

Denver Regional Council of Governments

FY 2020 and FY 2021

**UNIFIED PLANNING**

**WORK PROGRAM**

FOR THE DENVER REGION

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Adopted  
July 17, 2019



## ABSTRACT

TITLE: FY 2020 and FY 2021 Unified Planning Work Program for the Denver Region

AUTHOR: Denver Regional Council of Governments

SUBJECT: Joint transportation planning work program for the Denver Regional Council of Governments, Colorado Department of Transportation, and Regional Transportation District

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ABSTRACT: The Unified Planning Work Program describes and facilitates coordination of all urban transportation and transportation-related planning activities anticipated within the DRCOG Region for the 2-year period October 1, 2019 through September 30, 2021 (federal fiscal years 2020 and 2021)

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## I. INTRODUCTION

### **PURPOSE**

The Unified Planning Work Program (UPWP) describes the proposed multimodal transportation planning activities to be conducted in the Denver region during FY 2020 and FY 2021 (October 1, 2019 through September 30, 2021). The UPWP is administered by the Denver Regional Council of Governments (DRCOG) in accordance with the [Memorandum of Agreement](#) between DRCOG, the Colorado Department of Transportation (CDOT) and the Regional Transportation District (RTD). The Memorandum of Agreement coordinates transportation decision-making in the region. Additionally, the planning and decision making process is defined through a guiding document titled [Transportation Planning in the Denver Region](#).

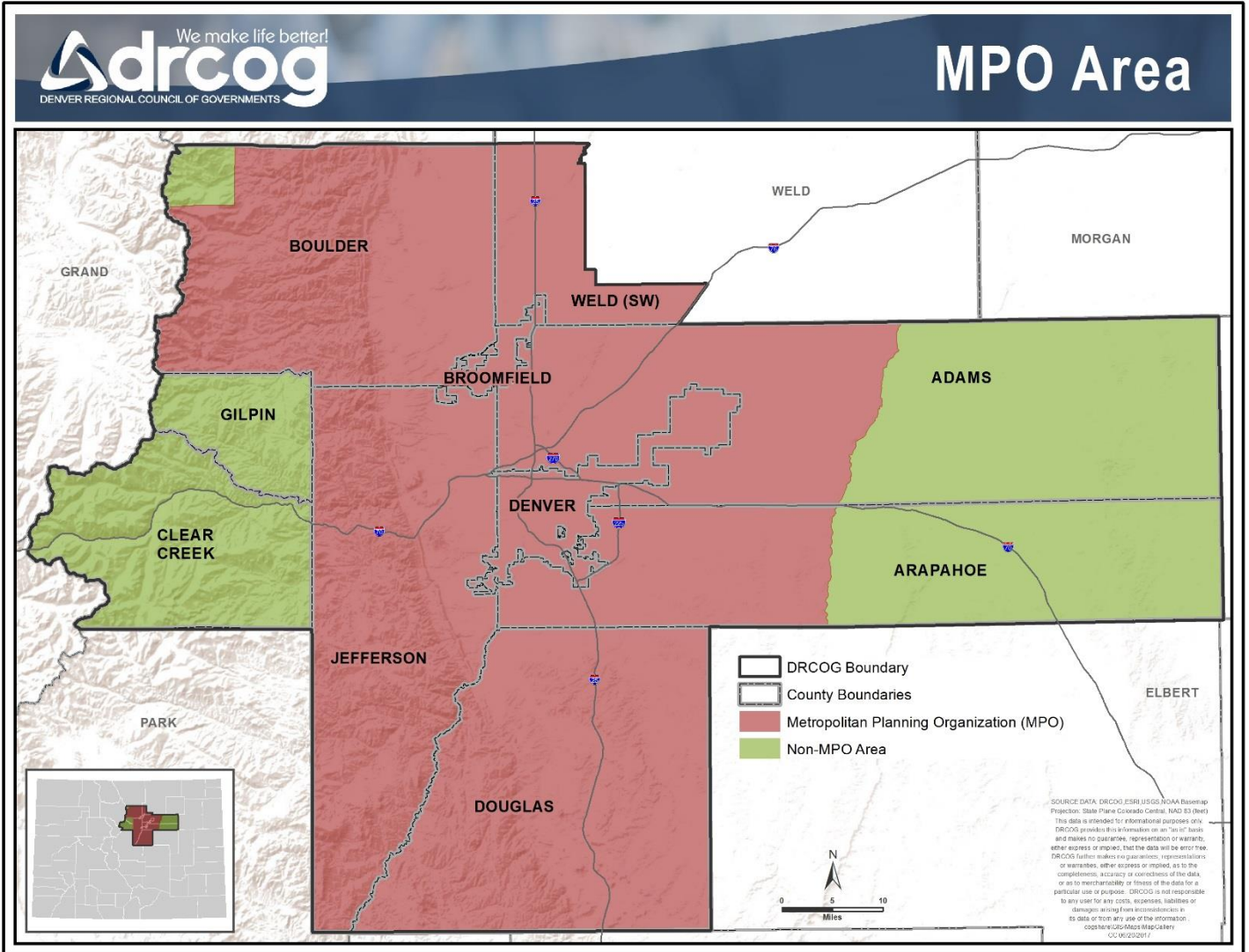
The UPWP is prepared biennially and serves as the basis by which Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) urban transportation planning funds are spent in the region. Additionally, the UPWP is the management tool for scheduling, budgeting and monitoring the planning activities of participating entities.

### **BACKGROUND**

The Denver Regional Council of Governments (DRCOG) is the designated Metropolitan Planning Organization (MPO) for the region's Transportation Management Area (TMA) (see Figure 1). DRCOG is the recipient of the federal urban transportation planning funds. As the designated MPO, DRCOG is responsible for facilitating the Urban Transportation Planning Process, and for coordinating the activities of the other participating agencies that carry out UPWP activities. DRCOG works with local governments, regional agencies, and the state to determine how the federal urban transportation planning funds will be spent.

DRCOG, CDOT and RTD signed a Memorandum of Agreement in May 2018 that coordinates transportation decision-making in this region. The Regional Transportation Committee (RTC) assists the DRCOG Board of Directors in carrying out the transportation planning process. These three agencies, working through the RTC, have approved and maintained a document titled [Transportation Planning in the Denver Region](#) that defines how the planning and decision making process works.

Figure 1. Transportation Management Area





## II. REGIONAL TRANSPORTATION PLANNING

The DRCOG Metro Vision Plan and companion Metro Vision Regional Transportation Plan (MVRTP) define the future growth, development, and transportation investment framework for the region. CDOT, RTD, and local governments implement many important projects and services that greatly impact how many people travel, where and how development occurs, and the quality of life in the Denver region.

### **GUIDELINES FOR PLANNING ACTIVITIES**

#### **Federal Transportation Planning Factors**

The Fixing America's Surface Transportation (FAST) Act was signed into law in December 2015. It carries forward the planning principles of its predecessor, Moving Ahead for Progress in the 21st Century Act (MAP-21), signed into law in 2012. MPOs are required to consider ten planning factors in the transportation planning process. Substantial work is anticipated during FY 2020-21 in consideration of these planning requirements. Below is a description of each planning factor and a summary of FY 2020-21 planning activities applicable to each.

- 1. Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency.**
  - Activity 2.2 – coordination of planning efforts with neighboring regions to address interregional issues and opportunities
  - Activity 3.1 – implement Metro Vision Plan, a shared vision of the metro area
  - Activity 3.3 – development of regional multimodal freight plan
  - Activity 3.3, 5.2, 6.5, 6.6, and 6.7 – promote the development of a multimodal transportation system
  - Activity 4.3 – monitor the progress status and results of TIP projects
  - Activity 5.1 and 5.3 – enhance the effectiveness of the region's existing transportation system
  - Activity 7.1 to 7.4 – maintain relevant data to better understand current and future travel patterns
  
- 2. Increase the safety of the transportation system for motorized and nonmotorized users.**
  - Activity 3.4 – develop strategies to improve safety of bicycle and pedestrian travelers
  - Activity 4.1 – continue to support safety as a factor in the evaluation of TIP projects
  - Activity 4.3 – monitor intermodal improvements in the DRCOG area
  - Activity 5.5 – maintain crash data; prepare safety analyses and encourage the development of appropriate mitigation strategies; participate in incident management related committees/events
  
- 3. Increase the security of the transportation system for motorized and nonmotorized users.**
  - Activity 2.2 – continue coordination with regional stakeholders

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- Activity 4.3 – monitor intermodal improvements in the DRCOG area
  - Activity 5.3 and 5.4 – promote the use of technology to enhance the security of roadway infrastructure
  - Activity 5.4 – coordinate with homeland security and emergency management related agencies and committee
  - Activity 7.1 and 7.4 – maintain an inventory of regional base maps and datasets
- 4. Increase the accessibility and mobility options available to people and for freight.**
- Activity 3.2 – support regional and local scenario analysis to study the impacts of alternative land use and development patterns
  - Activity 3.3 – development of regional multimodal freight plan
  - Activity 3.4 – develop a regional active transportation plan
  - Activity 2.6 – monitor the performance of the transportation system
  - Activity 5.1 and 5.3 – promote operational efficiencies of the existing roadway system
  - Activity 5.2 – continue travel demand management (TDM) activities
  - Activity 6.1 – update the Coordinated Public Transit-Human Services Plan
  - Activity 6.2 to 6.7 – continue to assess transit needs and promote transit options
- 5. Protect and enhance the environment, promote energy conservation, and improve quality of life, and promote consistency between transportation improvements and state and local planned growth and economic development patterns.**
- Activity 2.2 – coordinate with CDOT, RTD, and local governments with regard to transportation network improvements
  - Activity 2.4 – maintain contact with area citizens with a focus on receiving input to improve the transportation system and quality of life for the metro area
  - Activity 3.1 – implement Metro Vision Plan, a shared vision of the metro area; evaluate the social, environmental, land use, and economic impacts of transportation plans
  - Activity 3.3 – provide support to regional NEPA and other environmental efforts
  - Activity 2.3 – conduct air quality conformity determinations on transportation investments identified in the TIP and FC-RTP; continue to host Interagency Consultation Group (ICG) meetings
  - Activity 3.4 and 5.2 – promote non-motorized forms of transportation
  - Activity 6.2 to 6.7 – continue to assess transit needs and promote transit options
- 6. Enhance the integration and connectivity of the transportation system, across and between modes, and for people and freight.**
- Activity 2.2 – coordinate with CDOT, RTD, and local governments with regard to transportation network improvements
  - Activity 3.3 – maintain 2040 Metro Vision Regional Transportation Plan; development of regional multimodal freight plan
  - Activity 5.1 – continue a congestion management process that integrates transportation operations, travel demand management, and intelligent transportation systems (ITS) as mitigation tools
  - Activity 6.2 to 6.7 – continue to assess transit needs and promote transit options
  - Activity 7.1 and 7.4 – maintain an inventory of regional base maps and datasets

**7. Promote efficient system management and operation.**

- Activity 2.2 – coordinate with CDOT, RTD, and local governments with regard to transportation network improvements
- Activity 4.3 – monitor the progress and results of TIP projects
- Activity 2.6 – monitor the performance of the transportation system
- Activity 5.1 and 5.3 – promote operational efficiencies of the existing roadway system
- Activity 7.1 and 7.4 – maintain an inventory of regional base maps and datasets
- Activity 7.2 and 7.3 – analyze future travel demand

**8. Emphasize the preservation of the existing transportation system.**

- Activity 4.3 – monitor the progress and results of TIP projects
- Activity 5.1 – continue a congestion management process that integrates transportation operations, travel demand management, and intelligent transportation systems (ITS) as mitigation tools
- Activity 5.3 – enhance the effectiveness of the region's existing transportation system
- Activity 7.1 and 7.4 – maintain an inventory of regional base maps and datasets that provide information about transportation facility condition

**9. Improve resiliency and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation.**

- Activity 3.3 – provide support to regional NEPA and other environmental efforts
- Activity 5.1 – continue a congestion management process that integrates transportation operations, travel demand management, and intelligent transportation systems (ITS) as mitigation tools
- Activity 5.3 – enhance the effectiveness of the region's existing transportation system
- Activity 6.2 to 6.7 – continue to assess transit needs and promote transit options

**10. Enhance travel and tourism.**

- Activity 2.2 – coordination of planning efforts with neighboring regions to address interregional issues and opportunities
- Activity 3.4 – monitor efforts, provide assistance, and prepare products that support pedestrian and bicycle transportation activities
- Activity 5.3 – enhance the effectiveness of the region's existing transportation system
- Activity 6.1 – improve local and regional transit access and mobility through increased planning and coordination.

