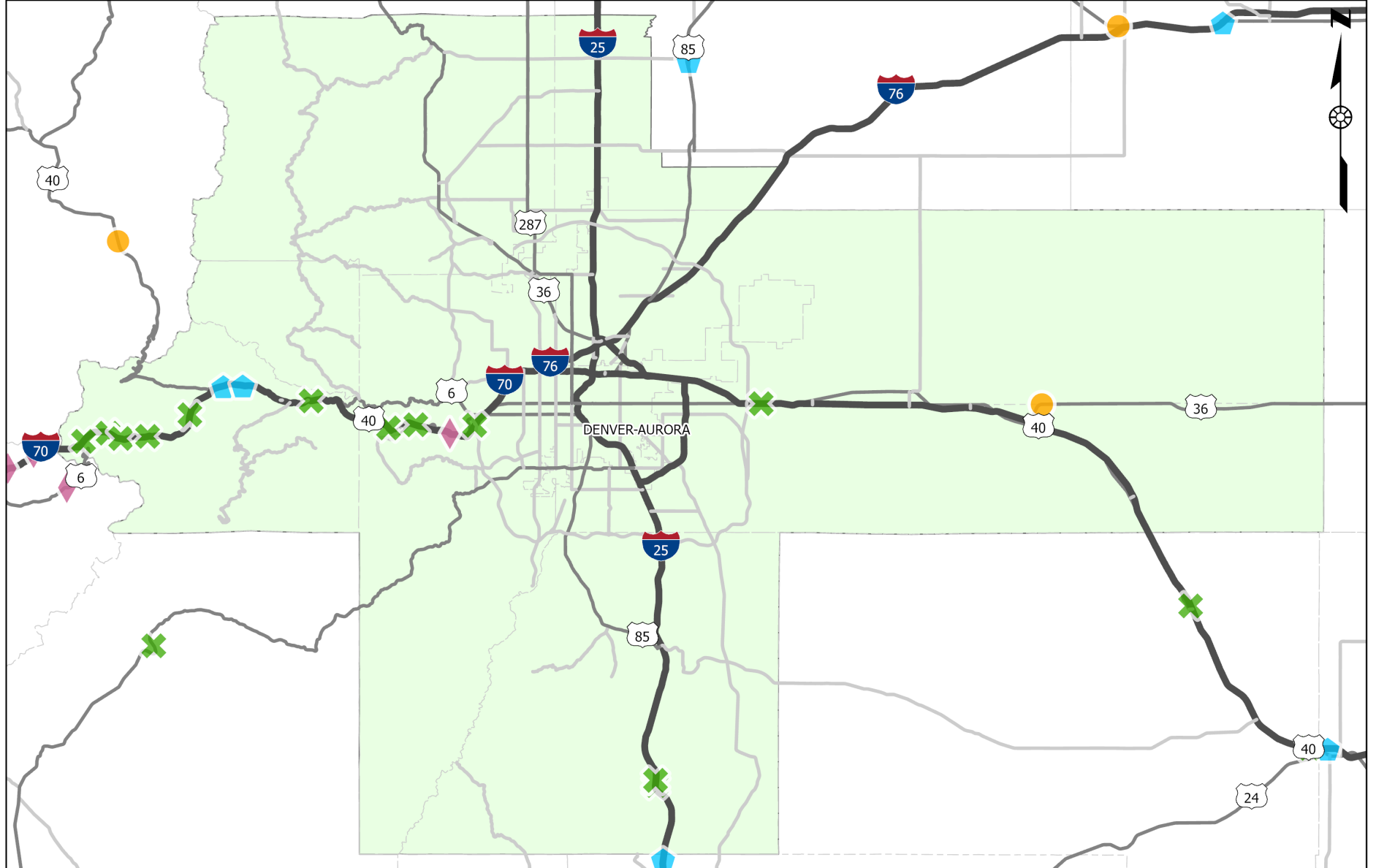
Crash Hot Spots






Transportation Facilities	Truck Involved Crashes Per Million Truck VMT, 2017 - 2021	Political Boundaries
Interstate	5 or Less	Counties
U.S. Routes	5 - 15	States
Other Highway	15 - 30	
	> 30	






Safety Operations Support Infrastructure



Transportation Facilities

-  Interstate
-  U.S. Routes
-  Other Highway

Pullouts

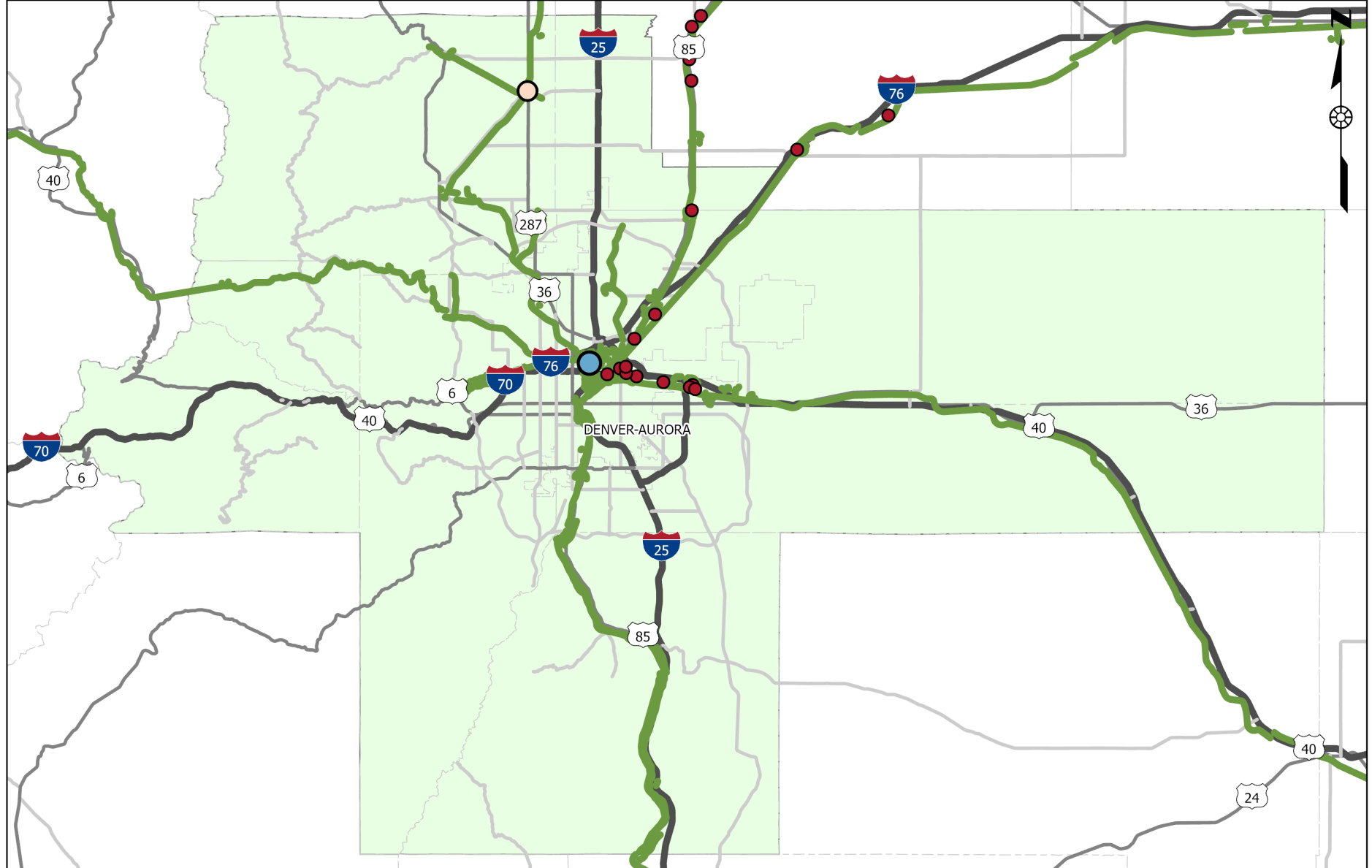
-  Chain Stations
-  Weigh-in-Motion
-  Runaway Ramps

Political Boundaries

-  Counties
-  States



At-grade Crossing Incidents



Transportation Facilities	Rail Crossing Incidents	Political Boundaries
Interstate	1	Counties
U.S. Routes	2	States
Other Highway	3	
Class I Railroad	4	



Safety Strategies

Commercial Vehicle Safety

Truck Parking

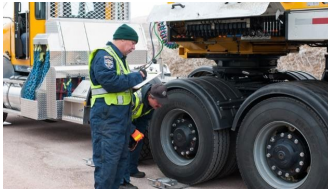
- Prioritize Truck Parking Investments
- Emergency Truck Parking
- Truck Parking Information
- Truck Parking Partnerships

Operational Safety Enhancements

Rail Safety

Safety Data

Communications



The Mountain Rules I-70 Mountain Corridor Overview

Watch on YouTube

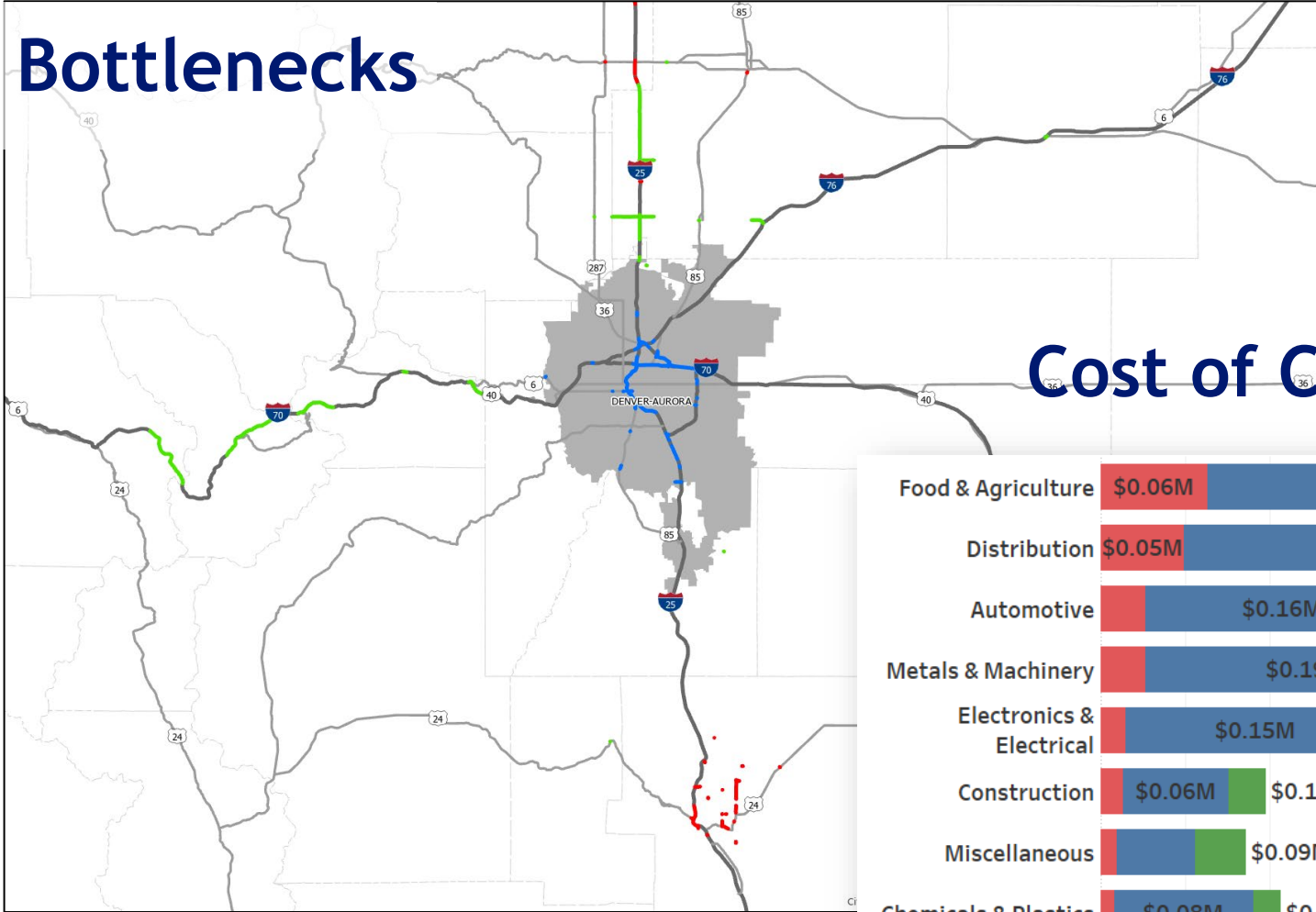
Hot Brakes, Runaway Truck Ramps & Summer Driving | Truck Safety and Winter Driving in Colorado | Construction Zone Safety



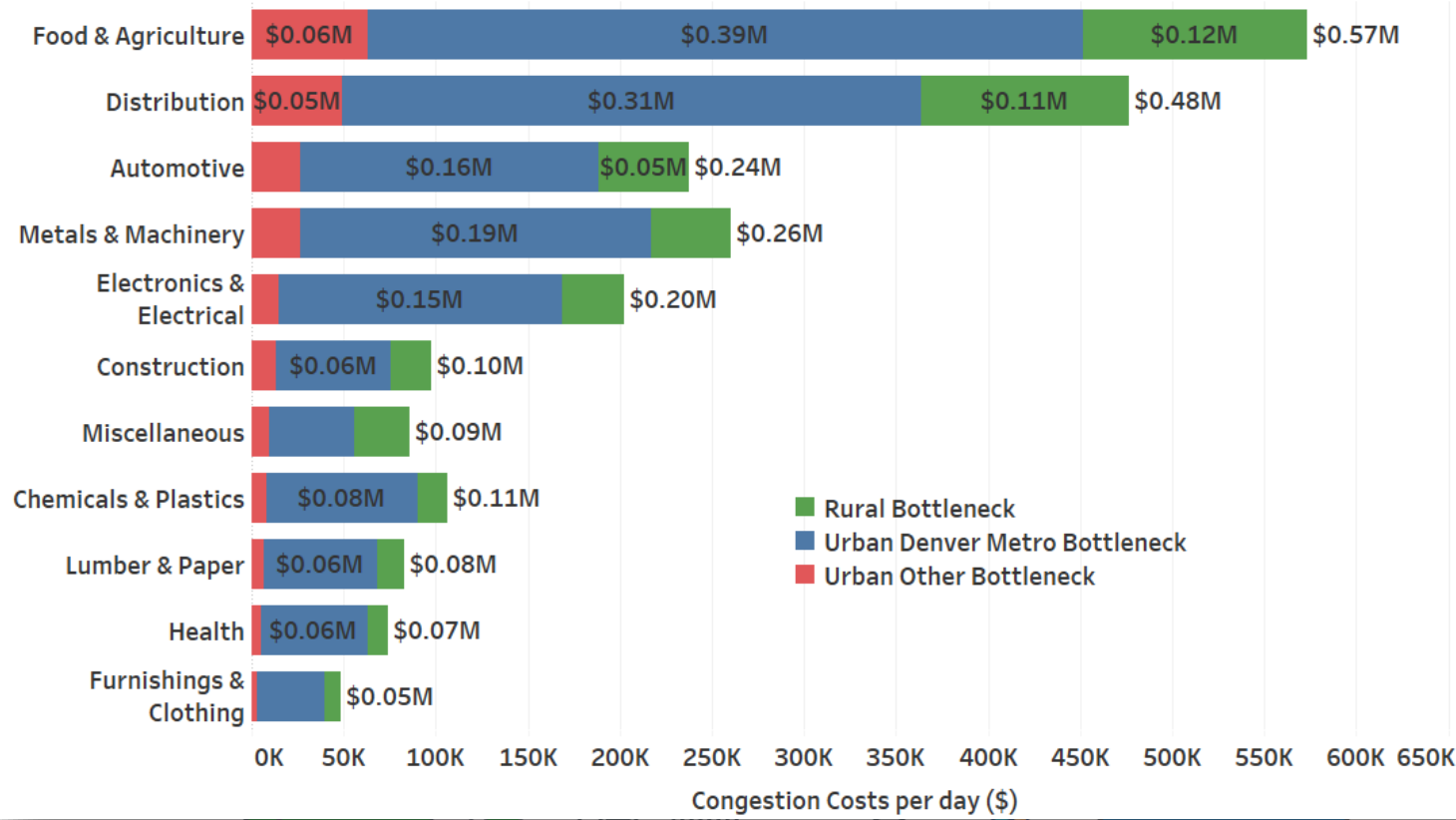
Mobility



Bottlenecks



Cost of Congestion per day (state)



Source: WSP analysis of NPMRDS data.



