

**Columbia  
Area  
Transportation  
Study  
Organization  
(CATSO)**

**FY 2018 Unified Planning Work Program**

**Approved by the CATSO Coordinating  
Committee on August 24, 2017**

<b>INTRODUCTION</b>	<b>3</b>
<b>SUMMARY</b>	<b>3</b>
<b>WORK ELEMENTS - PRODUCTS &amp; ACTIVITIES</b>	<b>5</b>
<b>ACTIVITY 110 - LAND USE PLANNING</b>	<b>5</b>
<b>ACTIVITY 120 - SHORT-RANGE TRANSPORTATION PLANNING</b>	<b>8</b>
<b>ACTIVITY 130 - LONG-RANGE TRANSPORTATION PLANNING</b>	<b>12</b>
<b>ACTIVITY 140 - TRANSIT PLANNING</b>	<b>16</b>
<b>ACTIVITY 220 - FEDERAL CONSOLIDATED PLANNING GRANT MANAGEMENT</b>	<b>19</b>
<b>ACTIVITY 240 - INFORMATION SYSTEMS</b>	<b>22</b>
<b>FY 2017 BUDGET SUMMARY</b>	<b>26</b>
<b>PUBLIC PARTICIPATION</b>	<b>27</b>
<b>APPENDICES</b>	<b>28</b>
<b>APPENDIX A</b>	<b>29</b>
<b>APPENDIX B</b>	<b>30</b>
<b>APPENDIX C</b>	<b>32</b>
<b>APPENDIX D</b>	<b>33</b>
<b>APPENDIX E</b>	<b>34</b>

## ***Introduction***

*The purpose of the Unified Planning Work Program (UPWP) is to outline grant-related Columbia metropolitan planning area programs and goals for the upcoming fiscal year. Federal metropolitan planning funding is received through a Federal Transportation Grant from the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA), known as a Consolidated Planning Grant (CPG). The UPWP provides the basis for requesting CPG assistance. The CPG is a combination of FHWA/FTA (OneDOT) funding consolidated into one grant category. The City of Columbia's Department of Community Development Planning Division, acting on behalf of the City, serves as the recipient agency for the Columbia Area Transportation Study Organization (CATSO) and conducts planning activities on their behalf. CATSO is an organization designated by the Governor as the certified "Metropolitan Planning Organization" (MPO) for the Columbia Area. The membership of this organization includes all of the public agencies participating in transportation programs for the Columbia area. Specifically, this includes MoDOT, Boone County, and the City of Columbia. The implementation of this FY2018 document is a cooperative process of the CATSO, MoDOT, OneDOT, Go COMO (formerly Columbia Transit System) representatives and members of the CATSO Technical Committee and Coordinating Committee. Eligible planning activities, as described in this work program, are funded by CPG funds on an 80/20 federal/local split.*

## ***Planning Priorities Summary***

The CATSO 2045 Long Range Transportation Plan is slated for completion in February of 2019. In FY2018, CATSO staff will continue efforts related to its completion including finalization of the long-range financial plan, coordination with planning partners to update a number of long range planning documents and the identification and establishment of revised transportation goals and objectives (from the existing 2040 LRTP), with a specific emphasis on performance measures, through collaboration with the CATSO board, stakeholders and members of the public. Work will also maintain the focus on implementation of the transportation and related land-use components of *Columbia Imagined*, the comprehensive land use plan for the Metropolitan Planning Area, adopted in FY2014.

Continued emphasis on the walking and bicycling modes of transportation will be maintained. Staff will work on performance measures emphasized as federal priorities.

Included in the FY2018 work products will be the establishment of a permanent and

ongoing bicycle and pedestrian count program as a means to evaluate changes in bicycle and pedestrian activity, provide data for safety improvements and set goals for integration into the 2045 LRTP and, accordingly, the 2045 Bicycle and Pedestrian network plan (first adopted as a component of the CATSO 2040 LRTP update). In addition, staff will utilize collaboration with the City of Columbia Mayor's Climate Initiative Working Group to focus community resources and efforts towards increasing non-motorized transportation, transit and car sharing systems and infrastructure within the CATSO MPA.

