

Denver Regional Council of Governments

FY 2016 and FY 2017

UNIFIED PLANNING

WORK PROGRAM

FOR THE DENVER REGION

Adopted July 15, 2015
Amended July 20, 2016

ABSTRACT

TITLE: FY 2016 and FY 2017 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

DATE: Adopted July 15, 2015
Amended July 20, 2016

SOURCE OF COPIES: Public Information and Communications
DRCOG
1290 Broadway
Denver, CO 80203
(303) 455-1000
or from the [DRCOG Web site](#)

NUMBER OF PAGES: 47

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, 2015 through September 30, 2017 (federal fiscal years 2016 and 2017)

Preparation of this report has been financed in part through grants from the Federal Transit Administration and the Federal Highway Administration of the U.S. Department of Transportation.

TABLE OF CONTENTS

I. INTRODUCTION.....	1
<i>Purpose</i>	1
<i>Background</i>	1
II. REGIONAL TRANSPORTATION PLANNING	3
<i>Guidelines for Planning Activities</i>	3
Federal Transportation Planning Factors	3
Federal Planning Emphasis Areas	5
Title VI Requirements.....	5
Federal Quadrennial Review Comments.....	6
Integrate the Congestion Management Program Process.....	6
Relationship to Air Quality Planning.....	6
<i>Status of the Metro Vision Plan and Regional Transportation Plan</i>	8
<i>FY2014-FY2015 Accomplishments</i>	9
2016-2021 Transportation Improvement Program	9
Metro Vision/Metro Vision Regional Transportation Plan	9
Air Quality.....	10
Bicycle & Pedestrian and TDM Planning.....	10
Transit	11
Congestion Management	11
Traffic Ops.....	11
Modeling.....	11
Information Systems	12
III. THE PLANNING PROGRAM FOR FISCAL YEARS 2016 AND 2017	13
<i>Program Organization</i>	13
<i>Program Financing</i>	14
IV. FEDERAL URBAN TRANSPORTATION PLANNING PROGRAM ACTIVITY DESCRIPTIONS	15
<i>Objective 1.0 Program Administration and Coordination</i>	15
Activity 1.1 Direct Program Management.....	15
Activity 1.2 Maintaining the Metropolitan Transportation Planning Process.....	15
Activity 1.3 Interregional Planning Coordination.....	16
<i>Objective 2.0 Planning Outreach, Education, and Training</i>	17
Activity 2.1 Public Engagement and Outreach.....	17
Activity 2.2 Local Government and Stakeholder Education, Outreach, and Support	17
Activity 2.3 DRCOG Staff Training and Development	18
<i>Objective 3.0 Long Range Planning</i>	19
Activity 3.1 Metro Vision Plan.....	19
Activity 3.2 Metro Vision Regional Transportation Plan	20
Activity 3.3 Air Quality Conformity.....	21
Activity 3.4 Pedestrian and Bicycle Planning	21
Activity 3.5 Urban Growth Boundary/Area (UGB/A).....	22

<i>Objective 4.0</i>	<i>Short Range Planning</i>	23
Activity 4.1	Transportation Improvement Program.....	23
Activity 4.2	Performance Measure Reporting.....	24
<i>Objective 5.0</i>	<i>Transportation Operations</i>	25
Activity 5.1	DRCOG Congestion Management Process	25
Activity 5.2	Regional Travel Demand Management (TDM) Planning	25
Activity 5.3	Regional Transportation Operations.....	26
Activity 5.4	Transportation Security Planning.....	27
Activity 5.5	Transportation Safety Planning.....	27
<i>Objective 6.0</i>	<i>Public Transportation Planning</i>	29
Activity 6.1	Regional Transit/Human Service Transportation Planning Coordination	29
Activity 6.2	FasTracks Review and Assessment.....	29
Activity 6.3	RTD and CDOT Local Government Planning Process	30
Activity 6.4	RTD Strategic Budget Plan.....	30
Activity 6.5	RTD System Planning Process.....	31
Activity 6.6	Park-n-Ride® Planning and Transit Oriented Development (TOD).....	31
Activity 6.7	FasTracks Program Management and Planning Assistance	31
<i>Objective 7.0</i>	<i>Support Systems for Planning</i>	33
Activity 7.1	Develop and Maintain Information Systems	33
Activity 7.2	Land Use Modeling and Forecasting	34
Activity 7.3	Transportation Modeling and Forecasting	34
Activity 7.4	Maintain Transportation and Related Data	35
V. OTHER MAJOR PLANNING ACTIVITIES		37
A.	Identified in a previous/current Transportation Improvement Program	37
B.	Colorado Department of Transportation, Division of Transportation Development – State Planning and Research Program (Summary)	38
C.	Non-Federally Funded & Local Governments Planning Activities.....	39
APPENDIX A PROGRAM FINANCING TABLES		41
APPENDIX B TABLE OF DRCOG DELIVERABLES WITH EXPECTED COMPLETION DATES		45

FIGURE / TABLES

Figure 1. Transportation Management Area.....	2
Table 1 FY2016 and 2017 UPWP Revenue Sources.....	45
Table 2 FY2016 and 2017 Anticipated Expenditures	45
Table 3 Key DRCOG Deliverables with Expected Completion Dates.....	46

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 2016 and FY 2017 (October 1, 2015 through September 30, 2017). 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 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.



