

# FY 2017 Unified Planning Work Program Activity

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## Activity 1.1 Direct Program Management

### Tasks:

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

## Activity 1.2 Maintaining the Metropolitan Transportation Planning Process

### Tasks:

- Manage and administer the transportation planning process, including *the FY2016-2017 Unified Planning Work Program*
  - Approved administrative amendments to the FY2016-2017 UPWP (*February 2017*)
- Support and participate DRCOG's transportation policy, planning and programming committees with agendas, meeting logistics, maintenance of membership, and miscellaneous communications
  - Held 7 Regional Transportation Committee (RTC) meetings, 11 Transportation Advisory Committee (TAC) meetings, 11 DRCOG Board meetings, 9 Board Work Sessions, 8 Agency Coordination Team (ACT) meetings, and 9 (*air quality*) Interagency Coordination Group (ICG) meetings
  - Prepared ~150 agenda memos and associated attachments

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- Facilitate the planning and implementation of transportation projects and services, while strengthening the working relationships among the MPO partner agencies
  - Attended CDOT R1/DRCOG and CDOT R4/DRCOG quarterly meetings
  - Initialized discussions to hold RTD and DRCOG quarterly meetings
  - Attended meetings with CDOT and local agencies to update the CDOT local agency manual
  - Attended training on the STIP
- Continue to host the Agency Coordination Team (ACT) and Interagency Consultation Group (ICG) in order to facilitate communication among planning partners
  - Hosted 8 ACT and 9 ICG meetings
- Incorporate guidance of state and federal agencies on the regional transportation planning process
  - Communicated with CDOT, FHWA, and FTA, as necessary
- Participate on procedural efforts such as the definition of the functional highway classification system, national highway system, and planning boundaries

## **Deliverables:**

2017

- Prepare FY2016 UPWP end-of-year report
  - Completed and distributed end-of-year report
- Prepare FY2017 UPWP mid-year report
  - Completed and distributed mid-year report
- Develop the FY2018-FY2019 UPWP
  - Adopted FY18-19 UPWP (July 2017) [[https://drcog.org/sites/drcog/files/resources/FINAL%20FY18-19%20UPWP-Adopted%20July%2019%202017\\_2.pdf](https://drcog.org/sites/drcog/files/resources/FINAL%20FY18-19%20UPWP-Adopted%20July%2019%202017_2.pdf)]

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## Activity 1.3 Interregional Planning Coordination

### Tasks:

- Maintain communication and exchange information with other regional stakeholders, including neighboring counties and the state on transportation, land use, and economic development issues
  - Maintained communication and exchanged information
- Coordinate with neighboring counties, MPOs, and TPRs on planning for transportation facilities and services adjacent to mutual border; attend Statewide MPO Committee meetings
  - Coordinated with other MPOs and TPRs
  - Attended all scheduled SWMPO meetings
- Monitor, participate, and assist with statewide or interregional transportation planning activities, corridor studies, PEL's, and funding opportunities
  - Attended JEFFTAAG and JPAC meetings
  - Participated on the Denver Vision Zero Technical Advisory Committee
  - Attended, provided information for, or monitored numerous studies, including: I-25 South PEL, SH-7 BRT, SH-119 BRT, West Connect PEL, SH-66 PEL, I-270/Vasquez, North Metro Industrial Area Connectivity Study, US-85 North EA, Belleview/I-25 EA, and Castle Rock Transportation Master Plan
- 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 (TRAC), CDOT Efficiency and Accountability Committee, the State Transportation Advisory Committee (STAC), and others as appropriate
  - Attended all scheduled TRAC meetings
  - Attended all scheduled STAC meetings
  - Attended 2 TERC meetings (*hosted one*)
  - Attended 1 FAC meeting

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## Activity 2.1 Public Engagement and Outreach

### Tasks:

- Conduct public forums, community meetings, and workshops regarding major planning products identified in the UPWP
  - Hosted meetings and workshops on a variety of major planning products including Metro Vision, age-friendly communities, and small area scenario planning
  - Partnered with representatives from the Academy for Lifelong Learning to develop the curriculum and schedule fall sessions
- 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
  - Conducted public comment period and hearing on draft Metro Vision Plan (*November 2016*)
    - Conducted outreach activities with member jurisdictions between the end of the public comment period and adoption in January
  - Conducted public comment period and hearing on 2040 MVRTP and 2018-2021 TIP (*March 2017*)
- Inform the public of adopted documents, program amendments, and opportunities to offer comments via DRCOG's website
  - Provided information and an opportunity to comment on draft Metro Vision Plan, draft 2040 MVRTP, 2018-2021 TIP, and associated air quality conformity documents
  - Continued to conduct survey on DRCOG website to gather thoughts on transportation in the region [<http://www.surveymonkey.com/r/?sm=14hTifwoVPYCuiAfRUwu9g%3d%3d>]
  - Developed Metro Vision website to increase web presence of adopted plan [<http://metrovision.drcog.org/>]
- Give presentations to community, advocacy, and other interest groups, as requested
  - Gave presentations on a variety of topics, including:
    - DRCOG Who is TOD survey (*Colorado Appraisal Institute*) and Who is TOD findings (*Urban Land Institute TOD Committee*)
    - New *Metro Vision* and draft 2040 MVRTP (*TERC*) and draft 2040 MVRTP (*JEFFTAAG*)
    - Planning process overview (*Public Affairs Research Council of Alabama*)