Mobility Strategies

Mobility Data

Incident Management

Management and Operations

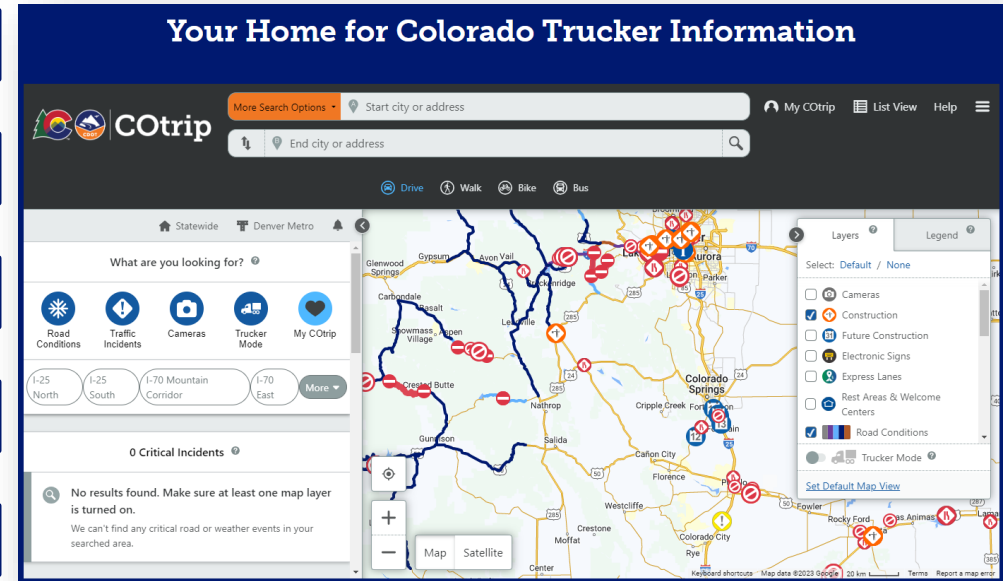
Freight Coordination

Freight Information

Freight Technology

At-grade Railroad Crossings

Military Freight

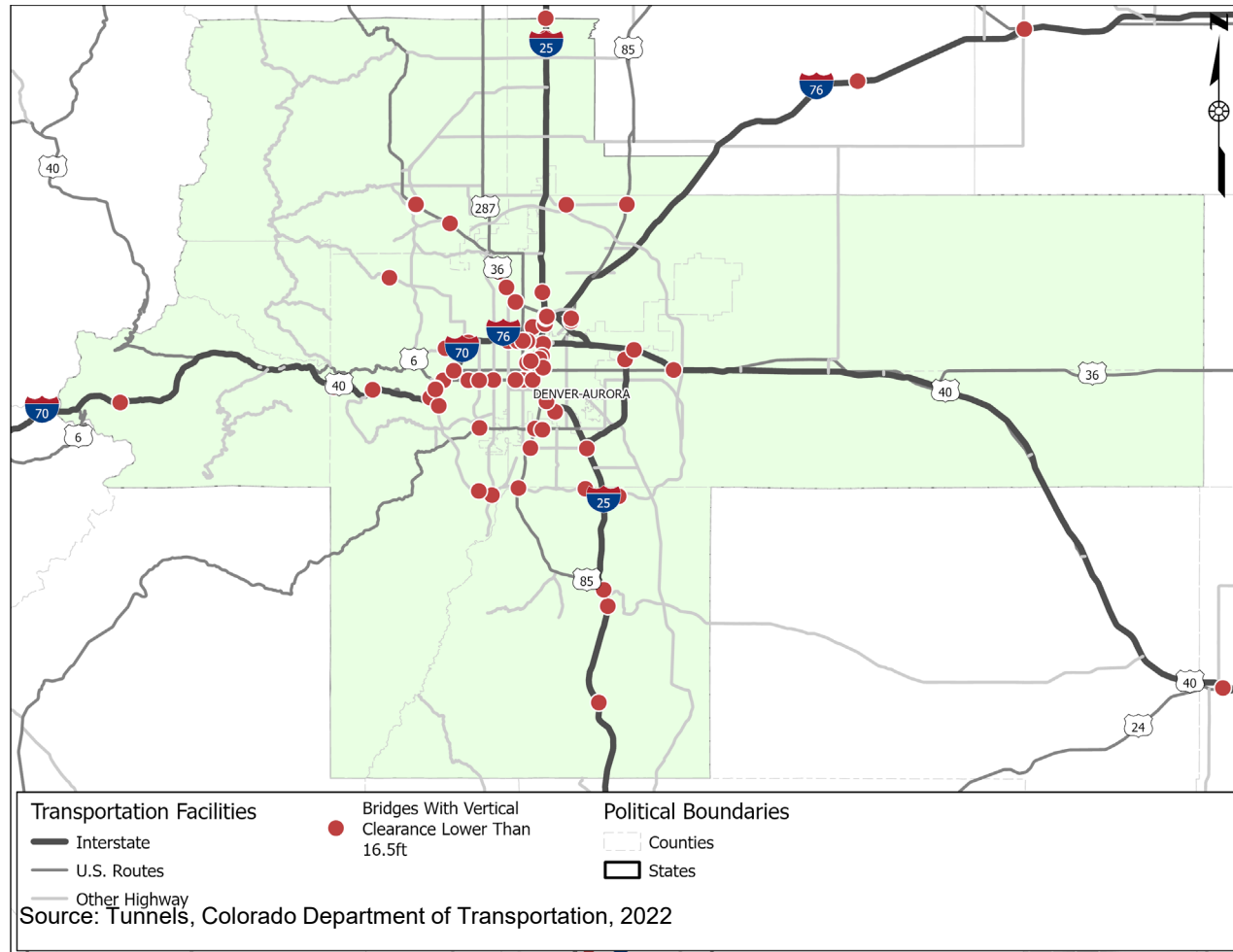


Maintenance

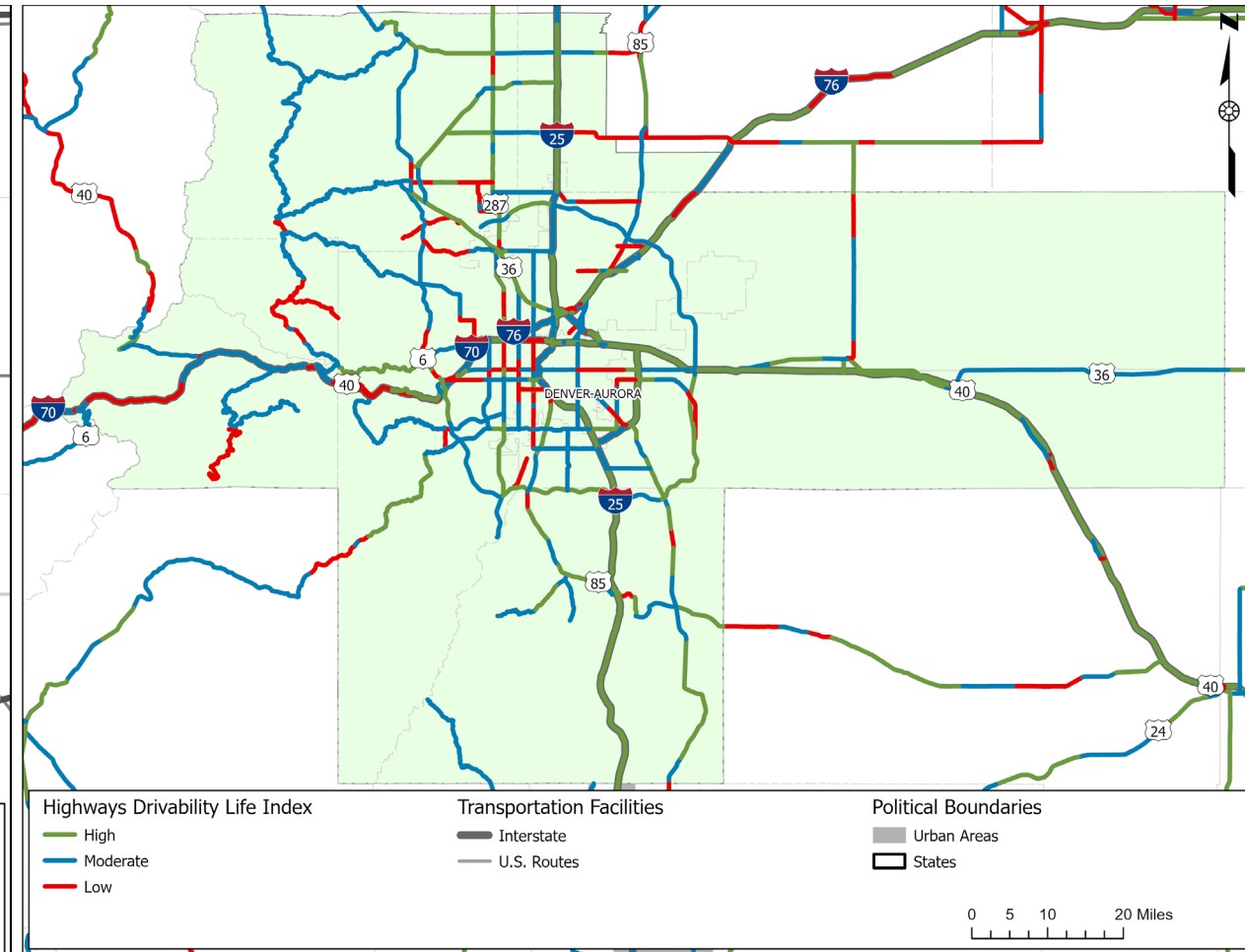


Bridge Restrictions and Pavement Condition

Bridges with Vertical Clearance Lower than 16.5 feet



Drivable Life



Maintenance Strategies

Bridge Constraints

- Identify and prioritize bridges on freight corridors

Freight Rail Condition

System Condition

- Identify and implement maintenance and improvement projects

Mitigate Pavement Deterioration

Sustainable Funding

- Identify sustainable funding sources

Timber Bridge Replacement Program

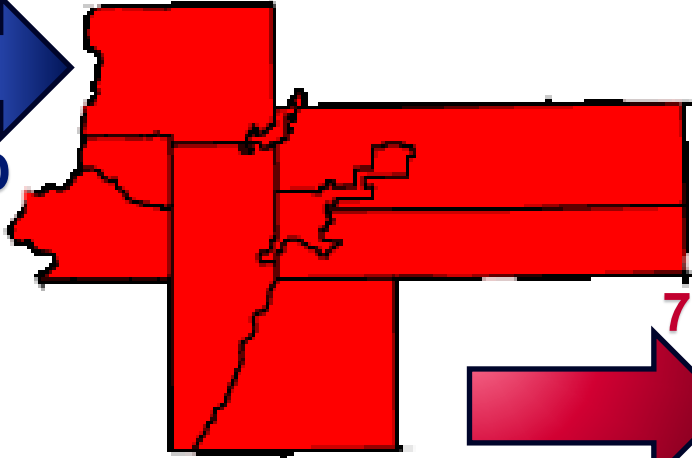
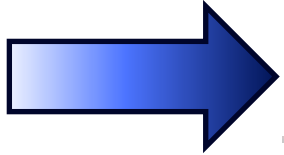


Economic Vitality



Commodity Flows (all modes)

7.32 M Tons



\$130.6 B USD

7.35 M Tons

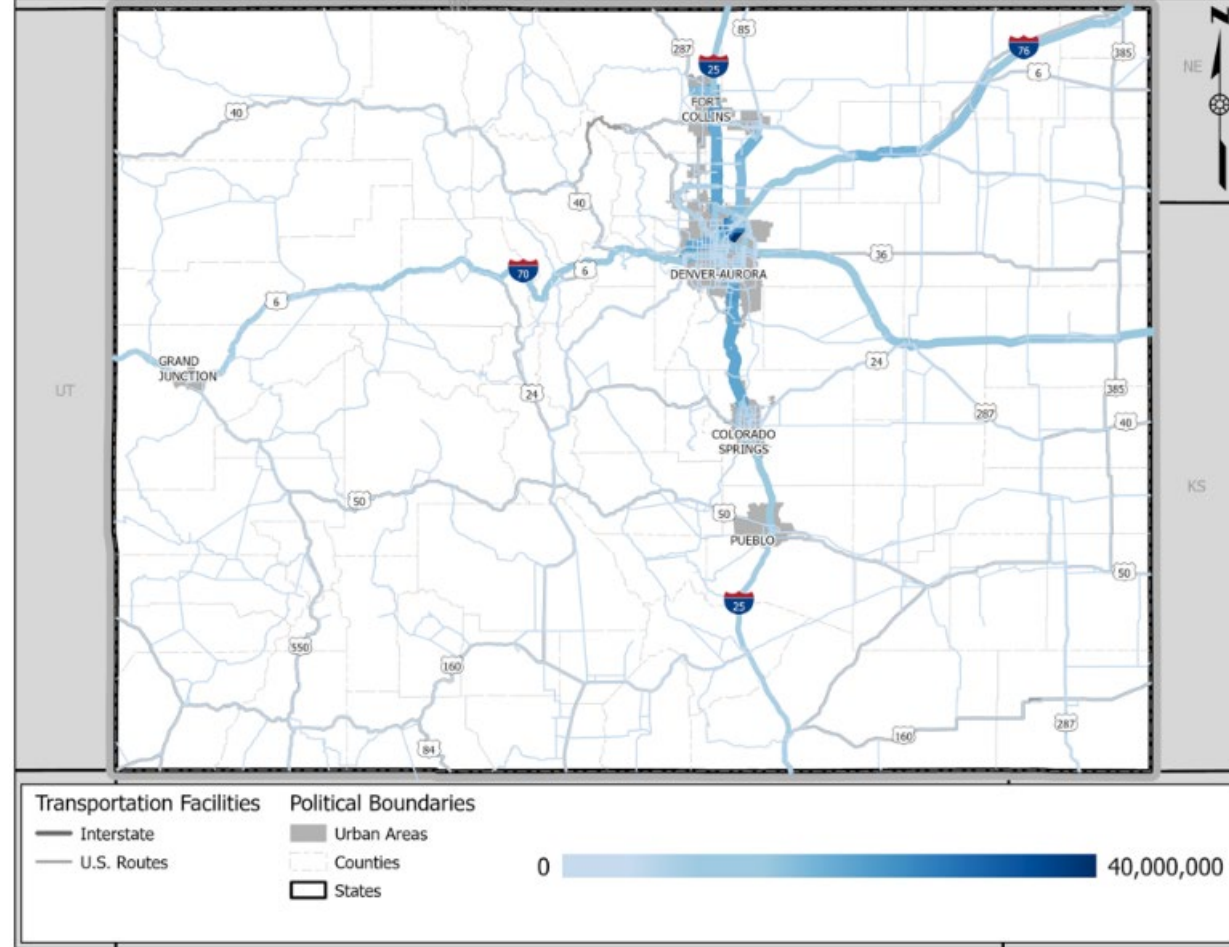


\$81.6 B USD

Region represent ~2/3 of state commodity flows



Important Supply Chain Highways



Source: S&P TRANSEARCH, 2021



Economic Vitality Strategies

Education and Communications

- Support Colorado Delivers

Economic Development

Economic Coordination

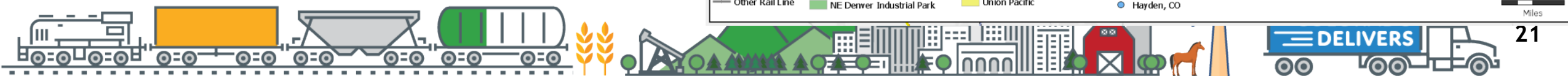
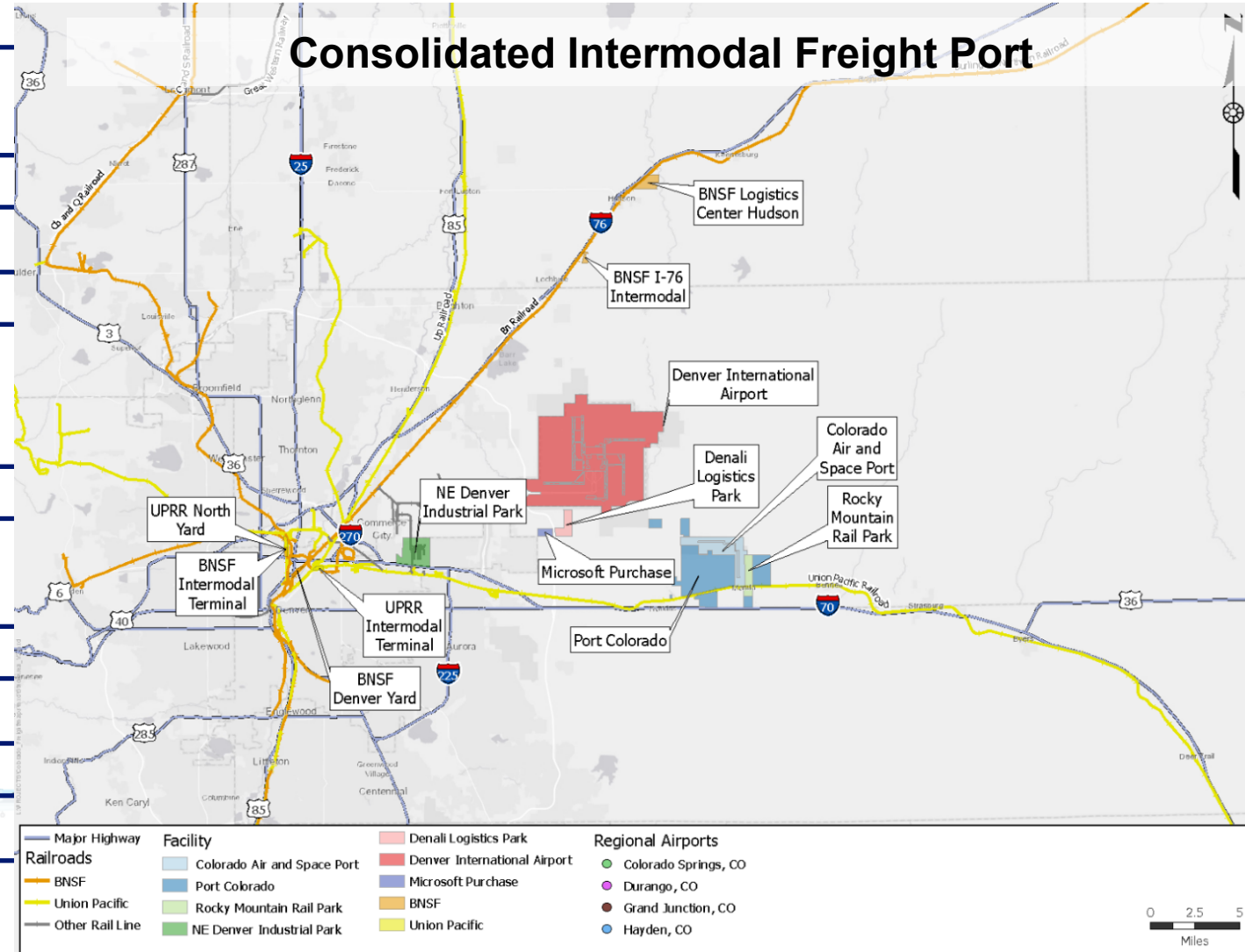
- e.g., Consolidated intermodal freight port (or inland port)