DENVER REGIONAL COUNCIL OF GOVERNMENTS

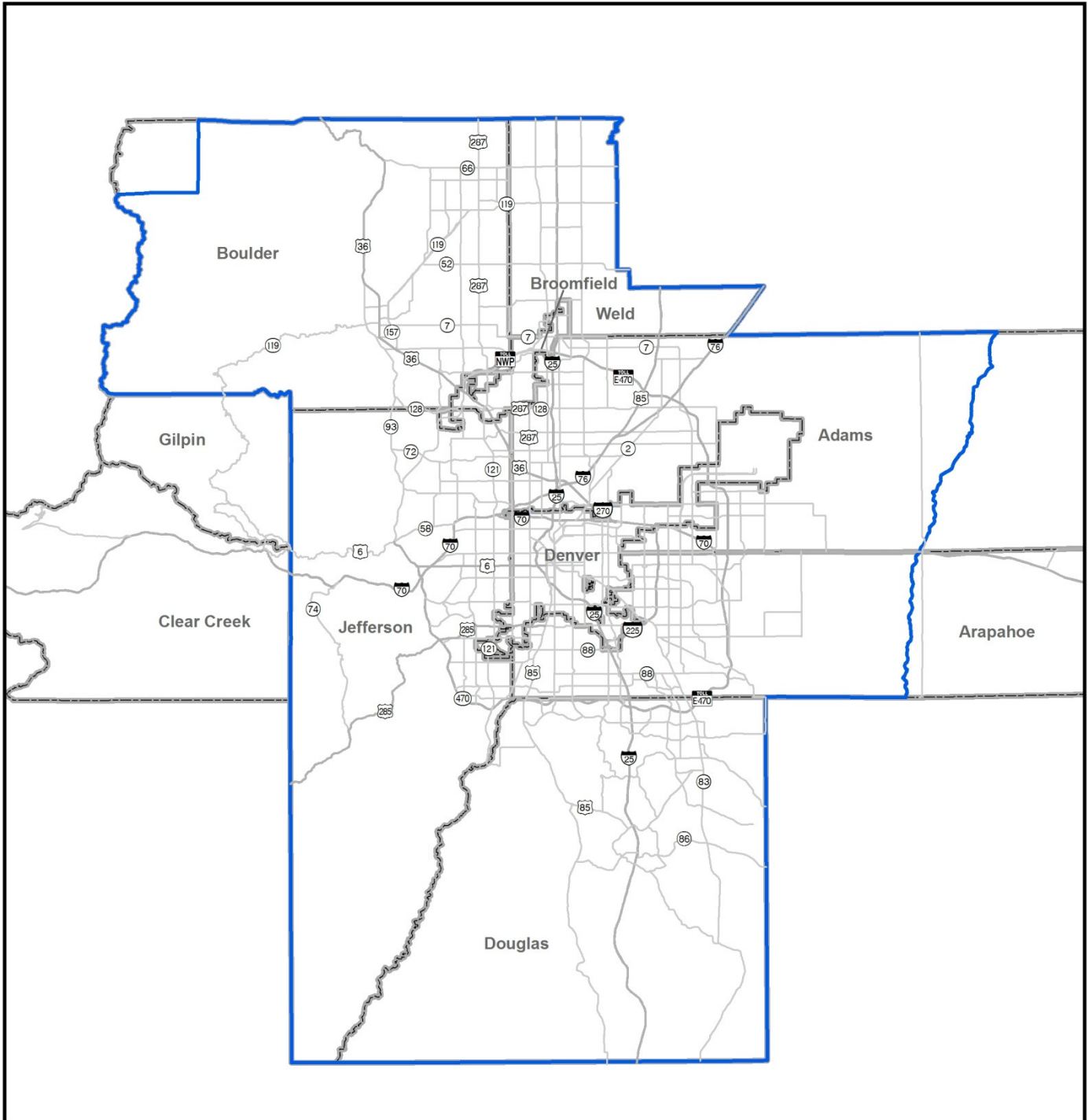
We make life better!

1290 Broadway
Suite 700
Denver CO 80203



Phone: 303-455-1000
Fax: 303-480-6790
Web: www.drcog.org

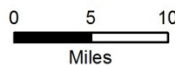
Figure 1

Transportation Management Area



LEGEND

-  Transportation Management Area
-  DRCOG County Boundaries



SOURCE DATA:
Enter all data sources here, included base map information

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.