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- DRCOG's Boomer Bond Program (*Colorado AARP Livable Community Partnership and Larimer County Partnership for Age-Friendly Communities*)
  - Demographics (*Littleton Leadership Academy*)
  - Regional planning overview (*Colorado College and Transit Alliance Citizens Academy*)
  - Regional Equity Atlas and Denver Regional Visual Resources (DRVR) (*Region VIII HUD Office*)
  - Future of Metro Denver (*Academy for Lifelong Learning*)
  - Transit and Mobility Solutions to Increase Access to Opportunity (*Rail~Volution Regional Day*)
- Create and maintain various web pages (e.g., Metro Vision 2040)
    - Created new web page
      - Explore Experience Engage [Metro Vision](#)
    - Maintained web pages including:
      - [Metro Vision](#), [Implementing Metro Vision](#)
      - [Transportation Planning](#) and [Traffic Operations](#)
  - Continue to research and implement interactive internet-based technologies and other methods to support the public participation process
    - Being conducted, in part, with the update to *Public Involvement in Regional Transportation Planning*
  - As requested, conduct DRCOG-led short courses on Metro Vision and the transportation planning process
    - Hosted *Regional Planning and Development Short Course (May 2017)*
    - Hosted *Transportation Planning Short Course (June 2017)*

## **Deliverables:**

2017

- Prepare an update to *Public Involvement in Regional Transportation Planning*
  - Began preparation of updated document after internal discussion about agency-wide document(s)

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

### Tasks:

- Educate local governments and other interested parties about the DRCOG transportation planning process, federal regulations, and associated documents
  - Developed Land Use Explorer, which allows users to view and provide input on small-area population and employment forecasts
    - Tutorial of the service was provided at TAC and RTC
- Meet with local governments about their transportation planning issues and needs
  - Met with numerous local governments on Metro Vision
    - Meetings and presentations occurred prior, during, and after public comment period and hearing
    - Presentations continued after the plan adoption (e.g., *City of Longmont, City of Arvada*)
- 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
  - Met with staff from Castle Rock, Douglas County, CDOT, RTD, and other stakeholders to review draft information for Castle Rock's Transportation Master Plan
- 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
  - Added Metro Vision "story" to the Denver Regional Visual Resources (DRVR) site entitled *Relating Jobs and Housing to Transit*
  - Posted new Metro Vision website [<http://metrovision.drcog.org/>]
- 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
  - Through Boomer Bond program, worked directly with 8 communities during FY 2017
    - Activities included public and stakeholder engagement efforts to identify important issues and priorities related to meeting the needs of region's growing older adult population
- Facilitate/host transportation-related webinars and other educational events

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- Hosted FHWA's Active Transportation and Demand Management (ATDM) Workshop in March
- Hosted 2017 MPO Modeling Conference in August
- Hold workshops and outreach opportunities for the DRVR site
  - Hired a consultant to reevaluate the DRVR site
    - Engaged stakeholders and potential users through interviews, surveys and focus groups
    - Final recommendations related to design and functionality enhancements will be considered in FY 2018

## Activity 2.3 DRCOG Staff Training and Development

### Tasks:

- Provide training in-house and offsite for DRCOG staff
  - Participated in in-house and offsite trainings
- Attend webinars
  - Participated in webinars
- Attend in-state and out-of-state conferences
  - Attended in-state and out-of-state conferences including:
    - American Planning Association National Planning Conference- New York (*May 2017*)
    - AARP Livable Communities Forum – Chicago
    - AARP Livable Communities Forum – Colorado Chapter (*Denver*)
    - ULI TOD Marketplace
    - Adams County Planning Conference (*Dec. 2016 and Sept. 2017*)
    - 2017 MPO modeling conference (*Denver*)
    - 2017 International Cartographic Conference (*Washington DC*)
    - 2017 International Conference for Free and Open Source Software for Geospatial (*Boston*)
    - Rail-Volution 2017 (*Denver*)

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## Activity 3.1 Metro Vision Plan

### Tasks:

- Provide decision-support tools and information sharing opportunities to local jurisdictions, regional partners, and the public
  - Added Metro Vision “story” to the DRVR site entitled *Relating Jobs and Housing to Transit*
  - Initiated project, including detailed workflow, to write more data-driven Metro Vision “stories” that correspond to plan outcomes
  
- Routinely analyze progress on Metro Vision with an emphasis on evaluating forces shaping trends and potential adjustments to regional strategies, actions, and initiatives
  - Began exploring ways to evaluate and communicate progress on the plan’s outcomes
    - Contracted with illustrator to create inspiring, graphical representations of plan outcomes
  
- 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
  - Provided direct technical assistance to numerous communities around the region including SHRP2 Planning Process Bundle Implementation Assistance Program
    - DRCOG staff ran small area scenarios for local governments to understand the potential travel impacts
  
- Survey local governments to understand local planning challenges, opportunities, and needs
  - Initiated survey of local governments, including evaluation of previous survey efforts and techniques



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- Conduct research to understand attitudes and preferences of residents, businesses, and employees that may shape location decisions and other behaviors
  - Began update to Who is TOD report
    - Received survey responses: Residents (2,547), business (1,254) and employee (677 employees from 108 businesses)
    - Prepared draft report comparing results from 2010 to 2016 survey results (*in corridors that were surveyed in previous and most recent surveys*) – final report will be published in FY2018
- 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
  - Tested the feasibility of performance measures to better understand the local and regional impact urban centers using SHRP2 product C02: *Performance Measurement Framework for Highway Capacity Decision Making*
    - Focused on the feasibility of each of the performance measures (*e.g., data availability, ability to draw conclusions, and urban center performance (SHRP2)*)
- Use new tools and technology to support regional and local scenario analysis, including impacts of alternative land use and development patterns
  - Developed a process to work with local governments to test local planned growth through small area scenarios using SHRP2 product C08: *Linking Community Visioning and Highway Capacity Planning*, which is also represented in PlanWorks. DRCOG staff worked with five volunteer local governments to pilot test this process
  - Developed a tool, Scenario Manager, to leverage a portion of its land use microsimulation model, UrbanSim, to develop small area scenarios based on the local government input collected through the process DRCOG staff derived from SHRP2 C08 and PlanWorks. The Scenario Manager tool helped integrate details about local plans and regulations concerning growth with real estate market feasibility to develop a more realistic scenario. The tool also helped DRCOG staff and local staff understand regulatory and market barriers to local plan implementation
  - Ran the small area scenarios developed under the approach and tool described above through the regional travel model, Focus, to help local governments understand the potential travel impacts