Freight Workforce

- Improve reliable access to logistics jobs

Trade and Logistics

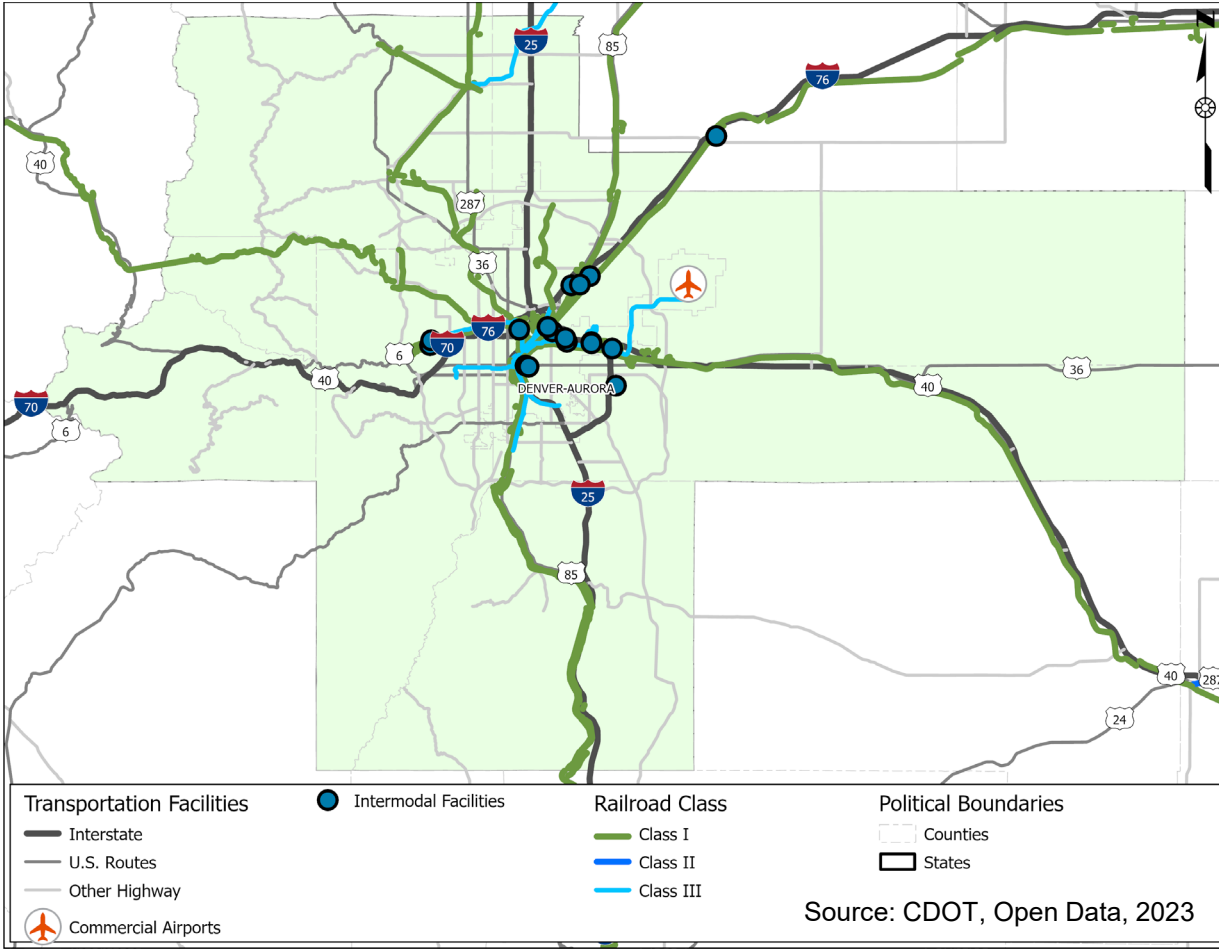
Economic Benefits



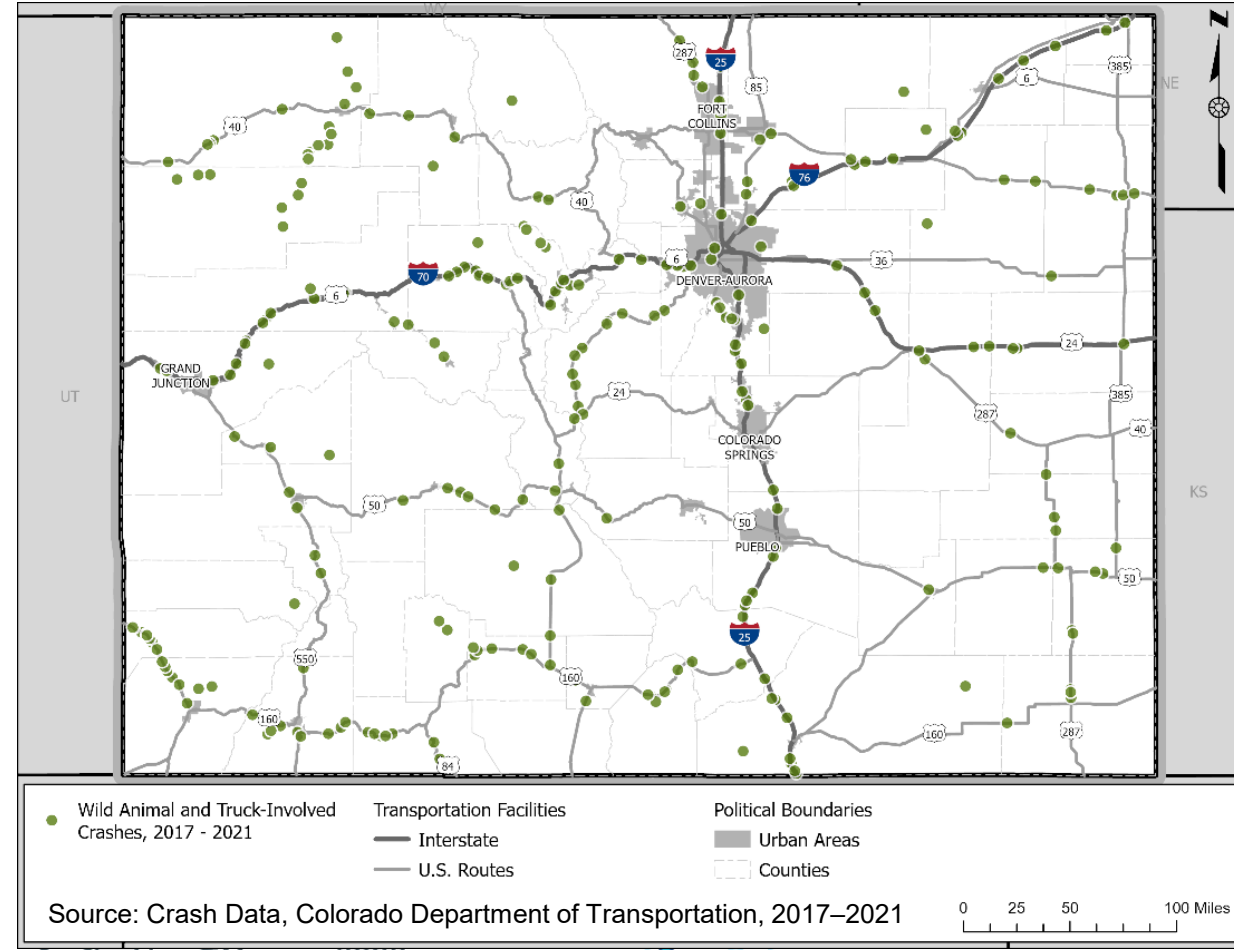
Sustainability & Resiliency



Intermodal Network



Wild Animal Involved Truck-Related Crash Distribution



Sustainability & Resiliency Strategies

Supply Chain Efficiency

Consolidated Intermodal Freight Port

Highway Mobility and Operational Improvements

Encourage Fleet Turnover

- Support the Colorado Clean Truck Strategy

Pursue Partnerships for Charging Infrastructure

Mitigate Wildlife Habitat Loss

System Risk and Redundancy



Colorado Freight Investment Plan



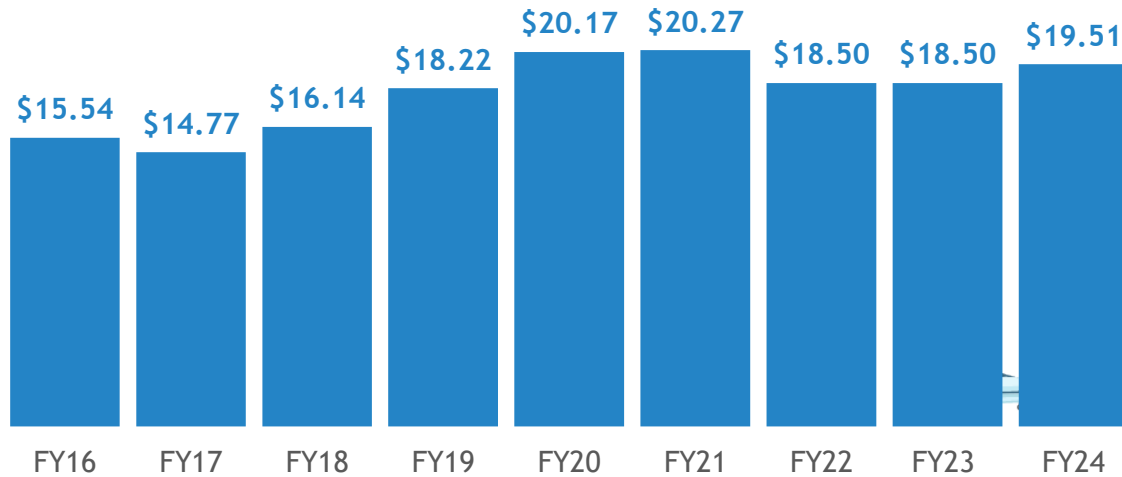
National Highway Freight Program

1 dedicated source of freight funding

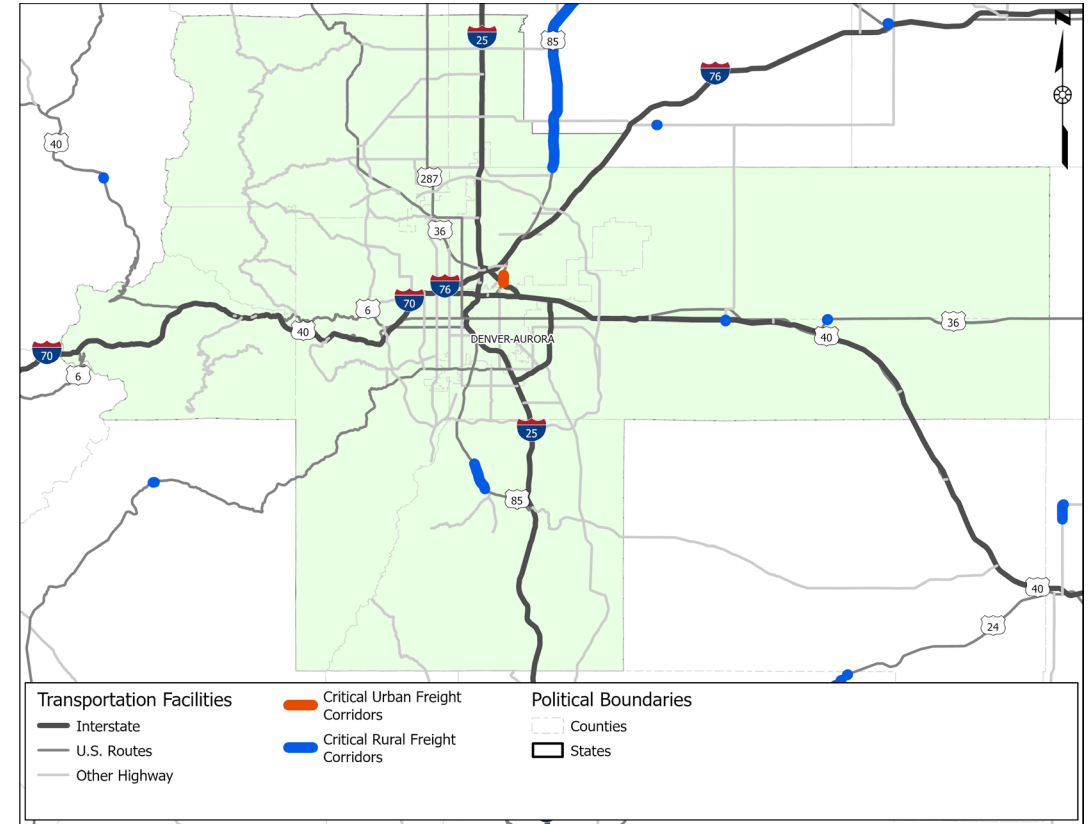
3 critical focus areas

70+ projects funded

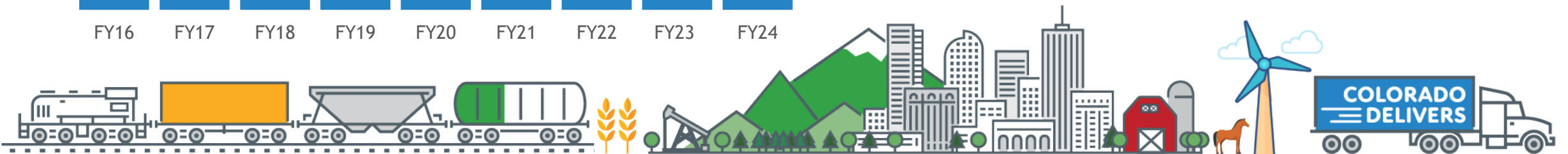
\$179 million invested in Colorado

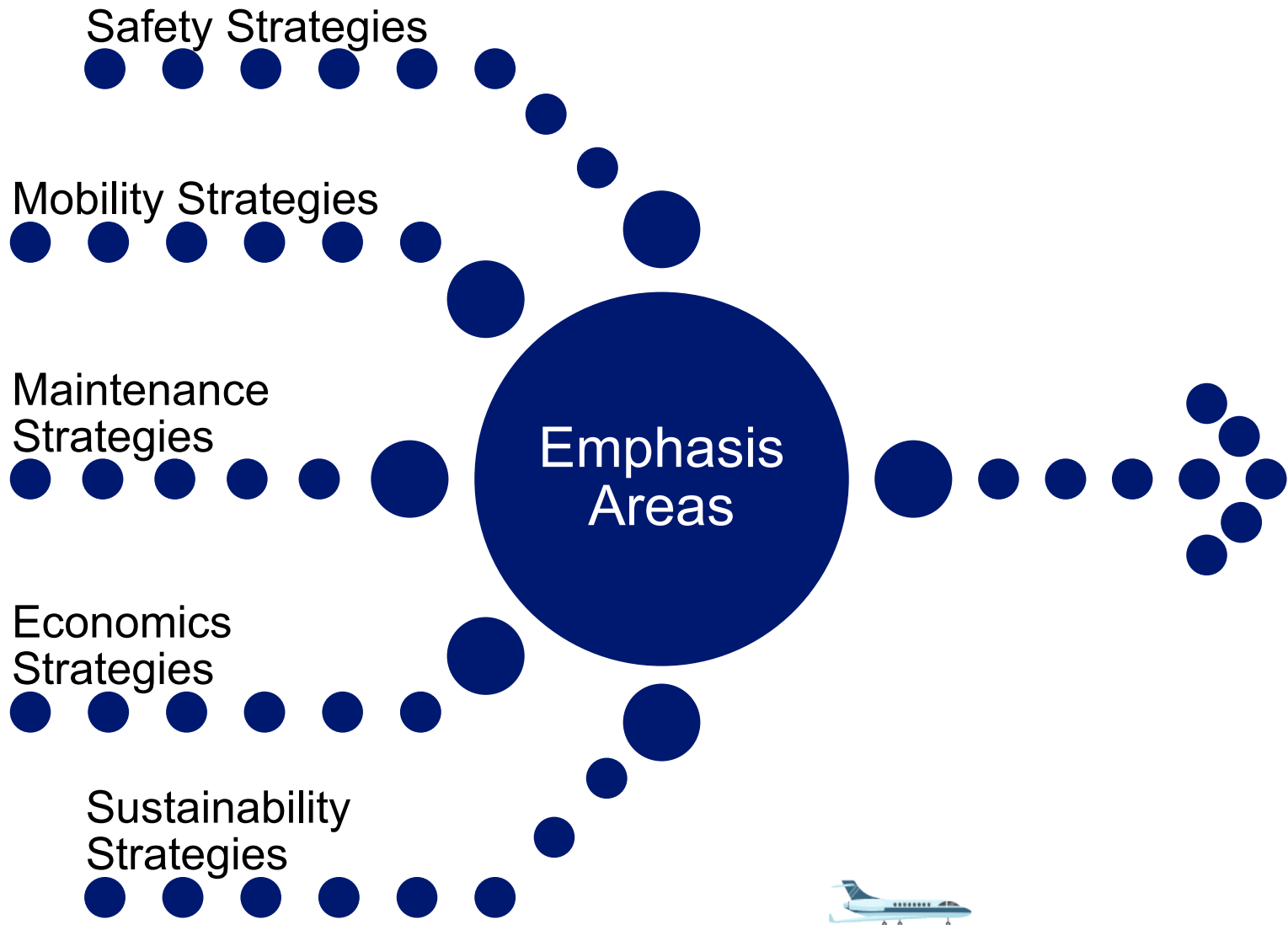


CUFCs and CRFCs



Climbing lanes, truck parking, chain stations, ports of entry, ITS parking and weather, safety improvements, bridge replacement, planning and design