Staff also anticipates collaboration with local and regional partnerships focused on traffic safety and the integration of traffic safety performance measures into the 2045 LRTP. Like the City of Columbia, CATSO's LRTP will reflect the goal of zero traffic deaths by 2030.

The total federal Consolidated Planning Grant (CPG) funding and match shown for work activities in the FY 2018 budget summary sheet is \$553,874. The FY 2018 CPG allocation has not yet been announced. It is CATSO policy to maintain a CPG balance for future year needs, particularly for special projects that may require a large dedication of CPG funds.

The following narrative outlines each program area and provides information on work activities planned for the FY2018 planning work program year period of October 1, 2017 to September 30, 2018. All tasks are to be completed by CATSO staff unless otherwise identified.

## ***Work Elements – Products & Activities***

### **Activity 110 Land Use Planning**

#### ***Purpose:***

The integration of land use and transportation planning is necessary to promote orderly growth and development in the Columbia Metropolitan Planning Area. This category includes the preparation of land use studies for small areas where specialized problems or circumstances exist. As such, studies and activities directed at the implementation of the Comprehensive Land Use Plan (*Columbia Imagined*) are also in this area of the work program. All tasks are to be completed by CATSO staff unless otherwise identified.

#### ***Objectives/Activities:***

- 1) The metro-wide comprehensive, long-range land use plan, *Columbia Imagined*, which includes analysis of the MPA's existing conditions and summarizes the public input regarding land use and policy preferences, was adopted in early FY2014. A work program was developed to implement the land use and transportation elements of the plan. Staff will continue on elements of the work plan, specifically land-use related code revisions, special area plans, and data analysis and mapping needs, during FY2018 and beyond.
- 2) Staff will continually review potential updates to the Future Land Use Map (FLUM) and Urban Services Area (USA) developed in *Columbia Imagined*; updates or amendments will be considered as needed to address development trends and infrastructure capacity, specifically sewer and transportation infrastructure. An ongoing staff activity has been to examine current land uses and potential land use impacts in corridors affected by the extension of sewer mains and roadways in the Major Roadway Plan (MRP).
- 3) One of the main work products called for in *Columbia Imagined* was the development of a revised, unified development code to replace the City of Columbia's subdivision and zoning codes. The Columbia City Council adopted the revised Unified Development Code (UDC) on March 20, 2017. As the City of Columbia municipal boundary encompasses a large proportion of the Metropolitan Planning Area (MPA), staff will continue

to provide technical feedback relevant to land use and transportation planning throughout the UDC implementation process as necessary (anticipated as an ongoing activity into FY 2018).

4) Staff will continue land use updates for 2030 model TAZ geography for use in the 2040 model update supplement to the 2040 Long-range Transportation Plan; the model supplement is anticipated to be completed in 2018. Likewise, staff will continue to provide updates to the MPA land use GIS data base that proves invaluable for MRP amendments, modeling and non-motorized project selection.

*Work Completed in FY 2017:*

- In preparation for its formal adoption by the City Council on March 20, 2017, staff assisted in the final review of the City of Columbia's UDC update (the comprehensive update and integration of Chapters 29 [Zoning] and 25 [Subdivision] of its development Code), and provided input, specifically on issues related to the relationship between transportation and land use.
- *Columbia Imagined*: Staff continued work on the land use and transportation elements of the *Columbia Imagined* Comprehensive Plan. Staff also provided input on transportation elements and land use for efforts related to the development of neighborhood plans for three strategically defined areas in central, north and east Columbia. City management has hired a consultant team to continue intensive community engagement and finalize the three strategic neighborhood plans by 2019. For the duration, CATSO staff will refocus land use and transportation planning efforts on a commercial area of western Columbia and Boone County to ensure the integrative completion of local infrastructure projects.
- Staff completed a major portion of the parking and transportation project recommendations resulting from the 2015 parking audit/transportation management project supported by Smart Growth America technical assistance. A City of Columbia Parking and Transportation Management Commission will be formed to finish completion of a number of recommendations focused on strategic parking management in support of smart growth land-use planning.
- Updated MPA land use GIS database for CATSO MPA transportation planning applications. This database provides valuable information for MRP amendments, modeling, and non-motorized project selection. Updates included MRP amendments, administrative modifications, quality control revisions, and new attribute data as appropriate.
- Continued the coordination of discussions concerning the completion and implementation of utility and transportation infrastructure score cards, preliminarily developed in FY2016, to evaluate the capacity of proposed developments.