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- Support and collaborate with local, sub-regional, and regional partners in efforts to create transit-oriented communities and corridors
  - Participated in all active Urban Center/Station Area Master planning efforts funded through TIP (e.g., *Stakeholder and Advisory Committees*)
  - Served on planning committee for the TOD Marketplace hosted by the Urban Land Institute
- Engage in a continuous dialogue with local governments and the private development community to understand the development and implementation challenges in designated urban centers
  - Developed and distributed survey on urban center development and challenges
    - Sent survey to local planning partners (*SHRP2*)
  - Co-sponsored two ULI Technical Advisory Panels (*Englewood and Superior*)
- Establish and convene topical working groups (e.g., urban centers, first- and final-mile)
  - Formed a technical working group to assist with improvements to our Development Type model
  - Formed technical working group to evaluate coordinated growth management approaches, including current Urban Growth Boundary/Area program and other potential initiatives
- Participate on steering committees, advisory groups, leadership teams, etc. for aligned organizations and initiatives
  - Served on steering committees and focus groups, including the Mile High Connects Advisory Council, Rail-Volution 2017 Local Steering Committee, and local committees that are directing DRCOG-funded urban center/station area planning
- Sponsor events, organize workshops, and collaborate with organizations that are working to support Metro Vision outcomes and objectives
  - Sponsored the Transit Alliance 6<sup>th</sup> Annual Transit Event
  - Sponsored 2017 Rail-Volution conference (*in addition to serving on Local Steering Committee and leading development of Regional Day*)
  - Served on the planning committee for the 2016 and 2017 Adams County Planning Partners Conferences
  - Regularly met with partners around the region to identify shared initiatives to collaborate on, with the adoption of Metro Vision
  - Received more than 30 nominations for 2017 Metro Vision awards
    - During the reporting period DRCOG staff worked with an evaluation panel to select award winners
  - Co-sponsored two ULI Technical Advisory Panels (*Englewood and Superior*)

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- Partnered with representatives from the Academy for Lifelong Learning to develop the curriculum and schedule fall sessions
- Participated in numerous interviews with organizations highlighting innovative practices being pursued by DRCOG (*i.e.*, *Transportation 4 America*)
- Continued data coordination discussions and activities with NREL and RTD
- Participated in numerous MPO peer exchanges (*both group and one-to-one*)
- Facilitate communication and project implementation between federal, state, regional, and local agencies
  - Participated in several conference calls and interviews for May APA conference peer exchange between MPOs (*and other regional planning entities*)
  - Attended MPO Peer Exchange at APA National Conference
  - Participated in a conference call with numerous FHWA representatives to share most recent scenario planning efforts and to learn about other applicable efforts from around the country (*SHRP2*)
  - Met regularly with partners around the region to identify shared initiatives to collaborate on, with the adoption of Metro Vision
- Develop and apply Metro Vision plan consistency framework for communities that voluntarily refer local plans and regulations for regional review
  - A revised consistency framework will be explored in FY 2018
- Coordinate with local governments on member-sponsored amendments (e.g., new urban centers, other policy amendments)
  - Amendments were not considered during Metro Vision development
    - Next plan assessment process will occur in FY 2018

## **Deliverables:**

2017

- Metro Vision performance measurement report
  - Publishing the first annual Metro Vision performance measurement report in early 2018

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## Activity 3.2 Metro Vision Regional Transportation Plan

### 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
  - Adopted the 2040 MVRTP (April 2017) [<https://drcog.org/sites/drcog/files/resources/FINAL%20-%202040%20MVRTP%20w%20APPENDICES%20-%20April%202017.pdf>]
  - Began planning for the next MVRTP amendment cycle
  - Processed amendments to be included as part of the adopted 2040 MVRTP
- Participate and provide technical support in regional NEPA/environmental and Planning and Environment Linkages (PEL) efforts and/or similar regional planning efforts, as necessary; implement or incorporate into planning documents as appropriate
  - Reviewed documents and attended several PEL/EA/regional plan study meetings, particularly for I-25 South PEL, SH-7 BRT, SH-119 BRT, West Connect PEL, SH-66 PEL, I-270/Vasquez, North Metro Industrial Area Connectivity Study, US-85 North EA, Belleview/I-25 EA, and Castle Rock Transportation Master Plan
- Participate in regional and statewide efforts to consider freight movement in planning activities
  - Participated in 4 State Freight and Passenger Rail Plan Working Group meetings
  - Participated in 1 FAC meeting
  - Met with BNSF and UP representative to discuss long-range regional planning issues and coordination
- Incorporate actions or products that respond to state or federal transportation legislation guidance on regional transportation plans (e.g., FAST Act)
  - Monitored USDOT rule-making status for performance-based planning requirements; attended full day Safety target setting training at FHWA (January 2017)
  - Incorporated MAP-21 and FAST Act guidance into planning process and documents, such as the 2040 MVRTP
  - Coordinated with CDOT on safety measures target setting and initiated broader PM2 and PM3 planning coordination

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- Monitor state and/or regional efforts to increase funding for transportation and assist, as necessary
  - Participated in meetings of MPACT64 and others working to develop transportation funding solutions
- Conduct process for developing a Regional Freight Movement Study, working with CDOT, local governments, railroads, motor carriers, and other stakeholders
  - Finalized freight document for inclusion in 2040 MVRTP
  - Continued coordinating with CDOT DTD to create a DRCOG version of CDOT's Statewide Multimodal Freight Plan
  - Participated on CDOT's Joint Project Advisory Committee for its update to the 2018 Colorado Multimodal Plan and the Colorado Freight and Passenger Rail Plan