Truck Safety

Freight Operations

Clean Transportation



Emphasis Areas

Truck Safety

- Reduce conflicts
- Shoulders and passing lanes
- Weather-related improvements
- Safety information

Freight Operations

- Truck parking
- ITS for chain stations and safety pullouts
- In-cab communications
- Runaway truck ramps
- Weigh in Motion

Clean Transportation

- Eliminate bottlenecks to reduce emissions
- Removing barriers
- Zero emission charging/fueling
- Emerging technologies (e.g., e-cargo bikes)



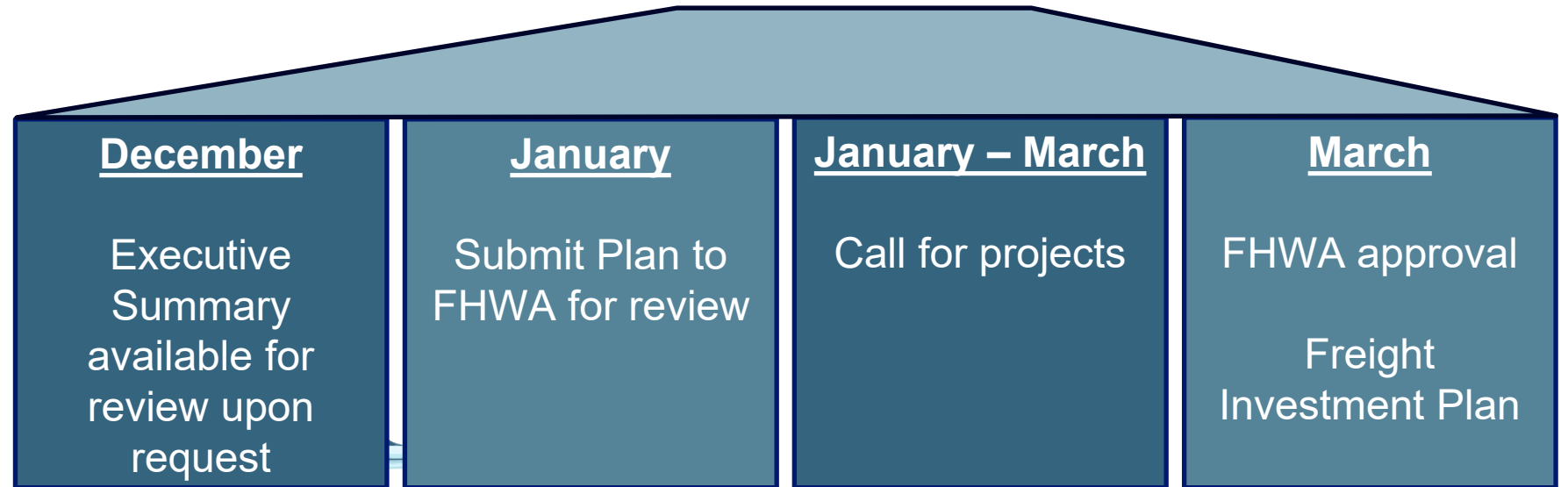
Next Steps



APRIL 2023

DECEMBER 2023

MARCH 2024





COLORADO
Department of Transportation
Freight Mobility & Safety Branch



freight.colorado.gov

ATTACH D

Transportation Advisory Committee

Meeting date: February 26, 2024

Agenda Item #: 6 (Attachment D)

Regional Housing Needs Assessment

Agenda item type: Discussion

Summary

Staff will update the Transportation Advisory Committee on the ongoing Regional Housing Needs Assessment.

Background

DRCOG, along with the consultant team of ECONorthwest, Community Planning Collaborative, and MIG, kicked off the Regional Housing Needs Assessment at the end of September 2023. Metro Vision, the region's plan, prioritizes "*diverse housing options to meet the needs of residents of all ages, incomes, and abilities.*" However, the region's current housing supply falls dramatically short of today's needs. The Regional Housing Needs Assessment will articulate the scale and scope of the region's housing needs and identify the systemic barriers to addressing housing in our region.

Phase 1 of the Regional Housing Needs Assessment focuses on data analysis to define the size and nature of current and future housing supply gaps based on changing demographics and land areas.

Phase 2 will focus on stakeholder engagement to identify systemic barriers to meeting housing needs defined in phase 1. Upcoming engagement opportunities include a focus group for infrastructure professionals in utilities and transportation on March 5 at 10:30 a.m. at the DRCOG office.

The Regional Housing Needs Assessment is planned to be completed by June 2024.

Action by others

None

Previous discussion

[June 26, 2023](#) - Adding Housing Coordination Activity to the Unified Planning Work Program

Recommendation

None

Attachment

Staff Presentation: Regional Housing Needs Assessment Update

For more information

If you need additional information, please contact Andy Taylor, Manager, Regional Planning and Analytics at (303) 480-5636 or ataylor@drcog.org; or Sheila Lynch, Division Director, Regional Planning and Development, at (303) 480-6839 or slynch@drcog.org.



Regional Housing Needs Assessment (RHNA) update

Transportation Advisory Committee
February 26, 2024

Andy Taylor, AICP
Manager, Regional Planning and
Analytics

Metro Vision: our shared vision



“ [I]ndividual communities will contribute to Metro Vision outcomes and objectives through **different pathways** and at **different speeds** for collective impact.



Housing is a part of metro vision



Metro Vision Plan

Included in Desired Outcome

Diverse **housing options** meet the needs of residents of all ages, incomes and abilities.

Included in Objectives

Diversify the region's **housing stock**

Increase the regional supply of **housing attainable** for a **variety of households**.

Increase opportunities for **diverse housing accessible by multimodal transportation**



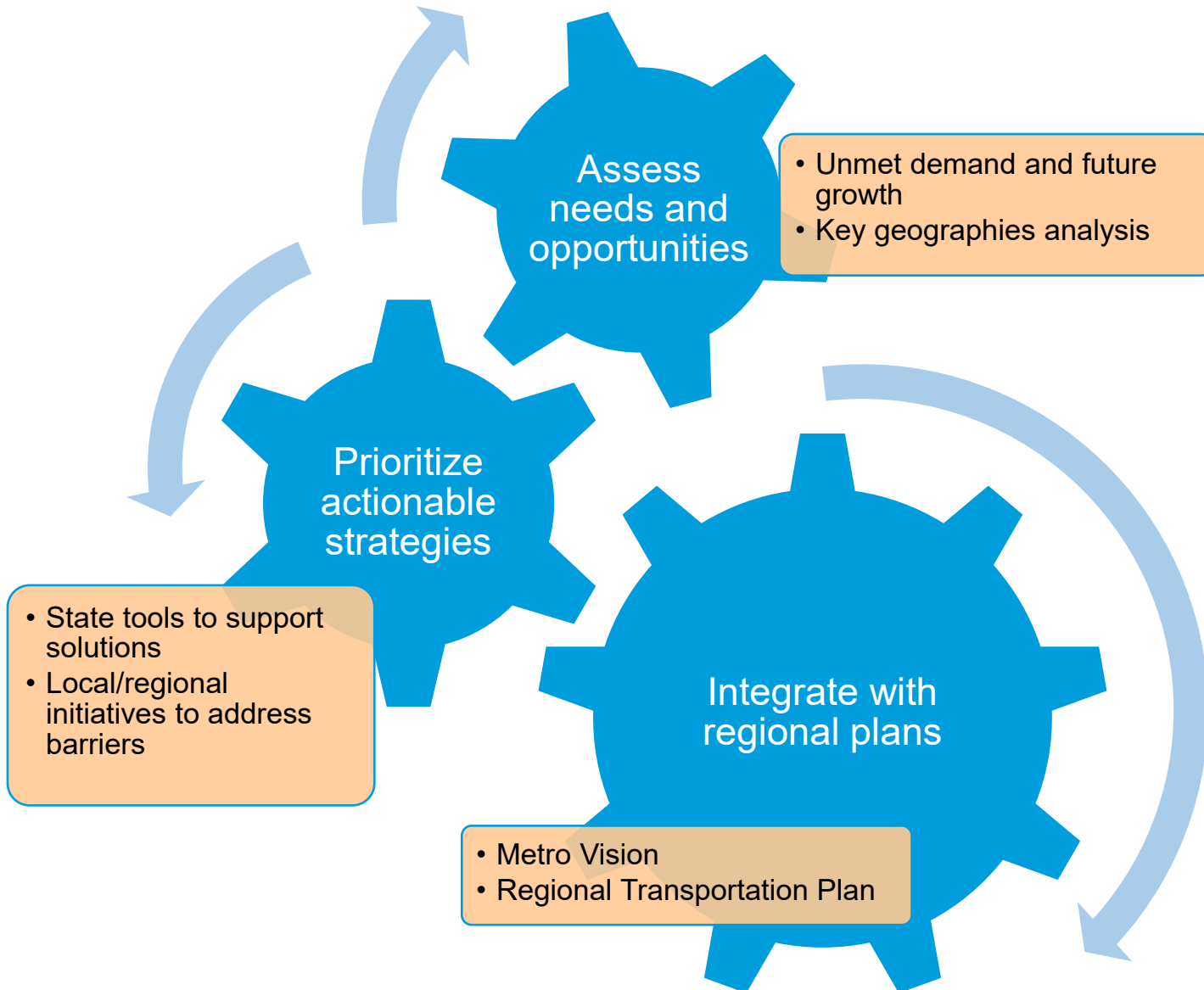
“The metropolitan planning process... ***shall*** provide for consideration of projects and strategies that will—

...

(E) ...promote **consistency** between **transportation improvements** and State and local planned **growth, housing, and economic development** patterns

23 United States Code § 134(h)

Our approach to regional housing assessment



Regional Housing Needs Assessment

- Oct 2023 – June 2024
 - Data Analysis
 - Understand barriers

Regional Housing Strategy

- July 2024-June 2025
 - Regional implementation structure

Regional Plans Updates

- 2025-2026
 - Guide Metro Vision and RTP updates

Comparing RHNA to other assessments

Some DRCOG members analyze housing need, either for local planning or to meet federal funding requirements. This RHNA uses different methods to understand need at a regional level and to develop strategies that address a range of contexts.

	Local Housing Needs Assessment	Consolidated Plan	DRCOG Regional Housing Needs Assessment
Key Components	<ul style="list-style-type: none"> Community demographics Inventory of housing stock Current market conditions Inconsistent approaches to calculating future need 	<ul style="list-style-type: none"> Current cost-burdened households, scaled for near-term growth Current market conditions Detailed demographic breakdown 	<ul style="list-style-type: none"> Current need accounts for historic underproduction and addressing homelessness Future need accounts for population growth and demographic change Distribution of needed units by income
Time Horizon	Varies	3–5 years	2050
Goal	Identify local actions—regulatory, financial—to encourage housing development that fills current gaps	Prioritize projects and actions for near-term allocation of federal grants	Understand regional and subregional needs to advance coordinated planning and policy

Steps in housing need methodology

Housing Need

Calculate each component of housing need:

- Current Need (“Underproduction”
+)
- Current Homelessness +
- Future Need

Income Targets

Target current housing need by income level

- As a range of Median Family Income (MFI)
- Future need income distribution is embedded in that methodology

Regional Submarkets

Determine regional submarket geographies

Distribute Need

Distribute total regional need to regional submarkets by unit type and income target

Current Need

UNDERPRODUCTION

Units that have not been produced to date in the region, but are needed to accommodate current population
(often referred to as housing shortage)



UNITS TO ADDRESS HOMELESSNESS

Units needed to house those who are currently experiencing homelessness



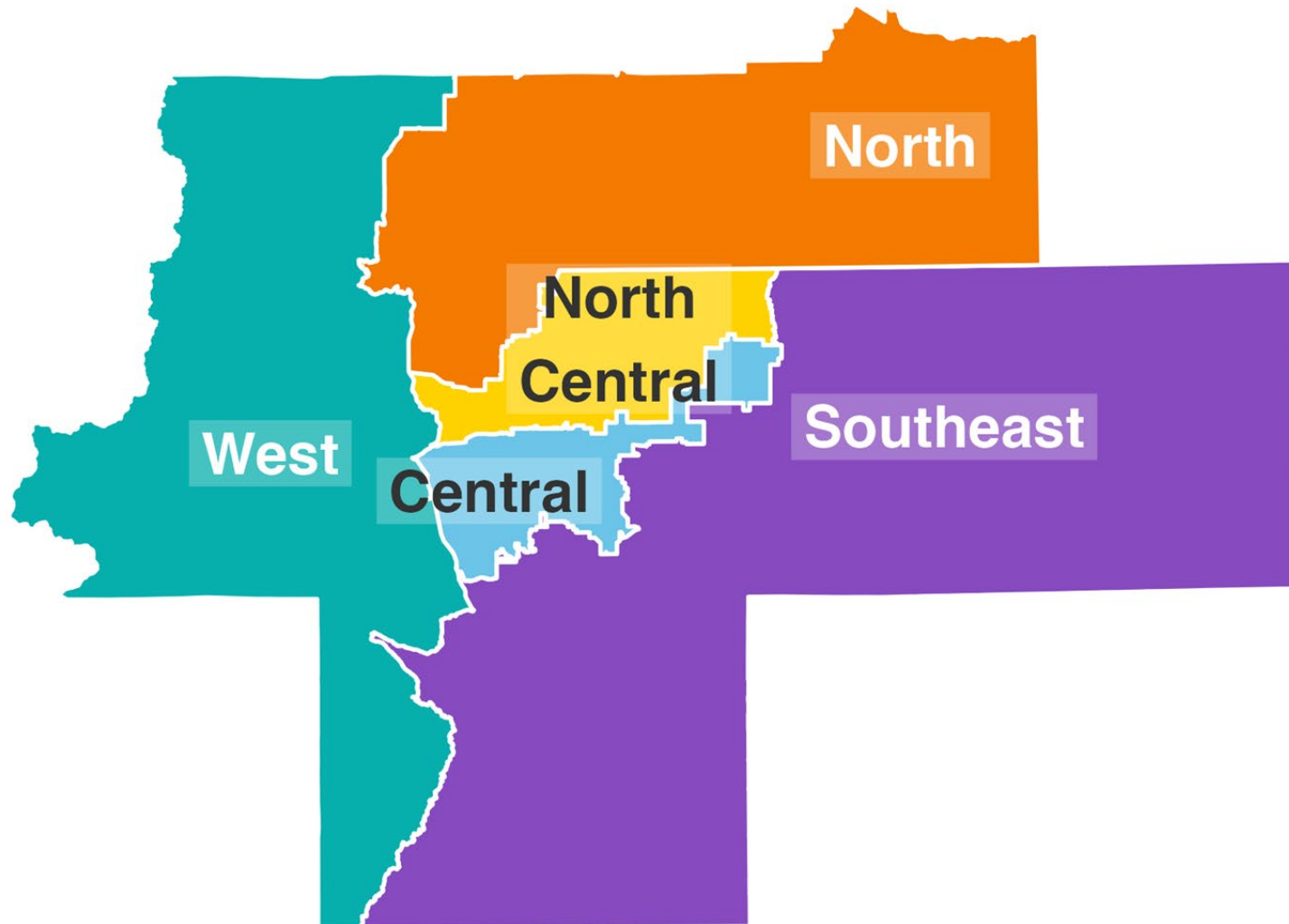
Future Need

PROJECTED NEED

Units needed to accommodate future population growth over 20 years



Regional submarket geographies



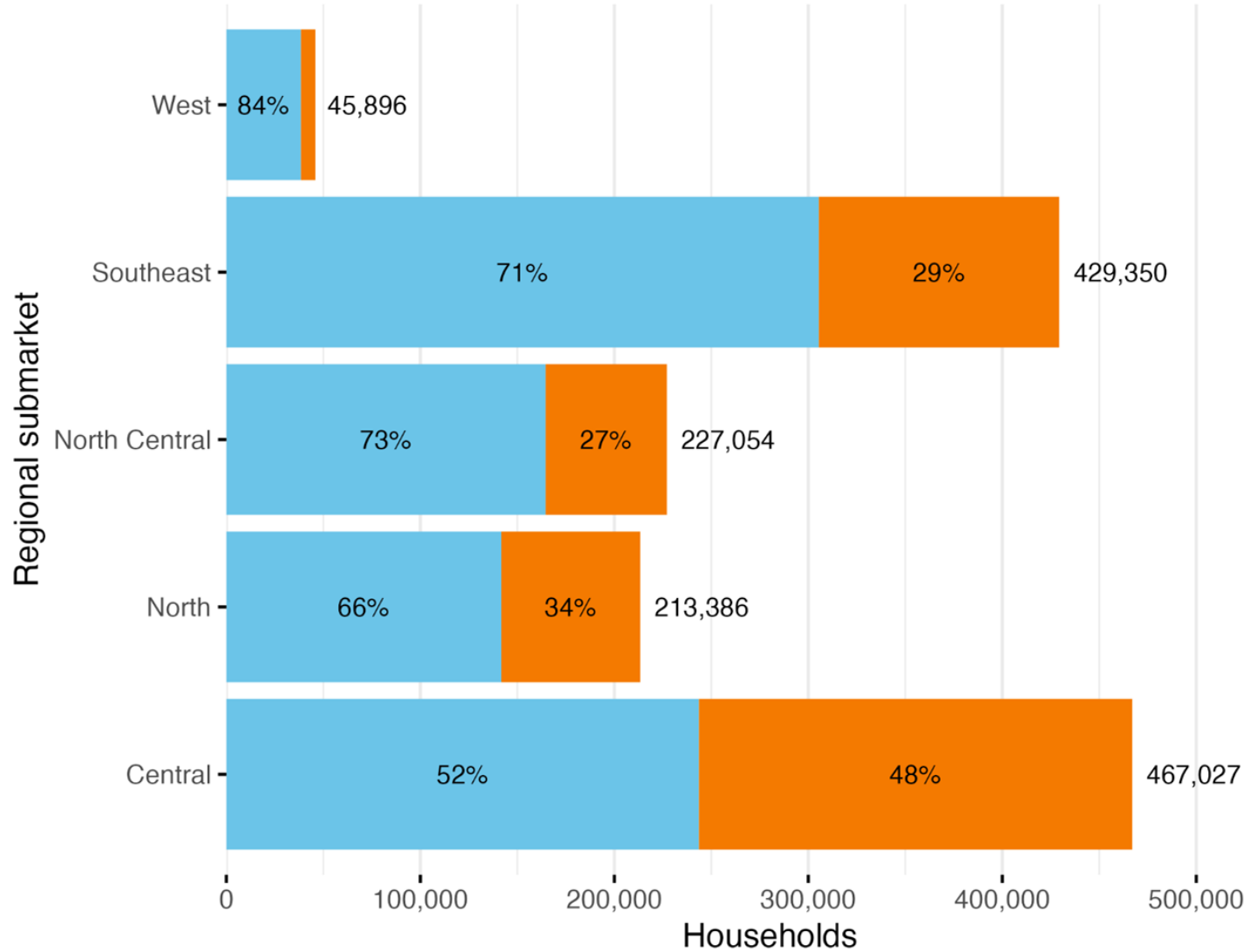
- Contiguous geographies
- Linked by Census data and commute patterns