*Products for FY 2018:*

- Continue to update MPA land use GIS database. Anticipated completion date-ongoing. Responsibility – CATSO Staff.
- Using the prioritized implementation table and FLUM adopted as a part of *Columbia Imagined*, continue to develop and carry out a work program for implementing the land use and transportation components of the plan. One of the primary work elements staff will continue to work on in FY2018 is an infrastructure “score card” to analyze and evaluate the suitability of development based upon the availability, capacity, condition, and planned extension or provision of infrastructure to a site or area. A score card was preliminarily developed in FY2016, but FY2017 scorecard implementation discussions among city departments and local stakeholders revealed the need to revise the score cards to reflect a more integrative model of development impacts. Accordingly, efforts to develop a suitably integrative and transparent score card process will continue in FY2018. Anticipated completion date-Ongoing. Responsibility – CATSO Staff assistance.
- Advance the implementation of elements of *Columbia Imagined*, specifically land-use and transportation related code revisions in conjunction with collaborative special area plans focused on infrastructure improvements and extension. Anticipated completion date-ongoing. Responsibility- CATSO Staff assistance.
- Continue to make growth projections for use in transportation decision-making by collecting development data and analyzing various US Census products and other relevant data sources. This data will be used in travel demand model runs and plan updates. Anticipated completion date-ongoing. Responsibility – CATSO Staff.

The updates of the GIS databases and map services utilize databases provided by the Boone County Assessor’s Office and the GIS Consortium. All developed tracts within the MPA are coded by existing land use and vacant tracts by their land use plan designation. Other attribute data, such as developable acreage and TAZ number, is also included.

*Staffing, Funding Sources:*

Staffing of the various work activities will come primarily from the CATSO staff. At times, City of Columbia and Boone County departments and the Missouri Department

of Transportation (MoDOT) may provide necessary assistance. Funding will come from the City of Columbia and the Consolidated Planning Grant.

*Funding Breakdown:*

Total Costs \$58,719– Federal \$46,975, Local \$11,744.



## Activity 120

### Short-Range Transportation Planning

#### *Purpose:*

This program area encompasses a range of activities including the identification, analysis, and solution of transportation problems that either are immediate concerns or will be in the near future. Attention is given to all modes of transportation. Program activities in this category are also devoted to the coordination of transportation programs between the various jurisdictions involved with transportation activities in the MPA. All tasks are to be completed by CATSO staff unless otherwise identified.

#### *Objectives/Activities:*

- 1) Prepare specific studies in relation to transportation issues, as requested, e.g. review of a Major Roadway Plan planned extension in relation to a development request. There is no definite number of studies expected; it is possible that none may be required. This is included to indicate that any such analyses would be done on an as-needed basis.
- 2) Promote non-motorized transportation, as funded by the Transportation Alternatives program for example, through staff support (data analysis, map creation/GIS analysis, grant application preparation and management, etc.) and assistance with the prioritization of funding for non-motorized infrastructure (sidewalk construction/repair, ADA compliance, trails, pedways, bike lanes, etc.) within the MPA. Additionally, since the City of Columbia comprises a large portion of the MPA, CATSO staff provides technical support to the City of Columbia Bicycle and Pedestrian Commission, which serves in an advisory role to the Columbia City Council on non-motorized transportation issues.
- 3) Continue to provide Go COMO with general staff support related to the Transportation Improvement Program, grant applications, Triennial Review, and any other relevant planning issues.
- 4) Coordinate transportation improvements within the MPA between Boone County, the City of Columbia, and MoDOT to prevent possible conflicts and service duplication.

- 5) Prepare and present to the Coordinating Committee for their approval the 4-year FY 2019-2022 CATSO Transportation Improvement Program (TIP).
- 6) Participate in the MoDOT Planning Partner Framework and related processes to identify statewide and regional investment priorities.
- 7) Processing of TIP amendments when required as requested by CATSO member jurisdictions, including Boone County, MoDOT, and the City of Columbia.
- 8) Develop the FY 2017 Annual Listing of Obligated Projects.
- 9) Process Functional Classification revisions when required.