## Deliverables:

2017

- Complete Regional Freight Movement Study
  - Finalized freight document for inclusion in 2040 MVRTP
  - Continued coordinating with CDOT DTD to create a DRCOG version of CDOT's Statewide Multimodal Freight Plan

## Activity 3.3 Air Quality Conformity

### Tasks:

- Monitor federal and state legislation regarding new standards, requirements, or procedures impacting transportation. Assist air quality agencies (i.e., APCD, RAQC), as needed
  - Participated at RAQC Board meetings and Air Quality Control Commission meetings
  - Followed the development of the new 0.70 ppb ozone standard
- Monitor the readings and trends of criteria pollutants in relation to established attainment standards
  - Ongoing
- Host the Interagency Consultation Group (ICG) in order to facilitate better communication among planning partners and make air quality process decisions
  - Held monthly ICG meetings focusing on the new SIP and new ozone standard

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- Collect annual Regulation 16 Street Sanding and Sweeping reports and prepare a summary (RAQC)
  - Completed by 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
  - Completed the 2016 amendments
- Prepare air quality conformity findings (DRCOG) and assess findings (APCD and AQCC) associated with amendments to the MVRTP
  - Completed the 2016 conformity determination
- Participate in the development of the new ozone State Implementation Plan (SIP)
  - Attended and participated in all RAQC Board meetings, several RAQC sub-committee meetings, AQCC meetings, and the AQCC public hearing associated with the development of the new SIP
- Continue with activities associated with the Regional Haze SIP
  - No activities

## **Deliverables:**

2017

- Biannual Conformity Determination Reports
  - Completed the 2040 MVRTP conformity determination reports:
    - CO and PM10 Conformity Determination [[https://drcog.org/sites/drcog/files/resources/FINAL%20-%20CO%20and%20PM10%20Conformity%20Determination%20-%20April%202017\\_0.pdf](https://drcog.org/sites/drcog/files/resources/FINAL%20-%20CO%20and%20PM10%20Conformity%20Determination%20-%20April%202017_0.pdf)]
    - Denver Southern Subarea 8-hour Ozone Conformity Determination [[https://drcog.org/sites/drcog/files/resources/FINAL%20-%20Denver%20So%20Subarea%208-Hour%20Ozone%20Conformity%20Determination%20-%20April%202017\\_0.pdf](https://drcog.org/sites/drcog/files/resources/FINAL%20-%20Denver%20So%20Subarea%208-Hour%20Ozone%20Conformity%20Determination%20-%20April%202017_0.pdf)]

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## Activity 3.4 Pedestrian and Bicycle Planning

### Tasks:

- Monitor progress on TIP-funded and other bicycle and pedestrian projects
  - Ongoing
- Maintain facility inventory and mapping products for bicycle facilities in the Denver region. Monitor new sources, methodologies, and applications for providing information
  - Ongoing
- Continue regional active transportation meetings/summits to facilitate communication and provide educational opportunities
  - Ongoing
- Respond to requests for assistance regarding local pedestrian and bicycle planning topics and projects
  - Attended meetings and provided information on projects such as: US 36 Bicycle Bus Bike Shelter projects, CDOT Count program, and Arapahoe County Bike/Ped Master Plan
- Monitor, evaluate procedures, and compile bicycle use counts conducted by CDOT and local governments across the region
  - Conducted research on bicycle count programs in other regions
  - Conducted research on bicycle count technologies and implementation strategies
  - Conducted outreach with stakeholders to inform best practices regarding collaboration for regional bicycle count program
- Participate in CDOT's annual Safe Routes to School program development and project selection process, as requested
  - Was not asked to participate
- Maintain a performance tracking report on TIP-funded bicycle and pedestrian projects
  - Conducted bicycle/pedestrian counts on recently completed TIP-funded active transportation projects

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## Deliverables:

2017

- Worked on the DRCOG Active Transportation Plan
  - Developed AT Plan RFP
  - Conducted consultant selection process
  - Negotiated contract with selected consultant team
  - Identified the AT Stakeholder Committee (meetings kick-off in November)
- Prepared draft white paper outlining steps for the development and implementation of a DRCOG Regional Bicycle Count Program
- Prepared white paper (*Effects of Pedestrian- and Bike-Oriented Infrastructure: A Review of Existing Literature*) in partnership with Mile High Connects
  - Prepared white paper with Mile High Connects [see attached]

## Activity 3.5 Urban Growth Boundary/Area (UGB/A)

### Tasks:

- Administer the UGB/A allocation (expansion) process
  - Delayed the UGB/A allocation process until after the adoption of Metro Vision
  - Continued to develop programs or update current initiatives to improve coordinated efforts to identify and designate areas for new urban development
- Work with local governments to monitor the extent of current and future urban development patterns
  - Convened a working group to identify potential improvements for the Development Type model which identifies land classified as urban
  - Responded to several UGB/A information requests from member governments
- Maintain Development Type and UGB/A status for area jurisdictions
  - Met with staff from Castle Pines to answer questions about UGB/A prior to the city joining DRCOG



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- Administer emergency requests for new UGB/A
  - None received
- Track municipal annexations to determine impact on UGB/A in unincorporated areas
  - Ongoing
- Monitor the amount of land consumed by development outside the UGB/A
  - Prepared analysis at request of Board of Directors – urban development within existing urbanized footprint, within future UGB/A, and outside 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:

2017

- UGB/A Regional Allocation
  - Currently working with stakeholders and Board of Directors to determine next steps with UGB/A program and/or other approaches to coordinated growth management

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## Activity 4.1 Transportation Improvement Program