Regional submarket geographies

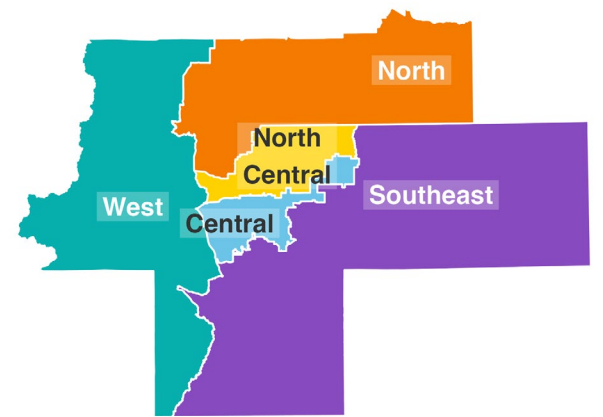
Central	North	North Central	Southeast	West
Denver	Arvada*	Arvada*	Aurora	Arvada*
Edgewater	Boulder*	Brighton*	Bennett	Black Hawk
Glendale	Brighton*	Commerce City	Bow Mar	Boulder*
Golden*	Broomfield	Federal Heights	Castle Pines	Central City
Lakewood	Dacono	Golden*	Castle Rock	Empire
Morrison*	Erie	Lochbuie*	Centennial	Georgetown
Wheat Ridge*	Firestone	Northglenn*	Cherry Hills Village	Golden*
	Frederick	Thornton	Columbine Valley	Idaho Springs
	Lafayette	Westminster*	Deer Trail	Lyons
	Lochbuie*	Wheat Ridge*	Englewood	Morrison*
	Longmont		Foxfield	Nederland
	Louisville		Greenwood Village	Silver Plume
	Mead		Larkspur	
	Northglenn*		Littleton	
	Superior		Lone Tree	
	Westminster*		Parker	
			Sheridan	

* City overlaps with multiple submarket geographies

Tenure

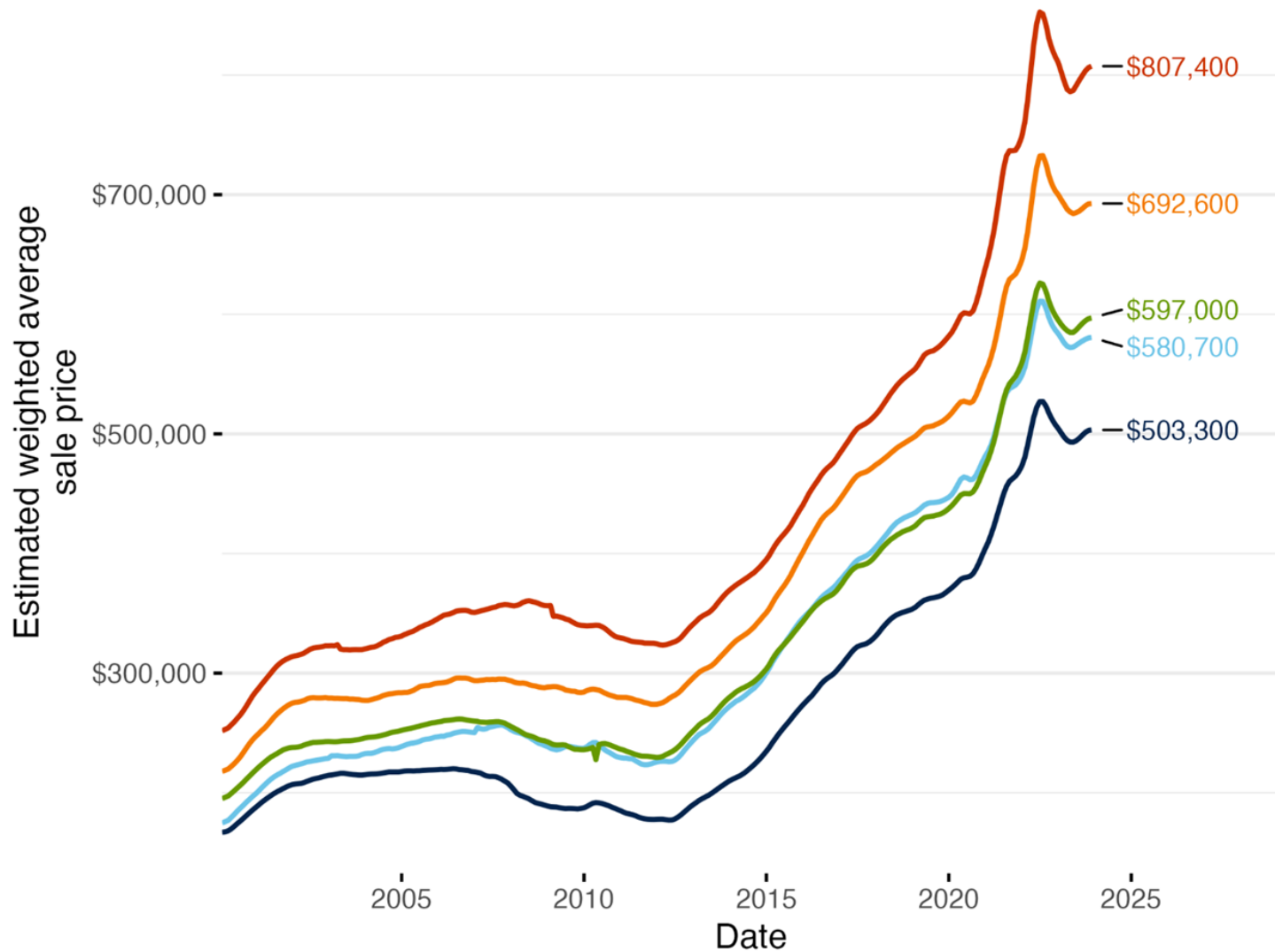


Tenure
■ Owner
■ Renter



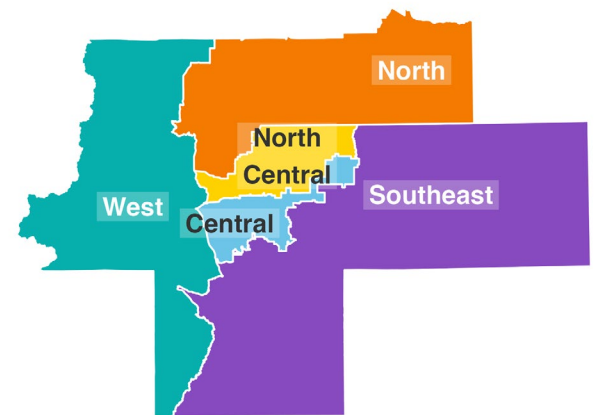
Source: PUMS 2022 1-year

Home sale price trends



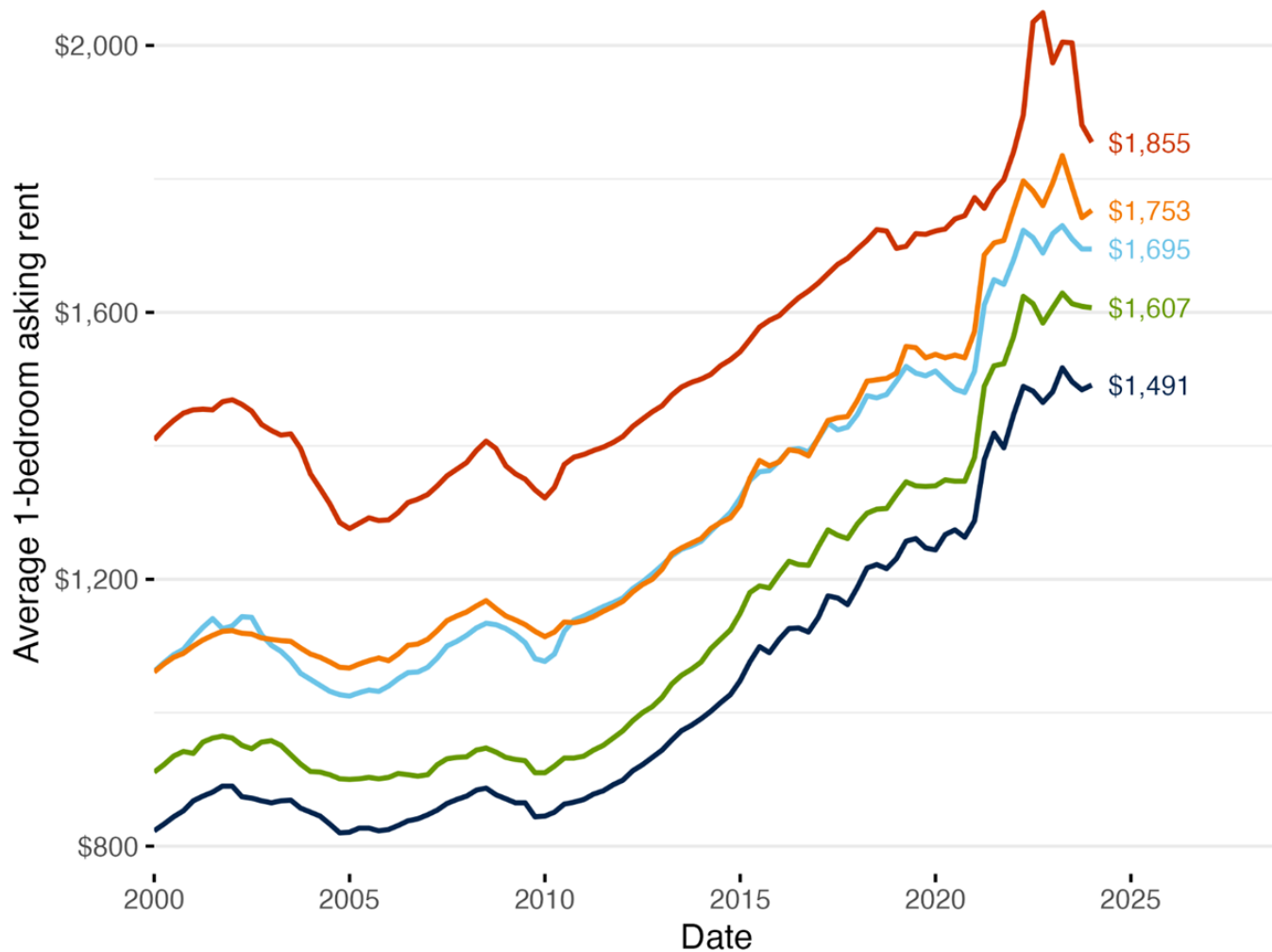
Regional submarket

- Central
- North
- North Central
- Southeast
- West



Source: Zillow, 2021 ACS 5-year

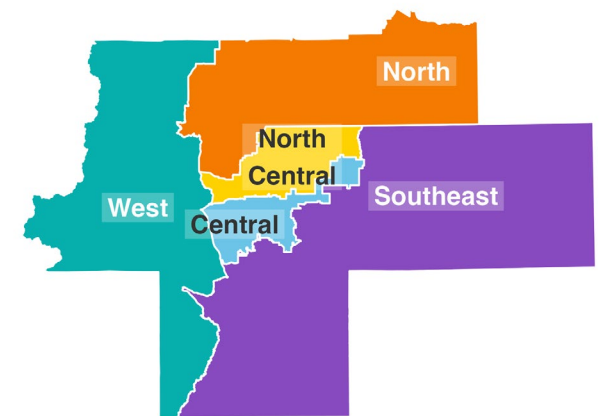
Rental price trends



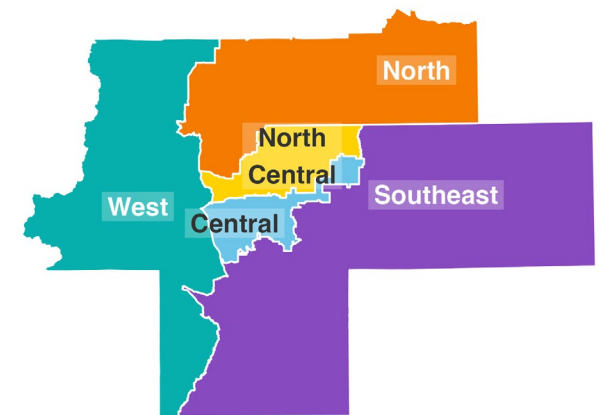
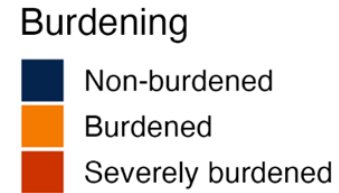
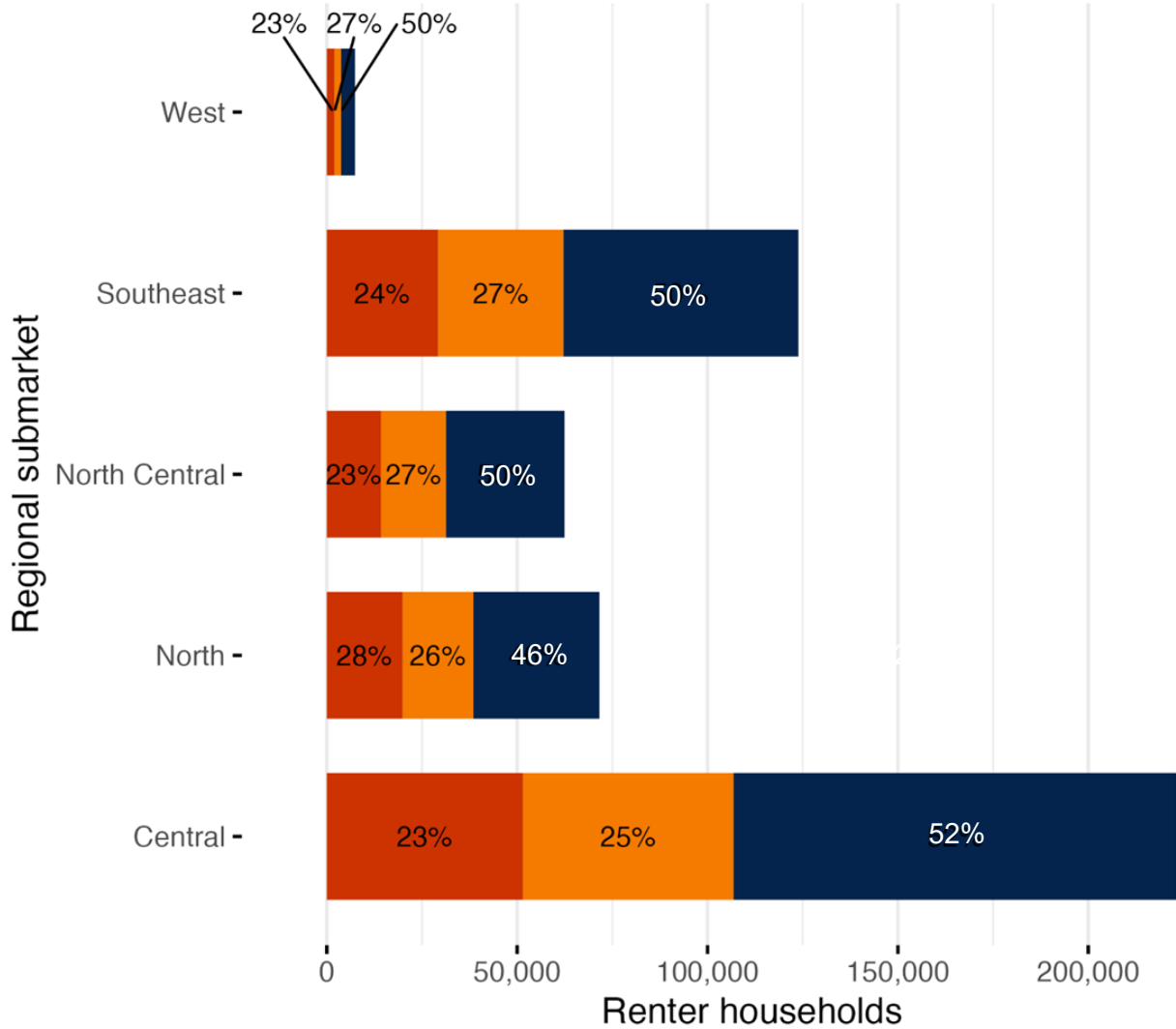
Source: CoStar

