

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
- Prepare and maintain adequate records of correspondence, purchasing and contracts

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 MAP-21 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 issues and opportunities associated with transportation.

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
- 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 an update to “Public Involvement in Regional Transportation Planning”

2017

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

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 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

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, 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 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, etc.)

Deliverables:

2016

- Complete the Metro Vision Plan update
- Metro Vision performance measure baseline report
- Who is TOD survey and report

2017

- Report on progress towards Metro Vision foundational measure targets

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., MAP-21)
- 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 3.4 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
- As requested coordinate with local communities and infrastructure service providers to identify urban reserve areas that should be conserved for future growth

Deliverables:

2016

- 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
- Explore federal funding allocation concepts for the next TIP Call for Projects
- Monitor progress and results of TIP projects; update TRIPS project database when applicable

Deliverables:

2016

- Prepare FY 2015 Projects Delayed Report
- Prepare FY 2015 Annual Listing of Obligated Projects
- Prepare initial CMAQ Performance Plan, as required by MAP-21. Additional reports will occur biennially

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 MAP-21 rulemaking and CDOT actions related to measures and targets

- Define applicable measures and targets through MPO process
- Develop and distribute information products that support the monitoring and evaluation of Metro Vision performance measures

Deliverables:

2016

- Document MAP-21 applicable performance measures and targets

2017

- Report on progress towards Metro Vision foundational measure targets

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 (MAP-21) 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:

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
- 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
- Coordinate with relevant CDOT TSM&O Division incident management efforts
- 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
- Conduct internet/network security audit and develop guidelines for non-information based transportation systems

2017

- Conduct select 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

Task 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.)
- If needed 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

- RTD submittal for DRCOG Board information 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

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 and maintain tools, applications, and visualizations that allow internal and external users to explore and consume information (e.g. Regional Equity Atlas, TIP WebMap, Denver Regional Visual Resources (DRVR))
- 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 and Regional Economic Reports)
- 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

Deliverables:

2016

- Initiate the 2016 Denver Regional Aerial Photography Project (DRAPP)
- Complete the Denver Regional Planimetric Project

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
- 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 better, faster, and more accurate results for wider-scale availability to 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 & outputs for RTP Cycle runs
- Work with RTD to evaluate Focus travel demand model forecasts regarding Park-n-Ride® and TOD 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

- Create 2015 base year model including new calibration and validation
- Complete commercial vehicle survey as part of the Front Range Travel Counts project
- Develop travel model data visualization tool to support internal and external decision making on model results

2017

- 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 transportation 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 QC, 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 crashes 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 annual Transportation Improvement Survey
- Conduct an annual Household Daily Mode of Travel survey, to supplement US Census data

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