

Denver Regional Council of Governments

FY 2018 and FY 2019

# UNIFIED PLANNING

# WORK PROGRAM

FOR THE DENVER REGION

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| **DRAFT** ~~May 23~~ June 19, 2017



## ABSTRACT

TITLE: FY 2018 and FY 2019 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, 2017 through September 30, 2019 (federal fiscal years 2018 and 2019)

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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 2018 and FY 2019 (October 1, 2017 through September 30, 2019). 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 “~~prospectus~~”-guiding document titled Transportation Planning in the Denver Region.](#)

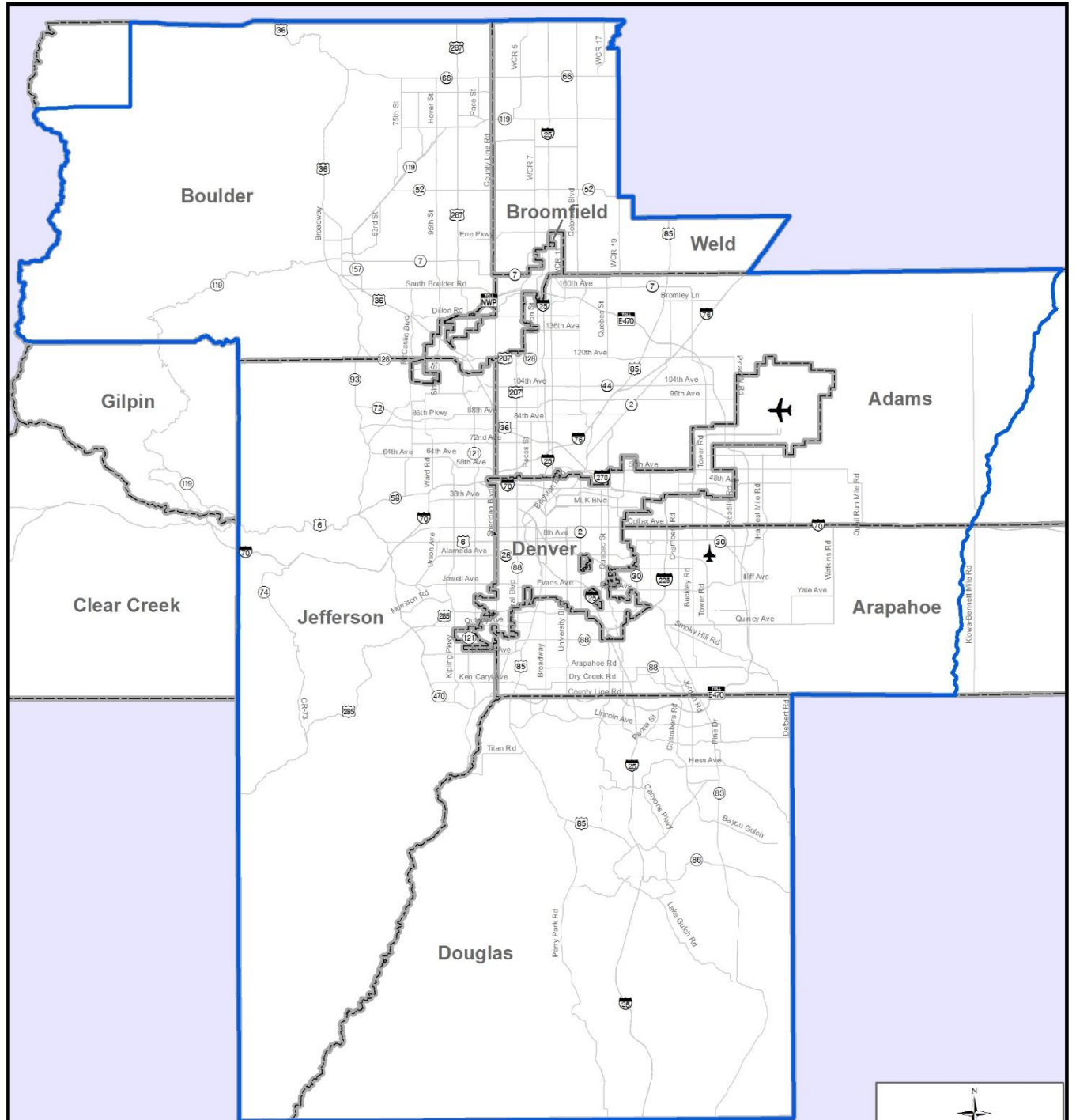
The UPWP is prepared biennially and serves as the basis by which Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) urban transportation planning funds are spent in the region. Additionally, the UPWP is the management tool for scheduling, budgeting and monitoring the planning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



### BACKGROUND

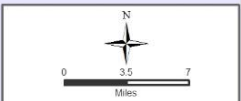
The Denver Regional Council of Governments (DRCOG) is the designated Metropolitan Planning Organization (MPO) for the region’s Transportation Management Area (TMA) (see Figure 1). DRCOG is the recipient of the federal urban transportation planning funds. As the designated MPO, DRCOG is responsible for 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 July 2001 (modified in June 2008) 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 “~~prospectus~~”-document titled [Transportation Planning in the Denver Region](#) that defines how the planning and decision making process works.

**Figure 1**  
**Transportation Management Area**



 **Transportation Management Area**  
 **DRCOG County Boundaries**



**SOURCE DATA:** DRCOG, ESRI  
 This data is intended for informational purposes only. DRCOG provides this information on an "as is" basis and makes no guarantee, representation or warranty, either express or implied, that the data will be error free. DRCOG further makes no guarantees, representations or warranties, either express or implied, as to the completeness, accuracy or correctness of the data, or as to merchantability or fitness of the data for a particular use or purpose. DRCOG is not responsible to any user for any costs, expenses, liabilities or damages arising from inconsistencies in its data or from any use of the information.



**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 ~~eight~~ten planning factors in the transportation planning process. Substantial work is anticipated during FY 2018-19 in consideration of these planning requirements. ~~The Following~~Below is a description of ~~the~~each planning factors and a summary of FY 2018-19 planning activities applicable to each ~~FAST Act~~planning factor.

#### **1. Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency.**

- Activity 1.3 – coordination of planning efforts with neighboring regions to address interregional issues and opportunities
- Activity 3.1 – ~~update~~implement Metro Vision Plan, a shared vision of the metro area
- Activity 3.~~2~~3 – development of regional freight ~~movement study~~and goods movement report
- Activity 3.~~2~~3, ~~3~~4, 5.2, 6.5, 6.6, 6.7 – promote the development of a multimodal transportation system
- Activity 4.1 – ~~provide a process to~~ monitor ~~and evaluate proposed~~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, 7.2, 7.3 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~~5 – 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 4.2 – 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 1.2 – continue coordination with regional stakeholders
- Activity 4.2 – monitor intermodal improvements in the DRCOG area
- Activity 5.3 – 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 3.1 – support regional and local scenario analysis to study the impacts of alternative land use and development patterns
- Activity 3.2-3 – develop regional freight ~~movement study~~ and goods movement report
- Activity 3.4-5 – develop a regional active transportation plan
- Activity 4.2 – 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 1.2 – coordinate with CDOT, RTD, and local governments with regard to transportation network improvements
- Activity 2.1 – 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 – ~~update~~ implement Metro Vision Plan, a shared vision of the metro area; evaluate the social, environmental, land use, and economic impacts of transportation plans
- Activity 3.2-3 – provide support to regional NEPA and other environmental efforts
- Activity 3.3-4 – conduct air quality conformity determinations on transportation investments identified in the TIP and FC-RTP; continue to host Interagency Consultation Group (ICG) meetings
- Activity 3.4-5 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 1.2 – coordinate with CDOT, RTD, and local governments with regard to transportation network improvements
- Activity 3.2-3 – ~~update~~ ~~maintain~~ 2040 Metro Vision Regional Transportation Plan; develop regional freight and goods movement report~~movement 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 1.2 – coordinate with CDOT, RTD, and local governments with regard to transportation network improvements
- Activity 4.1 – ~~provide a process to~~ monitor the progress and results of ~~and evaluate proposed~~ TIP projects
- Activity 4.2 – 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 4.1 – ~~provide a process to~~ monitor the progress and results of ~~and evaluate proposed~~ 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 1.3 – coordination of planning efforts with neighboring regions to address interregional issues and opportunities
- Activity 3.5 - 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**