Regional submarket

- Central
- North
- North Central
- Southeast
- West



Rental cost burdening



Source: PUMS 2022 1-year

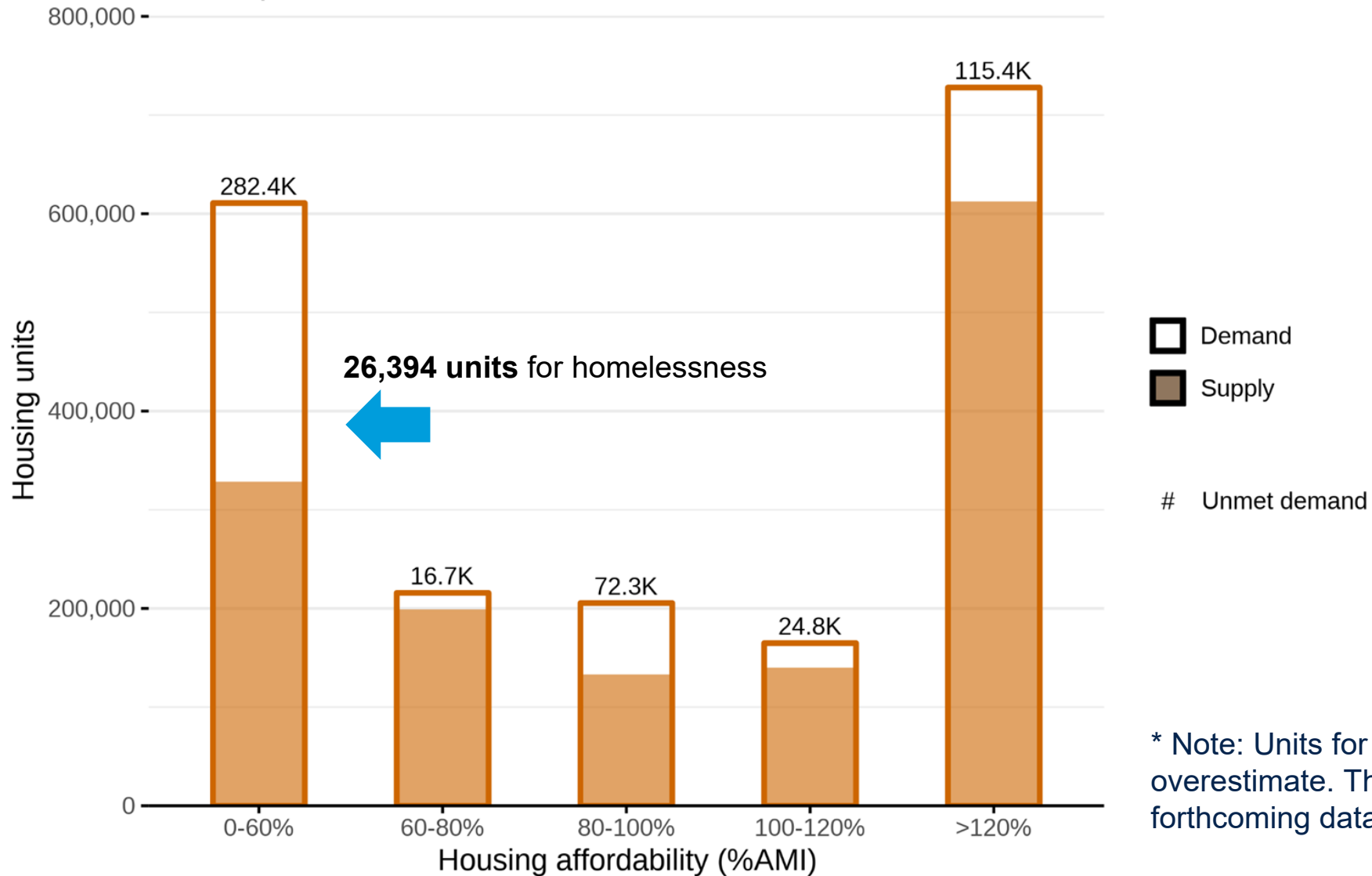
Total regional need

To address current and future needs across the income spectrum, the Denver region needs to build 511,000 units by 2050. To stay on track to reach that goal, the region should work toward building 216,000 new units by 2035.



Includes all units to address homelessness and underproduction

Distribution of need – 2050



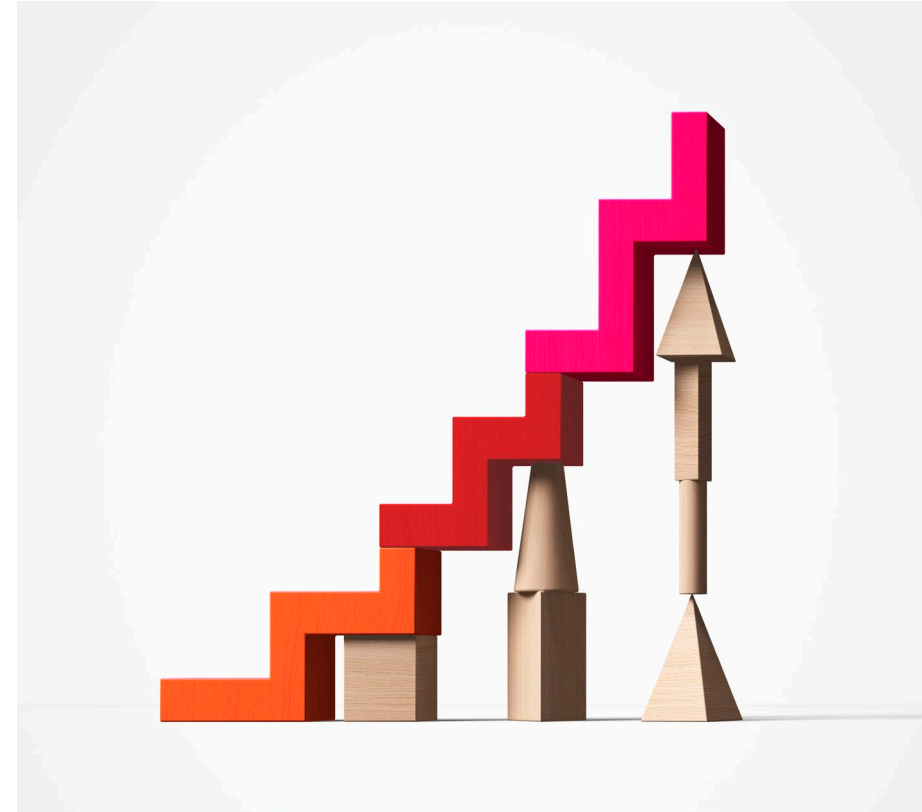
* Note: Units for homelessness is likely an overestimate. This figure will be revised with forthcoming data from MDHI.

Schedule overview



Phase 2: Barriers and Potential Strategies

- Discuss systemic barriers to meeting housing needs across the Denver region
 - Meet with stakeholders and conduct large and small group conversations
- Evaluate policies and strategies to support housing production to meet housing needs across the Denver region
- Develop a report bringing all this information together delivered by end of June 2024



Tuesday, March 5 – 10:30 am to 11:30 am

Group: Infrastructure professionals in utilities/transportation

Description: Discussion of housing barriers from the perspective of those working in infrastructure.

Location: In-person at the DRCOG Offices

Registration: [Microsoft Forms](#)



Wednesday, March 6: Group: Advocates, developers and service providers

Time: 10:00am-11:30am

Setting: In-person

Registration: [Microsoft Forms](#)

Thursday, March 14: Group: Advocates, developers and service providers

Time: 10:00am-11:30am

Setting: Virtual

Registration: [Zoom Registration](#)

Other: Spanish translation will be available



THANK YOU!
QUESTIONS?

Andy Taylor, AICP | Manager
Regional Planning and Analytics
ataylor@drcog.org
303-480-5636

ATTACHE

Transportation Advisory Committee

Meeting date: February 26, 2024

Agenda Item #: E (Attachment 7)

Taking Action on Regional Vision Zero Strategic Update

Agenda item type: Discussion

Summary

Briefing on the strategic update to Taking Action on Regional Vision Zero.

Background

In June 2020, the Denver Regional Council of Governments adopted Taking Action on Regional Vision Zero to support the region's commitment to eliminate traffic-related fatalities and severe injuries on our roadways and make safety a priority for all users of the transportation system. The action plan is guided by robust collaboration with local, regional, and state stakeholders through the Regional Vision Zero Working Group. The plan sets out Action Initiatives, an implementation timeline and measures that will help track regional progress toward safety improvements.

DRCOG staff have been working on a strategic update to Taking Action on Regional Vision Zero to ensure its relevance and consistency with emerging best practices in transportation safety.

The objectives for this update are to:

- Take a wholistic approach to updating Chapter 6: Implementation Plan Action Initiatives to create a valuable and sustainable approach to addressing multiple aspects of safety across the region, with the goal of achieving zero fatalities and serious injuries.
- Develop an accompanying story map as a resource for staff, local government members, regional partners, safety stakeholders and the public.
- Meet upcoming state accessibility requirements (HB-1110).

The Regional Vision Zero Working Group has been meeting monthly since February 2023 to conduct workshops focused on the six objectives identified in the plan. The Working Group met on October 30, 2023, to participate in a 2.5-hour workshop to identify regional priorities and timelines.

Using the Working Group's feedback, staff have drafted an update to Taking Action on Regional Vision Zero that is representative of the region. The update includes actions with measurable goals, timelines, and appropriate stakeholders responsible for implementation, with the ultimate goal of achieving zero deaths or serious injuries on our roadways.

Since adopting Taking Action on Regional Vision Zero in 2020, the region has completed or made substantial progress on several actions recommended in the plan.

- Developed a Complete Street Toolkit for the DRCOG region, addressing safety-related aspects of street design, incorporating Vision Zero principles, crash profiles and



countermeasures, and including further guidance for establishing safe design components.

- Performed a prioritization analysis of the Complete Streets network of the region to identify the top corridors for investing funds and resources to improve mobility and accessibility for all users.
- Created a story map data tool on the Regional Data Catalog to enhance the Regional Vision Zero toolkit and provide local governments with easy access to quick analysis of area type crash profiles.

Staff from the Region Planning and Development division and the Transportation Planning and Operations division have also completed a companion story map that explores the fatal and serious injury crash trends in the Denver region, where these crashes are occurring on the regional roadway system and the top contributing factors. Analyzing patterns in the data helps determine which countermeasures will have the biggest impact. For more information, please visit the [Regional Vision Zero Story Map](#).

Along with the story map and implementation update work, staff have also been working to ensure the plan meets upcoming state accessibility requirements and making any necessary changes to be compliant. The updated document has been out for public review and feedback. The final date to give public comments is February 27 at 5:00 P.M. Once comments have been addressed, this update is expected to be presented to the Board to consider approval at their April meeting.

Action by others

None

Previous discussion/action

[February 27, 2023](#) – Project status briefing

[August 28, 2023](#) – Project status briefing

Attachment

Staff presentation

For more information

If you need additional information, please contact Emily Kleinfelter, Safety/Regional Vision Zero Planner at 303-480-5647 or ekleinfelter@drcog.org.





Strategic Update

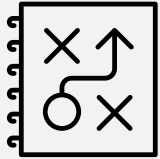
Taking Action on Regional Vision Zero

Transportation Advisory Committee – February 26, 2024

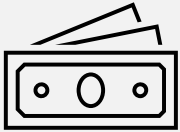
Why update?



Serious injury and fatal crashes are increasing.



Aligning with best practice: Safe System Approach.



More funding opportunities through the Bipartisan Infrastructure Law.



Increased feedback and collaboration from member governments.

What is the Safe System Approach?



THE SAFE SYSTEM

APPROACH

Zero is our goal. A Safe System is how we get there.

Guiding principles:

- Death and serious injuries are unacceptable.
- Humans make mistakes.
- Humans are vulnerable.
- Responsibility is shared.
- Safety is proactive.
- Redundancy is crucial.

Safe System Elements

1. Safe road users.
 2. Safe vehicles.
 3. Safe speeds.
 4. Safe roads.
 5. Post-crash care.
- Requires a supporting safety culture that places safety first and foremost in road investment decisions.

TAKING ACTION ON



Taking Action on Regional Vision Zero

- Chapter 1: Background on Vision Zero
- Chapter 2: Why the Region Needs Vision Zero
- Chapter 3: DRCOG Vision Zero Principles
- Chapter 4: Community Engagement
- Chapter 5: Regional Vision Zero Toolkit
- **Chapter 6: Implementation Plan**
- Chapter 7: Additional Efforts
- Chapter 8: How to Stay Engaged
- **New! Vision Zero Story Map**

Update Structure

Status Check

- Reviewed completion status of current strategies and actions for each Objective.

Objective Workshops & Surveys

- Solicit feedback from RVZ Working Group on the level of impact and difficulty to implement each Objective's strategies and actions.
- Follow-up surveys to identify priorities and stakeholder involvement in the draft strategies and action are sent out to the RVZ Working Group after each workshop

Prioritization Workshop

- In-person Breakout Group Exercise to identify Short Term, Mid Term, Long Term, and Ongoing actions, using feedback from previous virtual workshops.

Public Comment

- 30-day period for public comment. Outreach done via eblasts, social media and event engagement.

Safer People

Strategy/Action	Impact of Action/Strategy			Difficulty to Implement (in 5yrs)			Decision Dots
	Low	Medium	High	Easy	Moderate	Hard	Grab & Drag or Copy & Paste
<p>NEW: Develop a resolution/pledge statement that commits member governments and local leaders to promote and establish a positive traffic safety culture to decision-making at all levels, as a part of policy and practice for all disciplines.</p>							
<p>Strategy: Develop and implement a Regional Vision Zero partnership program modeled on the Way To Go program to promote and prioritize safety in the DRCOG region.</p>							
<p>Provide information, resources, trainings, and educational opportunities to local communities, local governments, and media outlets. Promote consistent messaging and crash reporting language.</p>							
<p>Provide information and resources regarding the needs of vulnerable road users (people with disabilities, elderly, children, and people with harmful...</p>							

Objective Workshops

- Determining level of impact and difficulty to implement the actions from each Objective.

Prioritization Workshop Takeaways

- Coordination with partners is crucial to sustainable implementation of actions.
- Take advantage of existing programs instead of creating new ones.
- Reliable crash data is important and a known challenge.
- Clarifying which actions are currently underway, and to what extent.



Action Accomplishments

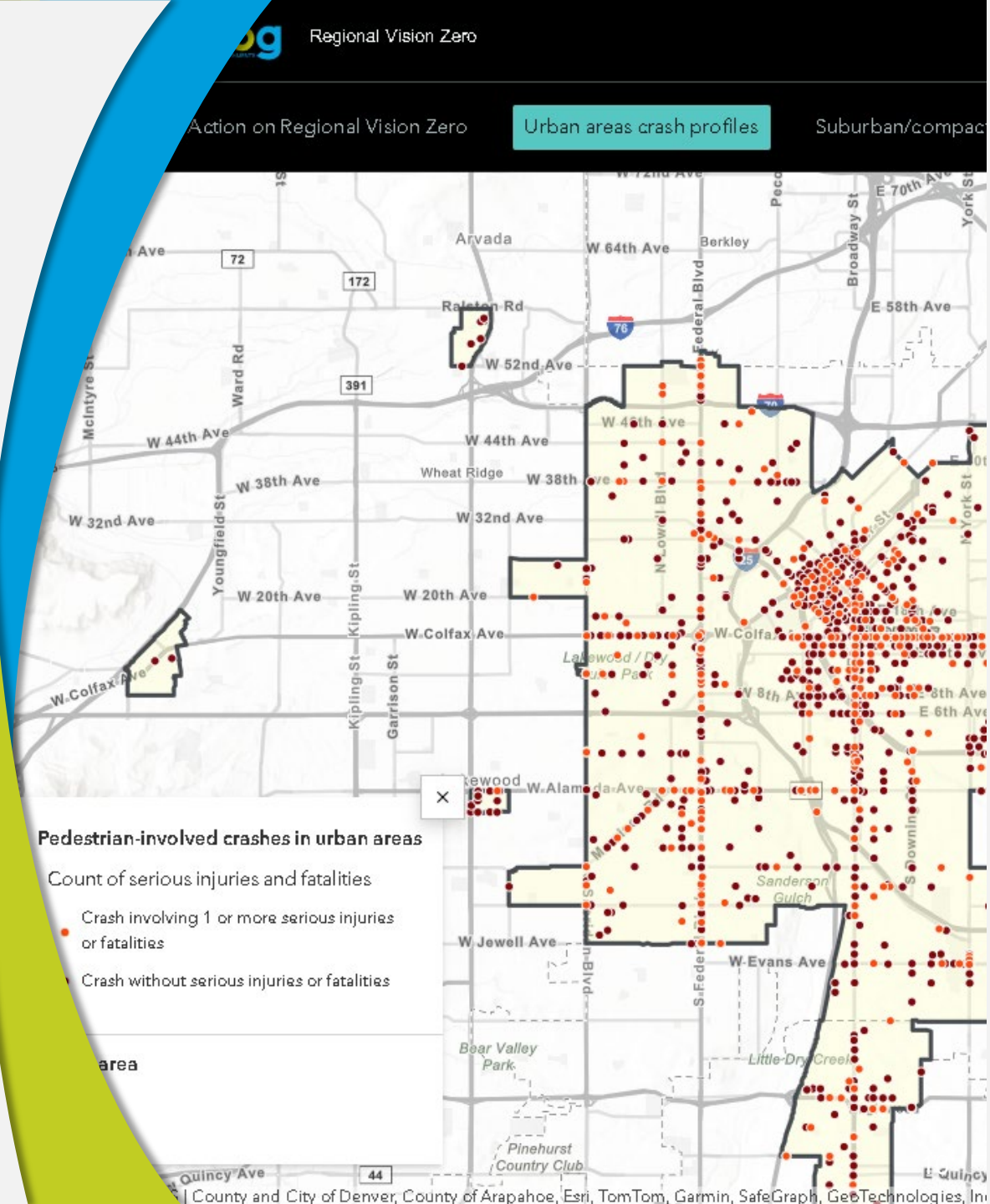
- **Objective 3: Design and Retrofit Roadways to Prioritize Safety**
 - Developed a **Complete Streets Toolkit** for the DRCOG region.
 - Performed a **prioritization analysis** of the region's Complete Streets network.