Projection: State Plane Colorado Central, NAD 83 (feet)
PJ 913

C:\inetpub\wwwroot\Programs\UPWPF\fig1\Portal_Map_Template.mxd

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 planning factors in the transportation planning process. Substantial work is anticipated during FY 2016-17 in consideration of these planning requirements. Following is a description of the planning factors and a summary of FY 2016-17 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 Metro Vision Plan, a shared vision of the metro area
- Activity 3.2 – development of regional freight movement study
- Activity 3.2, 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 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 – 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 – develop regional freight movement study
 - Activity 3.4 – 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 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 – provide support to regional NEPA and other environmental efforts
 - Activity 3.3 – conduct air quality conformity determinations on transportation investments identified in the TIP and FC-RTP; continue to host Interagency Consultation Group (ICG) meetings
 - Activity 3.4 and 5.2 – promote non-motorized forms of transportation
 - Activity 6.2 to 6.7 – continue to assess transit needs and promote transit options

- 6. Enhance the integration and connectivity of the transportation system, across and between modes, and for people and freight.**

- Activity 1.2 – coordinate with CDOT, RTD, and local governments with regard to transportation network improvements
- Activity 3.2 – update 2040 Metro Vision Regional Transportation Plan; develop regional freight 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 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 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.

Federal Planning Emphasis Areas

The Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) require the metropolitan transportation planning process be responsive to three planning emphasis areas in FY 2016: MAP-21 implementation (performance based planning), regional models of cooperation, and ladders of opportunity ([see letter](#)). 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 addition, DRCOG participates in the Colorado Unified Certification Plan 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. Recommendations from that review are incorporated in this document, as warranted. The next review will be completed in 2016.

Integrate the Congestion Management Program Process

Traffic congestion has been recognized for its 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, avoid 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.

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 plan (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, air quality conformity was demonstrated for all approved TIP's and Fiscally Constrained RTP's.

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 will be reclassified as moderate nonattainment. As a result an updated SIP is currently being developed including an examination of transportation related emission control measures. The completed SIP must be submitted to the state legislature 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 Prospectus and an MOA between DRCOG and RAQC 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 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 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 THE METRO VISION PLAN AND REGIONAL TRANSPORTATION PLAN

The following table lists the most recent status (as of May 2016) of the Metro Vision Plan, the Regional Transportation Plan, and associated planning documents.

Document	Action/Date
2035 Metro Vision Plan (2040 Plan anticipated adoption Fall 2016)	Amended May 2014
2035 Metro Vision Regional Transportation Plan (2040 Plan anticipated adoption Fall 2016)	Amended May 2014
<ul style="list-style-type: none"> • Pedestrian and Bicycle Element of the 2035 Metro Vision Regional Transportation Plan • Transit Element of the 2035 Metro Vision Regional Transportation Plan 	Amended May 2009
2040 Fiscally Constrained Regional Transportation Plan	Adopted April 2010
2016-2021 Transportation Improvement Program	Adopted February 2015
2016-2021 Transportation Improvement Program	Adopted April 2015
Metro Vision Growth and Development Supplement	Adopted January 2012
Regional TDM Short Range Plan	Adopted June 2012
Denver Regional Intelligent Transportation Systems Strategic Plan	Adopted October 2010
Public Involvement in Regional Transportation Planning	Adopted April 2010

FY2014-FY2015 ACCOMPLISHMENTS

Major activities completed in the FY2014-FY2015 UPWP include:

2016-2021 Transportation Improvement Program

- 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
- Integrated a new enhanced graphical search function for TIP projects into [Transportation Regional Improvement Projects and Survey \(TRIPS\)](#) webpage

Metro Vision/Metro Vision Regional Transportation Plan

- Adopted new [2040 Fiscally Constrained RTP](#):
 - Developed roadway capacity project scoring criteria
 - Updated the designated Regional Roadway System definition
 - Scored and selected fiscally constrained roadway capacity projects
 - Worked extensively with CDOT and FHWA on estimating long range revenues (Program Distribution)
 - Prepared 32 committee memos and associated presentations
- Finished scenario planning analyses and reporting
- Prepared draft transportation chapter (*A Connected Multimodal Region*) of Metro Vision Plan, identifying ~40 performance measures
- Administered 2035 RTP 2013 Cycle 2 amendments and prepared the new 2040 Fiscally Constrained RTP
- Metro Vision Stakeholder Engagement - The Metro Vision Update included extensive stakeholder engagement to inform the draft plan. Two new committees, the Metro Vision Planning Advisory Committee made up of local government staff and technical experts and Citizens Advisory Committee made up of community and business leaders, met continuously through December 2014.
- Regional Citizens Academy: Staff worked with local nonprofit Transit Alliance to tailor its successful Citizens' Academy program around education and input on Metro Vision topics; this program included seven weekly sessions with 28 participants. Staff and consultants held six focus groups on topics like infill and edge development, access to opportunity, housing and health and the built environment; conducted interviews related to urban centers, corridors and rural town center; and completed local government and urban centers surveys.