~~The Federal Highway Administration (Both FHWA) and the Federal Transit Administration (FTA) require the metropolitan transportation planning process be responsive to three federal planning emphasis areas, if any exist, in FY 2016: MAP-21 implementation (performance based planning), regional models of cooperation, and ladders of opportunity (see letter). Currently, there are none covering FY 2018-2019. If at any time during the fiscal years of this UPWP any come to exist new planning emphasis areas are identified, they will be amended into this document. This UPWP has been developed to address these emphasis areas and anticipated MAP-21 guidance as much as possible.~~

## **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 2013, DRCOG completed new Title VI complaint procedures and a Limited English Proficiency (LEP) Plan. In 2016-2017, DRCOG prepared a draft 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 Plan-Program that was approved by USDOT in April 2004. ~~The UPWP also addresses Environmental Justice issues as required by an Executive Order that clarifies elements of the Civil Rights Act.~~

## **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 ~~October 2012~~2016. Recommendations from that review are incorporated in this document, as warranted. The next review will be completed in ~~2016~~2020.

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

Traffic congestion has been recognized for its impacts~~harmful effects~~ 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~~and~~ adapt to traffic congestion.

## **Relationship to Air Quality Planning**

~~The DRCOG Board of Directors has issued a policy statement in which it pledges to work cooperatively with all agencies and commits itself to a leadership role in the region's on-going efforts to improve air quality. The region has been classified in "attainment maintenance" for all federal air quality standards, except for the eight-hour ozone standard.~~

Outcomes, objectives, targets, and initiatives~~Goals, policies, and action strategies~~ 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 ~~the~~ state implementation plans (SIP) for air quality. ~~DRCOG conducts modeling activities to estimate future vehicle miles traveled and associated characteristics. The Colorado Air Pollution Control Division (APCD) of the Colorado Department of Public Health and Environment (CDPHE) performs the analysis of air pollutants expected from implementation of the plan.~~

~~In recent years, a~~ Air quality conformity has been~~was~~ demonstrated for all approved~~the~~ current 2018-2021 TIP ~~TIP's and Fiscally Constrained RTP's over the past several~~ years, 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-North Front Range 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 at this time. The Denver-North Front Range Area failed to meet the standard before 2015 and was~~is~~ to be reclassified as moderate nonattainment. As a result, an updated Ozone SIP ~~is currently being developed including an examination of transportation related emission control measures. The~~ was

completed ~~SIP and must be~~ submitted to the state legislature in early 2017. ~~by the end of 2016.~~

The Denver-North Front Range 8-hour Ozone Nonattainment Area for the 2008 ozone NAAQS ~~keeps the same boundary as the nonattainment area under the 1997 ozone NAAQS, which~~ 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 Prospectus 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 ~~prepared and executed~~ 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 METRO VISION PLAN AND REGIONAL TRANSPORTATION PLAN~~

The following table lists the most recent status (as of July 2017) of the Metro Vision Plan, the Regional Transportation Plan, Transportation Improvement Program, and other associated planning documents.

Document	Action/Date
<del><u>2040 Metro Vision Plan</u></del>	<del>Adopted April 2017</del> Adopted <del>April</del> January 2017
<del><u>2035 Metro Vision Plan</u> (2040 Plan anticipated adoption Fall 2016)</del>	<del>Amended May 2014</del>
<u>2040 Metro Vision Regional Transportation Plan</u>	<u>Adopted April 2017</u>
<del><u>2035 Metro Vision Regional Transportation Plan</u> (2040 Plan anticipated adoption Fall 2016)</del>	<del>Amended May 2014</del>
<del><u>Pedestrian and Bicycle Element of the 2035 Metro Vision Regional Transportation Plan</u></del>	<del>Amended May 2009</del>
<del><u>Transit Element of the 2035 Metro Vision Regional Transportation Plan</u></del>	<del>Adopted April 2010</del>
<del><u>2040 Fiscally Constrained Regional Transportation Plan</u></del>	<del>Adopted February 2015</del>
<del><u>2016-2021 Transportation Improvement Program</u></del>	<del>Adopted January 2012</del>
<u>2018-2021 Transportation Improvement Program</u>	<u>Adopted April 2017</u>
<u>Metro Vision Growth and Development Supplement</u>	Adopted June 2012
<u>Regional TDM Short Range Plan</u>	Amended October 2010
<u>Denver Regional Intelligent Transportation Systems Strategic Plan</u>	Adopted April 2010
<u>Public Involvement in Regional Transportation Planning</u>	<u>Adopted April 2010</u>



## FY2016-2017 ACCOMPLISHMENTS

Major activities completed in the 2016-2017 UPWP include:

### ~~2016-2021~~ Transportation Improvement Program

- 2016-2021 TIP
  - ~~Guided Board and Committees through process to complete TIP Policy Document and final TIP:~~
    - ~~Eligibility Rules~~
    - ~~Scoring Process~~
    - ~~Developed web-based TIP Project Application Form~~
    - ~~Compiled, reviewed, and revised scoring for 150 project applications~~
    - ~~Facilitated Phase 2 Selection Criteria~~
    - ~~Final Project Selection~~
    - ~~Waiting List~~
    - ~~Prepared 72 committee memos and associated presentations~~
  - ~~Completed revenue forecasts with CDOT~~
  - ~~Worked with CDOT Region 4 to evaluate applications and project selection for Transportation Alternatives Program funds~~
  - Processed over 30 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 ~~during the past year~~ in FY 2016 and FY 2017
  - Integrated a new enhanced graphical search function for TIP projects into Transportation Regional Improvement Projects and Survey (TRIPS) webpage
- 2018-2021 TIP
  - Worked with CDOT to best align the new annual STIP updates with updates to the TIP
  - Worked with CDOT and RTD to update ~~the 2016-2021~~ projects in the TIP to 2018
  - Prepared committee memos and presentations leading toward adoption in April 2017
  - Processed amendments and administrative modifications to the TIP
- 2020-2023 TIP
  - Facilitated two TIP workgroups to develop a policy for project selection in 2018

### Metro Vision Regional Transportation Plan

- Adopted the 2040 Metro Vision Regional Transportation Plan, including components specifically addressing freight and goods movement, active transportation (walking/bicycling), and transit (public transit and human service transportation)
- Administered 2040 Fiscally Constrained RTP 2015 Cycle 2 amendments
- Administered 2040 Fiscally Constrained RTP 2016 amendments as part of 2040 MVRTP preparation and adoption

## **Planning Outreach, Education, and Training**

- Developed and maintained portion of DRCOG website to keep all stakeholders informed of interim Board discussions and decisions related to the draft Metro Vision plan
- Public hearing on Metro Vision (Nov. 2016)
- Hosted meetings and workshops on a variety of major planning products - most notably Metro Vision, age friendly communities, and Urban Growth Boundary/Area
- Numerous public and stakeholder presentations throughout the reporting period (Metro Vision, Who is TOD, Age-Friendly efforts, etc.)
- Hosted 6 Metro Vision Idea Exchanges
- Financially supported and participated in a Citizen Engagement workshop hosted by the University of Denver (Mar. 2016)
- Co-hosted a two-day convening with AARP-Colorado. The conference focused ways that AARP (national and state offices) can partner with MPOs and other regional planning agencies to advance age-friendly efforts, including transportation and mobility issues

## **Metro Vision Plan**

- Adoption of Metro Vision (Jan. 2017)
- Directly supported the efforts of communities from around the region that are assessing their communities ability to support our region's aging population – including land use and mobility programs, policies and investments
- Worked with consultant to develop survey instruments (Who is TOD) – DRCOG staff took lead on working with member governments and other partners, including RTD, to ensure results were of maximum value
- Worked with consultant to develop initial report summarizing survey responses (Who is TOD): residents (2,547 responses), businesses (1,254 responses), and employees (677 responses)
- Developed a candidate list of performance measures to support urban center planning and analysis
- Explored several visualization tools that can potentially support small area scenario planning efforts, including informal testing at TOD site
- Offered opportunity for member governments to participate in pilot exploration of small area scenario planning tools – 5 communities were selected to participate
- Developed eligibility and evaluation criteria for Urban Center/Station Area Master Planning funding (FY16-17)
- Worked closely with the Urban Land Institute (ULI) to develop the program for the 2016 TOD Marketplace
- Financially supported 2 ULI Technical Assistance Panels (TAPs) to explore transit-oriented development issues in two communities – Englewood and Superior