**Federal Planning Emphasis Areas**

Both FHWA and FTA require the metropolitan transportation planning process be responsive to federal planning emphasis areas, if any exist. Currently, there are none covering FY 2020-2021. If at any time during the fiscal years of this UPWP new planning emphasis areas are identified, they will be amended into this document.

## Planning Priorities

For the FY 2020-2021 UPWP, two of the most important planning priorities for the MPA are preparing the 2050 Metro Vision Regional Transportation Plan (2050 MVRTP) – a major update to the 2040 MVRTP – and completing the Regional Vision Zero Plan (RVZ Plan).

The 2050 MVRTP will focus on how the region’s multimodal transportation system can best implement Metro Vision, particularly what mix of projects and investment decisions will best achieve Metro Vision’s performance targets. The 2050 MVRTP will include specific tasks and activities addressing:

- Robust public and stakeholder engagement in accordance with DRCOG’s new Public Engagement Plan
- Updating the 2050 MVRTP’s Regional Roadway System to better address functional classification and street typologies
- Updating DRCOG’s Environmental Justice methodology and calculations
- 2050 land use forecasts
- Land use and multimodal transportation-based scenario planning analysis
- Focus model calibration/validation
- 2050 MVRTP financial plan, including revenues and expenditures to major projects, programs, and services
- Using scenario planning, performance-based planning, and other inputs to Identify fiscally constrained air quality regionally significant capacity projects
- Conducting air quality conformity analysis on the fiscally constrained plan
- Updating and/or incorporating multimodal components, including the Active Transportation Plan, Regional Multimodal Freight Plan, RVZ Plan (see below), and Coordinated Transit Plan
- Preparing and adopting the 2050 MVRTP

The Regional Vision Zero (RVZ) Action Plan will build off existing safety activities and support DRCOG’s commitment to improving the safety of the regional transportation system and hitting future safety targets. The RVZ Action Plan will include four main tasks:

- Define how Vision Zero will benefit the Denver region,
- Formation of a stakeholder committee, virtual engagement, and the development of strategies to implement on-going safety engagement and education,
- Conduct crash analysis to identify top contributing factors and the identification of the regional High Injury Network, and
- Development of goals, actionable strategies and a local member jurisdiction toolkit.

## Title VI Requirements

Transportation planning activities must be consistent with Title VI of the Civil Rights Act of 1964. DRCOG prepared a 2001 Title VI Status Report, which was provided to the Federal Transit Administration (FTA). In 2009, DRCOG updated the Disadvantaged Business Enterprise Program, originally prepared in 1999. In 2017, DRCOG completed new Title VI complaint procedures and a [Limited English Proficiency \(LEP\) Plan](#). In 2018, DRCOG adopted a [Title VI Implementation Plan](#). In 2016-2017, DRCOG also completed the “Status and Impacts of DRCOG Transportation Planning and Programming with

Environmental Justice” report. In addition, DRCOG continues to participate in the Colorado Unified Certification Program that was approved by USDOT in April 2004.

## **Federal Quadrennial Review Comments**

Every four years, the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) perform a review of the urban transportation process conducted by DRCOG, CDOT, and RTD. The last review was completed in 2016. Recommendations from that [review](#) are incorporated in this document, as appropriate. The next review will be completed in 2020.

## **Integrate the Congestion Management Program Process**

Traffic congestion has been recognized for its impacts on the region's economy, environment, quality of life, and public health. It can influence decisions on where to live or work and impact the price of goods and services. DRCOG works with local, state, and national partners, creating plans and programs that seek ways to alleviate congestion and help people and businesses avoid or adapt to traffic congestion.

## **Relationship to Air Quality Planning**

Outcomes, objectives, targets, and initiatives related to air quality are fully incorporated in the adopted Metro Vision Regional Transportation Plan (MVRTP). The MVRTP explicitly calls for the transportation system to minimize transportation's contribution to air pollution. The plan advocates the development of a rapid transit system, a supporting and supplemental bus system, and a robust system of bicycle and pedestrian facilities and services.

The planning process is responsive to federal clean air legislation. Clean Air Act (CAA) amendments were passed by Congress in November 1990, and require that the TIP and the RTP show conformity with state implementation plans (SIP) for air quality.

Air quality conformity has been demonstrated for the current 2018-2021 TIP and the 2040 Metro Vision Regional Transportation Plan.

In 2008, the U.S. Environmental Protection Agency (EPA) lowered the National Ambient Air Quality Standards (NAAQS) for ground-level ozone to 0.075 parts per million (ppm) from the 1997 standard of 0.085 ppm. On April 30, 2012, the EPA designated Denver Metro/North Front Range (DM/NFR) Area as marginal nonattainment under the 2008 ozone standard (0.075 ppm). The marginal nonattainment designation did not impose any new planning requirements on the State of Colorado. The Denver-North Front Range Area failed to meet the standard before 2015 and was reclassified as moderate nonattainment. As a result, an updated Ozone SIP was completed and submitted to the state legislature in early 2017, including lowered motor vehicle emission budgets. EPA found the new budgets adequate in March 2018.

In 2015, the EPA lowered the NAAQS for ground-level ozone again to 0.070 ppm. On June 4, 2018, EPA published a final rule designating DM/NFR Area as Marginal for the 2015 ozone NAAQS, effective August 3, 2018. A SIP has yet to be developed for the 2015 ozone NAAQS. Until new motor vehicle budgets are approved and become effective, the DM/NFR nonattainment area demonstrates conformity to the 2015 ozone NAAQS by meeting the approved Moderate SIP MVEB tests for the 2008 NAAQS (40 CFR

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93.109(c)(2)(i)). This conformity determination meets EPA's requirement to complete a new conformity determination within one year of the effective date of the Marginal nonattainment designation for the 2015 Ozone NAAQS.

The DM/NFR 8-hour Ozone Nonattainment Area for the 2008 ozone NAAQS covers the counties of: Adams, Arapahoe, Boulder, Broomfield, Denver, Douglas, Jefferson, and parts of Larimer and Weld Counties that have the highest concentration of emissions.

The regional transportation planning process has been organized to ensure communication and coordination between air quality and transportation agencies. The DRCOG transportation committee structure is defined in the MPO Memorandum of Agreement (MOA). The companion document, Transportation Planning in the Denver Region and an MOA between DRCOG and RAQC further define the positions on specific committees. The RAQC and APCD staffs are full participants in the air quality technical work of the planning program.

An [MOA](#) was signed by DRCOG, the North Front Range MPO (NFRMPO), RAQC, and APCD in 2015 that defines specific roles and responsibilities of DRCOG, NFRMPO, RAQC, the Air Quality Control Commission (AQCC), and APCD with respect to coordination of activities and technical responsibilities. DRCOG is responsible for preparing transportation data to be used for air quality modeling associated with conformity determinations. The APCD is responsible for conducting air quality modeling and mobile source emission calculations.

Since the 8-Hour Ozone conformity process involves three regional transportation planning agencies, a separate [MOA](#) addressing this process was signed in March 2008 by CDPHE, CDOT, RAQC, Upper Front Range TPR, NFRMPO, and DRCOG. This MOA outlines agency roles, methods for determining conformity, and procedures for compiling model results from the three planning regions.

## **STATUS OF DRCOG PLANNING DOCUMENTS**

The following table lists the most recent status (as of July 2019) of the Metro Vision Plan, the Regional Transportation Plan, Transportation Improvement Program, and other associated planning documents.

<b>Document</b>	<b>Action/Date</b>
<a href="#">Metro Vision Plan</a>	Amended May 2019
<a href="#">2040 Metro Vision Regional Transportation Plan</a>	Amended May 2019
<a href="#">2018-2021 Transportation Improvement Program</a>	Adopted April 2017
<a href="#">Metro Vision Growth and Development Supplement</a>	Adopted June 2012
<a href="#">Regional TDM Short Range Plan</a>	Adopted June 2012
<a href="#">Denver Regional Active Transportation Plan</a>	Adopted January 2019
<a href="#">Denver Regional Intelligent Transportation Systems Deployment Program</a>	Adopted June 2014
<a href="#">Status and Impacts of DRCOG Transportation Planning and Programming with Environmental Justice</a>	Approved June 2018
<a href="#">Title VI Implementation Plan</a>	Adopted June 2018
<a href="#">Public Engagement Plan</a>	Adopted May 2019

## **FY2018-2019 ACCOMPLISHMENTS**

Major activities completed in the 2018-2019 UPWP include:

### **Air Quality and Conformity**

- Monitored the State Air Quality Control Commission (AQCC) notices, documents, and hearings related to the state LEV and ZEV executive orders
- Coordinated with air quality partners on detailed conformity procedures and facilitated Interagency Consultation Group meetings
- Completed conformity determinations (*modeling and report*) for 2017 and 2018 Amended 2040 MVRTP and 2020-2023 TIP

## Public Engagement and Outreach

- Partnered with Academy for Lifelong Learning to design and host an adult learning course on regional trends, issues and planning efforts
- Hosted DRCOG's inaugural Citizens' Academy in fall 2018, including coordination with Transit Alliance, former manager of Academy, and curriculum development
- Hosted the spring 2019 Citizens' Academy, including application process and review of over 60 applicants
- Developed organizational plan for public engagement (*People-centered planning, projects and services*)
- Hosted 9 in-person and 3 virtual Idea Exchanges, including several in partnership with CU Denver (*Imagine a Great Region*)
- Adopted Title VI Implementation Plan for DRCOG and received concurrence.
- Completed the *Status and Impacts of DRCOG Transportation Planning and Programming with Environmental Justice* reports

## Local Government and Stakeholder Education, Outreach, and Support

- Held small Communities Hot Topic Forums (*2018 and 2019*)
- Partnered with the Urban Land Institute (ULI) to host the UrbanPlan for Public Officials workshop, the first offering of the workshop in Colorado