### 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
  - Processed 5 administrative modifications and 4 policy amendment actions to the 2016-2021 TIP [<https://drcog.org/2016-2021-transportation-improvement-program-2>]
  - Adopted a new 2018-2021 TIP (April 2017) [[https://drcog.org/sites/drcog/files/resources/2018-2021%20Transportation%20Improvement%20Program%20-%20Adopted%20April%202017\\_2.pdf](https://drcog.org/sites/drcog/files/resources/2018-2021%20Transportation%20Improvement%20Program%20-%20Adopted%20April%202017_2.pdf)]
  - Processed 5 administrative modifications and 2 policy amendments actions to the 2018-2021 TIP [<https://drcog.org/programs/transportation-planning/transportation-improvement-program/2018-2021-transportation>]
- Conduct appropriate project programming activities when additional revenues are made available or decreased
- Provide assistance to implementing agencies and project sponsors
  - Assisted sponsors with their TIP projects
- Provide financial and project coordination
  - Assisted sponsors with their TIP projects
- 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
  - Analyzed the status of project phases for FY16 (*reported out to the Board*)
  - Confirmed the status of potentially-delayed FY17 project phases with CDOT and RTD in April 2017
- Conduct activities associated with policy development for the new 2020-2025 TIP and call for projects
  - Held 4 TIP Review Work Group meetings (*2020-2023 TIP*)
  - Finalized the TIP Dual Model Framework Report

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- Facilitate TIP Work Group to advise the DRCOG Board of Directors on specific 2020-2025 TIP policy topics
  - Began TIP Policy Work Group in February 2017 and held 11 meetings (2020-2023 TIP)
  - Began to draft a 2020-2023 TIP Policy document
- Coordinate with CDOT on annual “rolling” STIP/TIP updates related to CDOT’s new cash management process

## Deliverables:

2017

- Prepare FY 2016 Projects Delayed Report
  - Provided to DRCOG Board (December 2016)
- Prepare FY 2016 Annual Listing of Obligated Projects
  - Provided to DRCOG Board as informational item (January 2017)  
[\[https://drcog.org/sites/drcog/files/resources/FY16%20ALOP.pdf\]](https://drcog.org/sites/drcog/files/resources/FY16%20ALOP.pdf)

## Activity 4.2 Performance Measure Reporting

### Tasks:

- Compile data associated with various regional performance measures
  - Continued to compile data internally and with partner agencies (CDOT and RTD)
- Monitor FAST Act rulemaking and CDOT actions related to measures and targets
  - Reviewed and confirmed ability to compile data associated with new FAST Act guidance
  - Coordinated with CDOT on draft safety measures and targets
- Define applicable measures and targets through the MPO process
  - Defined several (further definition in progress)
- Develop and distribute information products that support the monitoring and evaluation of Metro Vision performance measures
  - Created interim data dictionary for Metro Vision performance measures

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- Publishing the first annual Metro Vision performance measurement report in early 2018

## Deliverables:

2017

- Metro Vision performance measurement report
  - Produced interim documentation in form of data dictionary made available during plan review
  - Publishing the first annual Metro Vision performance measurement report in early 2018

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## Activity 5.1 DRCOG Congestion Management Process

### Tasks:

- Update the Congestion Mitigation Program (CMP) databases annually
  - Completed the update to the 2016 CMP database
- Update formulas and factors for delay calculations, as needed
  - Ongoing (including a major update using INRIX data)
- Prepare public information and outreach documents and presentations, including summaries of CMP data
  - Ongoing
- Maintain and update CMP pages on the DRCOG website
  - Expanded and clarified the CMP process on the DRCOG website
- Monitor federal (FAST Act) and statewide congestion measures, methodologies, and analytical tools
  - Kept up to date on these topics including several webinars
- Work with CDOT on operational evaluations of key bottleneck locations
  - On hold
- Monitor research on impacts of tolling and pricing mechanisms
  - Worked with CDOT on a Vehicle Occupancy Study and examined HOT volumes
- Maintain performance tracking report on TIP-funded roadway projects
  - Ongoing

### Deliverables:

2017

- Prepare 2016 Annual Report of Traffic Congestion in the Denver Region
  - Nearing completion of the 2016 traffic congestion report

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

### Tasks:

- Monitor progress and results of projects funded through the TIP Regional TDM Pool, including activities of the Regional TDM Program
  - Continued working with TDM Pool awardees for FYs 2016-2017 to get projects under contract
- Monitor new types of TDM activities and techniques
  - Ongoing
- Monitor and assist with “last-mile” studies and analyses associated with various transit stations
  - Served on RTD first and last mile proposal review committee
  - Prepared white paper (*Effects of Pedestrian- and Bike-Oriented Infrastructure: A Review of Existing Literature*) in partnership with Mile High Connects [see attached]

### Deliverables:

2017

- Complete FY 2018-2019 project selection process for the TDM Pool
  - Developed draft eligibility rules, selection process, and evaluation criteria for set-aside (Call for Projects to be in November)

## Activity 5.3 Regional Transportation Operations

### Tasks:

- Conduct periodic stakeholder meetings to maintain dialogue necessary to implement the Regional Concept of Transportation Operations and assist with project implementation
  - Conducted eight Regional Transportation Operations (RTO) Working Group meetings
- Monitor ITS deployment to ensure compliance with 23 CFR Part 940 and maintain systems engineering analysis project documentation submitted by stakeholders
  - Coordinating with CDOT as they prepare to create a statewide ITS Architecture

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- Maintain the DRCOG Turbo Architecture database and companion document
  - Updated database was published to the web [<http://www3.drcoq.org/documents/its/architecture/index.htm>]
  - Updated regional ITS architecture to ARC-IT 8.0 that includes definition of FY2018 RTO Improvement Projects
  - Updated maintenance processes for the architecture (*on-going and annual process*)
- Coordinate with CDOT and FHWA to perform Operation Clearance functions assigned to MPOs
  - No activity assigned to MPO
- Assist CDOT and FHWA with implementation of a statewide transportation operations plan
  - Completed plan done by CDOT
- Coordinate with relevant CDOT TSM&O Division incident management efforts
  - Participated in eight incident management plan development meetings
  - Participated on The Governor's Task Force on Responder Safety [*see attached*]
  - Strategic coordination with CDOT and-CSP to emphasize incident management in the region and define each agency's roles in improving incident management
- Incorporate ITS and operations strategies into the Congestion Management Process analyses, measures, and public information products
  - Ongoing
- Maintain and update Regional Transportation Operations and other applicable DRCOG web site pages
  - Ongoing
- Assist in the establishment of inter-jurisdictional and interagency data sharing and performance measure procedures and agreements
  - Monitored ongoing efforts between CDOT and Denver to share Computer-Aided Dispatch (CAD) traffic incident management data
  - Monitored ongoing efforts with Denver's center-to-center data sharing feasibility project with several regional partners
  - Monitored ongoing efforts with Denver's separate smart city efforts (*in advance of ATCMTD grant funding*) and CDOT's RoadX program