## **Air Quality**

- Monitored and provided comment on the development of the Moderate Ozone State Implementation Plan
- Coordinated an Electric Vehicle Workshop in Aug 2016
- Coordinated with air quality partners on detailed conformity procedures and facilitated Interagency Consultation Group meetings
- Completed two conformity determinations (modeling and report) for Cycle 2 2015 and the new 2040 MVRTP and 2018-2021 TIP
- Completed update to Regionally Significant Projects definition

## **Bicycle & Pedestrian and TDM Planning**

- Oversaw/coordinated the update of GIS inventory and mapping of bicycle facilities. Will be working on ways to enhance the mapping features, product(s) and process in FY 2017 (and 2018) as part of the Active Transportation Plan
- Active Transportation Plan
  - Held bicycle summit and stakeholder meetings to solicit input on AT topics to potentially include in the RFP and Plan
  - Developed and released RFP soliciting firms to partner with to develop the AT Plan
  - Assembled a consultant review panel to assist in the selection of a consultant
  - Selected consultant
  - Plan underway (beginning July 2017 and will be underway for 12 months)
- Regional Bicycle Use Count Program
  - Began development of a regional AT count program
    - Conducted research on what other MPO's have implemented in terms of count programs
    - Working with CDOT to determine ways to collaborate based on their recently released state AT count plan study
    - Reviewing FHWA's recently released Bicycle-Pedestrian Count Pilot Program study to garner ideas on best practices and lessons learned.
    - Developing recommendation for regional program
- Regional Transportation Plan
  - Developed the Active Transportation and TDM Sections of the Plan
- TDM Set-Aside
  - Board approval of the projects recommended for the 2016-2017 TDM set-aside (October 2016)
  - Coordinating efforts to get FY 2016-2017 infrastructure projects under contract with RTD and CDOT
  - Monitored evaluations and results of past projects
  - Developing recommendations for 2018-2019 Call for Projects

## **Transit**

- Completed the Coordinated Transit Plan (the federally required Coordinated Public Transit Human Services Transportation Plan)

- Completed the “Status and Impacts of DRCOG Transportation Planning and Programming with Environmental Justice” report
- Completed draft Title VI Implementation Plan for DRCOG

## **Congestion Management**

- Completed 2015 Report on Traffic Congestion
- Completed Report on VMT in the Denver Region
- Completed 2016 Report on Traffic Congestion
  - Updated traffic count inventory
- Completed new INRIX-based congestion performance measures

## **Traffic Ops**

- Completed *Regional Transportation Operations Improvement Program* document, project selection, and associated ITS Turbo Architecture database
- Conducted extensive dialogue and coordination with local, regional, state, and federal partners regarding operations, security, and new technologies

## **Modeling**

- Developed UrbanSim socioeconomic forecasts for three RTP amendment conformity modeling cycles
- Conducted major outreach effort with local governments to improve socioeconomic forecasts
- Conducted travel model runs to create inputs for three air quality determination cycles
- Completed Focus 2.0 travel model recalibration and validation effort which significantly reduced the model run time and improved the model results
- Provided the travel model, specific output results, and ~~assitance~~ assistance to partner agencies and consultants for use on over a dozen major corridor studies
- Completed the Commercial Vehicle Survey as the final element of the Front Range Travel Counts project

## **Information Systems**

- Launched the Signal Timing Briefs webmap (see <http://gis.drcog.org/signaltimingbriefs>)
- Created and took measurements from 2016/2017 regional datasets for Metro Vision Performance Measure Analysis
- Updated base year data for UrbanSim to 2015
- Restructured the Information Systems Wiki (online documentation)
- Completed the 2014 Planimetric Project (occurred in 2016; vintage of the data is 2014)
- Completed the Denver Regional Aerial Photography Project (DRAPP) 2016
- Hosted Denver Regional Visual Resources (DRVVR) workshops for local government planners, GIS professionals, librarians, and the media

- Launched a new visualization on the DRVR site - (see <https://drcog.org/services-and-resources/denver-regional-visual-resources/relating-jobs-and-housing-to-transit>)
- Optimized the Development Type Model
- Applied new DRCOG branding to static and webmaps
- GIS team published in ArcUser magazine for innovative and collaborative quality control approach
- Published new and updated data to the Regional Data Catalog
- Hosted Denver Regional Data Consortium (DRDC) meetings

### III. THE PLANNING PROGRAM FOR FISCAL YEARS 2018 AND 2019

#### PROGRAM ORGANIZATION

The UPWP lists proposed transportation and transportation-related planning objectives and activities in the Denver region from October 1, 2017 through September 30, 2019.

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 and Coordination**—Coordinate activities between Metropolitan Planning Organization (MPO) participating agencies to address transportation and development issues of the region.
- **Objective 2.0 Planning Outreach, Education, and Training** – 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 Short Range Planning** – 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 shows federal Consolidated Planning Grant (CPG) expenditures and associated match amounts by activity. Table 4 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:** To provide for the 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 new 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 Maintaining the Metropolitan Transportation Planning Process

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

**Tasks:**

- Manage and administer the transportation planning process, including the ~~FY2016~~FY2018-2017-2019 Unified Planning Work Program
- 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
- ~~Continue to 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](#)

**Deliverables:**

~~2016~~[2018](#)

- ~~Complete update to The Prospectus, *Transportation Planning in the Denver Region*~~
- ~~Complete materials for the joint FHWA and FTA Quadrennial Review of the MPO planning process, which will be conducted in spring 2016. The review will include a desk audit and on-site interviews. The certification review will evaluate all areas of the MPO's compliance with federal laws and guidelines~~
- Complete FAST Act compliant Metropolitan Planning Agreement between DRCOG, CDOT, and RTD
- Prepare ~~FY2015~~[FY2017](#) UPWP end-of-year report
- Prepare ~~FY2016~~[FY2018](#) UPWP mid-year report

~~2017~~[2019](#)

- Prepare ~~FY2016~~[FY2018](#) UPWP end-of-year report
- Prepare ~~FY2017~~[FY2019](#) UPWP mid-year report
- Develop the ~~FY2018~~[FY2020](#)-~~FY2019~~[FY2021](#) UPWP

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

### **Activity 1.3 Interregional Planning Coordination**

**Purpose:** To maintain the working relationship and coordination of planning efforts between DRCOG and its neighbors that address interregional 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
- Monitor, participate, and assist with statewide or interregional transportation planning activities, corridor studies, [NEPA studies](#), PELs, and funding opportunities
- 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

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

## Activity 1.4 DRCOG Staff Training and Development

**Purpose:** To 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

## OBJECTIVE 2.0 PLANNING OUTREACH, EDUCATION, AND TRAINING

### Activity 2.1 Public Engagement and Outreach

**Purpose:** To 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.  
~~the objectives, activities, and progress of DRCOG plan and program development 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
- Give presentations to community, advocacy, and other interest groups, as requested
- Create and maintain various DRCOG Web pages ~~(e.g. Metro Vision 2040)~~
- Continue to research and integrate and/or implement interactive internet-based technologies and other methods to support the public participation process, as necessary and appropriate
- ~~As requested, conduct DRCOG-led short courses on Metro Vision and the transportation planning process~~

**Deliverables:**

~~2016~~2018

- Summaries of public meetings, hearings, and workshops

- ~~• Prepare report on “Status and Impacts of DRCOG Transportation Planning and Programming with Environmental Justice”~~

~~2017~~2019

- [Summaries of public meetings, hearings and workshops](#)
- ~~• Prepare an update to “Public Involvement in Regional Transportation Planning”~~