## Performance Measure Reporting

- Adopted all FAST Act-required transportation performance management (TPM) targets (known as PM-1, PM-2, and PM-3) and completed signed MOUs with affected stakeholders that address the process, roles, and coordination for setting and adopting TPM targets

## Metro Vision Plan

- Partnered with Denver Public Schools (DPS) to develop tools to better predict future school choices, connect school choices to residential choices, and improve travel model accuracy
- Conducted two Metro Vision amendment cycles and held two public hearings on DRCOG and sponsor-initiated amendments
- Completed Boomer Bond Assessments with Bennett, Broomfield and Thornton
- Served on the Interim Steering Committee of new Metro Denver Nature Alliance, including efforts to recruit and appoint first staff position (*Alliance Director*)
- Collaborated with MPOs around the country to develop and host the 2018 Livable Communities Forum (*New Orleans, April 2018*)
- Partnered with CU Denver to design and launch the university's Imagine a Great Region Initiative – an initiative to facilitate conversations and research about growth in the Denver metro area
- Collaborated with the Governor's Senior Advisor on Aging, AARP-Colorado and others to develop a statewide age-friendly initiative, along with Colorado's designation as an age-friendly state by AARP (*3<sup>rd</sup> state in nation to receive this designation*)



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- In partnership with AARP-Colorado, hosted Colorado Age-Friendly Communities Conference
- Completed first Metro Vision performance measure update using 2016 data and observations
- Sponsored four Technical Advisory Panels (TAPs) in partnership with ULI including corridor visioning and implementation strategies for Morrison Road (*Denver*)
- Created a more robust web presence for *Metro Vision*, including hosting performance measure reporting, community highlights, and publicizing upcoming events and opportunities
- Served on RTD's First- and Last-Mile Planning Partner Advisory Committee
- Recognized local and regional efforts as part of the 2018 and 2019 *Metro Vision* awards, including award solicitation and review and documentation of innovative activities for replication by other communities and stakeholders
- Provided numerous public, stakeholder and peer agency presentations throughout the reporting period (*i.e. Trust for America's Health, APA National Conference, and Indianapolis 2018 Leadership Exchange*)
- Engaged a cross-section of communities in efforts to explore small area scenario planning tools

### **Metro Vision Regional Transportation Plan**

- Administered 2017 amendments to the 2040 MVRTP (*adopted April 2018*)
- Administered 2018 amendments to the 2040 MVRTP (*adopted May 2019*)

### **Pedestrian and Bicycle Planning**

- **Bicycle Facility Inventory**
  - Coordinated the update of GIS inventory and mapping of bicycle facilities, including new schema development and migration, documentation and inventory mapping
- **TIP Bicycle and Pedestrian Projects**
  - Conducted annual requests for status updates on TIP-funded bicycle and pedestrian projects
- **Active Transportation Plan**
  - Prepared Active Transportation Plan (*adopted January 2019*)
  - Held 7 Active Transportation Stakeholder Committee meetings, engaging 64 participants from 35 agencies
  - Attended 5 local agency meetings, engaging 55 participants from 31 agencies
  - Conducted outreach at 10 Bike to Work Day stations resulting in 233 responses to an engagement activity and 412 responses to an online survey
  - Conducted statistically valid mail-out survey
- **Regional Bicycle Use Count Program**
  - Completed white paper on count implementation options
  - Developed recommendation for next steps, including ongoing short duration counts at TIP project locations, development of a data management plan and potential web-map/database to share count data with partners
  - Conducted short duration counts at selected TIP project sites

- **Micromobility Work Group**
  - Developed and refined work plan for the work group

## **Transportation Improvement Program (TIP)**

- **2018-2021 TIP**
  - Processed over 20 sets of amendments and administrative modifications to the TIP
  - Analyzed projects for delay and reported out to committees and Board
  - Completed annual listings of projects obligated in FY 2017 and FY 2018
- **Community Mobility Planning and Implementation Set-Aside (2018-2021 TIP)**
  - Developed set-aside concept and proposal
  - Held two listening sessions with stakeholders to receive feedback on proposal
- **Travel Demand Management (TDM) Set-Aside (2018-2021 TIP)**
  - Monitored previously selected TDM set-aside projects
  - Administered the FY 2018-2019 TDM set-aside project selection process and facilitated project review panel work
  - Worked with FHWA and CDOT to refine scopes
  - Board approval of the projects recommended for the 2018-2019 TDM set-aside
- **Station Area Master Plan/Urban Center (STAMP/UC) Set-Aside (2018-2021 TIP)**
  - Developed eligibility and evaluation criteria for FY 2019 Station Area Master Plan/Urban Center (STAMP/UC) set-aside
  - Held FY 2019 Station Area Master Plan/Urban Center (STAMP/UC) “call for studies”, including involvement of external review committee.
- **2020-2023 TIP**
  - Facilitated two TIP work groups to develop and adopt a policy for project selection in 2018
  - Started and worked with the eight county TIP subregional forums to develop rules, processes, and projects for both the regional and subregional calls for projects
  - Conducted both regional and subregional calls for projects
  - Adopted the TIP document in August 2019
- **Community Mobility Planning and Implementation Set-Aside (2020-2023 TIP)**
  - Developed description, priorities, eligibility and evaluation criteria for the Community Mobility Planning and Implementation Set-Aside
  - Finalized eligibility and selection process document through committee process
  - Issued two-step call for projects including Letter of Intent and Application phases
  - Facilitated internal project review project selection
  - Board approval of the projects recommended for the 2020-2021 CMPI set-aside
- **Human Service Transportation Set-Aside (2020-2023 TIP)**
  - DRCOG Board approved TIP Set Aside for Human Service Transportation (HST)

## **DRCOG Congestion Management Process**

- Completed 2017 Report on Traffic Congestion
- Completed 2016 Report on Traffic Congestion
- Updated traffic count inventory
- Completed updated INRIX-based congestion performance measures

## **Regional Travel Demand Management (TDM) Planning**

- Calculated air quality benefits for TDM set-aside infrastructure and non-infrastructure projects
- Participated in statewide discussion about CMAQ reporting and calculation best practices

## **Regional Transportation Operations**

- Facilitated implementation of projects selected in the 2017 RTO Improvement Program call for projects
- Completed update and maintenance of Regional ITS Architecture
- Participated on several new mobility and technology initiatives, including the Mobility Choice Blueprint
- Participated and assisted with local, regional, state, and federal Transportation Incident Management efforts

## **Transportation Security Planning**

- Conducted extensive dialogue and coordination with local, regional, state, and federal partners regarding operations, security, and new technologies

## **Regional Transit/Human Service Transportation Planning/Coordination**

- Initiated development of “trip exchange” for human service transportation through VTCLI grant
- Included HST with FTA 5310 in joint call for projects with CDOT
- Continued to provide technical assistance for corridor studies including SH-119 BRT NEPA
- DRCOG Board approved regional Transit Asset Management (TAM) targets
- Agreement of TAM Memorandum of Understanding (MOU) amongst DRCOG, RTD, and CDOT

## **Develop and Maintain Information Systems**

- Worked with partners from other MPOs to create the AMPO GIS Working Group. The effort will build MPO capacities and advance the state of practice for GIS capabilities within MPOs, including integration of emerging technologies and utilization of new data streams (*i.e. shared mobility*)
- Launched an updated version of the Signal Timing Briefs webmap (see <http://gis.drcog.org/signaltimingbriefs>)
- Completed the 2016 Planimetric Project (*occurred in 2018; vintage of the data is 2016*)
- Completed the 2018 Denver Regional Aerial Photography Project (DRAPP)
- Published new and updated data to the Regional Data Catalog

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- Hosted Denver Regional Data Consortium (DRDC) meetings
- Optimized the processing of crash data, including changing schema and finding a new geocoding method
- Changed the schema for the bike facilities data to conform to AASHTO standards
- Engaged local governments in Census 2020 planning and submitted data for the LUCA and PSAP programs
- Migrated the traffic operations database to increase usability
- Provided data for 2020-2023 TIP applicants
- Developed and tested new methodology for creating EJ zones
- Updated webmaps and DRVR visualizations
- Completed annual data collection in support of regional data set creation

### **Develop and Maintain Land Use Modeling and Forecasting**

- Developed new UrbanSim base year, reflecting the 2015 status of buildings, jobs, and parcels in the region
- Developed macro-economic model to produce 2040 and 2050 employment projections (2050 without labor force for model testing)
- Developed socioeconomic forecasts for RTP conformity modeling cycles
- Created and took measurements from regional datasets for Metro Vision Performance Measure Analysis

### **Transportation Modeling and Forecasting**

- Developed UrbanSim socioeconomic forecasts for two RTP amendment conformity modeling cycles
- Conducted outreach efforts with local governments to improve socioeconomic forecasts
- Conducted travel model runs to create inputs for two air quality determination cycles
- Completed Focus 2.1 and Focus 2.2 travel model recalibration and validation efforts that significantly improved the model results for all modes of travel
- Provided the travel model, specific output results, and assistance to partner agencies and consultants for use in over a dozen major corridor and interchange studies
- Completed the Commercial Vehicle Survey as the final element of the Front Range Travel Counts project

### III. THE PLANNING PROGRAM FOR FISCAL YEARS 2020 AND 2021

#### **PROGRAM ORGANIZATION**

The UPWP lists proposed transportation and transportation-related planning objectives and activities in the Denver region from October 1, 2019 through September 30, 2021.

The activities (ongoing tasks and specific deliverables) are organized to reflect the following key objectives associated with the implementation of the region's transportation planning process:

- **Objective 1.0 Program Administration** – Coordinate activities between Metropolitan Planning Organization (MPO) participating agencies to address transportation and development issues of the region.
- **Objective 2.0 Planning Coordination and Outreach** – Increase participation and support of the public in the planning process to achieve projects that are consistent with Metro Vision goals and policies.
- **Objective 3.0 Long Range Planning** – Implement and refine Metro Vision to enhance and improve the quality of life in the DRCOG region.
- **Objective 4.0 Project Programming** – Identify and implement priorities within the metropolitan area. The transportation improvement program is the primary tool used to advance the goals of the regional transportation plan.
- **Objective 5.0 Transportation Operations** – Emphasize mitigation strategies that improve the safety and effectiveness of the existing transportation system.
- **Objective 6.0 Public Transportation Planning** – Plan and operate rapid transit corridors, the regional bus network, and transit facilities.
- **Objective 7.0 Support Systems for Planning** – Acquire and maintain critical data and tools for planning activities.

Other major planning activities are presented in Chapter V and organized in three groups:

- **Planning for projects identified in the Transportation Improvement Program** – The implementation of major projects requires planning studies, environmental assessments, and design activities. One or more of the implementation steps for the projects listed in this section have been funded with federal and state funds and are derived from the Regional Transportation Plan (RTP).
- **Activities identified in the CDOT State Planning and Research Program** – The Colorado Department of Transportation (CDOT) prepares a document similar to the UPWP for its planning activities. A number of these activities affect this region and are so listed.
- **Non-federally funded and local government planning activities** – The Regional Transportation District (RTD) and local governments conduct various plans and prepare project environmental documents. Significant transportation planning and project development activities are listed in this section.