- DRCOG staff hosted seven Metro Vision Idea Exchanges with more than 300 participants on topics ranging from infill development, community health and wellness, regional data, and transit-oriented communities.
- [*OUR Shared Vision*](#), an online civic engagement forum using the MindMixer platform was launched to gather input from stakeholders; to date the site has had more than 2,200 unique visitors with more than 800 interactions including 220 new ideas related to a variety of Metro Vision topics.
- The draft Metro Vision Plan document was completed and submitted to the Board. Three catalytic project studies and three technical assistance projects were completed for the Sustainable Communities Initiatives grant. The catalytic projects included: Peoria Station, Wheat Ridge Ward Road/Ridge Road, and the Westminster Station. The technical assistance projects included: Market Readiness Studies for the East and Gold Corridor, and a Bike/Pedestrian Accessibility Study for the US-36 Corridor. These projects provided local government planning and helped to inform the update of Metro Vision (funded by SCI grant).
- Hosted various government agencies for peer sharing related to SCI work, Metro Vision, Urban Centers, and Regional Equity Atlas
- Provided support of Station Area Master Plans and Urban Center Studies, UGB/A
- Developed and administered an Urban Center Survey to gather information about best practices and identify the best performing urban centers

Air Quality

- Became proficient with the latest MOVES model
- Facilitated improvements to fleet type/VMT distribution assumptions
- Completed three conformity determinations (modeling and report) for Cycle 2 2013, new 2040 RTP, and 2016-2021 TIP
- Completed update to MOA with RAQC
- Completed update MOA with APCD, NFRMPO, and RAQC
- Completed update to Regulation 10 document (approved by EPA)

Bicycle & Pedestrian and TDM Planning

- Oversaw/coordinated the update of GIS inventory and mapping of bicycle facilities
- Coordinated and hosted NACTO bicycle facility design training session for local governments
- Coordinated bicycle design workshop
- Held Bicycle Summit in May 2014
 - Received 100% positive feedback in evaluation survey with the majority of attendees responding they would be interested in attending a bicycle summit twice a year.
- Held Innovative Bicycle Facilities Treatment (Design) workshop for local governments
- Coordinated the evaluation and scoring of bicycle and pedestrian project applications for the 2016-2021 TIP; provided assistance to project sponsors
- Updated the Regional Bicycle Network Vision for the 2040 MVRTIP
 - Held one large stakeholders meeting and seven small workshops by county (for all 10 counties) to obtain input to the regional bicycle network vision

- Will make a recommendation and approve a final product (Fall 2015)
- Conducted and compiled controlled counts of pedestrians and bicyclists on recently completed TIP projects
- Completed programming of TIP TDM Pool funds to projects for FY 2014 and FY 2015 and initiated process for FY 2016 and FY 2017 funds
- Monitored and responded to emails regarding contractual issues with TDM Pool and Partnership projects
- Coordinated the 2014 and 2015 Bike to Work Days. The Denver region's event is the second largest in the country, drawing 30,000 participants annually

Transit

- Worked with CDOT, RTD, and Governor's office to transition FTA 5310 Designated Recipient designation from RTD to CDOT; worked with RTD and CDOT to transition the administration of DRCOG-selected FTA 5310 projects to CDOT
- Board approved 2014 FasTracks Baseline Report and first FasTracks Change Report
- Coordinated the evaluation and scoring of transit project applications for the 2016-2021 TIP; provided assistance to project sponsors
- Worked with DRMAC on its strategic planning and service coordination efforts
- Hosted successful public and stakeholder forum for the Coordinated Transit Plan

Congestion Management

- Completed 2012 Report on Traffic Congestion
- Completed Report on VMT in the Denver Region
- Completed 2014 Report on Traffic Congestion
 - Updated traffic count inventory
- Completed congestion performance measure calculations

Traffic Ops

- Completed *Regional Intelligent Transportation System Deployment Program*

Modeling

- Completed enhancements to the DRCOG's Regional Activity Based Model (Focus model) to improve its reliability and responsiveness
 - Accomplished a considerable success of reducing the length of time to run the Focus model
 - Constrained the Regular School Location Choice model to select an enrollment point of the appropriate grade level for the student for more realistic results
 - Created a new Park-n-Ride category for regional lots with substantial service to Denver International Airport
 - Added new "use" category to allow the I-25 NB Express Lanes to be assigned during the off-peak period
 - Conducted calibration of various components to more closely match 2010 Front Range Traffic Count (FRTC) household survey tabulations
- Developed new model/forecasts for the 2040 Fiscally Constrained RTP

Information Systems

- Launched the Denver Regional Equity Atlas
- Updated Webmap Template
- Created 2014/2015 regional datasets for transportation planning purposes
- Restructured the GIS Network
- Project application improvements for TIP Evaluation
- Launched the Transportation Improvement Program (TIP) Webmap within TRIPS
- Completed the LIDAR Data Project
- Launched the DRCOG Data Portal
- Completed the Metadata Migration and Decommissioned the Internal Data Catalog
- Completed the Denver Regional Aerial Photography Project (DRAPP) 2014
- Launched the Denver Regional Visual Resources (DRVR) site
- Developed 2014 and 2015 Bike to Work Day Website

III. THE PLANNING PROGRAM FOR FISCAL YEARS 2016 AND 2017

PROGRAM ORGANIZATION

The UPWP lists proposed transportation and transportation-related planning objectives and activities in the Denver region from October 1, 2015 through September 30, 2017.