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

## Activity 2.2 Local Government and Stakeholder Education, Outreach, and Support

**Purpose:** To provide local governments and other stakeholders education, outreach, and support.

### **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
- Provide support for communities as they prepare transportation [and other](#) plans and studies, including reviewing consultant scopes of service, ensuring final plan consistency with ~~the~~ Metro Vision ~~Plan~~ and [the](#) MVRTP, ~~and similar assistance~~
- 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
- [Hold workshops and outreach opportunities for the DRVR site](#)
- [Maintain and update DRCOG’s plans and documents addressing public involvement, environmental justice, and Title VI/limited English proficiency](#)

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

## OBJECTIVE 3.0 LONG RANGE PLANNING

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

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

#### **Tasks:**

- Provide decision-support tools and information-sharing opportunities to local jurisdictions, regional partners, and the public
- Routinely analyze progress on Metro Vision with an emphasis on evaluating forces shaping trends and potential adjustments to regional strategies, actions, and initiatives
- Explore and document connections between key social, economic, and environmental issues and the physical development of the region
- Provide individualized technical assistance to communities, through both staff time and consultant assistance for the purposes of implementing Metro Vision
- Document and distribute best practices related to achieving Metro Vision outcomes and objectives
- Survey local governments to understand local and regional planning challenges, opportunities, and needs
- Conduct research to understand attitudes and preferences of residents, businesses, and employees that may shape location decisions and other behaviors
- Monitor and assess private development and public policy and investment activity adjacent to transit stations—as needed create standardized ways for partners to collect and disseminate data
- Use new tools and technology to support regional and local scenario analysis, including impacts of alternative land use and development patterns
- Support and collaborate with local, sub-regional, and regional partners in efforts to create transit-oriented communities and corridors
- Engage in a continuous dialogue with local governments and the private development community to understand the development and implementation challenges in designated urban centers
- Establish and convene topical working groups (e.g., urban centers, first- and final-mile)
- Participate on steering committees, advisory groups, leadership teams, etc. for aligned organizations and initiatives
- Sponsor events, organize workshops, and collaborate with organizations that are working to support Metro Vision outcomes and objectives
- Facilitate communication and project implementation between federal, state, regional, and local agencies
- Develop and apply Metro Vision plan consistency framework for communities that voluntarily refer local plans and regulations for regional review
- Coordinate with local governments on member-sponsored amendments (e.g., new urban centers, other policy amendments)

- 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
- Use new tools and technology to support regional and local scenario analysis, including impacts of alternative land use and development patterns
- Establish and convene topical working groups and forums, as needed (e.g., urban centers, first- and final-mile, small or rural communities, etc)
- Participate on steering committees, advisory groups, leadership teams, etc. for aligned organizations and initiatives
- Sponsor events, organize workshops, and collaborate with organizations that are working to support Metro Vision outcomes
- Develop and apply Metro Vision plan consistency framework for communities that voluntarily refer local plans and regulations for regional review
- Coordinate with local governments on member-sponsored plan amendments (e.g., new urban centers, other policy amendments)
- 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 or update current initiatives that improve the coordinated efforts to identify and designate areas for new urban development.

**Deliverables:**

~~2016:~~ 2018:

- ~~Complete the Metro Vision Plan update~~
- ~~Who is TOD survey and report~~
- ~~TOD Pipeline Mapping Application~~
- ~~2016 Local Government Survey—Summary Report~~
- Urban center boundary review with member governments
- Amendments (if any) to Metro Vision
- Evaluation of coordinated growth management initiative(s)

~~2017~~2019:

- ~~Metro Vision performance measurement report~~
- Amendments (if any) to Metro Vision
- Preliminary scope for Metro Vision 2020 assessment (to be completed in 2020)

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

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

**Purpose:** To 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.)
- Survey local governments, the public, and other stakeholders to understand local and regional planning challenges, opportunities, and needs
- Develop and provide information on key economic trends influencing the region's forecasted growth
- Develop and provide data-driven stories and infographics that illustrate the state of the region in terms of economics, transportation and demographics.
- Design, build, maintain and enhance applications (i.e. Regional Equity Atlas) that enable internal and external users to explore and consume regional data related to Metro Vision outcomes, objectives and initiatives.

### **Deliverables:**

#### 2018

- Metro Vision performance measurement report
- Data-driven visualizations for Metro Vision performance measures

#### 2019

- Metro Vision performance measurement report
- Data-driven visualizations for Metro Vision performance measures
- Regional Equity Atlas – extensive update (smaller updates occur annually)

## **Activity 3.23 Metro Vision Regional Transportation Plan**

**Purpose:** To maintain the 2040 Metro Vision Regional Transportation Plan (2040 MVRTP), ~~including the 2040 Fiscally Constrained Regional Transportation Plan (2040 FC-RTP)~~ and prepare the 2045 MVRTP.

### **Tasks:**

- ~~Solicit and process (if needed) amendments to the 2040 MVRTP and 2040 FC-RTP twice-annually or as needed;~~ assist local governments and other project sponsors with plan amendment questions and procedures
- Coordinate with CDOT to prepare a freight and goods movement report for the DRCOG region derived from CDOT's Statewide Multimodal Freight Plan
- Incorporate the DRCOG region freight report and Active Transportation Plan into the 2040 MVRTP through amendment and/or into the 2045 MVRTP
- Participate and provide technical support in regional NEPA/environmental and Planning and Environment Linkages (PEL) efforts and/or similar regional planning efforts, as necessary; implement or incorporate into planning documents as appropriate

- 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
- Collaborate with CDOT, RTD, and other stakeholders to develop a common set of revenue assumptions, project costs, and other information needed to prepare the 2045 MVRTP financial plan
- ~~Participate in regional and statewide efforts to consider freight movement in planning activities~~
- ~~Incorporate actions or products that respond to state or federal transportation legislation guidance on regional transportation plans (e.g., FAST Act)~~
- Monitor federal, state and /or regional other efforts to increase transportation funding, and incorporate into scenario analysis for the 2045 MVRTP financial plan ~~for transportation and assist, as necessary~~
- ~~Conduct process for developing a Regional Freight Movement Study, working with CDOT, local governments, railroads, motor carriers, and other stakeholders~~
- Solicit, evaluate, score, rank, and prioritize regionally significant projects desiring federal or state funding
- Prepare the 2045 MVRTP financial plan
- Conduct transportation and air quality modeling for the draft fiscally constrained RTP
- Prepare and adopt the ~~final~~ 2045 MVRTP

#### **Deliverables:**

~~2016~~2018

- Amendments (if any) to the 2040 MVRTP
- Complete the DRCOG region freight and goods movement report
- ~~Complete the update of the Metro Vision Regional Transportation Plan~~
- ~~Initiate Regional Freight Movement Study~~

~~2017~~2019

- Complete and adopt the 2045 MVRTP
- ~~Complete Regional Freight Movement Study~~

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

### **Activity 3.34 Air Quality Conformity**

**Purpose:** To 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
- 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

**Deliverables:**

~~2016 and 2017~~ 2018 and 2019

- ~~Bia~~ Annual Conformity Determination Reports

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

**Activity 3.45 Pedestrian and Bicycle Planning**

**Purpose:** To 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 (Note: Enhancing the mapping product and identifying process efficiencies will be a focus in the AT Plan)
- Continue regional active transportation meetings/summits to facilitate communication and provide educational opportunities
- Assemble Active Transportation Plan Work Group and coordinate monthly meetings
- 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
- Participate in the development of TIP Policy related to AT projects in the region, including ~~the attending or contributing to as necessary,~~ TIP Policy Work Group meetings



**Deliverables:**

~~2016~~2018

- Develop the DRCOG Active Transportation Plan (will be completed approximately March/April/Spring 2018)
- Implementation of a regional bicycle use count program (pending feasibility study recommendations)
- ~~Initiate development of the DRCOG Active Transportation Plan (Bicycling and Walking)~~
- ~~Conduct a study to determine the feasibility of developing a regional bicycle use count program~~

~~2017~~2019

- ~~Complete the DRCOG Active Transportation Plan~~
- ~~Develop of a regional bicycle use count program (pending feasibility study recommendations)~~