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## Deliverables:

2017

- Prepare 2016 Annual Report on Regional Transportation Operations Performance Measures
  - Began formatting and content of draft performance measures report
    - Additional coordination with other transportation performance measure reporting is required
- Develop and approve Regional Transportation Operations Program, programming funds identified in the RTO set-aside of the DRCOG TIP
  - RTO Improvement Program development process was approved by the RTO Working Group and the DRCOG Board
  - Issued call for applications (March 2017) [<https://drcog.org/regional-transportation-operations-improvement-program>]
  - Conducted project selection process and Board approved the RTO Improvement Program (July 2017) [<https://drcog.org/sites/drcog/files/event-materials/July%202017%20Board%20of%20Directors%20Agenda.pdf>]

## Activity 5.4 Transportation Security Planning

### Tasks:

- Participate on federal and state agency committees dealing with security and transportation, as requested
  - Participated in the Department of Homeland Security Denver Area Regional Resiliency Assessment Program
- Monitor and respond to federal rulemaking and guidance documents
  - Ongoing
- Liaise with the Colorado's North Central All-Hazards Region
  - Attended multiple North Central All-Hazards Region (NCR) Board and planning meetings
  - Member of the NCR/UASI Cybersecurity Committee. Attended multiple committee meetings and workshops



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- 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
  - Ongoing

## Deliverables:

2017

- Conduct internet/network security audits for stakeholders requesting support
  - Audits will not be conducted
    - The regional stakeholders have not requested this service

## Activity 5.5 Transportation Safety Planning

### Tasks:

- Geocode crashes in the Denver region that are off the state highway system, as data is made available
  - Completed geocoding crash data for 2014
  - Began geocoding crash data for 2015
- House the annual crash database of all crashes in the region and disseminate data
  - Ongoing (*as data becomes available*)
- Prepare crash and safety analyses, as needed
  - Began organizing 2014 crash data for use in Active Transportation Plan
- Respond to requests for information
  - No requests received

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## Activity 6.1 Regional Transit/Human Service Transportation 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
  - Explored options to better coordinate FTA 5310 and leverage with Older Americans Act funding
  - Participated in several DRMAC meetings and events including:
    - 6 DRMAC membership meetings (*bi-monthly*)
    - 12 Board meetings as member of the DRMAC Board (*ex-officio*)
    - 4 DRMAC Regional LCC Meeting (*quarterly*)
- 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
  - Ongoing discussions about strategies to coordinate transportation services for older adults, individuals with disabilities, and other vulnerable populations
  - Continued discussions with CDOT, DRMAC, FTA, transportation providers, and other key stakeholders about blending and leveraging FTA 5310 and Older Americans Act funding
- Work with DRMAC and RTD on identifying gaps in connectivity of people and services
  - Worked with DRMAC, RTD, other planning partners, and the public to identify gaps that were included in the draft Coordinated Public Transit-Human Services Transportation Plan (*Coordinated Transit Plan*)
- Monitor, participate, and/or assist with local and regional transit planning activities and studies
  - Involved with local and regional transit planning activities and studies including:
    - Colfax Corridor Connections
    - SH-7 BRT Technical Advisory Committee
    - Denver Moves Transit AAT
    - CDOT ICS PLT
    - SH-119 BRT Technical Advisory Committee
- Coordinate with RTD, CDOT, and LCCs on the selection, implementation, and performance of FTA grant-funded transit projects within the DRCOG region
  - Participated in the evaluation and selection of CDOT administered FTA and FASTER-funded transit projects

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- Coordinated with RTD to monitor the implementation of DRCOG-selected FTA funded projects
- Coordinated with stakeholders to submit to CDOT a FY 2018 FTA 5310 mobility management grant application (*not awarded*)
- Maintain a performance tracking report on TIP funded transit projects
  - Updated this report as necessary (*including project-based performance metrics*)

## Activity 6.2 FasTracks Review and Assessment

### 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.)
  - No FasTracks Change Reports submitted by RTD
- 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
  - N/A
- Provide to the DRCOG Board RTD's submittal of the annual FasTracks Status Report by May 1<sup>st</sup> of each year
  - 2017 FasTracks Status Report provided to DRCOG including RTD presentation at DRCOG Board meeting

### Deliverables:

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

# FY 2017 Unified Planning Work Program Activity

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## Activity 6.3 RTD and CDOT Local Government 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
  - Held local government planning meetings (*February and July 2017*)

## Activity 6.4 RTD Strategic Budget Plan

### Deliverables:

2017

- Prepare the 2017-2022 Strategic Budget Plan for input into the Transportation Improvement Program
  - 2018-2023 SBP adopted by Board (*October 2017*) [*see attached*]

## Activity 6.5 RTD System Planning Process

### Tasks:

- Continue oversight of system planning process
  - Ongoing

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

### Tasks:

- Prepare quarterly Park-n-Ride use reports
  - Completed the Q3-2016 and Q4-2017 utilization reports [*see attached*]
  - Completed the Q1-2017 and Q2-2017 utilization reports [*see attached*]