Action Accomplishments

- **Objective 4: Improve Data Collection and Reporting**

- Created **Regional Vision Zero story map** to enhance the Regional Vision Zero toolkit and provide local governments with easy access to quick analysis of area type crash profiles and potential countermeasures.



Key Immediate Actions



Objective 1: Improve collaboration between allied agencies

- Convene regular safety meetings of state and local transportation and public health professionals, police and fire departments, and community and advocacy organizations, to **collaboratively address dangerous behaviors on the roadways** with strategies like culturally appropriate safety programs and educational messages, paired with outreach and investments.
- Expected Impact: Medium to High
- Difficulty to Implement: Moderate to Hard

Key Immediate Actions



Objective 2: Improve collaboration between allied agencies

- Identify and promote Safe System Approach and Vision Zero training or education opportunities to local governments, community organizations and media outlets.
- Expected Impact: Medium
- Difficulty to Implement: Easy

Key Immediate Actions



Objective 3: Design and retrofit roadways to prioritize safety

- Develop a Quick-Build Toolkit for member governments to provide guidance on the design and implementation of quick-to-deliver and adjustable traffic measures to improve safety on the Regional High Injury Network and Critical Corridors.
- Expected Impact: Medium to High
- Difficulty to Implement: Moderate

Key Immediate Actions



Objective 4: Improve data collection and reporting

- Perform a comprehensive crash data analysis to understand high-risk actions, pre-crash activities and demographics to further build out the regional area type crash profiles (initiate in 0 to 2 years and perform an analysis every 3 to 5 years following).
- Expected Impact: High
- Difficulty to Implement: Moderate to Hard

Key Immediate Actions



Objective 5: Increase funding and resources

- Continue evaluating Transportation Improvement Program criteria to further prioritize safety projects on the regional High-Injury Network that address key crash profiles or otherwise reduce fatal and serious injury crashes.
- Expected Impact: High
- Difficulty to Implement: Moderate to Hard

Key Immediate Actions



Objective 6: Improve data collection and reporting

- Support legislation to increase funding and evaluate reallocation of existing funding to safety projects to create a reliable, dedicated funding stream.
- Expected Impact: High
- Difficulty to Implement: Moderate

Timeline

**March
2023**

- Update Kickoff

October 2023

- In-person prioritization workshop

March 2024

- TAC recommendation

**August
2023**

- Mid-way progress report to TAC & RTC

**January –
February 2024**

- Public comment period
- Progress report to TAC

April 2024

- RTC & Board adoption

Join the Regional Vision Zero Working Group!

When: Every other month for 1.5-hours.

Where: Virtual meetings with 2 site visits over the course of the year.

Who: Local government staff, state and federal partners, advocacy organizations, and other safety stakeholders in the region.

How: Email Emily Kleinfelter (ekleinfelter@drcog.org) to join the email list.

Thank you!

Emily Kleinfelter

Safety/Regional Vision Zero planner

303-480-5647

ekleinfelter@drcog.org



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ATTACH F

Transportation Advisory Committee

Meeting date: February 26, 2024

Agenda Item #: F (Attachment 8)

Federal Greenhouse Gas Performance Measure

Agenda item type: Discussion

Summary

Introduction to the new federal greenhouse gas performance measure.

Background

Federal regulations require state departments of transportation and metropolitan planning organizations 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.

In December 2023, the Federal Highway Administration issued a final rule that establishes a new greenhouse gas performance measure. The measure is part of the National Highway Performance Program and assesses the percent change in carbon dioxide (CO₂) emissions on the National Highway System relative to 2022 levels. State departments of transportation and metropolitan planning organizations are required to establish declining targets and report on progress. There are no penalties for not achieving the established targets.

As with previous federal performance measures, DRCOG has the flexibility to support the state's targets or establish targets specific to its area. DRCOG staff, with support from CDOT, will provide an overview of the new performance measure, including data requirements, methodologies, and next steps.

Action by others

None

Previous discussion/action

None

Recommendation

None

Attachments

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

For more information

If you need additional information, please contact Alvan-Bidal Sanchez, Regional Transportation Planning Program Manager, at 720-278-2341 or asanchez@drcog.org.





Federal GHG Performance Measure

Transportation Advisory Committee: February 26, 2024

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

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
- % change in tailpipe CO2 emissions on the NHS



Freight reliability

- Truck travel time reliability index

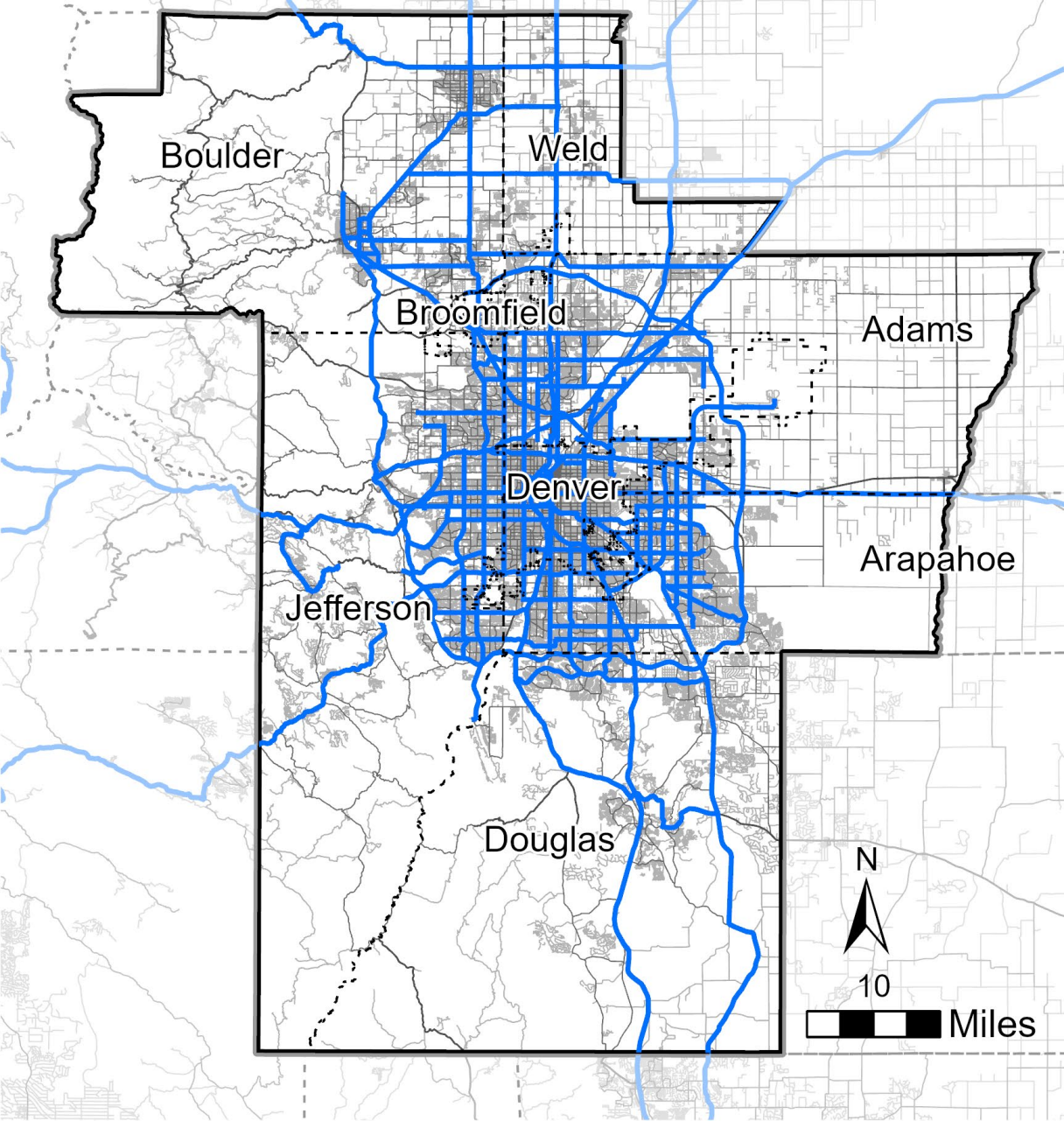
PM3: GHG performance overview

- **Area** – All mainline highways on the **Interstate and non-Interstate National Highway System (NHS)**
- **Data** –
 - CO2 emissions factors and fuel sales data to be provided by FHWA.
 - VMT data from the best available data representing the prior calendar year.
- **Performance measures** –
 - Percent change in on-road tailpipe CO2 emissions on the NHS relative to 2022.

- **Calculation** –

$$\frac{(\text{Tailpipe CO}_2\text{Emissions on NHS})_{\text{CY}} - (\text{Tailpipe CO}_2\text{Emissions on NHS})_{\text{reference year}}}{(\text{Tailpipe CO}_2\text{Emissions on NHS})_{\text{reference year}}} \times 100$$

- **Federal guidance** –
 - Targets must be declining targets.
 - 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 federal certification.



- National Highway System
- Roadway Network
- ▭ MPO Boundary
- - - County Boundaries

National Highway System

- Interstate
- Non-Interstate NHS

Target setting requirements

- MPOs are required to establish targets no later than 180 days after the State DOT establishes their targets. (by September 25, 2024)
- Targets to be established through resolution. (DRCOG standard practice)
- Option to commit to support the State DOT target or establish a unique quantifiable target.
 - MPOs may use the MPO share of the State's vehicle miles traveled (VMT) as a proxy for the MPO share of CO2 emissions in the State.
- Coordination with CDOT encouraged.
- No significant progress determinations.

DRCOG considerations

- Metro Vision's Surface Transportation Greenhouse Gas performance measure
 - Pounds of carbon dioxide equivalent GHG emissions per capita per day.
- State GHG Planning Standard
 - Reduction levels of annual greenhouse gas in million metric tons for four future analysis years: 2025, 2030, 2040 and 2050

Next steps

- **February:** Briefings to the Regional Transportation Committee and Board of Directors
- **March 29:** CDOT deadline to establish and report targets
- **March-September:** Continued coordination with CDOT and the Board on target-setting
- **September 25:** DRCOG deadline to establish targets

Thank you!

Questions?

Alvan-Bidal Sanchez

Program Manager

720-278-2341

asanchez@drcog.org



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COLORADO

Department of Transportation

New Greenhouse Gas (GHG) Rule National Performance Measures



Contents

- Overview of GHG Rulemaking
- New GHG Performance Measure
- Target Setting Requirements
 - Colorado Department of Transportation (CDOT)
 - Metropolitan Planning Organizations (MPOs)
- Reporting Requirements Timeline
 - CDOT
 - MPOs
- Data Sources
- Resources and Questions



Overview of GHG Rulemaking

- To help address the climate crisis the new GHG rule establishes a method for the measurement and reporting of greenhouse gas (GHG) emissions associated with transportation.
- The new rule requires State departments of transportation (State DOTs) and metropolitan planning organizations (MPOs) to establish **declining** carbon dioxide (CO₂) targets and report on progress toward the achievement of those targets.
- The rule does not mandate how low targets must be, only that the targets are **declining**.
- State DOTs and MPOs have flexibility to set targets that are appropriate for their communities and that work for their respective climate change and other policy priorities, provided the targets aim to **reduce** emissions over time.



Overview of GHG Rulemaking



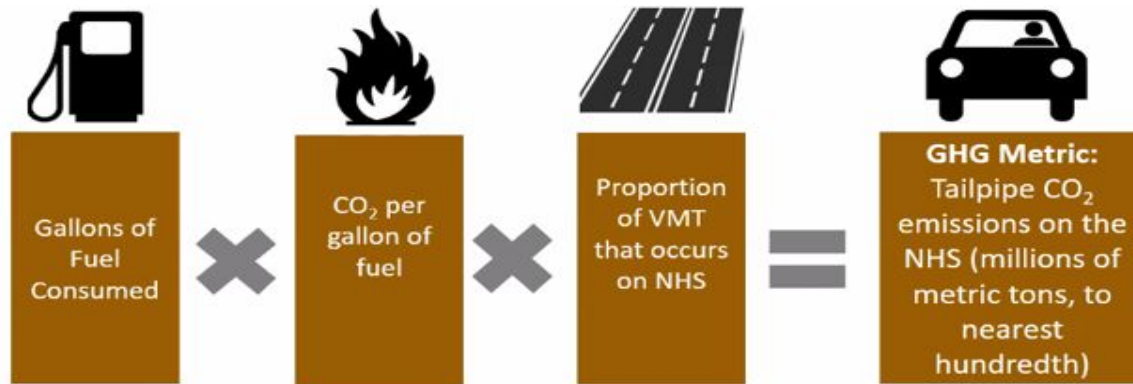
Transportation Performance Management (TPM) Performance Measures

Performance Area	Performance Measure
Safety	<ul style="list-style-type: none"> • 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 non-motorized serious injuries.
Pavement Condition	<ul style="list-style-type: none"> • Percentage of pavements of the Interstate System in Good condition. • Percentage of pavements of the Interstate System in Poor condition. • Percentage of pavements of the non-Interstate National Highway System (NHS) in Good condition. • Percentage of pavements of the non-Interstate NHS in Poor condition.
Bridge Condition	<ul style="list-style-type: none"> • Percentage of NHS bridges classified as in Good condition. • Percentage of NHS bridges classified as in Poor condition.
System Performance	<ul style="list-style-type: none"> • Percent of person-miles traveled on the Interstate that are reliable. • Percent of person-miles on the non-Interstate NHS that are reliable. • NEW: Percent change in tailpipe carbon dioxide (CO₂) emissions on the NHS compared to the reference year (calendar year 2022).
Freight Movement	<ul style="list-style-type: none"> • Truck Travel Time Reliability (TTTR) index.
Traffic Congestion	<ul style="list-style-type: none"> • Annual Hours of Peak Hour Excessive Delay (PHED) Per Capita. • Percent of Non-Single Occupancy Vehicle (SOV) Travel.
On-Road Mobile Source Emissions	<ul style="list-style-type: none"> • Total Emission Reductions for applicable criteria pollutants.

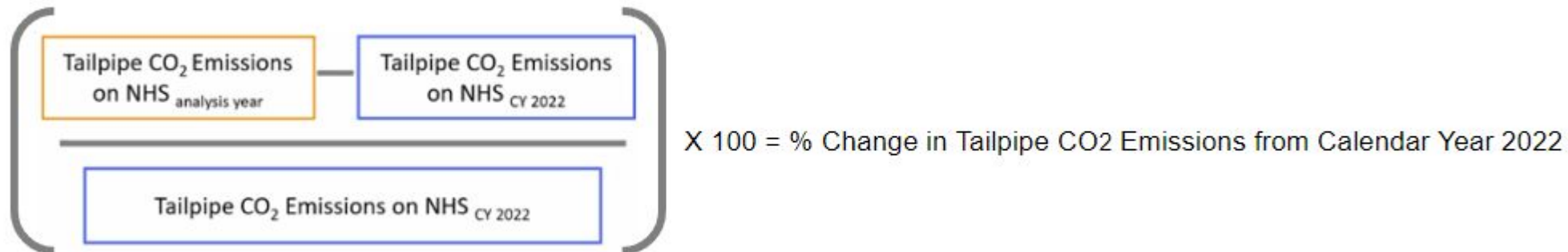


New GHG Performance Measure

- Performance Measure Language
 - The percent change in on-road tailpipe CO₂ emissions on the NHS relative to 2022.
- Calculating the GHG Metric - Annual Tailpipe CO₂ Emissions on the NHS:



- Calculating the GHG Measure





FHWA Deadline Extension

- Twenty-two States have challenged the GHG rule in federal court.
 - See State of Texas, et al. v. USDOT, et al. (N.D. Tex., Civil Action No. 5:23-cv-304) and Commonwealth of Kentucky, et al. v. FHWA, et al. (W.D. Ky., Civil Action No. 5:23-cv-162).
- Pursuant to negotiations in these cases, the FHWA has agreed that it will not seek to enforce the February 1, 2024, deadline for States to submit initial targets and reports, until March 29, 2024.
- The MPOs are due to establish targets no later than 180 days after the State DOT establishes their targets.



Target Setting Requirements - CDOT

- State DOTs will establish 2- and 4-year statewide emissions reduction targets
- State DOTs will first establish targets and report those targets by March 25, 2024. Subsequent targets will be established and reported no later than October 1, 2026, in line with other transportation performance management (TPM) measures.
- **For this current performance period (2022-2025), State DOTs only need to develop a four-year target (2025).**
- Biennial reporting related to the GHG measure will begin with the 2026 Full Performance Period Progress Report and the 2026 Baseline Performance Period Report.
- If targets are not met, CDOT must document the actions it will take to meet the targets.



Target Setting Requirements - MPO's

- MPOs will establish 4-year (2025) emissions reduction targets
 - MPOs are required to establish targets no later than 180 days after the State DOT establishes their targets (by September 25, 2024).
 - Targets to be established through resolution.
 - Option to commit to support the State DOT target or establish a unique quantifiable target.
 - MPOs may use the MPO share of the State's vehicle miles traveled (VMT) as a proxy for the MPO share of CO₂ emissions in the State.
 - Coordination with CDOT encouraged.
 - No significant progress determinations.



Data Sources

Data Input	Data Source	Description
Annual Fuel Sales Information	Fuels and Financial Analysis System-Highways (Fuels and FASH)	Total gallons of fuel consumed by fuel type, based on fuel sales data as of August 15th of the year in which the significant progress determination is made.
CO2 emission factor	FHWA-supplied emission factors	Posted on FHWA website no later than August 15th of each reporting year.
Annual vehicle miles traveled (VMT)	Highway Performance Monitoring System (HPMS)	Estimates of VMT on NHS and all public roads as of November 30 of the year in which the significant progress determination is made. The reference year shall use HPMS data as of November 30, 2023.