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

**~~Activity 3.5 – Urban Growth Boundary/Area (UGB/A)~~**

**Purpose:** ~~To maintain the region’s Urban Growth Boundary/Area.~~

**Tasks:**

- ~~Administer the UGB/A allocation (expansion) process~~
- ~~Work with local governments to monitor the extent of current and future urban development patterns~~
- ~~Maintain Development Type and UGB/A status for area jurisdictions~~
- ~~Administer emergency requests for new UGB/A~~
- ~~Track municipal annexations to determine impact on UGB/A in unincorporated areas~~
- ~~Monitor the amount of land consumed by development outside the UGB/A~~
- ~~Coordinate with local communities and infrastructure service providers to identify urban reserve areas that should be conserved for future growth, as requested~~

**Deliverables:**

~~2016~~

- ~~Growth and Development Supplement Update – Development Type Mapping Classification Amendments~~

~~2017~~

- ~~UGB/A Regional Allocation~~

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

## OBJECTIVE 4.0 SHORT RANGE PLANNING

### Activity 4.1 Transportation Improvement Program

**Purpose:** To 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 ~~2016~~2018-2021 ~~Transportation Improvement Program~~ and the subsequent 2020-2023 TIP, and maintain ~~the~~ an up-to-date web-amended version of the ~~Transportation Improvement Program Tables~~ document on ~~the~~ DRCOG's website and in the Transportation Regional Improvement Projects and Survey (TRIPS) database ~~webpage~~, as necessary
- Facilitate the 2020-2023 TIP Policy Work Group and advise DRCOG committees and the Board, leading to a 2020-2023 TIP Policy document
- Lead and coordinate the Regional Share project selection process Call for Projects for the 2020-2023 TIP
- Monitor and assist in the Subregional Share Forums and subsequent Call for Projects and project selection process for the 2020-2023 TIP
- Prepare a 2020-2023 TIP document for committee review and Board adoption by March 2019
- 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
- ~~Provide financial and project coordination~~
- Conduct activities with CDOT and local governments to continuously refine the IGA and contracting processes
- ~~Monitor the progress~~ status and results of TIP projects
- ~~Update~~ Update TRIPS project database when applicable
- ~~Conduct activities associated with policy development for the new 2020-2025 TIP and call for projects~~
- ~~Facilitate TIP Work Group to advise the DRCOG Board of Directors on specific 2020-2025 TIP policy topics~~
- ~~Coordinate with CDOT on Annual "Rolling" STIP/TIP updates related to CDOT's new cash management process~~

#### **Deliverables:**

~~2016~~2018

- Prepare FY ~~2015~~2017 Projects Delayed Report
- Prepare FY ~~2015~~2017 Annual Listing of Obligated Projects
- ~~Develop white paper with TIP Work Group recommendations to provide to Board~~ Adopt 2020-2023 TIP Policy document

~~2017~~2019

- Prepare FY ~~2016-2018~~ Projects Delayed Report
- ~~Prepare FY 2016-2018~~ Annual Listing of Obligated Projects
- [Adopt 2020-2023 TIP](#)

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

## **-Activity 4.2 Performance Measure Reporting**

**Purpose:** To update, compile, and report on regional performance measures from Metro Vision and the 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 CMAQ performance plan of TIP-funded projects](#)
- ~~Monitor FAST Act rulemaking and CDOT actions related to measures and targets~~
- ~~Define applicable measures and targets through the MPO process~~
- Develop and distribute information products that support the monitoring and evaluation of Metro Vision performance measures

### **Deliverables:**

#### ~~2016-2018~~

- [Metro Vision performance measurement report](#)
- ~~Document FAST Act applicable performance measures and targets~~

#### ~~2017-2019~~

- [Metro Vision performance measurement report](#)
- [Fast Act performance measures report](#)
- ~~Metro Vision performance measurement report~~

**Participants:** DRCOG [\(lead\)](#), [CDOT](#), [RTD](#)

## OBJECTIVE 5.0 TRANSPORTATION OPERATIONS

### Activity 5.1 DRCOG Congestion Management Process

**Purpose:** To 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 \(e.g., INRIX, HERE\)](#)
- 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 s, methodologies, and analytical tools](#)
- ~~Work with CDOT on operational evaluations of key bottleneck locations~~
- ~~Monitor research on impacts of tolling and pricing mechanisms~~
- [Maintain performance tracking report on TIP-funded roadway projects](#)
- [Review CMP per recommendation of 2016 Federal Planning Certification Review](#)

**Deliverables:**

~~2016~~2018

- [Prepare white paper \(CMP Status Report\) summarizing status and results of congestion mitigation projects funded in the TIP from FY 2012 through FY 2017 \(Recommendation of 2016 Federal Planning Certification Review\)](#)
- Prepare ~~2015~~ Annual Report of Traffic Congestion in the Denver Region

~~2017~~2019

- Prepare ~~2016~~ 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:** To 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 Pool, 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

**Deliverables:**

~~2016~~2018

- [Complete FY 2018-2019 project selection process for the TDM Pool](#)
- ~~Complete FY 2016-2017 project selection process for the TDM Pool~~

2017~~2019~~

- ~~Complete FY 2018-2019 project selection process for the TDM Pool~~

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

**Activity 5.3 Regional Transportation Operations**

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

**Tasks:**

- Conduct periodic stakeholder meetings to maintain dialogue necessary to implement the Regional Concept of Transportation Operations and assist with project implementation
- Monitor ITS deployment to ensure compliance with 23 CFR Part 940 and maintain systems engineering analysis project documentation submitted by stakeholders
- Maintain the DRCOG ~~Turbo~~ [Regional ITS Architecture database and companion document](#)
- Coordinate with CDOT and FHWA to perform ~~Operation Clearance~~ functions assigned to MPOs [for operations project clearance and the systems engineering analysis process](#)
- ~~Assist CDOT and FHWA with implementation of a statewide transportation operations plan~~
- Coordinate with relevant CDOT TSM&O Division incident management efforts
- Incorporate ITS 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
- Assist in the establishment of inter-jurisdictional and interagency data sharing and performance measure procedures and agreements

**Deliverables:**

~~2016~~2018

- Prepare ~~2015-2017~~ Annual Report on Regional Transportation Operations Performance Measures

- ~~Update Regional Concept of Transportation Operations~~
- Prepare feasibility study for pilot implementation of regional traffic operations monitoring support

~~2017~~2019

- Prepare ~~2016-2018~~ Annual Report on Regional Transportation Operations Performance Measures
- Develop and approve Regional Transportation Operations Program, programming funds identified in the RTO set-aside of the DRCOG TIP

**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:** To 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:**

- 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

### **Deliverables:**

~~2016~~2018

- ~~Develop guidance for security of transportation operations systems and data sharing processes~~

~~2017~~2019

- ~~Conduct internet/network security audits for stakeholders requesting support~~

**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:** To further incorporate safety data and analyses into transportation planning and public awareness activities.

**Tasks:**

- Geocode 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
- Lead or participate on a Regional ~~Develop a~~ “Vision Zero” or “Towards Zero Deaths” regional strategy

**Deliverables:**

~~2016~~2018

- Board established HSIP 2014-2018 safety targets (Five federal measures)
- Documentation of Federal safety baseline performance measures for DRCOG region
- Incorporate crash data into Active Transportation Plan
- ~~Traffic Safety in the Denver Region Report~~
- ~~Pedestrian and Bicycle Safety in the Denver Region Report~~

2019

- Documentation of federal safety performance measures and progress for DRCOG region

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

## OBJECTIVE 6.0 PUBLIC TRANSPORTATION PLANNING

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

**Purpose:** To improve local and 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, including serving on DRMAC's Board in an ex-officio capacity
- 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 ~~DRMAC and RTD on identifying gaps in connectivity of people and services~~ stakeholders to better leverage and integrate various human service transportation funding sources and activities to increase service and people served.
- ~~Monitor, participate, and/or assist with local and regional transit planning activities and studies~~
- 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

**Deliverables:**

~~2016~~2018

- Complete and achieve objectives of Veterans Transportation and Community Living Initiative Grant
- ~~Update~~ Maintain and update Coordinated Public Transit--Human Services Transportation Plan (Coordinated Plan)