**PROGRAM FINANCING & DELIVERABLES**

Revenues available to carry out the region's transportation planning activities contained within this UPWP are shown in Appendix A.

- Table 1 displays total funding by specific revenue source.
- Table 2 shows total anticipated expenditures distributed to each major objective and the activities within each objective.
- Table 3 in Appendix B shows key deliverables and expected completion dates for each activity.

## IV. FEDERAL URBAN TRANSPORTATION PLANNING PROGRAM ACTIVITY DESCRIPTIONS

*DRCOG may acquire consultant services in completing planning activities in this UPWP.*

### **OBJECTIVE 1.0 PROGRAM ADMINISTRATION AND COORDINATION**

#### **Activity 1.1 Direct Program Management**

**Purpose:** Provide effective administration of the DRCOG transportation planning process including management of DRCOG planning staff and grants.

**Tasks:**

- Supervise DRCOG personnel assigned MPO planning work. Monitor staff work on the UPWP and evaluate progress
- Implement internal strategic management and performance measurement system
- Prepare and maintain adequate records of correspondence, purchasing, and contracts
- Routine personnel, office, and administrative activities

**Participants:** DRCOG

#### **Activity 1.2 DRCOG Staff Training and Development**

**Purpose:** Provide DRCOG staff with the necessary training and development to perform their jobs efficiently and effectively.

**Tasks:**

- Provide training in-house and offsite for DRCOG staff
- Attend webinars
- Attend in-state and out-of-state conferences

**Participants:** DRCOG

#### **Activity 1.3 Unified Planning Work Program**

**Purpose:** Develop and maintain the Unified Planning Work Program in compliance with applicable federal laws.

**Tasks:**

- Manage and administer the FY2020-2021 Unified Planning Work Program

**Deliverables:**

2020

- FY 2019 UPWP end-of-year report
- FY 2020 UPWP mid-year report

2021

- FY 2020 UPWP end-of-year report
- FY 2021 UPWP mid-year report
- FY 2022-FY 2023 UPWP

**Participants:** DRCOG (lead), CDOT, RTD, and local governments

## **OBJECTIVE 2.0 PLANNING COORDINATION AND OUTREACH**

### **Activity 2.1 MPO Compliance**

**Purpose:** Ensure the metropolitan transportation planning process is conducted in compliance with applicable federal and state laws.

**Tasks:**

- Support and participate in DRCOG's transportation policy, planning, and programming committees with agendas, meeting logistics, maintenance of membership, and miscellaneous communications
- Facilitate the planning and implementation of transportation projects and services, while strengthening the working relationships among the MPO partner agencies
- Host the Agency Coordination Team (ACT) and Interagency Consultation Group (ICG), and participate in CDOT and RTD quarterly meetings in order to facilitate communication among planning partners
- Incorporate guidance of state and federal agencies on the regional transportation planning process
- Participate on procedural efforts such as the definition of the functional highway classification system, national highway system, and planning boundaries
- Address items that were contained within the 2016 joint FHWA and FTA Quadrennial Review of the MPO Planning Process
- Participate on joint FHWA and FTA Quadrennial Review of the MPO Planning Process

**Deliverables:**

2020

- Metropolitan Planning Agreement between DRCOG, CDOT, and RTD

**Participants:** DRCOG (lead), CDOT, RTD, APCD, RAQC

### **Activity 2.2 Public Engagement and Outreach**

**Purpose:** Inform stakeholders and the general public about DRCOG's plan and program development and implementation processes, and to provide an opportunity for them to participate in planning and policy decisions by conveying their opinions to DRCOG staff and Board members.

**Tasks:**

- Conduct public forums, community meetings, and workshops regarding major planning products identified in the UPWP
- Hold public hearings and facilitate public comment periods associated with MVRTP and Metro Vision Plan amendments, FasTracks reviews, new TIPs, and other topics; monitor and compile comments and input received
- Inform the public of adopted documents, program amendments, and opportunities to offer comments via DRCOG's website
- Hold the Citizens' Academy, a program to educate participants about regional issues and empower them to participate in civic decision-making
- Give presentations to community, advocacy, and other interest groups, as requested
- Create and maintain various DRCOG web pages and other communications materials



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- Continue to research, integrate and implement interactive internet-based technologies and other methods to support the public participation process, as necessary and appropriate
- Maintain and update DRCOG's plans and documents addressing public involvement, environmental justice, and Title VI/Limited English proficiency
- Implement engagement and outreach strategies identified in the updated Public Engagement Plan
- Evaluate the effectiveness of public engagement efforts
- As requested, conduct DRCOG-led short courses on Metro Vision and the transportation planning process

### **Deliverables:**

2020

- Summaries of public meetings, hearings, and workshops

2021

- Summaries of public meetings, hearings, and workshops

**Participants:** DRCOG (lead), CDOT, RTD, and local governments

### **Activity 2.3 Local Government and Stakeholder Education, Outreach, and Support**

**Purpose:** Provide education, outreach, and support to local governments and other stakeholders.

### **Tasks:**

- Educate local governments and other interested parties about the DRCOG transportation planning process, federal regulations, and associated documents
- Meet with local governments about their transportation planning issues and needs
- Meet with local governments, and their planning and development partners, about local planned growth and development patterns
- Provide support for communities as they prepare transportation and other plans and studies, including reviewing consultant scopes of service, ensuring final plan consistency with Metro Vision and the MVRTP
- Develop and distribute data, web maps, and informational products at the local and regional level (e.g., Community Profiles, Legislative Profiles)
- Facilitate forums for data professionals in the region to collaborate on GIS data and information (e.g., Denver Regional Data Consortium)
- Develop and distribute factsheets, reports, white papers, brochures, and other collateral materials needed to communicate critical regional issues to the Board, regional stakeholders, and the public
- Work collaboratively across jurisdictions, agencies, and organizations to conduct stakeholder outreach and engagement processes to better inform and involve communities in planning and decisions that impact them
- Facilitate/host transportation-related webinars and other educational events

**Participants:** DRCOG (lead), CDOT, RTD, and local governments

## **Activity 2.4 Interregional, Regional, and Corridor Planning Coordination**

**Purpose:** Maintain the working relationship and coordination of planning efforts between DRCOG and its local governments, planning partners, and neighboring transportation agencies to address transportation issues and opportunities.

### **Tasks:**

- Maintain communication and exchange information with other regional stakeholders, including neighboring counties and the state on transportation, land use, and economic development issues
- Coordinate with neighboring counties, MPOs, and TPRs on planning for transportation facilities and services adjacent to mutual border; attend Statewide MPO Committee meetings; coordinate with neighboring MPOs on growth and development forecasting
- Monitor, participate, and assist with statewide or interregional transportation planning activities, corridor studies, NEPA studies, PELs, and funding opportunities
- Provide model components and outputs to planning partners, local governments, or consultants conducting NEPA or other studies
- Participate and provide technical support in regional NEPA/environmental and Planning and Environment Linkages (PEL) efforts and/or similar regional and corridor planning efforts, as necessary. Implement or incorporate outcomes into planning documents as appropriate
- Participate in and/or monitor the state transportation-related enterprises and committees including: High-Performance Transportation Enterprise, Statewide Bridge Enterprise, CDOT Transit and Rail Advisory Committee, CDOT Efficiency and Accountability Committee, the State Transportation Advisory Committee (STAC), and others as appropriate
- Participate as one of the partner agencies on the Mobility Choice Blueprint project analyzing how future travel trends and technologies will impact mobility in the region
- Participate in regional transportation funding initiative

**Participants:** DRCOG (lead), CDOT, RTD

## **Activity 2.5 FAST Act Performance Measure Reporting**

**Purpose:** Update, compile, and report on regional performance measures related to regional transportation planning processes.

### **Tasks:**

- Compile data associated with various regional performance measures
- Work with CDOT, RTD, FHWA, and FTA to set targets and develop baselines for each FAST Act-required performance-based planning measure
- Prepare performance measure reports, and/or assisting CDOT with preparing performance measure reports, for FAST Act performance measures
- Maintain performance tracking reports on TIP-funded projects
- Prepare/update CMAQ performance plan of TIP-funded projects

### **Deliverables:**

2020

- FAST Act-required performance targets

2021

- FAST Act-required performance targets
- Fast Act performance measures report

**Participants:** DRCOG (lead), CDOT, RTD

### **Activity 2.6 Air Quality and Conformity**

**Purpose:** Complete air quality conformity determinations associated with transportation facilities identified in the TIP and the 2040 FC-RTP (a finding of conformity is a federal requirement and a prerequisite to the adoption or amendment of the TIP or RTP).

**Tasks:**

- Monitor federal and state legislation regarding new standards, requirements, or procedures impacting transportation. Assist air quality agencies (i.e., APCD, RAQC), as needed
- Monitor the readings and trends of criteria pollutants in relation to established attainment standards
- Host the Interagency Consultation Group (ICG) in order to facilitate better communication among planning partners and make air quality process decisions
- Collect annual Regulation 16 Street Sanding and Sweeping reports and prepare a summary (RAQC)
- Prepare highway and transit networks (DRCOG), update planning assumptions, perform air quality conformity model runs (DRCOG and APCD), and review highway networks (CDOT) and transit networks (RTD) associated with amendments of the 2040 MVRTP
- Provide travel model data results in support of air quality conformity analyses
- Prepare air quality conformity findings (DRCOG) and assess findings (APCD and AQCC) associated with amendments to the MVRTP
- Participate in the development of the new ozone State Implementation Plan (SIP)
- Continue with activities associated with the Regional Haze SIP
- Assist with local analyses of emissions, greenhouse gases, and other air quality topics

**Deliverables:**

2020 and 2021

- Annual Conformity Determination Reports

**Participants:** DRCOG (lead), APCD, RAQC, AQCC, RTD, CDOT

**OBJECTIVE 3.0 LONG RANGE PLANNING**

**Activity 3.1 Metro Vision Plan – Collaboration and Implementation Assistance**

**Purpose:** Work with local and regional partners to continuously evaluate and implement Metro Vision.

**Tasks:**

- Collect, compile, and purchase data in support of Metro Vision collaboration and implementation activities
- Develop and provide decision-support tools to local jurisdictions, regional partners, and the public
- Provide individualized technical assistance to communities for the purposes of implementing Metro Vision
- Work with local governments and other stakeholders to form issue- and/or geography-based cohorts to identify and pilot initiatives affecting growth, development, economic vitality, and quality of life.
- Participate on steering committees, advisory groups, leadership teams, etc. for aligned organizations and initiatives; participate in regional partnerships that advance Metro Vision outcomes and objectives
- Sponsor events, organize workshops, and collaborate with organizations that are working to support Metro Vision outcomes (e.g. Metro Vision Idea Exchanges)
- Coordinate with local governments on member-sponsored plan amendments (e.g., new urban centers, other policy amendments)
- Develop Metro Vision plan amendments that ensure consistency between 2050 Metro Vision Regional Transportation Plan and Metro Vision (e.g. new/revised measures, targets and initiatives)
- Collaborate with communities using DRCOG’s Boomer Bond assessment tool to help address impacts of region’s rapidly increasing aging population
- Work with local governments to develop programs, data partnerships, initiatives that improve the coordinated efforts to identify and designate areas for new urban development or other locally designated priority areas for population and employment growth
- Prepare Regional Complete Streets Toolkit that provides best practices for context-sensitive local street designs that support multi-modal access
- Facilitate the review, evaluation and process to update intergovernmental agreement(s) designed to assist local governments in their efforts to individually and collectively plan for, and address, regional growth