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- Prepare biannual Park-n-Ride user distribution geocoding and mapping
  - 2016 survey completed
  - Geocoding complete, but have not yet plotted maps
- Participate in local jurisdiction land-use planning processes for station areas
  - Ongoing
- 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
  - Worked with City and County of Denver on potential redevelopment of I-25/Broadway Station
  - Construction now beginning with Denver Housing Authority at 10<sup>th</sup> & Osage
  - Reviewing proposals for 29<sup>th</sup> and Welton site
  - Worked with City of Longmont on 1<sup>st</sup> & Main Station
  - Working with City of Wheat Ridge on MOU for old Ward Road Park-n-Ride site redevelopment
- Benchmark TOD activity in annual status report and FasTracks Quality of Life study
  - Completed report [<http://www.rtd-denver.com/QofL.shtml>]
- Provide ongoing TOD education and outreach
  - Ongoing
- Complete Annual TOD Status Report
  - Information from TOD Status Report now incorporated into Quality of Life Study [<http://www.rtd-denver.com/QofL.shtml>]

## Activity 6.7 FasTracks Program Management and Planning Assistance

### Tasks:

- Annual Program Evaluation of the FasTracks program, including revised capital costs, schedule, and preparation of program management plans for FasTracks corridors
  - Submitted FasTracks 2017 Annual Status Report

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- Preparation of FasTracks Change Report(s) for DRCOG
  - Nothing prepared for this fiscal year
  
- Other assorted engineering, planning, and environmental activities for FasTracks
  - Initiated SH-119 BRT study
  - Initiated First and Final mile study
  - Began finalizing Scope of Work for Regional BRT Study (*RFP issued in November*)

# FY 2017 Unified Planning Work Program Activity

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## Activity 7.1 Develop and Maintain Information Systems

### 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)
  - Developed new Metro Vision “story” to the DRVR site entitled *Relating Jobs and Housing to Transit*
  - Lead the development of the TOD Application (*which became known as the Development Project Pipeline*)
    - Ultimately the final product was not launched due to insurmountable legal obstacles
  - Developed the Land Use Explorer, which allows users to review the results of DRCOG’s small-area population and employment forecasts
  - Initiated a project to write more data-driven Metro Vision “stories” that correspond to outcomes in the plan
  - Created smoke tests for all applications and webmaps so that functionality can be maintained as our infrastructure changes
- Develop and maintain tools and applications that enable data exchange amongst local jurisdictions, regional partners, and DRCOG (e.g., Data Portal, Regional Data Catalog)
  - Performed maintenance on the Data Portal and the Regional Data Catalog
  - Used Data Portal for 2017 data request from local governments
  - Documented 5,838 downloads from Regional Data Catalog
  - Began a project to rebuild the Regional Data Catalog with refreshed content, functionality, and design
- Develop and distribute informational products at the local and regional level (e.g., Community Profiles, Legislative Profiles)
  - Updated online Legislative Profiles and Community Profiles with new American Community Survey data, including additional functionality and data [<https://drcog.org/services-and-resources/denver-regional-visual-resources/legislative-profiles> and <https://drcog.org/services-and-resources/denver-regional-visual-resources/community-profiles>]
- Facilitate forums for data professionals in the region to collaborate on GIS data and information (e.g., Denver Regional Data Consortium)
  - Held Denver Regional Data Consortium meetings (*November 2016, March 2017, and July 2017*)
    - Attendance in 2017 was at an all-time high (*measured since the first meeting in 2009*)

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- DRDC newsletters were published (*October 2016, January 2017, April 2017 and July 2017*) [<https://drcog.org/services-and-resources/data-maps-and-modeling/gis-maps/denver-regional-data-consortium>]
  - 243 recipients and a 49% open rate reported in 2017
- Worked with partners from around the region to publicly kick-off the Census 2020 process, including LUCA initiative
- Collect, compile, and purchase data in support of transportation and land use modeling, travel modeling, performance measurement, and Metro Vision implementation
  - Collected significant inputs to our regional base data from our local governments
    - On average, 83% of the region's area was collected through the initial data request process
  - Purchased data from several vendors to help with business and residential address tabulations
  - Initiated a project to purchase updates to our planimetric data (*buildings outlines, sidewalks, parking, etc.*)
  - Worked on a new baseline for the UrbanSim model
  - Compiled the following regional datasets: Bike inventory, Regional employment, Municipal boundaries, Parks and Open Space, Parcels, Subdivisions, Zoning, and Schools
- Create and maintain a Data Plan that integrates the data management efforts of the planning, socioeconomic, travel modeling, and GIS teams
  - Populated and maintained a wiki page with information on every dataset, application, and model
  - Increased documentation (*measured by number of wiki pages edited*) by 7x
- Maintain an internal and external data repository
  - Maintained external repository [<http://gis.drcog.org/datacatalog>]
  - Began a project to rebuild the Regional Data Catalog with refreshed content, functionality, and design
- Coordinate the purchases of regional datasets through the Denver Regional Data Consortium and Denver Regional Aerial Photography Projects
  - Purchased DRAPP imagery with 50 partners, InfoGroup data with 11 partners, and initiated a project to buy planimetric updates with 27 partners
- Perform GIS analysis for decision-support and performance measurement
  - Ongoing (*including documentation of Metro Vision performance measurements*)



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- Maintain internal processes and infrastructure in support of application and tool development
  - Developed a “device lab” which includes synced desktops and mobile devices that allow quick and accurate testing and troubleshooting of applications and tools
  - Upgraded Geosrvr, which allows DRCOG to serve data to webmaps and the Regional Data Catalog and Postgres to assist with data management and storage
  - Upgraded Postgres, which stores the datasets that we publish to the Regional Data Catalog and our webmaps
  - Began a project to organize data on Geosrvr, in support of the Regional Data Catalog rebuild
- Complete the local data collection and regional dataset creation efforts
  - Collected significant inputs to our regional base data from our local governments
    - On average 83% of the region’s area was collected through the initial data request process
  - Completed the compilation of two regional datasets (*Parcels and Master Employment, 25% of annual data compilation effort*)
  - Compiled the following regional datasets: Bike inventory, Regional employment, Municipal boundaries, Parks and Open Space, Parcels, Subdivisions, Zoning, and Schools
- Run the Development Type Model
  - Rewritten during the performance period (*including input from stakeholders*)
    - Revised model is producing dramatically improved results