* MPOs have the flexibility to use additional data sources to calculate the measure



2022 Baseline Emissions

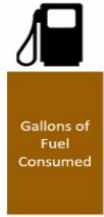


Table 1: Fuel Consumption

Gasoline & Gasohol Fuels	Special Fuels
2,383,076	787,608

Table 1 displays the quantity of fuel consumed, rounded to the nearest thousand gallons in 2022, and expressed in 1,000 gallons.

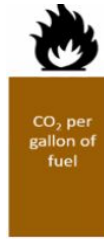


Table 2: CO₂ Factor

Gasoline & Gasohol Fuels	Special Fuels
0.00000810	0.00001019

Table 2 displays the CO₂ Factor for CY 2022, as provided by FHWA. (million metric tons (mmt) / 1,000 gal).

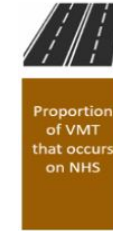


Table 3: 2022 Vehicle Miles Traveled (VMT)

Statewide VMT	National Highway System VMT
53,935,000,000	34,286,000,000

Calculation for 2022 Baseline Tailpipe CO₂ Emissions Million Metric Tons (MMT)

$$((2,383,076 * 0.00000810) + (787,608 * 0.00001019)) * (34,286,000,000 / 53,935,000,000) = 17.37 \text{ Million Metric Tons of Tailpipe CO}_2 \text{ Emissions}$$

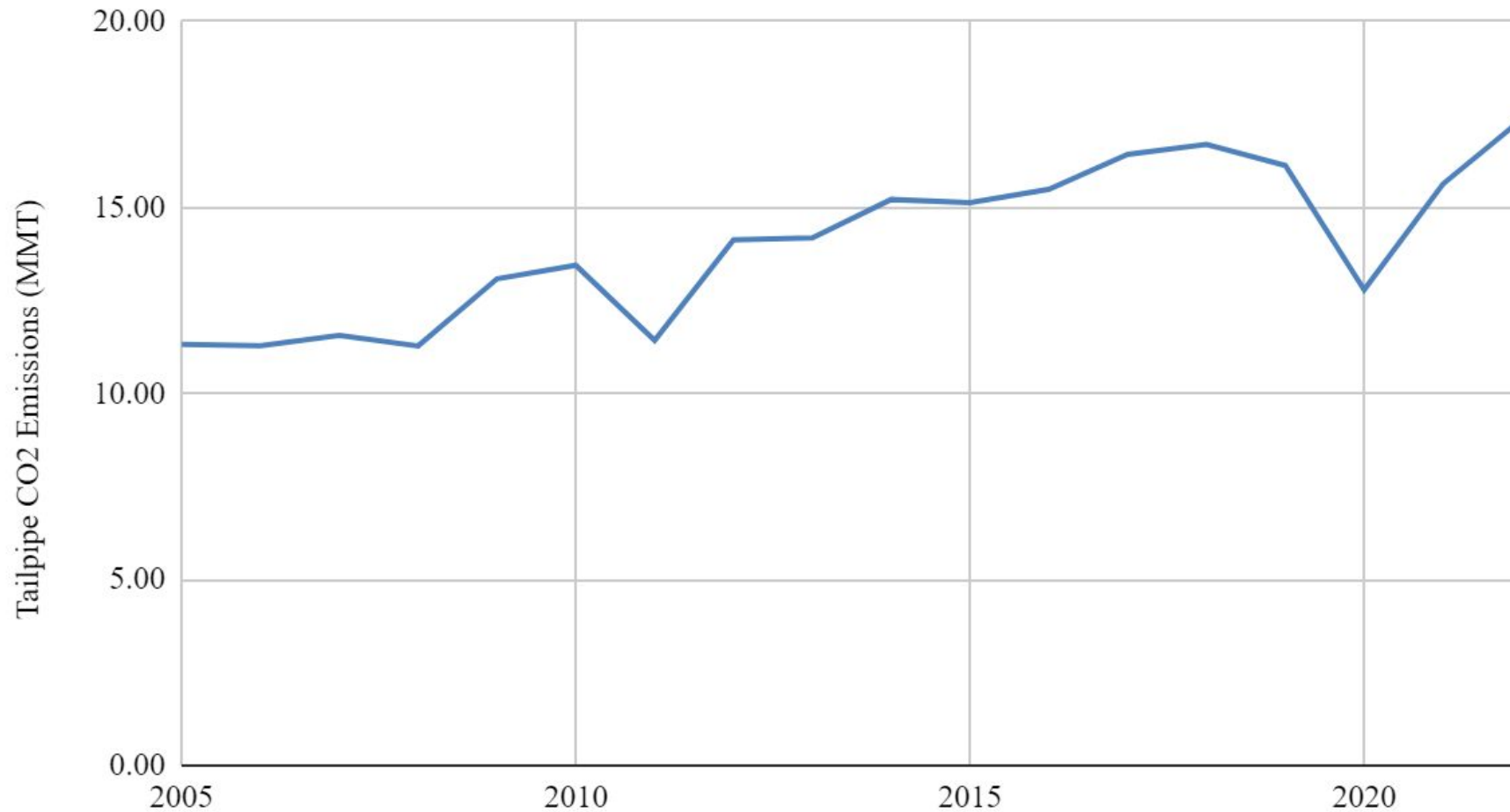


GHG Metric:
Tailpipe CO₂ emissions on the NHS (millions of metric tons, to nearest hundredth)



Tailpipe CO2 Emissions on NHS

Tailpipe CO2 Emissions (MMT) on NHS





Next Steps

- **March 29, 2024** - CDOT to establish and report 2025 target to FHWA
- **March to September** - CDOT/MPOs coordinate to establish MPO targets
- **September 25, 2024** - MPOs to establish target by resolution



Questions and Resources

- **Resources:**
 - [GHG Rulemaking Docket](#)
 - [GHG Final Rule](#)
 - [Greenhouse Gas Emissions Performance Measure Notice of Proposed Rulemaking \(NPRM\) - Webinar](#)
 - [GHG analysis tools and resources](#) - used to evaluate the impact of GHG reduction strategies and help set targets.
- **For questions or comments on this presentation, please contact:**

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ATTACH G

Transportation Advisory Committee

Meeting date: February 26, 2024

Agenda Item #: 9 (Attachment G)

2024 Rebuilding American Infrastructure with Sustainability and Equity Grant Requests

Agenda item type: Discussion

Summary

This item addresses regional coordination associated with 2024 Rebuilding American Infrastructure with Sustainability and Equity (RAISE) grant requests to be submitted by agencies within the DRCOG region.

Background

The U.S. Department of Transportation has published a [Notice of Funding Opportunity](#) for the Fiscal Year 2024 Rebuilding American Infrastructure with Sustainability and Equity (RAISE) grant program. Approximately \$1.5 billion is available. In 2023 alone, RAISE funding supported 162 projects in all 50 states, the District of Columbia, Puerto Rico, and the Northern Mariana Islands.

DRCOG staff requested that any project sponsor anticipating applying for a RAISE grant in the Denver region provide information to DRCOG for information and discussion, not approval, at the February 26 Transportation Advisory Committee meeting. An information form was distributed to all local governments and partner agencies on December 8, 2023 with a request to return information by 5:00 pm, February 15, 2024. In response, DRCOG received six submittals from six agencies.

RAISE grant applications are due to no later than **11:59 PM EST on February 28, 2024** through Grants.gov.

DRCOG staff reserves the right to not provide letters of support for any project that is not consistent with the 2050 Metro Vision Regional Transportation Plan.

Action by others

None

Previous discussion/action

None

Recommendation

None



Attachment

Submitted member government RAISE project informational forms

For more information

If you need additional information, please contact Jacob Riger, Manager, Multimodal Transportation Planning, at 303-480-6751 or jriger@drcog.org





2024 Rebuilding American Infrastructure with Sustainability and Equity (RAISE) Grant

Information about the RAISE Grant program is available [here](#).

DRCOG requests that all RAISE grant requests in the Denver region be submitted for Transportation Advisory Committee (TAC) review at the February 26, 2024 meeting for information and discussion – **not approval**.

If requested, DRCOG will provide letters of support for any project consistent with the 2050 Metro Vision Regional Transportation Plan.

Please submit this form to Cam Kennedy - ckennedy@drcog.org by 5:00pm MST on February 15, 2024.

Agency: City of Thornton

Contact: Daniel Schiltz

Project Name: 104th Ave (CO 44) Corridor Improvements

Project Type: Colorado Boulevard to west side of the Platte River Bridge

Project Description:

This project will provide funding to complete the Construction for the widening of 104th Avenue (SH-44) between Colorado Boulevard and west side of the Platte River Bridge.

- The typical section of the proposed corridor will include two general-purpose travel lanes in each direction, center turn lane / median and on-street bicycle lanes.
- The project will also construct shared use bicycle and pedestrian paths in suitable locations throughout the corridor.
- The project will mitigate both safety and environmental problem associated with an overly congested roadway corridor.
- The proposed project will decrease pollution and improve water quality in the South Platte River.

Total Project Cost: \$31,250,000 (approximate)

RAISE Grant Funding Request: \$25,000,000 (approximate)



2024 Rebuilding American Infrastructure with Sustainability and Equity (RAISE) Grant

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DRCOG requests that all RAISE grant requests in the Denver region be submitted for Transportation Advisory Committee (TAC) review at the February 26, 2024 meeting for information and discussion – **not approval**.

If requested, DRCOG will provide letters of support for any project consistent with the 2050 Metro Vision Regional Transportation Plan.

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Agency: City of Commerce City

Contact: Shawn Poe (spoe@c3gov.com)

Project Name: E. 88th Avenue: I-76 to Highway 2

Project Type: Capital Improvement

Project Description:

The RAISE Grant Funding requested would support a project that proposes to improve approximately 1.6 miles of E. 88th Avenue between I-76 and Highway 2. The purpose is to improve traffic conditions and accommodate current and future general vehicular traffic, heavy trucks, bicycles and pedestrians on E. 88th Avenue between I-76 and Highway 2.

The existing roadway has measured Average Daily Traffic of 20,500 vehicles which exceeds the design volume of approx. 18,000 for a two lane roadway. E. 88th Avenue is currently operating at an unacceptable lack of service due to insufficient travel lanes, narrow lanes, heavy truck traffic and lack of turning/acceleration/decelerations lanes.

The project improvements would include:

- Widening E. 88th Avenue from two to four lanes with appropriate turn lanes and medians.
- Upgrading the traffic signal at E. 88th Avenue and Rosemary Street and providing traffic signal interconnect of all traffic signals between I-76 and Highway 2.
- Construction of a new traffic signal at the entrance drive to the Mile High Flea Market to improve the safety of vehicles entering and exiting the site.
- Traffic signal operations improvements through utilization of advanced signal controller functions including Traffic Responsive programming.
- Implementation of Complete Streets components through construction of sidewalks along the roadway and installation of a multi-use path along the north side of E. 88th Avenue.

- Storm drainage improvements to address persistent roadway and neighborhood flooding issues.
- Implement the 60 inch storm sewer planned by Mile High Flood District (MHFD) for the Irondale Outfall Systems Plan Conceptual Design Report dated September 2011.
- Replace an aging bridge over the O'Brian Canal.

Total Project Cost: \$31,800,000

RAISE Grant Funding Request: \$21,000,000



2024 Rebuilding American Infrastructure with Sustainability and Equity (RAISE) Grant

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If requested, DRCOG will provide letters of support for any project consistent with the 2050 Metro Vision Regional Transportation Plan.

Please submit this form to Cam Kennedy - ckennedy@drcog.org by 5:00pm MST on February 15, 2024.

Agency: City of Castle Pines

Contact: Larry Nimmo, Public Works Director

Project Name: I-25 & Happy Canyon Interchange Improvements

Project Type: Bridge project

Project Description:

The Interstate 25 (I-25) & Happy Canyon Road Interchange Improvement Project (the Project) will replace the existing interchange with a proposed diverging diamond interchange (DDI) to improve numerous safety issues at the current interchange, nearby intersections, and adjacent interchanges (Figure 1). The existing interchange's configuration is a traditional diamond interchange with two-way, stop-controlled (TWSC) ramp termini that pose significant safety concerns, including left turns on and off the ramps, unbalanced crossroad traffic, and capacity overloads as the population continues to grow. The Project's proposed modern DDI design will improve infrastructure by significantly reducing conflicts and eliminating left-turn conflicts completely.

The Project will enhance throughput and promote greater access to the east and west corridors, facilitating development in southern Castle Pines. Without the construction of the proposed DDI, the interchange will be unable to accommodate future traffic volumes, and there will be no connection to planned developments on the eastern side of I-25. The Project enhances the current infrastructure to cater to and fulfill the diverse development potential in southern Castle Pines and unincorporated Douglas County, addressing the current deficiency in roadway accessibility. The Project will comprehensively cater to the needs of cyclists and pedestrians by incorporating separated facilities throughout the interchange. This approach aims to tackle existing safety concerns and enhance accessibility across I-25.

Total Project Cost: \$34,220,582

RAISE Grant Funding Request: \$8,000,000



2024 Rebuilding American Infrastructure with Sustainability and Equity (RAISE) Grant

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If requested, DRCOG will provide letters of support for any project consistent with the 2050 Metro Vision Regional Transportation Plan.

Please submit this form to Cam Kennedy - ckennedy@drcog.org by 5:00pm MST on February 15, 2024.

Agency: Adams County

Contact: Josh Sender

Project Name: US 85 / 120th Avenue / UPRR Grade Separation

Project Type: Interchange

Project Description:

The US 85/120th Avenue Grade-Separation and Interchange Project will alleviate numerous transportation, safety, and freight delivery challenges with one project. The project will eliminate two at-grade signalized intersections along the US 85 corridor. It will create a new grade-separation of the Union Pacific Railroad (UPRR) and 120th Avenue and a closure of 124th Avenue at US 85, thereby closing the 124th Avenue rail crossing. The new grade separation would include an interchange at US 85 and 120th Avenue. The US 85 corridor, including the adjacent railway, is the region's freight transportation backbone, carrying an estimated 30 to 40 million tons of freight per year, valued at \$40 to \$50 billion. For decades, this corridor has been critical to the safe, efficient transportation of agricultural products (vegetables, dairy, and beef), natural resources (oil and gas, sand, and gravel), and serves as a National Security Route.

Total Project Cost: \$142,100,000

RAISE Grant Funding Request: \$1,175,040



2024 Rebuilding American Infrastructure with Sustainability and Equity (RAISE) Grant

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If requested, DRCOG will provide letters of support for any project consistent with the 2050 Metro Vision Regional Transportation Plan.

Please submit this form to Cam Kennedy - ckennedy@drcog.org by 5:00pm MST on February 15, 2024.

Agency: City of Lafayette

Contact: Michelle Melonakis, Principal Transportation Engineer, 303-661-1280,
michelle.melonakis@lafayetteco.gov

Project Name: Project Type: CO 7 Multimodal Corridor from Lafayette to Boulder

Project Type: Multimodal Transportation Improvements

Project Description:

The CO 7 Coalition, along with CDOT and RTD, is planning multimodal transportation improvements to optimize regional connectivity and mobility between Brighton and Boulder. This project spans 24.7 Miles, including eight jurisdictions, and three counties, in this rapidly growing and increasingly congested part of the northwest region. Planned regional Bus Rapid Transit (BRT), a regional bikeway, pedestrian improvements, first and final mile connections, and future innovative transportation modes will result in improved safety, multimodal access, and faster and more reliable travel times. This CO 7 Coalition is identifying priority projects and developing preliminary design plans so as funding becomes available, improvements can be made along the corridor.

The first project proposed by the CO 7 TAC is the CO 7 Multimodal Corridor from Lafayette to Boulder. The project goal is to increase safety between vehicles and pedestrians, increase accessibility to pedestrian and bicycle facilities, decrease greenhouse gases, and connect area of Persistent Poverty and Historically Disadvantaged Communities to daily destinations. To achieve these goals, this project is proposing to install a multi-use path north of CO 7 between the intersection of CO 7 and 75th Street traveling east to the intersection at CO 7 and 95th Street. The project proposes to add an eastbound left turn lane onto Willow Creek Drive; add an eastbound left turn onto Park Lake Drive to minimize conflicts with slowing vehicles. The project is also looking at improvements at the 95th intersection, by adding a second left turn lane from North 95th Street heading west onto CO 7. Additional improvements include transit signal priority, queue jump lanes, and upgraded crossings to meet current ADA standards. Pedestrian crossings will be analyzed and provided at CO 7 and Dagny Way and at CO 7 and Forest Park Circle intersections, which are immediately east and west of 95th Street.

Total Project Cost: 42 Million Program Cost

RAISE Grant Funding Request: \$23 Million



2024 Rebuilding American Infrastructure with Sustainability and Equity (RAISE) Grant

Information about the RAISE Grant program is available [here](#).

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If requested, DRCOG will provide letters of support for any project consistent with the 2050 Metro Vision Regional Transportation Plan.

Please submit this form to Cam Kennedy - ckennedy@drcog.org by 5:00pm MST on February 15, 2024.

Agency: City and County of Denver

Contact: Jennifer Bartlett

Project Name: Reunited Denver

Project Type: Infrastructure/remediation

Project Description:

This project includes 4 elements in the the GES/National Western Center Campus area: The 48th Ave Greenway & Bettie Cram Bridge, The National Western Pedestrian Bridge, Remediation for the former DPA Bus Barn Site on Brighton Blvd and an improved rail crossing on the National Western Campus.

Each of these projects has been identified in area planning efforts and will improve connectivity and access for the neighborhoods

Total Project Cost: \$67M

RAISE Grant Funding Request: \$25M