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

### Activity 6.2 FasTracks Review and Assessment

**Purpose:** To 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) when submitted by RTD. (If consultant assistance is required for DRCOG financial plan review of an RTD Change Report, RTD would provide funding for the financial consulting effort. ~~CPIG funds may be used for the other consultant activities.~~)
- Based on DRCOG review and assessment of RTD Change Report(s), take further action pursuant to SB-208, and/or amend the 2040 ~~Fiscally Constrained~~ Metro Vision Regional Transportation Plan, if needed
- Provide to the DRCOG Board RTD's ~~submission of the~~ annual FasTracks Status Report (by due to DRCOG by May 1<sup>st</sup> ~~of each year~~)

**Deliverables:**

~~2016~~2018

- DRCOG review and assessment of RTD Change Report(s), when submitted by RTD. If needed, subsequent SB-208 action and/or 2040 ~~FC-RTP~~MVRTP amendment
- RTD ~~2016~~2018 FasTracks Annual Status Report

~~2017~~2019

- DRCOG review and assessment of RTD Change Report(s), when submitted by RTD. If needed, subsequent SB-208 action and/or 2040 ~~FC-RTP~~MVRTP amendment
- RTD ~~2017~~2019 FasTracks Annual Status Report

**Participants:** DRCOG, RTD

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

**Purpose:** To 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 Strategic Budget 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 Strategic Budget Plan

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

**Deliverables:**

~~2016~~2018

- Prepare the ~~2016~~2018-~~2021~~-2023 Strategic Budget Plan for input into the Transportation Improvement Program

~~2017~~2019

- Prepare the ~~2017~~2019-~~2022~~-2024 Strategic Budget Plan for input into the Transportation Improvement Program

**Participants:** RTD

## Activity 6.5 RTD System Planning Process

**Purpose:** To continue to provide system-level planning for the rapid transit corridors, the regional bus network, and transit facilities.

**Tasks:**

- Continue oversight of system planning process

**Participants:** RTD

## Activity 6.6 Park-n-Ride® Planning and Transit Oriented Development (TOD)

**Purpose:** To 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
- Benchmark TOD activity in annual status report and FasTracks Quality of Life study
- Provide ongoing TOD education and outreach
- Complete Annual TOD Status Report

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

## Activity 6.7 FasTracks Program Management and Planning Assistance

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

**Tasks:**

- Annual Program Evaluation of the FasTracks program, including revised capital costs, schedule, and preparation of program management plans for FasTracks corridors
- Preparation of FasTracks Change Report(s) for DRCOG
- Other assorted engineering, planning, and environmental activities for FasTracks

**Participants:** RTD

## OBJECTIVE 7.0 SUPPORT SYSTEMS FOR PLANNING

### Activity 7.1 Develop and Maintain Information Systems

**Purpose:** To be a regional resource for the research, development, and deployment of tools and technologies, and provide data and information that support UPWP activities.

**Tasks:**

- Develop, maintain, and update tools, applications, and visualizations that allow internal and external users to explore and consume information (e.g. Regional Equity Atlas, TRIPS, including the TIP WebMap, Denver Regional Visual Resources (DRVR), ~~TOD Application~~, traffic signal webmap)
- Develop and maintain tools and applications that enable data exchange amongst local jurisdictions, regional partners, and DRCOG (e.g. Data Portal, Regional Data Catalog)
- Develop and distribute 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)
- Collect, compile, and purchase data in support of transportation and land use modeling, travel modeling, performance measurement, and Metro Vision implementation
- Create and maintain a Data Plan that integrates the data management efforts of the planning, socioeconomic, travel modeling, and GIS teams
- Maintain an internal and external data repository
- Coordinate the ~~purchases~~ acquisition of regional datasets through the Denver Regional Data Consortium and Denver Regional Aerial Photography 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
- Run the Development Type Model
- Partner with the US Census to prepare our local governments for Census 2020

**Deliverables:**

~~2016~~2018

- Initiate the ~~2016-2018~~ Denver Regional Aerial Photography Project (DRAPP)
- ~~Complete the Denver Regional Planimetric Project~~
- Create a new baseline dataset for UrbanSim

~~2017~~2019

- Complete the ~~2016-2018~~ DRAPP
- Complete the Denver Regional Planimetric Project
- Submit PSAP data to US Census on behalf of our member governments.:  
[https://www.census.gov/geo/partnerships/psap\\_overview.html](https://www.census.gov/geo/partnerships/psap_overview.html)

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

## Activity 7.2 Land Use Modeling and Forecasting

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

**Tasks:**

- Maintain and refine UrbanSim model, as needed
- Implement ~~UrbanCanvas~~-visualization and planning ~~model~~tools into the land use forecasting process and in support of the implementation of Metro Vision 2040 plan
- Develop and maintain economic forecasting tools in support of UrbanSim
- Develop and distribute informational products at the local and regional level (e.g. Regional Economic Reports)
- Support work groups associated with forecasting, modeling, and planning efforts detailed in the UPWP

**Deliverables:**

~~2016~~2018

- Calibrate and validate the UrbanSim land use model with updated base year data

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

## Activity 7.3 Transportation Modeling and Forecasting

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

**Tasks:**

- Provide travel model data results in support of 2040 Metro Vision Regional Transportation Plan (MVRTP) amendments, air quality conformity, the new 2045 MVRTP, and other 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. Evaluate modifications to facility types, areas types, values of time (VOT), TAZs, and other model attributes
- Incorporate outcomes of the Commercial Vehicle Survey (CVS) into the components of the Commercial Vehicle Travel Model. examine package delivery travel patterns
- Work with partner agencies (CDOT, RTD, other Colorado MPOs) to evaluate options and prepare for an updated and statewide household travel survey
- 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 model ridership forecasts regarding Park-n-Ride and Transit -Oriented Development outcomes
- Investigate developing a spatial visualization tool for CVS data
- ~~Provide travel model data results in support of Metro Vision and 2040 Regional Transportation Plan (RTP) amendments~~
- Explore/Evaluate uses and benefits of 2D and 3D ABM visualization tools such as CityPhi (INRO product)
- Explore how additional socioeconomic traits or network attributes (e.g. sidewalks) may enhance Focus modeling of bicycle and pedestrian trips
- Work with RPD Division on a new methodology for forecasting future school locations
- Evaluate and if cost effective, implement the Highway/Transit Master Network for maintaining different projects
- 2010 Front Range Travel Counts/Household Travel Survey:
  - Further incorporate into Focus model components
  - Collaborate with CDOT to re-estimate the model coefficients
- ~~Evaluate other modeling/visualization/economic tools, as needed~~
- ~~Support work groups associated with forecasting and modeling efforts detailed in the UPWP~~
- Provide model components and outputs to planning partners, local governments, or consultants conducting NEPA or other studies
- ~~Explore how a "complete streets" network (with sidewalk information) may supplement information for Focus's non-motorized mode modeling~~
- 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
- ~~Work with RTD to evaluate Focus travel demand model forecasts regarding Park-n-Ride and Transit-Oriented Development outcomes. Determine if refinements are justified based on available data and methodological tools~~
- ~~Summarize toll survey data (collected by others) for regional applicability~~
- ~~Front Range Travel Counts/Household Travel Survey:~~

- ~~○ Further incorporate into Focus~~
- ~~○ Summarize data for use in public information and planning products~~
- ~~○ Complete summary documentation, offer training to prospective data users, and compile data outputs for specific requests~~

**Deliverables:**

~~2016~~2018

- Create 2015 base year model including new calibration and traffic/ridership validation
- ~~Complete updated Focus model runs and output data files used for air quality conformity determinations~~~~Complete commercial vehicle survey as part of the Front Range Travel Counts project~~
- ~~Develop travel model data visualization tool(s) to support internal and external decision making on model results~~

~~2017~~2019

- ~~Create 2015 base year model including new calibration and validation~~
- ~~Automate process for inputting data (e.g. UrbanSim) into the Focus model~~
- Design and implement a new tool to automate the calibration process of the Focus model components
- Complete Focus model runs and output data files used for air quality conformity determinations
- ~~Develop an integration platform between Focus and UrbanSim models~~
- ~~Develop multi-resolution modeling capability (e.g. dynamic traffic assignment) for regional, corridor, and intersection level analysis to support transportation planning activities~~
- ~~Design and implement new Graphical User Interface (GUI) for the Focus model~~