**Deliverables:**

2020

- Regional Complete Streets Toolkit
- Amendments (if any) to Metro Vision

2021

- Amendments to Metro Vision to reflect new horizon year of MVRTP and any other adjustments to ensure consistency

**Participants:** DRCOG (lead), local governments, CDOT, RTD

## Activity 3.2 Metro Vision Plan – Research and Performance Management

**Purpose:** Research and share data and information that may illustrate progress toward plan outcomes.

**Tasks:**

- Routinely analyze progress on Metro Vision outcomes, including documentation of successes and ongoing challenges
- Provide data, tools, case studies, and information that support and document local and region initiatives that contribute to Metro Vision outcomes and objectives (e.g. connecting people to open space, preparing for and minimizing the impact of natural disasters, increasing access to opportunity, and diversifying the region’s housing stock, etc.)
- Collect, compile, and purchase data in support of Metro Vision performance measurement
- Develop and maintain tools and applications that enable data exchange among local jurisdictions, regional partners, and DRCOG
- Develop, maintain, and update the Denver Regional Visual Resources (DRVR) that allow internal and external users to explore and consume information
- Survey local governments, the public, and other stakeholders to understand local and regional planning challenges, opportunities, and needs
- Work with local governments, the public, and other stakeholders to understand the need for data, tools and other enhancements that improve the ability to explore, consume and contribute to regional data products
- Develop and provide information on key economic trends influencing the region’s forecasted growth
- Support regional and local scenario analysis, including impacts of alternative land use and development patterns

**Deliverables:**

2020

- Populate metrovision.drcog.org with research (e.g. Metro Vision performance measure reporting, infographics, community highlights, external resources, etc.)
- Metro Vision 2020 retrospective
- Perspectives on Transit scoping and approach alternatives
- Regional research briefings

2021

- Populate metrovision.drcog.org with research (e.g. Metro Vision performance measure reporting, infographics, community highlights, external resources, etc.)
- Perspectives on Transit (3<sup>rd</sup> version of longitudinal survey, also referred to “Who is TOD?”)
- Regional research briefings

**Participants:** DRCOG (lead), local governments, CDOT, RTD, DOLA

### **Activity 3.3 Metro Vision Regional Transportation Plan**

**Purpose:** Maintain the 2040 Metro Vision Regional Transportation Plan (2040 MVRTP), and prepare and adopt the 2050 MVRTP.

#### **Tasks:**

- Solicit and process (if needed) amendments to the 2040 MVRTP annually or as needed; assist local governments and other project sponsors with plan amendment questions and procedures
- Prepare and implement a proactive and robust public and stakeholder engagement plan and process for the 2050 MVRTP
- Prepare 2050 land use/socioeconomic forecasts
- Work with local governments, CDOT, RTD, and other stakeholders to update the Metro Vision transportation system, including the Regional Roadway System and unfunded/vision projects
- Conduct scenario planning analyses to test land use/urban form and multimodal transportation investment priorities
- Collaborate with CDOT, RTD, and other stakeholders to finalize a common set of revenue assumptions, project costs, and other information needed to prepare the 2050 MVRTP financial plan
- Define expenditures and allocate revenues and expenditures to projects and project categories
- Identify fiscally constrained regionally significant roadway, interchange, and rapid transit capacity projects
- Provide travel model data results in support of 2040 Metro Vision Regional Transportation Plan (MVRTP) amendments and the 2050 MVRTP
- Complete travel model and air quality conformity modeling analyses for the draft fiscally constrained network
- Prepare the 2050 MVRTP document to address all federal requirements and document the planning process and recommended plan
- Conduct a public hearing and adopt the 2050 MVRTP
- Complete the DRCOG Regional Multimodal Freight Plan derived from CDOT's Statewide Multimodal Freight Plan
- Incorporate the DRCOG Regional Multimodal Freight Plan and Active Transportation Plan into the 2050 MVRTP
- Participate in the National Highway Freight Program project selection process and designate Critical Urban Freight Corridors (as needed) based on project selection
- Participate in Freight Advisory Council meetings

#### **Deliverables:**

2020

- Amendments (if any) to the 2040 MVRTP
- DRCOG Regional Multimodal Freight Plan
- New baseline dataset for UrbanSim Block Model
- Baseline small area forecasts of population, households, and employment to 2050
- Land use scenario analysis in support of 2050 MVRTP

2021

- Complete and adopt the 2050 MVRTP

**Participants:** DRCOG (lead), CDOT, RTD, local governments, and other stakeholders and partner agencies

### **Activity 3.4 Pedestrian and Bicycle Planning**

**Purpose:** Monitor efforts, provide assistance and prepare products that support pedestrian and bicycle transportation activities.

**Tasks:**

- Monitor progress on TIP-funded and other bicycle and pedestrian projects
- Maintain facility inventory and mapping products for bicycle facilities in the Denver region. Monitor new sources, methodologies and applications for providing information
- Collect regional bicycle facility counts
- Develop resources and training to share bicycle facility inventory schema with regional partners
- Continue regional active transportation meetings/summits to facilitate communication and provide educational opportunities
- Convene regional Micromobility Work Group to discuss opportunities to identify shared regional approach to micromobility services and operations
- Respond to requests for assistance regarding local pedestrian and bicycle planning topics and projects
- Monitor, evaluate procedures, and compile bicycle use counts conducted by CDOT and local governments across the region
- Participate in CDOT's annual Safe Routes to School program development and project selection process, as requested
- Maintain a performance tracking report on TIP-funded bicycle and pedestrian projects

**Deliverables:**

2020

- Regional bicycle count data management plan
- Regional bicycle facility counts
- Develop regional micromobility framework and procedures

2021

- Conduct regional bicycle facility counts
- Implement regional micromobility framework and procedures

**Participants:** DRCOG (lead), RTD, CDOT, local governments

## **OBJECTIVE 4.0 PROJECT PROGRAMMING**

### **Activity 4.1 Prepare Transportation Improvement Program**

**Purpose:** Prepare the Transportation Improvement Program (TIP) by identifying projects to be funded with federal resources and other regionally significant projects.

**Tasks:**

- Prepare an assessment of the 2020-2023 dual model TIP process
- Work with project sponsors, CDOT, and RTD to rollover all appropriate 2020-2023 TIP projects and funding to a new 2022-2025 TIP document
- Prepare a 2022-2025 TIP document for committee review and Board adoption in Summer 2021

**Deliverables:**

2020

- 2020-2023 dual model TIP process assessment

2021

- Adopt 2022-2025 TIP document

**Participants:** DRCOG (lead), RTD, CDOT, local governments

### **Activity 4.2 Transportation Improvement Program Set-Asides Selections**

**Purpose:** Set policy, select projects, and maintain and monitor the Transportation Improvement Program (TIP) Set-Asides to be funded with federal resources.

**Tasks:**

- Set call for project procedures for each set-aside
- Conduct appropriate calls once procedures are adopted by the DRCOG Board
- Ensure selected projects are incorporated into the adopted TIP

**Deliverables:**

2020

- Adopt policies, procedures, and projects for the TDM non-infrastructure and Regional Transportation Operations and Technology Set-Asides

2021

- Adopt policies, procedures, and projects for the TDM non-infrastructure, Regional Transportation Operations and Technology, Community Mobility Planning Implementation, and Human Services Transportation Set-Asides

**Participants:** DRCOG (lead), RTD, CDOT, local governments

### **Activity 4.3 Transportation Improvement Program Management**

**Purpose:** Maintain and monitor the Transportation Improvement Program (TIP) by identifying projects to be funded with federal resources and other regionally significant projects.

**Tasks:**

- Prepare amendments and monthly administrative modifications to the 2020-2023 TIP and the subsequent 2022-2025 TIP, and maintain an amended version of the



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TIP document on DRCOG's website and in the Transportation Regional Improvement Projects and Survey (TRIPS) database, as necessary

- Conduct appropriate project programming activities when additional revenues are made available or decreased
- Provide financial and project coordination assistance to implementing agencies and project sponsors
- Conduct activities with CDOT and local governments to continuously refine the IGA and contracting processes
- Monitor the progress status and results of TIP projects
- Develop, maintain, and update the TRIPS project database and TIP web map

### **Deliverables:**

2020

- FY 2019 Projects Delayed Report
- FY 2019 Annual Listing of Obligated Projects

2021

- FY 2020 Projects Delayed Report
- FY 2020 Annual Listing of Obligated Projects

**Participants:** DRCOG (lead), RTD, CDOT, local governments

## **OBJECTIVE 5.0 TRANSPORTATION OPERATIONS**

### **Activity 5.1 DRCOG Congestion Management Process**

**Purpose:** Administer the region’s multimodal and multi-approach congestion management process through the DRCOG Congestion Mitigation Program that includes transportation operations, travel demand management (TDM), and intelligent transportation systems (ITS).

**Tasks:**

- Update the Congestion Mitigation Program (CMP) databases annually
- Update formulas and factors for delay calculations, as needed. Evaluate new data sources and methodologies (e.g., INRIX, HERE, StreetLight)
- Prepare public information and outreach documents and presentations, including summaries of CMP data
- Maintain and update CMP pages on the DRCOG website
- Monitor federal (FAST Act) and statewide congestion measure rules, measures, targets, and procedures. Compile required calculations as needed
- Maintain performance tracking report on TIP-funded roadway projects
- Review CMP per recommendation of 2016 Federal Planning Certification Review

**Deliverables:**

2020

- CMP Project Tracking Report summarizing status and results of congestion mitigation projects funded in the TIP and completed by FY 2018
- Annual Report of Traffic Congestion in the Denver Region

2021

- Annual Report of Traffic Congestion in the Denver Region

**Participants:** DRCOG (lead), CDOT, RTD, TMOs, public highway authorities

### **Activity 5.2 Regional Travel Demand Management (TDM) Planning**

**Purpose:** Facilitate and monitor the provision of travel demand management services and projects consistent with the MVRTP.

**Tasks:**

- Monitor progress and results of projects funded through the TIP Regional TDM Set-Aside, including activities of the Regional TDM Program
- Monitor new types of TDM activities and techniques
- Monitor and assist with “last-mile” studies and analyses associated with various transit stations
- Coordinate TDM project benefit calculation methodology and training with regional and statewide partners

**Deliverables:**

2020

- Evaluate results of past TDM set-aside and TDM services projects

2021

- Evaluate results of past TDM set-aside and TDM services projects

**Participants:** DRCOG (lead), CDOT, RTD, TMO’s, local governments

### **Activity 5.3 Regional Transportation Operations & Technology**

**Purpose:** Provide a Regional Transportation Operations technical perspective to the Metro Vision planning process, assure project conformance with the Regional ITS Architecture and the Regional Transportation Operations Improvement Program, and continue to facilitate cooperative work on transportation technology deployment and day-to-day transportation operations.