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 FY2016-2017 Unified Planning Work Program
- Support and participate 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) 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

Deliverables:

2016

- 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 UPWP end-of-year report
- Prepare FY2016 UPWP mid-year report

2017

- Prepare FY2016 UPWP end-of-year report
- Prepare FY2017 UPWP mid-year report
- Develop the FY2018-FY2019 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, PEL's, 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

OBJECTIVE 2.0 PLANNING OUTREACH, EDUCATION, AND TRAINING

Activity 2.1 Public Engagement and Outreach

Purpose: To inform stakeholders and the general public about 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, 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 Web pages (e.g. Metro Vision 2040)
- Continue to research and implement interactive internet-based technologies and other methods to support the public participation process
- As requested, conduct DRCOG-led short courses on Metro Vision and the transportation planning process

Deliverables:

2016

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

2017

- 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 plans and studies, including reviewing consultant scopes of service, ensuring final plan consistency with the Metro Vision Plan and 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

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

Activity 2.3 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 3.0 LONG RANGE PLANNING

Activity 3.1 Metro Vision Plan

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 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)

Deliverables:

2016

- Complete the Metro Vision Plan update
- Who is TOD survey and report
- TOD Pipeline Mapping Application
- 2016 Local Government Survey – Summary Report

2017

- Metro Vision performance measurement report

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

Activity 3.2 Metro Vision Regional Transportation Plan

Purpose: To maintain the Metro Vision Regional Transportation Plan, including the [2040 Fiscally Constrained Regional Transportation Plan](#) (2040 FC-RTP).

Tasks:

- Solicit and process (if needed) amendments to the MVRTP and 2040 FC-RTP twice annually; assist local governments and other project sponsors with plan amendment questions and procedures
- 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
- 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 state and/or regional efforts to increase funding 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

Deliverables:

2016

- Complete the update of the Metro Vision Regional Transportation Plan
- Initiate Regional Freight Movement Study

2017

- Complete Regional Freight Movement Study

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

Activity 3.3 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

- Biannual Conformity Determination Reports

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

Activity 3.4 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
- Continue regional active transportation meetings/summits to facilitate communication and provide educational opportunities
- Respond to requests for assistance regarding local pedestrian and bicycle planning topics and projects

- Monitor, evaluate procedures, and compile bicycle use counts conducted by CDOT and local governments across the region
- Participate in CDOT's annual Safe Routes to School program development and project selection process, as requested
- Maintain a performance tracking report on TIP-funded bicycle and pedestrian projects

Deliverables:

2016

- 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

- 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 [2016-2021 Transportation Improvement Program](#) and maintain the up-to-date web-version of the Transportation Improvement Program Tables on the DRCOG's website and Transportation Regional Improvement Projects and Survey (TRIPS) webpage, as necessary
- Conduct appropriate project programming activities when additional revenues are made available or decreased
- Provide assistance to implementing agencies and project sponsors
- Provide financial and project coordination
- Conduct activities with CDOT and local governments to refine the IGA and contracting processes
- Monitor progress and results of TIP projects; 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

- Prepare FY 2015 Projects Delayed Report
- Prepare FY 2015 Annual Listing of Obligated Projects
- Prepare initial CMAQ Performance Plan, as required by FAST Act. Additional reports will occur biennially
- Develop white paper with TIP Work Group recommendations to provide to Board

2017

- Prepare FY 2016 Projects Delayed Report
- Prepare FY 2016 Annual Listing of Obligated Projects

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
- 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

- Document FAST Act applicable performance measures and targets

2017

- Metro Vision performance measurement report

Participants: DRCOG

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
- 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 measures, 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

Deliverables:

2016

- Prepare 2015 Annual Report of Traffic Congestion in the Denver Region

2017

- 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

- Complete FY 2016-2017 project selection process for the TDM Pool

2017

- 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 Architecture database and companion document
- Coordinate with CDOT and FHWA to perform Operation Clearance functions assigned to MPOs
- 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

- Prepare 2015 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

- Prepare 2016 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 Colorado's North Central All-Hazards Region
- 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

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

2017

- 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

Deliverables:

2016

- Traffic Safety in the Denver Region Report
- Pedestrian and Bicycle Safety in the Denver Region Report

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
- Monitor, participate, and/or assist with local and regional transit planning activities and studies
- 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

- 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. CPG 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 Regional Transportation Plan, if needed

- Provide to the DRCOG Board RTD's submittal of the annual FasTracks Status Report by May 1st of each year

Deliverables:

2016

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

2017

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

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

2017

- Prepare the 2017-2022 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

This page intentionally left blank.