*Work Completed in FY 2017:*

- Preparation/approval of 1 amendment to the FY2017-2020 TIP in December 2016 (1 new project) and 3 amendments in February 2017 (3 new projects and 1 project deletion).
- Staff presented the Hominy Trail Phase I and II Health Impact Assessment (HIA), completed by staff in 2016, to City Commissions and stakeholders in order to elevate awareness of the health and transportation impacts of the new non-motorized transportation facility.
- Assistance to the City of Columbia GetAbout (Non-Motorized) program staff.
- Developed the Annual List of Obligated Projects for FY2016.
- Development and adoption of the FY 2018-2021 Transportation Improvement Program (TIP).
- Developed and submitted five Transportation Alternatives program applications. One project application for the construction of a .25 mile City of Columbia sidewalk in a high pedestrian area was successfully rewarded.
- Assisted Columbia Transit staff with their 2017 Triennial Review.

*Products for FY 2018:*

- An updated FY 2019-2022 Transportation Improvement Program (TIP). Anticipated completion date – August 2018.
- Coordinating Committee approved amendments/modifications to the FY 2018-2021 TIP. Anticipated completion date – as needed.
- A map of the FY 2018-2021 TIP projects will be developed. Anticipated completion date – First Quarter 2018.
- Development of the Annual Listing of Obligated Projects for FY2017. Anticipated

completion date – First Quarter 2018.

*Staffing, Funding Sources and Agencies:*

The work in this activity category will be done by the CATSO staff, with assistance from City of Columbia Public Works and GetAbout Columbia staff. Some staff assistance will be requested from MoDOT. Funding will come from the City of Columbia and the Consolidated Planning Grant.

*Funding Breakdown:*

Total Costs \$73,488 – Federal \$58,790, Local \$14,698

## Activity 130

### Long-Range Transportation Planning

#### *Purpose:*

This activity is directed toward maintaining the Columbia Area Major Roadway Plan (MRP) and other elements of the CATSO 2040 Long Range Transportation Plan (LRTP) and conducting an effective program for long-range transportation planning. The CATSO 2040 LRTP update was adopted by the CATSO Coordinating Committee on February 27, 2014. Modeling of the adopted 2040 MRP will continue in FY 2018 using 2040 land use and employment forecasts and evaluating for adequacy of capacity and level of service (LOS). Additional work tasks to implement the plan are anticipated. Moreover, efforts related to the completion of the 2045 LRTP will continue. All tasks are to be completed by CATSO staff unless otherwise identified.

#### *Objectives/Activities:*

- 1) Provide staff support to the Columbia Area Transportation Study Organization (CATSO) Coordinating and Technical Committees, including agenda preparation, public notices, meeting minutes, and staff reports for agenda items. More specifically, this includes the provision of staff reports on proposed road, sidewalk/pedway and bicycle route reconstruction and new construction projects, and other transportation related issues.
- 2) Staff will integrate and update the travel demand model data inputs to reflect changes in population, land use, employment, utilities, roadways and related infrastructure issues; and changes in the adopted Columbia Imagined comprehensive plan to ensure consistency and to support the accuracy of data used for implementing the CATSO 2040 LRTP.
- 4) Advance efforts related to the completion of the 2045 LRTP, including the finalization of the long-range financial plan; coordination and data collection with planning partners; and collaboration between CATSO staff and board, stakeholders and the public to identify and establish the 2045 LRTP goals and objectives.
- 5) Continued engagement of bicycle and pedestrian stakeholders to leverage resources towards, and increase awareness of the value of a comprehensive, ongoing bike-ped count program, with the aim to establish a long-term program. Thorough analysis and evaluation of emerging non-motorized transportation count technologies with the potential to pilot new technology deployment within

the MPA.