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

**Activity 7.4 Maintain Transportation and Related Data**

**Purpose:** To 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:**

~~2016 and 2017~~ 2019

- Conduct the Transportation Improvement Survey

**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 FY2018-2019.

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

SPONSOR	DESCRIPTION
<i>Corridor/Interchange/Operational Studies/EA/EIS</i>	
<b>Bennett</b>	Hwy 79 and Hwy 36 Grade Separation EA and Design Study
<b>Boulder County</b>	SH-7 BRT Study: Boulder to Brighton
<b>Centennial</b>	Arapahoe Rd: I-25 to Parker Rd Next Steps Operations Study
<b>CDOT Region 1</b>	West Connects PEL I-25 S PEL/NEPA I-25 Operational Bus on Shoulder Central I-25 PEL Wadsworth (Wheat Ridge) EA Vasquez PEL
<b>CDOT Region 4</b>	Environmental Impact Statement of North I-25 (DUS to Ft. Collins)
<b>Commerce City</b>	North Metro Industrial Area Transportation Study: I-25 to I-270 to 40th Ave/Smith Rd 88 <sup>th</sup> Ave NEPA Study: I-76 to Hwy 2
<b>DRCOG</b>	SHRP2 Planning Process Bundle Implementation Assistance Program
<b>Longmont</b>	Southwest Longmont Subarea Operations Study
<b>RTD</b>	SH 119 BRT NEPA Analysis: Boulder to Longmont Regional BRT Feasibility Study
<i>Rapid Transit Station Area, Urban Center Master Plans, or other Planning-Related Studies</i>	
<b>36 Commuting Solutions</b>	Northwest Corridor Bike/Pedestrian Final Wayfinding Plans
<b>Arvada</b>	Gold Line Kipling Ridge Station
<b>Aurora</b>	Aurora City Center Train/Traffic and Transportation Network Study
<b>Boulder County</b>	SH-7 Arterial BRT Station Design, Connectivity, and ROW Needs



SPONSOR	DESCRIPTION
Denver	Federal Blvd Corridor Plan National Western Center Parking and Transportation Management Study North Capitol Hill/Colfax Urban Center Study
Littleton	Mineral Light Rail Station Area Study
Longmont	Main Street Corridor Plan
RTD	Colfax Corridor Connections (3C) TOD Implementation Plan
Transportation Solutions	Multi-Station Plan and Mobility Study

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

SPONSOR	DESCRIPTION
CDOT	<a href="#">10-Year Development Plan</a> <a href="#">2045 Statewide Transportation Plan</a> <a href="#">Bike/Ped Facilities Inventory</a> <a href="#">High Priority Bicycle Corridors</a> <a href="#">Mobility Choice</a> <a href="#">Multimodal Freight Plan</a> <a href="#">Risk-Based Asset management Plan Update</a> <a href="#">Statewide TDM Plan</a> <a href="#">Statewide Travel Model</a> <del>2040 Statewide Transportation Plan (SWP)</del> <del>Implementation, Reporting, and Continued Outreach</del> <del>Multi-modal Freight Plan</del> <del>10 Year Development Program</del> <del>Statewide Travel Model</del> <del>Asset Management</del> <del>Transportation Safety in the Planning Process Study</del> <del>Non-Motorized (Bike/Ped) Monitoring Program Plan</del> <del>Bike/Ped Facility Inventory Program</del>

## Non-Federally Funded & Local Governments Planning Activities

SPONSOR	DESCRIPTION
<a href="#"><u>Adams County</u></a>	<a href="#"><u>Complete Streets Study and Cross-sections</u></a>
<a href="#"><u>Adams County</u></a> <a href="#"><u>Denver</u></a> <a href="#"><u>Westminster</u></a>	<a href="#"><u>Federal PEL: 46<sup>th</sup> to 84<sup>th</sup></u></a>
<b>Arapahoe County</b>	<del>Bike and Pedestrian Master Plan</del> <a href="#"><u>Transportation Plan Update</u></a> <a href="#"><u>1601: I-70 and Monahagn</u></a> <a href="#"><u>1601: I-70 and Watkins</u></a>
<b>Arapahoe Centennial</b>	<del>I-25/Dry Creek Interchange/Corridor PEL Study</del>
<b>Arvada</b>	<del>SH-72 Alternative Analysis/NEPA</del>
<b>Aurora</b>	<del>Northeast Aurora Transportation Study</del>
<b>Boulder County</b>	<del>Envision East Arapahoe</del> <del>Arapahoe Access Control Plan</del> <del>Canyon Corridor Study</del> <del>30<sup>th</sup> St Corridor Study</del> <del>Williams Village BRT top on US 36</del> <a href="#"><u>East County Line Road Master Plan</u></a> <a href="#"><u>UP/RTD Trail Master Plan</u></a> <a href="#"><u>SH119 Quiet Zone Feasibility/Design</u></a>
<a href="#"><u>Boulder County</u></a> <a href="#"><u>City of Boulder</u></a>	<a href="#"><u>Boulder Valley Comprehensive Plan Update</u></a>
<b>Broomfield</b>	<del>Comprehensive Plan/Transportation Plan Update</del>
<b>Castle Rock</b>	<del>Castle Rock Transportation Master Plan</del>
<a href="#"><u>Denver</u></a>	<a href="#"><u>Washington Street Study</u></a>
<b>Douglas County</b>	<del>Transit Feasibility Study</del> <del>US 85 Corridor PEL — SH 67 to County Line Rd</del> <del>US 85: Titan Rd /Highlands Ranch Pkwy/Blakeland Dr NEPA and final design</del> <del>US 85/C-470 Interchange <a href="#"><u>Phase II</u></a> final NEPA clearance and design</del> <del>I-25/Happy Canyon Rd Interchange <a href="#"><u>Feasibility</u></a> Study</del> <a href="#"><u>2040</u></a> Transportation Plan Update
<a href="#"><u>Greenwood Village</u></a>	<a href="#"><u>Transportation Plan</u></a> <a href="#"><u>EA: Belleview/I-25 Interchange Improvements</u></a>

<b>Lakewood</b>	<del>Bicycle Master Plan Update</del>
<b>Longmont</b>	<del>Comprehensive Plan/Multimodal Transportation Plan Update Ken Pratt Boulevard Corridor Plan</del>
<b>RTD</b>	<a href="#">SH 119 BRT NEPA/Preliminary Engineering</a> <a href="#">First and Final Mile Study</a> <a href="#">Regional BRT Study</a> Development Review <del>North Metro Corridor: Stock Show Station Planning</del> Quality of Life Study RTD Boundary Mapping <del>Strategic Parking Plan</del> TOD Status Report <del>West Corridor "Before" On-Board Study</del> <del>Parking Study FY16</del> <del>RTD First and Final Mile Study</del>

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

May 17, 2016

**Table 1**  
**FY2016 and 2017 UPWP Revenue Sources**

Funding Source	Recipient	Federal Funding	DRCOG Cash Match	RTD In-Kind	TOTAL
FY 16 CPG	DRCOG	4,392,700	456,567	456,567	\$ 5,305,834
FY 17 CPG	DRCOG	4,636,594	481,917	481,917	\$ 5,600,427
FY14/FY15 CPG Carryover	DRCOG	4,858,730	505,005	505,005	\$ 5,868,740
<b>Total Available Funding</b>		<b>\$ 13,888,024</b>	<b>\$ 1,443,489</b>	<b>\$ 1,443,489</b>	<b>\$16,775,001</b>