**Tasks:**

- Coordinate and facilitate meetings and activities of the Regional Transportation Operations Working Group
- Monitor transportation technology deployment to ensure compliance with 23 CFR Part 940, including coordination with state and federal project clearance and the systems engineering analysis evaluation
- Assist project sponsors with DRCOG Regional ITS Architecture and other transportation technology project implementation, as requested
- Maintain the DRCOG Regional ITS Architecture
- Monitor and participate on national, state, regional, and local mobility technology efforts
- Monitor and participate on transportation incident management committees efforts
- Incorporate technology and operations strategies into the Congestion Management Process analyses, measures, and public information products
- Maintain and update Regional Transportation Operations and other applicable DRCOG web site pages
- Develop, maintain, and update the traffic signal web map
- Assist in the establishment of foundational transportation technology initiatives with an emphasis on inter-jurisdictional and interagency procedures and agreements

**Deliverables:**

2020

- Feasibility study for pilot implementation of regional traffic operations monitoring support
- Update RTO&T Improvement Program with projects using available funds identified in the RTO&T set-aside of the DRCOG 2020-2023 TIP
- Annual update to the DRCOG Regional ITS Architecture
- Regional Transportation Operations and Technology Plan

2021

- Annual update to the DRCOG Regional ITS Architecture

**Participants:** DRCOG (lead), FHWA, CDOT, RTD, public highway authorities, public safety agencies, local governments (traffic, public safety, and information technology elements)

### **Activity 5.4 Transportation Security Planning**

**Purpose:** Participate in security-related activities and develop planning products/methods that will be used to consider security in the process to identify, evaluate, and fund transportation projects.

**Tasks:**

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- Participate on federal and state agency committees dealing with security and transportation, as requested
- Monitor and respond to federal rulemaking and guidance documents
- Liaise with the boards of Colorado's North Central All-Hazards Region and the Denver Urban Area Security Initiative
- Refine roles, establish and maintain relationships to existing documents and protocols (e.g., incident management plans, evacuation plans, training/exercise planning, and Regional ITS Architecture), and determine further activities with local stakeholders

**Participants:** DRCOG (lead), CDOT, RTD, local governments, Colorado Department of Public Safety, Division of Homeland Security and Emergency Management (North Central Region and Northeast Region), and others

### Activity 5.5 Transportation Safety Planning

**Purpose:** Incorporate safety data and analyses into transportation planning and public awareness activities.

**Tasks:**

- Geocode and perform quality checks on crashes in the Denver region that are off the state highway system, as data is made available
- House the annual crash database of all crashes in the region and disseminate data
- Prepare crash and safety analyses, as needed
- Respond to requests for information
- Complete the DRCOG Regional Vision Zero Action Plan

**Deliverables:**

2020

- 2020 safety targets (five federal measures)
- Documentation of federal safety baseline performance measures for DRCOG region
- Regional Vision Zero Action Plan

2021

- 2021 safety targets (five federal measures)
- Documentation of federal safety performance measures and progress for DRCOG region

**Participants:** DRCOG (lead), CDOT, Colorado Department of Revenue

### Activity 5.6 Mobility Choice Blueprint and Advanced Mobility Partnership

**Purpose:** Implement tactical actions and other recommendations of the Mobility Choice Blueprint report and planning process

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**Tasks:**

- Work with CDOT, RTD, and other stakeholders to implement Mobility Choice Blueprint recommendations, including planning processes, funding, projects, and other efforts
- Attend routine Project Management Team meetings

**Deliverables:**

2020

- Identify technical and policy issues, develop implementation priorities, prepare recommendations, and other tasks
- Continue the Micromobility Work Group to facilitate shared learning and potential shared standards and approaches to dockless mobility for local governments
- Identify other near-term priorities for implementation

2021

- Continue implementation activities

**Participants:** DRCOG (lead), CDOT, RTD, local governments

## **OBJECTIVE 6.0 PUBLIC TRANSPORTATION PLANNING**

### **Activity 6.1 Regional Transit/Human Service Transportation Planning and Coordination**

**Purpose:** Improve regional transit access and mobility through increased planning and coordination.

**Tasks:**

- Participate with the Denver Regional Mobility and Access Council (DRMAC) and other groups on efforts to improve coordination of human service transportation
- Coordinate with DRMAC, DRCOG's Area Agency on Aging (AAA), Local Coordinating Councils (LCCs), and other stakeholders to plan for, develop, and implement regional human service transportation coordination strategies
- Work with stakeholders to better leverage and integrate various human service transportation funding sources and activities to increase service and people served
- Compile ongoing service data from RTD to use for the travel model, plans, reports, and other activities as needed
- Coordinate with RTD, CDOT, and LCCs on the selection, implementation, and performance of FTA grant-funded transit projects within the DRCOG region
- Maintain a performance tracking report on TIP funded transit projects
- Explore becoming the Designated Recipient for FTA 5310 funding for the Denver-Aurora Urbanized Area as a way to better coordinate human service transportation funding and services
- Begin implementation with CDOT for the new Human Services Set-Aside in the 2020-2023 TIP and FTA 5310 in the Denver-Aurora Urbanized Area for calendar year 2020

**Deliverables:**

2020

- Maintain and update Coordinated Public Transit-Human Services Transportation Plan (Coordinated Plan)

2021

- Complete and achieve objectives of Veterans Transportation and Community Living Initiative Grant

**Participants:** DRCOG (lead), RTD, CDOT, DRMAC and others

### **Activity 6.2 FasTracks Review and Assessment**

**Purpose:** Review and assess the status of FasTracks with respect to State Senate Bill 90-208 (SB-208) as directed by the DRCOG Board (such as through Resolution #14, 2013).

**Tasks:**

- Complete the review and assessment of RTD FasTracks Change Report(s), as needed (If consultant assistance is required for DRCOG financial plan review of an RTD Change Report, RTD would provide funding for the financial consulting effort.)
- Based on DRCOG review and assessment of RTD Change Report(s), take further action pursuant to SB-208, and/or amend the 2040 Metro Vision Regional Transportation Plan, if needed

- Provide RTD’s annual FasTracks Status Report to the DRCOG Board (due to DRCOG by May 1<sup>st</sup>)

**Deliverables:**

2020

- DRCOG review and assessment of RTD Change Report(s), when/if submitted by RTD. If needed, subsequent SB-208 action and/or 2040 MVRTP amendment
- RTD 2020 FasTracks Annual Status Report

2021

- DRCOG review and assessment of RTD Change Report(s), when/if submitted by RTD. If needed, subsequent SB-208 action and/or 2040 MVRTP amendment
- RTD 2021 FasTracks Annual Status Report

**Participants:** DRCOG, RTD

**Activity 6.3 RTD and CDOT Local Government Planning Process**

**Purpose:** Provide a mechanism that incorporates the input of local and governmental jurisdictions into the RTD Strategic Budget Plan/FTA Program of Projects and CDOT planning process.

**Tasks:**

- Gather input from local government representatives for RTD’s Midrange Financial Plan capital projects and annual service plan changes
- Conduct coordinated public involvement efforts associated with CDOT and RTD products such as the STIP, environmental studies, and other planning activities

**Participants:** RTD (co-lead), CDOT(co-lead), local governments, DRCOG

**Activity 6.4 RTD Financial Planning**

**Purpose:** To prepare the RTD Midrange Financial Plan/FTA Program of Projects for the 2016-2021 and the 2017-2022 time frames.

**Task:**

- Evaluation of the FasTracks program, including revised capital costs, schedule, and preparation of program management plans for FasTracks corridors

**Deliverables:**

2020

- 2018-2023 Midrange Financial Plan for input into the TIP

2021

- 2019-2024 Midrange Financial Plan for input into the TIP

**Participants:** RTD

**Activity 6.5 RTD Base System Planning**

**Purpose:** Provide base system-level planning for the rapid transit corridors, the regional bus network, and transit facilities.

**Tasks:**

- Continue oversight of base system planning process
- Other assorted engineering, planning, and environmental activities

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- Conduct Transportation Transformation Comprehensive Plan to:
  - Provide guidance on future RTD services
  - Compliment FasTracks
  - Chart a course that optimizes existing and future FasTracks infrastructure and determine what other future investments are needed
  - Plan will provide a vision for RTD's existing rail system
  - Focus on ancillary services such as multi-modal first/last mile connections
  - Maximize FasTracks investments
  - Address staffing-related challenges
  - Evaluate long-term parking needs
  - Determine location and nature of future bus and rail maintenance facilities
  - Consider fleet electrification
  - Review RTD's boundaries

### **Deliverables:**

2021

- System Optimization Plan
- Mobility Plan for the Future

**Participants:** RTD (Lead), DRCOG, CDOT

### **Activity 6.6 Transit Facility Planning**

**Purpose:** Research and report on Park-n-Ride use and plan for and implement transit oriented development in conjunction with the planning and development of FasTracks and at existing transit stations and Park-n-Rides. This is done in partnership with local government jurisdictions, the development community, and other key stakeholders .

### **Tasks:**

- Prepare quarterly Park-n-Ride use reports
- Prepare biannual Park-n-Ride user distribution geocoding and mapping
- Participate in local jurisdiction land-use planning processes for station areas
- Pursue joint development at RTD transit stations where practical and consistent with local government land use plans and state law governing eminent domain and RTD operations
- Regional Transit Oriented Development (TOD) Opportunity Study
- Mobility Hub planning at priority locations identified in partnership among RTD, CDOT and DRCOG
- Benchmark Transit Oriented Development (TOD) activity in annual status report and FasTracks Quality of Life study
- Provide ongoing TOD education and outreach
- Support facility planning

### **Deliverables:**

2020

- Regional TOD Opportunity Study

2021

- Mobility Hub plan(s)



**Participants:** RTD (lead), DRCOG, local governments

**Activity 6.7 FasTracks Program Management and Planning Assistance**

**Purpose:** Oversee and manage engineering, planning, environmental, project controls, and construction management activities for FasTracks (consultant assistance may be required).

**Tasks:**

- Prepare FasTracks Change Report(s) for DRCOG

**Deliverables:**

2020

- FasTracks Change Report

2021

- FasTracks Change Report

**Participants:** RTD and DRCOG

## **OBJECTIVE 7.0 SUPPORT SYSTEMS FOR PLANNING**

### **Activity 7.1 Develop and Maintain Information Systems**

**Purpose:** Provide regional resources for the research, development, and deployment of tools and technologies, and provide data and information that support UPWP activities.