- 6) Staff will serve on the City of Columbia Mayor's Climate Initiative Working Group with a goal of reducing local emissions related to transportation. The working group may serve as a means to leverage community resources towards efforts to increase non-motorized transportation, transit and car sharing systems and infrastructure within the CATSO MPA.
- 7) Prepare Amendments to the CATSO 2040 LRTP, Major Roadway Plan, and the CATSO Pedestrian and Bicycle Network Plan as necessary and take amendments to CATSO Coordinating Committee for public hearing as directed. This will include the production of maps, staff reports, PowerPoint presentations, and related work to publicize the public hearings/meetings.
- 8) Continue to coordinate with MoDOT Central Office on CATSO staff efforts to incorporate applicable national performance measures in transportation plans as outlined in the FAST Act legislation.
- 9) Partner to implement the City of Columbia Vision Zero Action Plan, and integrate the Vision Zero goals and achievements into CATSO's 2045 Long-Range Transportation Plan (LRTP).

*Work Completed in FY 2017:*

- Staffing and preparation of reports and related materials for CATSO Technical and Coordinating Committee meetings.
- Work on the implementation of the 2040 LRTP continued, including work to develop a system of performance measurements for LRTP goals and priorities.
- Researched and developed data from capital improvement projects and master plans to support the development of forecasting metrics for future utility services for City utilities.
- Completed a thorough action item timeline for the 2045 LRTP, which was reviewed at the February CATSO Technical and Coordinating meetings. Began development of the 2045 LRTP financial plan and started coordination efforts with planning partners.
- Organized stakeholders to discuss the development of a permanent and ongoing bicycle and pedestrian count program. Met with transportation data collection service providers to discuss bicycle and pedestrian count capabilities.
- Collaborated with City of Columbia staff and MoDOT representatives from the Missouri Coalition for Roadway Safety's (MCRS) central region coalition to develop the City of Columbia's Vision Zero Action Plan.

*Products for FY 2018:*

- The largest long-range planning activity in FY18 will be the development of the 2045 LRTP. Staff has already started creation of the long-range financial plan and it has begun coordination efforts with planning partners that will include updates to a number of items such as CATSO's Major Roadway Plan, the Coordinated Public Transit Human Services Transportation Plan, Fast Act performance measures and MoDOT's long-range plan. Anticipated completion date for these efforts is the first quarter of 2018. Additionally, in FY18 staff will launch, and ultimately complete, the identification and establishment of revised transportation goals and objectives (from the existing 2040 LRTP) through collaboration with the CATSO board, stakeholders and members of the public. Anticipated completion date – Fourth Quarter 2018.
- Establish a permanent and ongoing bicycle and pedestrian count program as a means to develop both a baseline and goals for increases of non-motorized transportation commuters within the MPA. Potential pilot of new bike-ped count technology within the MPA. Greater understanding of the metrics related to bike-ped commuters will be used to evaluate changes in bike/ped activity, provide data for bike/ped safety improvements and set goals for integration into the 2045 LRTP and Bicycle and Pedestrian network plan. Anticipated completion date – Fourth Quarter 2018
- Development of transportation emission reduction goals through participation with the City of Columbia Climate Mayor's Initiative Working Group, and integration of emission reduction goals into the 2045 LRTP. Anticipated completion date – Fourth Quarter 2018.
- Staff will serve on the City of Columbia Vision Zero implementation team that aims to achieve a number of goals, such as formalizing local protocol for road safety audits and assessments, development of a safety education and communication campaign and increasing local and regional partnerships focused on traffic safety. Resulting goals and achievements will be integrated into CATSO's 2045 Long-Range Transportation Plan (LRTP). Anticipated completion date – Fourth Quarter 2018.
- Another considerable long-range planning activity in FY18 will continue to be the implementation of the CATSO 2040 LRTP's recommendations. This includes greater development of the use of vehicle miles traveled (VMT) as a performance measure (and ultimately the development of strategies to reduce VMT), the development of baseline data related to performance measures for the plan's goals and objectives, and the use of (LOS) measures for non-motorized facilities. Anticipated completion date-ongoing.
- A second emphasis for FY2018 related to the CATSO 2040 LRTP will be on additional geographically-based analysis work. The 2040 MRP network will be

modeled using the MPO travel demand model using updated land use and population forecast out to the horizon year of 2040. Anticipated completion date-ongoing.

- Updates to the CATSO Major Roadway Plan (MRP) if warranted by the travel demand analysis of the MRP network using 2040 data population/employment data. CATSO staff will bring more amendments forward at the direction of the Coordinating Committee. Anticipated completion date-ongoing.