**Table 3  
CPG (Federal) Expenditures and Associated Match  
FY2016 and 2017 Anticipated Expenditures**

FY2016/2017 UPWP Objectives and Activities		Expenditures					
FY2016/2017 UPWP Objectives and Activities		FY2016 Total Expenditures*				FY2017	
		FY 16 CPG (federal)	DRCOG Cash Match	RTD In-Kind Match	FY2016/FY2017 Anticipated (federal) Expenditures	DRCOG Cash Match	RTD In-Kind Match*
<b>Objective</b>	<b>1 Program Administration and Coordination</b>						
Activity	1.1 Direct Program Management	\$360,770	\$37,499	\$36,475	\$304,802	\$31,681	\$31,681
Activity	1.2 Maintaining the Metropolitan Transportation Planning Process	\$28,184	\$37,960	\$24,756	\$21,993	\$22,028	\$22,028
Activity	1.3 Interregional Planning Coordination	\$23,947	\$2,895	\$2,495	\$17,995	\$1,861	\$1,861
<b>Objective</b>	<b>2 Planning Outreach, Education, and Training</b>						
Activity	2.1 Public Engagement & Outreach	\$74,764	\$72,938	\$5,593	\$58,549	\$12,311	\$12,311
Activity	2.2 Local and State Local Education Outreach, and Support	\$9,004	\$10,378	\$4,397	\$10,604	\$10,482	\$10,482
Activity	2.3 DRCOG Staff Training and Development	\$92,749	\$42,029	\$18,006	\$24,995	\$8,606	\$8,606
<b>Objective</b>	<b>3 Long Range Planning</b>						
Activity	3.1 Metro Vision Plan	\$657,897	\$80,974	\$485,174	\$1,216,081	\$37,764	\$37,764
Activity	3.2 Metro Vision Regional Transportation Plan	\$266,063	\$27,689	\$27,557	\$655,213	\$27,645	\$27,645
Activity	3.3 Air Quality Conformity	\$95,389	\$27,654	\$24,857	\$246,484	\$10,212	\$10,212
Activity	3.4 Pedestrian and Bicycle Planning	\$143,313	\$32,130	\$27,720	\$36,378	\$15,162	\$15,162
Activity	3.5 Urban Growth Boundary/Area (UGB/A)	\$58,974	\$6,130	\$6,130	\$200,019	\$20,790	\$20,790
<b>Objective</b>	<b>4 Short Range Planning</b>		\$409,324	\$470,075	\$879,399		
<b>Objective</b>	<b>4 Short Range Planning</b>						
Activity	4.1 Transportation Improvement Project Measure Reporting	\$236,312	\$24,582	\$24,582	\$285,305	\$29,640	\$29,640
Activity	4.2 Performance Measure Reporting	\$60,738	\$6,313	\$6,313	\$62,561	\$6,502	\$6,502
<b>Objective</b>	<b>5 Transportation Operations</b>		\$431,966	\$441,887	\$873,853		
<b>Objective</b>	<b>5 Transportation Operations</b>						
Activity	5.1 DRCOG Congestion Management Process	\$96,956	\$44,189	\$45,267	\$89,456	\$10,272	\$10,272
Activity	5.2 Regional Transportation Operations	\$31,356	\$37,410	\$14,269	\$276,693	\$3,357	\$3,357
Activity	5.3 Regional Transportation Security Planning	\$108,525	\$2,398	\$2,970	\$53,278		
Activity	5.4 Transportation Safety Planning	\$16,602	\$1,280	\$1,280	\$11,775	\$11,618	\$11,618
Activity	5.5 Transportation Safety Planning	\$84,274	\$1,726	\$1,726	\$17,099	\$1,777	\$1,777
<b>Objective</b>	<b>6 Public Transportation Planning</b>		\$149,222	\$155,089	\$304,311		
<b>Objective</b>	<b>6 Public Transportation Planning</b>						
Activity	6.1 Regional Transit/Heavy Rail/Streetcar/Local Government Coordination	\$90,172	\$3,382	\$59,374	\$182,873	\$9,654	\$9,654
Activity	6.2 FasTracks Review and Strategic Budget Plan	\$12,478	\$4,297	\$4,297	\$62,282	\$1,336	\$1,336
Activity	6.3 RTD and TOD Local Government Planning Process	\$8,690	\$5,007	\$4,908	\$86,298	\$930	\$930
Activity	6.4 RTD Strategic Budget Plan		\$50,304	\$50,110	\$100,414		
Activity	6.5 RTD System Planning Process		\$43,307	\$4,803	\$88,210		
Activity	6.6 PnR Planning and Transit Oriented Development (TOD)	\$5,793	\$602	\$602	\$5,967	\$620	\$620
Activity	6.7 FasTracks Program Management and Planning Assistance		\$2,485,591	\$2,596,395	\$5,034,979		
<b>Objective</b>	<b>7 Support Systems for Planning</b>						
Activity	7.1 Develop and Maintain Information Systems		\$837,288	\$861,306	\$1,698,594		
Activity	7.2 Land Use Modeling and Forecasting	\$419,473	\$43,599	\$43,599	\$430,250	\$44,719	\$44,719
Activity	7.3 Transportation Modeling and Forecasting		\$63,164	\$6,396,768	\$12,694,912	\$82,857	\$82,857
Activity	7.4 Maintain Transportation and Related Data		\$168,195	\$19,148	\$4,090,889	\$17,421	\$17,421
					\$16,775,001		

Note: In-kind match provided by RTD for transit-related activities is proportionally distributed among all UPWP activities.

\* Total expenditures include CPG, cash match, and RTD in-kind.

Note: In-kind match provided by RTD for transit-related activities is proportionally distributed among all UPWP activities.

## **APPENDIX B**

### **TABLE OF DRCOG DELIVERABLES WITH EXPECTED COMPLETION DATES**



**Table 4  
Key DRCOG Deliverables with Expected Completion Dates**

Activity	Products	2-Year Program Period							
		FY2018				FY2019			
		2017	2018			2018	2019		
		Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep
1.2	<del>Prospectus</del>				✘				
	<del>FY18</del> <u>FY20-19-21</u> UPWP								X
2.4	<del>Public Involvement in Regional Transportation Planning</del>								✘
	<del>Status and Impacts of DRCOG Transportation Planning and Programming with Environmental Justice</del>				✘				
3.4	<del>Metro Vision Plan update</del>					✘			
	<del>Metro Vision performance measure baseline report</del>				✘				
	<del>Who is TOD survey and report</del>						✘		
	<del>Metro Vision foundational measure targets</del>	✘							
3.2	<del>Metro Vision Regional Transportation Plan update</del>					✘			
	<u>Metro Vision Performance Measurement Report</u>								
	<del>Regional Freight Movement Study</del>				✘				
3.3	<del>Conformity Determination Reports</del> <u>DRCOG Freight and Goods Movement Report</u>	As needed							
3.4	<del>DRCOG Active Transportation Plan</del> <u>Conformity Determination Reports</u>					As needed			
	<del>Regional Bicycle Use Count Program Development</del>				✘				
3.5	<del>UGB/A Regional Allocation</del> <u>Active Transportation Plan</u>			✘		✘			
4.1	TIP Projects Delayed Report		X				X		
	Annual Listing of Obligated Projects		X				X		
4.2	<del>FAST Act applicable performance measures and targets</del> <u>Metro Vision Performance Measurement Report</u>				✘				
	<del>Metro Vision foundational measure targets</del> <u>FAST Act Performance Measurement Report</u>								✘
5.1	Report of Traffic Congestion in the Denver Region	X		X				X	
	<u>CMP Status Report</u>								
5.2	<del>FY 16-17 project selection process for TDM pool</del>	✘							

**Table 4  
Key DRCOG Deliverables with Expected Completion Dates**

Activity	Products	2-Year Program Period							
		FY2018				FY2019			
		2017	2018			2018	2019		
		Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep
	FY18-19 project selection process for TDM pool								X
5.3	Annual Report on Regional Transportation Operations Performance Measures			X					
	Regional <del>Concept of</del> Transportation Operations <del>update</del> Program				X				X
5.4	<del>Guidance for security of transportation operations system</del>				X				
	<del>Internet/network security audit</del>								X
5.5	<del>Traffic Safety in the Denver Region</del> 2014-2018 Safety Targets			X					
	<del>Pedestrian and Bicycle Safety in the Denver Region</del> 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							
7.1	Denver Regional Aerial Photography Project (DRAPP)							X	
	Denver Regional Planimetric Project			X					
7.2	UrbanSim calibration and validation				X				
7.3	2015 Base Year Calibration				X				
	Focus/ <del>UrbanSim Integration Platform</del> Model Runs and Output Data								X
	<del>Commercial Vehicle Survey</del>		X						
7.4	Transportation Improvement Survey								X