**Tasks:**

- Develop, maintain, and update data, tools, applications, and visualizations that allow internal and external users to explore and consume information Create and maintain free and open regional data to support the analysis needs of researchers, entrepreneurs and other regional stakeholders (e.g. Regional Data Catalog)
- Maintain an internal data repository
- Coordinate the acquisition of regional datasets through the Denver Regional Data Consortium, Denver Regional Aerial Photography Projects, Regional Planimetric Data Projects and related initiatives (e.g. Regional Land Use Land Cover Projects, Regional Lidar Projects) Perform GIS analysis for decision-support and performance measurement
- Maintain internal processes and infrastructure in support of application and tool development
- Complete the local data collection and regional dataset creation efforts

**Deliverables:**

2020

- Initiate the 2020 Denver Regional Aerial Photography Project (DRAPP)
- Initiate the 2020 Regional Lidar Project

2021

- 2020 DRAPP deliverables
- 2020 Denver Regional Planimetric Project deliverables

**Participants:** DRCOG (lead), local governments

### **Activity 7.2 Develop and Maintain Land Use Modeling and Forecasting Systems**

**Purpose:** Maintain, operate, expand, and refine the land use modeling and forecasting tools.

**Tasks:**

- Collect, compile, and purchase data in support of land use modeling
- Partner with the Department of Local Affairs (DOLA) to pilot the use of DRCOG's modeling and forecasting systems to assist local governments in their review of DOLA's long-range, county-level forecasts (produced annually)
- Coordinate with local governments to maintain and improve UrbanSim model inputs that rely on local plans, policies, priorities and changes to development patterns (e.g. development constraints, scheduled development)
- Pursue improvements and enhancements UrbanSim model, as needed, including coordination with other MPOs and peer agencies on improvements to the Census Block model
- Develop and maintain economic forecasting tools in support of UrbanSim

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- Support work groups associated with forecasting, modeling, and planning efforts detailed in the UPWP

### **Deliverables:**

2020

- Improvements and enhancements to the UrbanSim model

2021

- Report detailing process to use DRCOG land use and forecasting tools to assist with local review of state forecasts

**Participants:** DRCOG (lead), local governments, DOLA

### **Activity 7.3 Transportation Modeling and Forecasting**

**Purpose:** Maintain, operate, expand, and refine the transportation modeling and forecasting tools.

### **Tasks:**

- Collect, compile, and purchase data in support of transportation modeling and forecasting
- Provide travel model data results in support of special requests
- Continue efforts to optimize and streamline Focus, DRCOG's regional travel demand forecasting model, for faster and more accurate results available to a wider range of users
- Update the Commercial Vehicle Travel Model with greater delineations and trip rates by vehicle type
- Collaborate with CDOT in developing the statewide activity-based (ABM) model
- Work with RTD to incorporate results of their 2015 system-wide on-board survey and new fare structure into the Focus model
- Work with RTD to evaluate methods for improving Focus mode-choice model component
- Explore/Evaluate uses and benefits of different model output visualization tools
- Evaluate implementing the Caliper Highway/Transit Master Network (for maintaining different projects) or other model process enhancements
- Maintain a cohesive storage area to keep all travel model related files including documentation, scenario analysis, calibrations, and inputs and outputs for RTP Cycle runs
- Participate on CDOT-led Statewide Household and other Travel Surveys
- Plan and participate in DEN travel surveys and data collection

### **Deliverables:**

2020

- Updated Commercial Vehicle Model component
- Complete updated and validated Focus model runs and output data files used for air quality conformity determinations and other studies

2021

- Complete updated and validated Focus model runs and output data files used for air quality conformity determinations and other studies
- DEN travel survey and data collection results

**Participants:** DRCOG (lead), CDOT, RTD

### **Activity 7.4 Maintain Transportation and Related Data**

**Purpose:** Obtain, maintain, and distribute transportation and related data to be used in the regional transportation planning process.

**Tasks:**

- Collect and process local government receipts and expenditure data, state, and local roadway inventory data, and bridge data from CDOT, incorporating it into DRCOG databases
- Collect and process traffic counts from CDOT and all member governments/consultants, perform quality control, and add to the traffic count database
- Continuously update the DRCOG website traffic count map to show count data for the last three years
- Improve methods for calculations of greenhouse gas and air quality measures
- Collect transit ridership, Park-n-Ride lot user data, and other transit-related data from RTD
- Obtain bridge and pavement condition data from CDOT and local governments, as needed
- Transfer state highway crash data into the DRCOG linear reference system and geocode crashes on non-state roadways
- Edit the transportation information database per plan amendment and update various travel model networks staging respectively

**Deliverables:**

2020

- Transportation Improvement Survey

**Participants:** DRCOG (lead), CDOT, RTD, local governments

### **Activity 7.5 Regional Transportation Dataset/Data Platform**

**Purpose:** Identify opportunity to effectively collect, manage, and maintain transportation data from transportation providers.

**Tasks:**

- Convene a regional work group to identify needs, issues, and opportunities for a regional transportation dataset and data platform
- Explore options for collecting and managing transportation data
- Prepare recommendations

**Deliverables:**

2020

- Analysis and Feasibility Study

2021

- Regional Transportation Data Platform (if deemed feasible)

**Participants:** DRCOG (lead), CDOT, RTD, local governments

## V. OTHER MAJOR PLANNING ACTIVITIES

The following sections describe other major planning activities that will be ongoing during FY2020-2021.

### Identified in a previous/current Transportation Improvement Program

SPONSOR	DESCRIPTION
<b><i>Roadway and/or Transit-Related Study (Corridor/Interchange/Operational Studies/EA/EIS)</i></b>	
<b>Adams County</b>	I-270 Corridor Environmental Assessment
<b>Arapahoe County</b>	US-85 PEL Study: C-470 to I-25 Parker Rd. PEL Study: Mississippi Ave. to Hampden Ave.
<b>Aurora</b>	13th Ave. Corridor Multimodal Mobility Study
<b>Broomfield</b>	US-287/120th Ave. Multimodal & Safety Study Broomfield Transit Needs Assessment & Pilot Project Active Transportation Wayfinding Pilot Midway Blvd. Multimodal Corridor Action Plan
<b>CDOT Region 1</b>	West Connects PEL I-25 Operational Bus on Shoulder I-25 Central PEL C-470: Wadsworth to I-70
<b>CDOT Region 4</b>	Environmental Impact Statement of North I-25 (DUS to Ft. Collins) SH-52 PEL Study: SH-119 to I-76
<b>Denver</b>	Transit Speed & Reliability on Federal Blvd. 16 <sup>th</sup> St. Mall Rehabilitation NEPA High Line Canal Trail: Hampden/Colorado NEPA I-25/Broadway NEPA Quebec Reconstruction: 13 <sup>th</sup> to 26 <sup>th</sup> NEPA
<b>Englewood</b>	US-285 Congestion Management Study
<b>Jefferson County</b>	Front Range Trail Study Jefferson County Bike Master Plan Update
<b>Lone Tree</b>	I-25/Lincoln Ave. Traffic and Mobility Improvements
<b>RAQC</b>	Ozone State Implementation Plan (SIP) Modeling Study
<b>RTD</b>	SH 119 BRT NEPA Analysis: Boulder to Longmont Regional BRT Feasibility Study Mobility as a Service: Implementing an Open-Ticketing Platform RTD T2 Comprehensive Plan

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<i>Planning-Related Studies (Station Area, Master Plans)</i>	
<b>Boulder County</b>	SH-7 Arterial BRT Station Design, Connectivity, and ROW Needs
<b>Denver</b>	Neighborhood Planning Initiative: East Area Plan Far Northeast Next Steps Study

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**Colorado Department of Transportation, Division of Transportation  
Development – State Planning and Research Program (Summary)**

<b>SPONSOR</b>	<b>DESCRIPTION</b>
<b>CDOT</b>	Development Program / 10-year Strategic Project Pipeline 2045 Statewide Transportation Plan Risk-Based Asset Management Plan Update Statewide Travel Model

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**Non-Federally Funded & Local Governments Planning Activities**

SPONSOR	DESCRIPTION
<b>Arapahoe County</b>	County Transportation Plan Update Oil and Gas Transportation Impact Study I-70/Watkins and I-70/Airpark Interchange Alternatives/Feasibility Study
<b>City of Boulder</b>	30 <sup>th</sup> Street and Colorado Avenue Corridors Study: Engineering Design and Cost 2020 Boulder Valley Comprehensive Plan Update ADA Self Evaluation and Transition Plan Canyon Boulevard Complete Streets Corridor Study: Engineering Design and Cost Curb Management Study CU South Traffic Impact Study East Arapahoe Avenue and 55 <sup>th</sup> Street Station Area Study East Boulder Subcommunity Plan (including transportation connections and TDM) Pedestrian Master Plan Safe Streets Boulder Report and Action Plan Transportation Master Plan
<b>Castle Rock</b>	SH-86 Corridor Study: Franktown to US-85 Transit Feasibility Study
<b>Centennial</b>	Colorado Boulevard Assessment: County Line Road to Orchard Road Easter Avenue Corridor Study: Havana Street to Peoria Street
<b>Denver</b>	41 <sup>st</sup> and Fox Station Next Steps Plan Cherry Creek Area Next Steps Study Colfax BRT NEPA Complete Streets Design Guidelines Denver Moves: Downtown Denver Moves: Transit Phase 2 Denver Strategic Transportation Plan Update Federal Boulevard Alternatives Analysis Neighborhood Planning Initiative: Near Northwest Area Plan Neighborhood Planning Initiative: Near Southeast Area Plan Neighborhood Planning Initiative: West Area Plan Yale Corridor Study
<b>Douglas County</b>	2040 Transportation Plan Update I-25/Happy Canyon Road Interchange Feasibility Study US-85/C-470 Interchange Phase II
<b>Englewood</b>	Englewood North/South Bicycle Connections US-285 Pedestrian and Bicycle Bridge/Rail-Trail
<b>Greenwood Village</b>	NEPA: I-25 and Belleview Avenue Interchange
<b>Louisville</b>	Transportation Master Plan
<b>Thornton</b>	Transportation and Mobility Master Plan
<b>Westminster</b>	Federal Boulevard Multimodal Study Transportation and Mobility Plan Update
<b>RTD</b>	First and Final Mile Study Development Review Quality of Life Study RTD Boundary Mapping TOD Status Report



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**APPENDIX A**  
**PROGRAM FINANCING TABLES**

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**Table 1. FY2020 and 2021 UPWP Revenue Sources**

Funding Source	Recipient	Federal Funding	DRCOG Cash Match	RTD In-Kind Match	TOTAL
FY 20 CPG	DRCOG	4,837,951	251,423	754,268	\$ 5,843,642
FY 21 CPG	DRCOG	5,021,181	260,945	782,834	\$ 6,064,960
FY18/FY19 CPG Carryover	DRCOG	7,037,150	365,713	1,097,138	\$ 8,500,000
<b>Total Available Funding</b>		<b>\$ 16,896,282</b>	<b>\$ 878,081</b>	<b>\$ 2,634,240</b>	<b>\$ 20,408,602</b>

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Table 2. 2020 and FY 2021 Anticipated Expenditures