## Deliverables:

2017

- Complete the 2016 DRAPP
  - Imagery was delivered and the project was closed out in spring 2017  
[\[https://drcog.org/sites/drcog/files/resources/2016%20DRAPP.zip\]](https://drcog.org/sites/drcog/files/resources/2016%20DRAPP.zip) and  
[http://gis.drcog.org/datacatalog/search/node/drapp%202016\]](http://gis.drcog.org/datacatalog/search/node/drapp%202016)
  - In 2016, we maintained participation & costs while increasing quality and access options:
    - Adopted the latest ASPRS positional accuracy standards for digital geospatial data (*which is 2x stricter than before*)
    - Used a color survey and committee to determine aesthetic preferences at the beginning and middle of the project to better inform processing procedures

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- Used client deliverable checklists to make sure orders were filled correctly
- Provided 2 WMS options
- 2016 DRAPP Survey Results:
  - Overall Experience - 42% very good; 54% good
  - Communication-88% very good;13% good
  - Quality-35% very good 43% good
  - Timing of Deliverables-17% very good;58% good
  - DRCOG's Performance -70% very good;30% good

## Activity 7.2 Land Use Modeling and Forecasting

### Tasks:

- Maintain and refine UrbanSim model, as needed
  - Worked to simplify Python code for UrbanSim model (*estimated delivery in mid-2018*)
  - Validated 2010-15 forecasts against actual ACS data (*completed mid 2017*)
  - Improved integration of data between UrbanSim and Focus travel model
  - Developed new zoning data set to improve forecasts (*completed mid 2017*)
- Implement UrbanCanvas visualization and planning model into the land use forecasting process and in support of the implementation of Metro Vision 2040 plan
  - Developed an alternative to UrbanCanvas called Land Use Explorer
    - Completed early 2017 [<http://landuseexplorer.drcoq.org/>]
  - Developed Scenario Manager (SHRP2)
    - This tool will support small area scenario planning efforts that build of regional modeling and tools (*completed mid 2017*)
- Develop and maintain economic forecasting tools in support of UrbanSim
  - Developed an in-house econometric model to produce new control forecasts for employment
    - Initial employment forecasts completed in FY 2017
    - local review will continue into FY 2018
- Develop and distribute informational products at the local and regional level (e.g., Regional Economic Reports)

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- Presented multiple economic and demographic presentations to member jurisdictions and other regional stakeholders (e.g., *Academy for Lifelong Learning, Colorado Real Estate Journal Land Conference, etc.*)
- Support work groups associated with forecasting, modeling, and planning efforts detailed in the UPWP
  - Provided multiple UrbanSim runs to support Focus 2.0 calibration and travel model runs linked to the RTP
  - Designed new population synthesizer to support Focus and travel forecasts (*Completed early 2017*)
  - Supported external consultants working on behalf of members by providing alternative land use scenario inputs for travel demand model
  - Provided various analytical and economic support for Metro Vision development and adoption

## Activity 7.3 Transportation Modeling and Forecasting

### 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
  - Ongoing
- Provide travel model data results in support of Metro Vision and 2040 Regional Transportation Plan (RTP) amendments
  - Produced extensive data for use and reporting in the 2040 MVRTP
- Evaluate other modeling/visualization/economic tools, as needed
  - Ongoing
- Support work groups associated with forecasting and modeling efforts detailed in the UPWP
  - Provided modeling assistance for TIP, Metro Vision Plan, Transit, Bicycle, and Pedestrian analyses, and Air Quality Conformity
- Provide model components and outputs to planning partners or consultants conducting NEPA or other studies
  - Provided modeling assistance on several NEPA studies and PELs

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- Explore how a "complete streets" network (with sidewalk information) may supplement information for Focus's non-motorized mode modeling
  - Continued research on new model "utility function factors" to represent P/B trip attractiveness in specific types of TAZs
- 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
  - In progress
- 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
  - Began in January 2017
    - Adjustments have been incorporated into model to be used for the upcoming 2017/2018 RTP amendments and conformity
- Summarize toll survey data (collected by others) for regional applicability
  - Conducted extensive calibration efforts to improve model results on tollways and managed lanes
- Front Range Travel Counts/Household Travel Survey:
  - Further incorporated into Focus (*completed and ongoing*)
- Summarize data for use in public information and planning products
  - Completed draft calibration and validation reports
- Complete summary documentation, offer training to prospective data users, and compile data outputs for specific requests
  - Compiled data outputs for 5 requesting entities

## Deliverables:

2017

- Create 2015 base year model including new calibration and validation
  - Validation (*and minor recalibration*) to be completed (*November 2017*)

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- Automate process for inputting data (e.g., UrbanSim) into the Focus model
  - Began development of automation process
- Develop an integration platform between Focus and UrbanSim models
  - Began development of integration platform
- Develop multi-resolution modeling capability (e.g., dynamic traffic assignment) for regional, corridor, and intersection level analysis to support transportation planning activities
  - On hold
- Design and implement new Graphical User Interface (GUI) for the Focus model
  - Designed and implemented new GUI

## Activity 7.4 Maintain Transportation and Related Data

### 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
  - Collected and processed local and state government data
- Collect and process traffic counts from CDOT and all member governments/consultants, perform quality control, and add to the traffic count database
  - Collected and processed 2016 traffic counts
- 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

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- Obtained bridge and pavement condition data
- 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
  - Edited the transportation information database

## **Deliverables:**

2017

- Conduct the Transportation Improvement Survey (will conduct in 2018 for 2018 MVRTP amendments and 2045 MVRTP development)