The CATSO MRP is the major instrument for controlling and accommodating both motorized and non-motorized traffic in the Columbia MPA. A specific concern is the development of an adequate collector and arterial street network in outlying areas that can be served by centralized sewer.

*Staffing, Funding Sources and Agencies:*

Primary staffing responsibilities will be with CATSO Staff, although some MoDOT assistance will be required. Funding will come from the City of Columbia and the CPG. Of the federal share costs for long range transportation planning \$13,440 is anticipated to go towards a pilot of new bike-ped count technology. The rest of the CPG fund for this work activity will be applied to staff salaries.

*Funding Breakdown:*

Total Costs \$125,966– Federal \$100,773, Local \$25,193.

## Activity 140 Transit Planning

### *Purpose:*

Work in this program area is primarily devoted to the review and implementation of transit operational strategies for the Go COMO bus system. Fiscal and status reporting of grant projects are also included. Go COMO is the public transit system that serves the Columbia MPA. The bus system operates both fixed routes as well as paratransit service. The public transit system has been operated by the City of Columbia since 1965.

### **System Management and Operation**

Go COMO continues to work with the City Council and their Public Transportation Advisory Commission (PTAC) to assess the need for additional service and the potential expenses involved with system coverage of the community and/or service hour expansion(s). Transit staff works to keep PTAC, the Council and the Manager's office informed of transit system operations. The described activities are continuous and ongoing.

### **Financial Planning**

The planning, data collection, analysis, and preparation of the annual financial and budget reports will be completed in this category. Go COMO staff prepares a detailed monthly data analysis and summary for both internal and external review. At the request of the Council or Commission, staff will prepare the financial planning of several potential expansion scenarios and report back on an ongoing basis. Each of these individual assessments could be incorporated into the Master Plan.

### **Other Activities**

**Paratransit:** The planning, development, and improvement of transportation services to persons with disabilities is ongoing. Paratransit services, complementing the fixed routes, have been provided since the early 1990s. Significant planning effort is expended to maximize service with limited personnel and equipment. As the City continues annexations, the service area grows. Go COMO replaced its demand response scheduling suite along with deploying a fleet-wide automatic vehicle locating (AVL) system. Implementing hardware and software systems will require continued diligence to ensure that the public views accurate data and demand response schedules continue to flow smoothly. Staff also plans for the provision of transportation for individuals under the Non-Emergency Medical Transportation (NEMT) and Medicaid Waiver programs. NEMT service has continued to grow steadily since implementation but requires constant planning as it continues to tax equipment and staff. Staff will map continued growth in the NEMT and Medicaid Waiver programs.



**DBE:** The City of Columbia has an individual disadvantaged business enterprise (DBE) program. The City will continue to maintain ties and utilize the State of Missouri's Unified Certification Program. Work continues to assess where additional participation opportunities exist.

**Implementation of ADA:** Staff will continue tasks necessary to ensure transit services remain compliant with the Americans with Disabilities Act (ADA), and will continue working with the City's ADA Advisory Committee. Go COMO will work to ensure accessibility of all passenger waiting sites, and will seek funding to install additional accessible amenities. Staff will assess sites, research property ownership and acquire right-of-use agreements, as necessary.

**Public Transportation and Human Services Transportation Coordination Planning:** Staff will continue to work to implement the recommendations of the adopted 2013 update to the CATSO Coordinated Public Transit Human Services Transportation Plan (CHSTP). Staff will also begin efforts to update the CHSTP and develop transit project prioritization and selection criteria as part of the plan's update effort.

**Transit Planning and Review:** Review of transit operations plus fiscal and operational reporting will occur. This is to collect information pertinent to making transit system decisions.

*Objectives/Activities:*

- 1) Maintain quarterly records of transit system operations.
- 2) Develop and use improved criteria to measure service efficiency continuously.
- 3) Establish transit project prioritization and selection criteria as part of the CHSTP update effort.
- 4) Continuously utilize management techniques that are responsive to changing conditions and needs.
- 5) Continuously monitor system operations so that problems can be identified and alleviated in an expedient manner.
- 6) Continuous planning to evaluate and implement Paratransit service delivery to the growing disabled population within the ADA service area for Go COMO.
- 7) Continue to seek and solicit a high level of citizen input into the development and maintenance of transit operations on a continuous basis.
- 8) Continue the transition of 8-12 fixed route fleet vehicles from diesel to battery electric.
- 9) Engage the public for feedback on the newly developed Go COMO Comprehensive Operational Analysis, Service Guidelines and transit Master Plan through a public hearing process. The plan will be vetted by the Columbia City Council in 2018 to forward prioritization and implementation of plan recommendations.