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, and)
- 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 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

Deliverables:

2016

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

2017

- Complete the 2016 DRAPP

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 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

- 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:

- 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
- Provide travel model data results in support of Metro Vision and 2040 Regional Transportation Plan (RTP) amendments
- 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 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

- 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

- Create 2015 base year model including new calibration and validation
- Automate process for inputting data (e.g. UrbanSim) into the Focus model
- 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

- 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 FY2016-2017.

Identified in a previous/current Transportation Improvement Program

SPONSOR	DESCRIPTION
<i>Corridor/Interchange/Operational Studies/EA/EIS</i>	
Aurora	Parker Rd/Quincy Ave Area Roadway Operational Study
Bennett	Hwy 79 and Hwy 36 Grade Separation EA and Design Study
Boulder County	SH-7 BRT Study: Boulder to Brighton
Centennial	Arapahoe Rd: I-25 to Parker Rd Next Steps Operations Study
CDOT Region 1	EIS for I-70, I-25 to Tower Road I-25 North PEL SH-7 PEL C470 West PEL I-25 S PEL C470 Study I-25 Operational Study Wadsworth (Wheat Ridge) EA I-270/Vasquez PEL
CDOT Region 4	Environmental Impact Statement of North I-25 (DUS to Ft. Collins) US-85 PEL Study
Commerce City	Industrial Area Transportation Study: I-25 to I-270 to 40th Ave/Smith Rd
Denver	Aerotropolis Transportation Plan
DRCOG	SHRP2 Planning Process Bundle Implementation Assistance Program
Erie	Erie Pkwy Study: SH-287 to I-25
Jefferson County	Jeffco Bike Wayfinding Study
RTD	SH 119 BRT NEPA Analysis: Boulder to Longmont Regional BRT Feasibility Study
<i>Rapid Transit Station Area or Urban Center Master Plans</i>	
36 Commuting Solutions	Northwest Corridor Bike/Pedestrian Final Wayfinding Plans
Adams County	Federal Blvd Corridor Plan
Arvada	Gold Line Kipling Ridge Station

SPONSOR	DESCRIPTION
Aurora	Aurora City Center Train/Traffic and Transportation Network Study
Denver	40th and Colorado Broadway/I-25 Federal Blvd Corridor Plan National Western Center Parking and Transportation Management Study North Capitol Hill/Colfax Urban Center Study Speer/Leetsdale
Denver South TMA	Southeast I-25 Urban Corridor Study
Englewood	Englewood Light Rail Corridor Next Steps Study
Littleton	Littleton Downtown Light Rail Station Area Study Mineral Light Rail Station Area Study
Longmont	Main Street Corridor Plan
Northglenn	112th Ave Station Area Master Plan
RTD	Civic Center Station Transit District Master Plan
Thornton	North Thornton and Highway 7 TOD Master 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	2040 Statewide Transportation Plan (SWP) Implementation, Reporting, and Continued Outreach Multi-modal Freight Plan 10 Year Development Program Statewide Travel Model Asset Management Transportation Safety in the Planning Process Study Non-Motorized (Bike/Ped) Monitoring Program Plan Bike/Ped Facility Inventory Program

Non-Federally Funded & Local Governments Planning Activities

SPONSOR	DESCRIPTION
Arapahoe County	Bike and Pedestrian Master Plan
Arapahoe Centennial	I-25/Dry Creek Interchange/Corridor PEL Study
Arvada	SH-72 Alternative Analysis/NEPA
Boulder County	Envision East Arapahoe Arapahoe Access Control Plan Canyon Corridor Study 30 th St Corridor Study Williams Village BRT top on US 36
Broomfield	Comprehensive Plan/Transportation Plan Update
Douglas County	Transit Feasibility Study US 85 Corridor PEL – SH 67 to County Line Rd US 85: Titan Rd /Highlands Ranch Pkwy/Blakeland Dr NEPA and final design US 85/C-470 Interchange final NEPA clearance and design I-25/Happy Canyon Rd Interchange Study Transportation Plan Update
Lakewood	Bicycle Master Plan Update
Longmont	Comprehensive Plan/Multimodal Transportation Plan Update Ken Pratt Boulevard Corridor Plan
RTD	Development Review North Metro Corridor: Stock Show Station Planning Quality of Life Study RTD Boundary Mapping Strategic Parking Plan TOD Status Report West Corridor “Before” On-Board Study Parking Study FY16 RTD First and Final Mile Study

This page intentionally left blank.