FY 2020/2021 UPWP Objectives and Activities		Total Expenditures*								Total Anticipated Expenditures
		FY 2020				FY 2021				
		Total FY 2020	DRCOG Cash		RTD In-Kind Match	CPG (federal)	Total FY 2021	DRCOG Cash		
Match	Match		Match	Match						
<b>Objective</b>	<b>1.0 Program Administration</b>	\$ 1,009,059	\$ 43,415	\$ 130,244	\$ 835,400	\$ 1,054,183	\$ 45,356	\$ 136,069	\$ 872,758	\$ 2,063,242
Activity	1.1 Direct Program Management	\$ 615,450	\$ 26,480	\$ 79,439	\$ 509,531	\$ 627,333	\$ 26,991	\$ 80,973	\$ 519,369	\$ 1,242,783
Activity	1.2 DRCOG Staff Training and Development	\$ 320,637	\$ 13,795	\$ 41,386	\$ 265,455	\$ 323,029	\$ 13,898	\$ 41,695	\$ 267,436	\$ 643,666
Activity	1.3 Unified Planning Work Program	\$ 72,973	\$ 3,140	\$ 9,419	\$ 60,414	\$ 103,821	\$ 4,467	\$ 13,401	\$ 85,953	\$ 176,793
<b>Objective</b>	<b>2.0 Planning Coordination and Outreach</b>	\$ 1,444,847	\$ 62,165	\$ 186,494	\$ 1,196,189	\$ 1,453,827	\$ 62,551	\$ 187,653	\$ 1,203,623	\$ 2,898,674
Activity	2.1 MPO Compliance	\$ 76,728	\$ 3,301	\$ 9,904	\$ 63,523	\$ 78,989	\$ 3,399	\$ 10,196	\$ 65,395	\$ 155,717
Activity	2.2 Public Engagement and Outreach	\$ 541,409	\$ 23,294	\$ 69,882	\$ 448,233	\$ 528,351	\$ 22,732	\$ 68,197	\$ 437,422	\$ 1,069,760
Activity	2.3 Local Government and Stakeholder Education, Outreach and Support	\$ 488,058	\$ 20,999	\$ 62,996	\$ 404,063	\$ 497,949	\$ 21,424	\$ 64,273	\$ 412,252	\$ 986,007
Activity	2.4 Interregional, Regional and Corridor Planning Coordination	\$ 174,035	\$ 7,488	\$ 22,464	\$ 144,084	\$ 179,181	\$ 7,709	\$ 23,128	\$ 148,344	\$ 353,216
Activity	2.5 FAST Act Performance Measure Reporting	\$ 56,024	\$ 2,410	\$ 7,231	\$ 46,382	\$ 57,506	\$ 2,474	\$ 7,423	\$ 47,609	\$ 113,530
Activity	2.6 Air Quality Conformity	\$ 108,593	\$ 4,672	\$ 14,017	\$ 89,904	\$ 111,851	\$ 4,812	\$ 14,437	\$ 92,601	\$ 220,444
<b>Objective</b>	<b>3.0 Long Range Planning</b>	\$ 1,641,141	\$ 70,610	\$ 211,830	\$ 1,358,701	\$ 1,562,132	\$ 67,211	\$ 201,632	\$ 1,293,289	\$ 3,203,273
Activity	3.1 Metro Vision Plan-Collaboration and Implementation Assistance	\$ 388,420	\$ 16,712	\$ 50,135	\$ 321,573	\$ 388,586	\$ 16,719	\$ 50,157	\$ 321,710	\$ 777,006
Activity	3.2 Metro Vision Plan-Research and Performance Management	\$ 182,128	\$ 7,836	\$ 23,508	\$ 150,784	\$ 182,701	\$ 7,861	\$ 23,582	\$ 151,258	\$ 364,829
Activity	3.3 Metro Vision Regional Transportation Plan	\$ 756,778	\$ 32,560	\$ 97,681	\$ 626,536	\$ 673,439	\$ 28,975	\$ 86,924	\$ 557,540	\$ 1,430,217
Activity	3.4 Pedestrian and Bicycle Planning	\$ 313,815	\$ 13,502	\$ 40,506	\$ 259,807	\$ 317,407	\$ 13,656	\$ 40,969	\$ 262,781	\$ 631,221
<b>Objective</b>	<b>4.0 Project Programming</b>	\$ 438,997	\$ 18,888	\$ 56,664	\$ 363,446	\$ 433,539	\$ 18,653	\$ 55,959	\$ 358,927	\$ 872,536
Activity	4.1 Prepare Transportation Improvement Program	\$ 39,361	\$ 1,693	\$ 5,080	\$ 32,587	\$ 100,752	\$ 4,335	\$ 13,005	\$ 83,413	\$ 140,113
Activity	4.2 Transportation Improvement Program Set-Asides Selection	\$ 94,189	\$ 4,052	\$ 12,157	\$ 77,979	\$ 96,888	\$ 4,169	\$ 12,506	\$ 80,214	\$ 191,077
Activity	4.3 Transportation Improvement Program Management	\$ 305,448	\$ 13,142	\$ 39,426	\$ 252,880	\$ 235,898	\$ 10,150	\$ 30,449	\$ 195,300	\$ 541,346
<b>Objective</b>	<b>5.0 Transportation Operations</b>	\$ 415,575	\$ 17,880	\$ 53,640	\$ 344,054	\$ 425,042	\$ 18,287	\$ 54,862	\$ 351,892	\$ 840,616
Activity	5.1 DRCOG Congestion Management Process	\$ 151,057	\$ 6,499	\$ 19,498	\$ 125,061	\$ 155,589	\$ 6,694	\$ 20,083	\$ 128,812	\$ 306,647
Activity	5.2 Regional Travel Demand Management (TDM) Planning	\$ 16,866	\$ 726	\$ 2,177	\$ 13,964	\$ 17,372	\$ 747	\$ 2,242	\$ 14,383	\$ 34,239
Activity	5.3 Regional Transportation Operations and Technology	\$ 121,600	\$ 5,232	\$ 15,695	\$ 100,672	\$ 125,113	\$ 5,383	\$ 16,149	\$ 103,581	\$ 246,713
Activity	5.4 Transportation Security Planning	\$ 7,537	\$ 324	\$ 973	\$ 6,240	\$ 8,718	\$ 375	\$ 1,125	\$ 7,218	\$ 16,255
Activity	5.5 Transportation Safety Planning	\$ 63,508	\$ 2,732	\$ 8,197	\$ 52,579	\$ 65,414	\$ 2,814	\$ 8,443	\$ 54,156	\$ 128,922
Activity	5.6 Advanced Mobility Partnership	\$ 55,006	\$ 2,367	\$ 7,100	\$ 45,539	\$ 52,835	\$ 2,273	\$ 6,820	\$ 43,742	\$ 107,841
<b>Objective</b>	<b>6.0 Public Transportation Planning</b>	\$ 289,787	\$ 12,468	\$ 37,404	\$ 239,915	\$ 292,480	\$ 12,584	\$ 37,752	\$ 242,145	\$ 582,267
Activity	6.1 Regional Transit/Human Service Transportation Planning and Coordination	\$ 60,412	\$ 2,599	\$ 7,798	\$ 50,015	\$ 62,224	\$ 2,677	\$ 8,032	\$ 51,515	\$ 122,636
Activity	6.2 FasTracks Review and Assessment	\$ 6,038	\$ 260	\$ 779	\$ 4,999	\$ 6,219	\$ 268	\$ 803	\$ 5,149	\$ 12,257
Activity	6.3 RTD and CDOT Local Government Planning Process	\$ 10,692	\$ 460	\$ 1,380	\$ 8,852	\$ 11,013	\$ 474	\$ 1,422	\$ 9,118	\$ 21,705
Activity	6.4 Financial Planning	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Activity	6.5 RTD Base System Planning	\$ 12,645	\$ 544	\$ 1,632	\$ 10,469	\$ 13,024	\$ 560	\$ 1,681	\$ 10,783	\$ 25,669
Activity	6.6 Transit Facility Planning	\$ 200,000	\$ 8,605	\$ 25,815	\$ 165,580	\$ 200,000	\$ 8,605	\$ 25,815	\$ 165,580	\$ 400,000
Activity	6.7 FasTracks Program Management and Planning Assistance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Objective</b>	<b>7.0 Support Systems for Planning</b>	\$ 2,202,782	\$ 94,775	\$ 284,324	\$ 1,823,683	\$ 3,323,382	\$ 142,989	\$ 428,966	\$ 2,751,428	\$ 5,526,164
Activity	7.1 Develop and Maintain Information Systems	\$ 661,306	\$ 28,453	\$ 85,358	\$ 547,495	\$ 584,253	\$ 25,137	\$ 75,412	\$ 483,703	\$ 1,245,559
Activity	7.2 Develop and Maintain Land Use Modeling and Forecasting Systems	\$ 336,490	\$ 14,478	\$ 43,433	\$ 278,580	\$ 337,161	\$ 14,506	\$ 43,519	\$ 279,135	\$ 673,651
Activity	7.3 Transportation Modeling and Forecasting	\$ 1,072,867	\$ 46,160	\$ 138,480	\$ 888,226	\$ 2,188,212	\$ 94,148	\$ 282,443	\$ 1,811,620	\$ 3,261,078
Activity	7.4 Maintain Transportation and Related Data	\$ 77,756	\$ 3,345	\$ 10,036	\$ 64,374	\$ 79,432	\$ 3,418	\$ 10,253	\$ 65,762	\$ 157,188
Activity	7.5 Regional Transportation Dataset/Data Platform	\$ 54,363	\$ 2,339	\$ 7,017	\$ 45,007	\$ 134,325	\$ 5,779	\$ 17,338	\$ 111,207	\$ 188,688
<b>FY 2020/2021 Anticipated Expenditures</b>		<b>\$ 7,442,188</b>	<b>\$ 320,200</b>	<b>\$ 960,600</b>	<b>\$ 6,161,388</b>	<b>\$ 8,544,585</b>	<b>\$ 367,631</b>	<b>\$ 1,102,892</b>	<b>\$ 7,074,062</b>	<b>\$ 15,986,773</b>
*Total expenditures include CPG, cash match, and RTD in-kind match.		Anticipated Unused FY 20/21 Contract Funds (Carryover to FY 22/23)								\$ 4,421,829
Note: In-kind match provided by RTD for transit-related activities is proportionately distributed among all UPWP activities.		TOTAL Funding Available								\$ 20,408,602

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**APPENDIX B**

**TABLE OF DRCOG DELIVERABLES WITH EXPECTED COMPLETION  
DATE**

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Table 3. Key DRCOG Deliverables with Expected Completion Dates

Activity	Products	2-Year Program Period							
		FY2020				FY2021			
		2019	2020			2020	2021		
		Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep
1.3	FY22-23 UPWP								X
2.5	FAST Act Performance Non-Safety Targets				X				
2.6	Conformity Determination Reports	As needed							
3.1	Complete Streets Toolkit				X				
3.3	DRCOG Regional Multimodal Freight Plan	X							
	2050 MVRTP						X		
4.1	2020-2023 Dual Model TIP Process Assessment Report		X						
	2022-2025 TIP							X	
4.3	Projects Delayed Report		X				X		
	Annual Listing of Obligated Projects		X				X		
5.1	Report of Traffic Congestion in the Denver Region	X			X			X	
	CMP Project Tracking Report				X				
5.3	Regional Transportation Operations and Technology Plan	X							
	DRCOG Regional ITS Architecture		X				X		
5.5	FAST Act Performance Safety Targets		X				X		
	Region Vision Zero Action Plan			X					
	Safety Performance Measures and Progress for DRCOG Region						X		
6.1	Coordinated Public Transit Human Services Transportation Plan update				X				
6.2	RTD Change Report review	As needed							
6.6	Regional TOD Opportunity Study				X				
7.1	Denver Regional Aerial Photography Project (DRAPP)							X	
	Denver Regional Planimetric Project			X					
7.2	UrbanSim Enhancements				X				
7.3	DEN Travel Survey								X
	Focus Model Runs and Output Data	X				X			
7.4	Transportation Improvement Survey		X						X
7.5	Analysis and Feasibility Study				X				

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