- 10) Utilize ReMIX planning software to create a more transparent and equitable transit service delivery process. The software can demonstrate real time demographic data and hourly cost of service analysis. The new tool will be used to clearly communicate and prioritize transit goals.

*Work Completed in FY 2017:*

- Preparation of capital and operating grant applications for service improvements.
- A new comprehensive Master Transit Plan was completed.
- Began the transition of 8-12 fixed route fleet vehicles from diesel to battery electric.

*Products for FY 2018:*

- Planning Software License. Staff will license new planning software called ReMIX which will allow for real time planning tools for public presentations, as well as sharable maps and comment threads for interested members of the public.
- Completed public engagement process to prioritize and implement Go COMO Comprehensive Plan.
- Updated CHSTP including transit project prioritization and selection criteria.
- Analysis and reporting on Go COMO as required by the City Council and PTAC.
- Complete the transition of 8-12 fixed route fleet vehicles from diesel to battery electric. The City of Columbia was awarded a Low Emission No Emission grant in July of 2016 to facilitate this transition.

*Staffing, Funding Sources and Agencies:*

Staff support will come primarily from the Go COMO staff, although some assistance will be needed from CATSO staff, along with City of Columbia Community Development, Finance, Human Resources, Health, and Legal Departments. Of the federal share costs for transit, \$12,000 is anticipated to go towards the licensing of transit planning software. The rest of the CPG fund for this work activity will be applied to staff salaries.

*Funding Breakdown:*

Total Costs \$87,000– Federal \$69,600, Local \$17,400.

Activity 220  
Federal Consolidated Planning Grant Management

*Purpose:*

This work activity is CATSO's administration/management of Consolidated Planning Grant (CPG) funds provided under 23 U.S.C. 104(f) to CATSO for metropolitan transportation planning. All tasks are to be completed by CATSO staff unless otherwise identified.

*Objectives/Activities:*

- 1) Maintain proper records and prepare quarterly progress reports and grant billings, DBE semi-annual reports, and FY 2017 completion report.
- 2) Actively administer grant activities by reviewing time sheets and financial reports and monitor that project completion proceeds in accordance with the work program.
- 3) Cooperate with representatives of MoDOT and OneDOT (Federal Transit Administration and Federal Highway Administration) to ensure good working relations during grant administration.
- 4) Develop the work program and budget for the FY 2019 Unified Planning Work Program (UPWP).
- 5) Implement and make any needed revisions to the Title VI Policy Plan, including research and preparation of the necessary data and annual reporting. Do related work to ensure compliance with ADA requirements.
- 6) Review and monitor CATSO documents for compliance with federal regulations and maintain a work program to ensure planning documents are updated as needed/required.
- 7) Refinement and expansion of the CATSO website to implement further improvements and convenience for public review and input. Ensure that the CATSO website and all electronic communications are accessible and meet the requirements of Section 504 of the Rehabilitation Act of 1973.
- 8) Work to implement federal recommendations from the FY2017 CATSO One DOT Transportation Planning Process Review administered by staff from the FHWA Missouri Division and the FTA Region 7.

*Work Completed in FY 2017:*

- FY 2018 UPWP approved by Coordinating Committee
- Quarterly reports for FY 2017 were prepared and submitted to MoDOT.
- DBE semi-annual reports in October 2016 and April 2017 were prepared.
- The FY2016 Completion Report was prepared.
- Annual report describing Title VI activities was developed in July 2017.
- Refinement of the CATSO website home and specialty pages that improved website accessibility and ease of use.
- Participated in MPO MAP-21/FAST ACT Performance Measurement, Interpretation, Compliance, Best Practices and Implementation monthly meetings hosted by MoDOT for MPOs and RPCs in Missouri and nearby states and provided input on safety and other data needs.
- Completed the One DOT Planning Process Review of the transportation planning practices for the Columbia metropolitan planning area.
- Developed a CATSO Logo to provide a recognizable brand representing the MPO's transportation planning efforts for stakeholders and members of the public.
- As the MPA is solely located within Boone County, CATSO staff regularly attended the Boone County Local Emergency Planning Committee (LEPC) meetings and participated in an area hazardous materials flow study managed by the LEPC.