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
Total Available Funding		\$ 13,888,024	\$ 1,443,489	\$ 1,443,489	\$16,775,001

**Table 2
FY2016 and 2017 Anticipated Expenditures**

FY2016/2017 UPWP Objectives and Activities			Total Expenditures*		
			FY2016	FY2017	FY2016/FY2017 Anticipated Expenditures
			<i>FY2016 Total</i>	<i>FY2017 Total</i>	
Objective	1	Program Administration and Coordination	\$777,650	\$670,815	\$1,448,465
Activity	1.1	Direct Program Management	\$435,765	\$368,175	\$803,940
Activity	1.2	Maintaining the Metropolitan Transportation Planning Process	\$312,960	\$281,013	\$593,973
Activity	1.3	Interregional Planning Coordination	\$28,925	\$21,627	\$50,552
Objective	2	Planning Outreach, Education, and Training	\$348,150	\$389,918	\$738,068
Activity	2.1	Public Engagement and Outreach	\$102,938	\$155,585	\$258,523
Activity	2.2	Local Gov and Stakeholder Education, Outreach, and Support	\$133,183	\$134,327	\$267,510
Activity	2.3	DRCOG Staff Training and Development	\$112,029	\$100,006	\$212,035
Objective	3	Long Range Planning	\$1,500,844	\$1,321,629	\$2,822,473
Activity	3.1	Metro Vision Plan	\$800,973	\$445,114	\$1,246,087
Activity	3.2	Metro Vision Regional Transportation Plan	\$327,686	\$327,527	\$655,213
Activity	3.3	Air Quality Conformity	\$121,533	\$124,931	\$246,464
Activity	3.4	Pedestrian and Bicycle Planning	\$179,419	\$182,459	\$361,878
Activity	3.5	Urban Growth Boundry/Area (UGB/A)	\$71,233	\$241,598	\$312,831
Objective	4	Short Range Planning	\$409,324	\$470,075	\$879,399
Activity	4.1	Transportation Improvement Program	\$335,960	\$394,509	\$730,469
Activity	4.2	Performance Measure Reporting	\$73,364	\$75,566	\$148,930
Objective	5	Transportation Operations	\$431,966	\$441,887	\$873,853
Activity	5.1	DRCOG Congestion Management Process	\$122,217	\$125,635	\$247,852
Activity	5.2	Regional Travel Demand Management (TDM) Planning	\$44,189	\$45,267	\$89,456
Activity	5.3	Regional Transportation Operations	\$137,400	\$141,269	\$278,669
Activity	5.4	Transportation Security Planning	\$26,368	\$26,910	\$53,278
Activity	5.5	Transportation Safety Planning	\$101,792	\$102,806	\$204,598
Objective	6	Public Transportation Planning	\$441,629	\$446,049	\$887,678
Activity	6.1	Regional Transit/Human Service...Planning and Coordination	\$149,222	\$155,089	\$304,311
Activity	6.2	FasTracks Review and Assessment	\$58,379	\$58,427	\$116,806
Activity	6.3	RTD and CDOT Local Government Planning Process	\$53,803	\$53,714	\$107,517
Activity	6.4	RTD Strategic Budget Plan	\$43,307	\$42,903	\$86,210
Activity	6.5	RTD System Planning Process	\$43,307	\$42,903	\$86,210
Activity	6.6	PnR Planning and Transit Oriented Development (TOD)	\$50,304	\$50,110	\$100,414
Activity	6.7	FasTracks Program Management and Planning Assistance	\$43,307	\$42,903	\$86,210
Objective	7	Support Systems for Planning	\$2,438,581	\$2,596,395	\$5,034,976
Activity	7.1	Develop and Maintain Information Systems	\$837,288	\$861,306	\$1,698,594
Activity	7.2	Land Use Modeling and Forecasting	\$506,671	\$519,688	\$1,026,359
Activity	7.3	Transportation Modeling and Forecasting	\$866,200	\$987,925	\$1,854,125
Activity	7.4	Maintain Transportation and Related Data	\$228,422	\$227,476	\$455,898
FY2016/FY2017 Anticipated Expenditures			\$6,348,144	\$6,336,768	\$12,684,912
Anticipated Unused FY16/17 Contract Funds (Carryover to FY18/19)					\$4,090,089
TOTAL Funding Available					\$16,775,001

* 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.

**Table 3
CPG (Federal) Expenditures and Associated Match**

FY2016/2017 UPWP Objectives and Activities		Expenditures					
		FY2016			FY2017		
		FY 16 CPG (federal)	DRCOG Cash Match	RTD In-Kind Match*	FY 17 CPG (federal)	DRCOG Cash Match	RTD In-Kind Match*
Objective	1	Program Administration and Coordination					
Activity	1.1	\$360,770	\$37,498	\$37,498	\$304,812	\$31,681	\$31,681
Activity	1.2	\$238,184	\$24,756	\$24,756	\$211,931	\$22,028	\$22,028
Activity	1.3	\$23,947	\$2,489	\$2,489	\$17,905	\$1,861	\$1,861
Objective	2	Planning Outreach, Education, and Training					
Activity	2.1	\$74,764	\$7,771	\$7,771	\$118,449	\$12,311	\$12,311
Activity	2.2	\$99,804	\$10,373	\$10,373	\$100,849	\$10,482	\$10,482
Activity	2.3	\$92,749	\$9,640	\$9,640	\$82,795	\$8,606	\$8,606
Objective	3	Long Range Planning					
Activity	3.1	\$657,897	\$68,380	\$68,380	\$363,330	\$37,764	\$37,764
Activity	3.2	\$266,063	\$27,654	\$27,654	\$265,979	\$27,645	\$27,645
Activity	3.3	\$95,389	\$9,915	\$9,915	\$98,250	\$10,212	\$10,212
Activity	3.4	\$143,313	\$14,896	\$14,896	\$145,878	\$15,162	\$15,162
Activity	3.5	\$58,974	\$6,130	\$6,130	\$200,019	\$20,790	\$20,790
Objective	4	Short Range Planning					
Activity	4.1	\$236,312	\$24,562	\$24,562	\$285,175	\$29,640	\$29,640
Activity	4.2	\$60,738	\$6,313	\$6,313	\$62,561	\$6,502	\$6,502
Objective	5	Transportation Operations					
Activity	5.1	\$95,955	\$9,973	\$9,973	\$98,833	\$10,272	\$10,272
Activity	5.2	\$31,356	\$3,259	\$3,259	\$32,296	\$3,357	\$3,357
Activity	5.3	\$108,525	\$11,280	\$11,280	\$111,776	\$11,618	\$11,618
Activity	5.4	\$16,602	\$1,726	\$1,726	\$17,099	\$1,777	\$1,777
Activity	5.5	\$84,274	\$8,759	\$8,759	\$85,113	\$8,846	\$8,846
Objective	6	Public Transportation Planning					
Activity	6.1	\$90,172	\$9,372	\$9,372	\$92,879	\$9,654	\$9,654
Activity	6.2	\$12,478	\$1,297	\$1,297	\$12,852	\$1,336	\$1,336
Activity	6.3	\$8,690	\$903	\$903	\$8,950	\$930	\$930
Activity	6.4	No federal funding will be expended on this activity					
Activity	6.5	No federal funding will be expended on this activity					
Activity	6.6	\$5,793	\$602	\$602	\$5,967	\$620	\$620
Activity	6.7	No federal funding will be expended on this activity					
Objective	7	Support Systems for Planning					
Activity	7.1	\$693,191	\$72,049	\$72,049	\$713,075	\$74,115	\$74,115
Activity	7.2	\$419,473	\$43,599	\$43,599	\$430,250	\$44,719	\$44,719
Activity	7.3	\$696,212	\$72,363	\$72,363	\$797,184	\$82,857	\$82,857
Activity	7.4	\$168,195	\$17,482	\$17,482	\$167,613	\$17,421	\$17,421

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							
		FY2016				FY2017			
		2015	2016			2016	2017		
		Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep
1.2	Prospectus				X				
	FY18-19 UPWP								X
2.1	Public Involvement in Regional Transportation Planning								X
	Status and Impacts of DRCOG Transportation Planning and Programming with Environmental Justice				X				
3.1	Metro Vision Plan update					X			
	Metro Vision performance measure baseline report				X				
	Who is TOD survey and report						X		
	Metro Vision foundational measure targets	X							
3.2	Metro Vision Regional Transportation Plan update					X			
	Regional Freight Movement Study				X				
3.3	Conformity Determination Reports	As needed							
3.4	DRCOG Active Transportation Plan								X
	Regional Bicycle Use Count Program Development				X				
3.5	UGB/A Regional Allocation					X			
4.1	TIP Projects Delayed Report		X				X		
	Annual Listing of Obligated Projects		X				X		
4.2	FAST Act applicable performance measures and targets				X				
	Metro Vision foundational measure targets								X
5.1	Report of Traffic Congestion in the Denver Region	X		X				X	
5.2	FY 16-17 project selection process for TDM pool	X							
	FY18-19 project selection process for TDM pool								X
5.3	Annual Report on Regional Transportation Operations Performance Measures			X					
	Regional Concept of Transportation Operations update				X				X
5.4	Guidance for security of transportation operations system				X				

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

Activity	Products	2-Year Program Period							
		FY2016				FY2017			
		2015	2016			2016	2017		
		Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep
	Internet/network security audit								X
5.5	Traffic Safety in the Denver Region			X					
	Pedestrian and Bicycle Safety in the Denver 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/UrbanSim Integration Platform								X
	Commercial Vehicle Survey		X						
7.4	Transportation Improvement Survey								X