*Products for FY 2018:*

- Aim to fulfill the CATSO One DOT Process Review transportation recommendations that were finalized in May of 2017. Anticipated completion date-Ongoing.
- FY2019 UPWP to be approved by the CATSO Coordinating Committee. Anticipated completion date-August 2018. Responsibility- CATSO Staff.
- Quarterly Reports. Anticipated completion date(s)-January 2018, April 2018, July 2018, and October, 2018.
- DBE semi-annual reports. Anticipated completion date(s)-October, 2017 and April, 2018.
- FY 2017 Completion Report. Anticipated completion date- November 2017.
- Continuous development and implementation of the Title VI Plan including an annual report in July 2018. Anticipated completion date-Ongoing.
- Continue participation in the MPO MAP-21/FAST Act Performance Measurement, Interpretation, Compliance, Best Practices and Implementation monthly meetings hosted by MoDOT for MPOs and RPCs in Missouri and nearby states. Anticipated completion date-Ongoing.
- Maintain participation in the Boone County Local Emergency Planning Committee (LEPC) meetings and efforts. Anticipated completion date-Ongoing.

Also to be expected would be Civil Rights compliance certification, the administration of Title VI activities, and active surveillance of grant activities. Review of CATSO planning documents for compliance with federal requirements and assessment for other amendment of updating needs is included in this section. Implementation and performance measurement evaluation of planning documents may also occur. The staff will also assist FTA representatives in their evaluation of local MPO performance toward DBE objectives. Participation in any audits or program review may also be a work product.

*Staffing, Funding Sources, and Agencies:*

Staffing will be with the CATSO staff, with assistance from City of Columbia Community Development, Public Works, and Finance departments. Funding will come from the City of Columbia and the Consolidated Planning Grant.

*Funding Breakdown:*

Total Costs \$35,130– Federal \$28,104, Local \$7,026

## Activity 240 Information Systems

### *Purpose:*

Work in this activity area is devoted to the production, collection, storage, management, analysis, and communication of information for departmental and public use. This information is utilized as a support mechanism for many of the tasks performed by the Department. Data prepared is provided to the public and other agencies upon request. Also included is the production of maps and other graphics, and general spatial and analytical data support activities for projects included in other UPWP work activities. Planning and assistance related to Census Bureau materials also occur in this program area. All tasks are to be completed by CATSO staff unless otherwise identified.

### *Objective/Activities:*

- 1) Maintain up-to-date information for population, employment, socioeconomic demographics, housing, structures, subdivisions, transportation, and other related data from integrated sources, including a current GIS street map and related databases, and develop related analysis and projection techniques.
- 2) Update the 2007 Natural Resources Inventory using leaf on and leaf off aerial imagery and field data samples procured in 2017. This is a requirement for understanding how the MPA has changed since 2007 and update land use and land cover inputs for future land use models.
- 3) Development of maps depicting sidewalks and lack of sidewalks in MPA for non-motorized transportation modeling and specialized area plans.
- 4) Continued development of street and traffic attributes for enhanced traffic, commuting, and transit analysis.
- 5) Continue to update and use the MPA Land Use digital database for more detailed landscape analysis for potential MPA transportation corridors, sidewalk system analysis, trail and pedway connector routes, and other transportation applications.
- 6) Continue to monitor US Census Bureau product releases including 5-year American Community Survey and economic census for applicable county, MPA, city, tract, block group, and block levels. Process and make available for use in graphics and map products, planning, network

analysis, and spatial analysis. Provide local data to support preparations for the 2020 Decennial Census.

- 7) Integrate transit data from passenger counters into time-enabled spatial databases.
- 9) Continue project to scan, geo-reference, and make available historical imagery and land information datasets from between 1950 and 1986 not currently available in electronic format.
- 10) Staff attendance at professional training sessions on transportation planning subjects relevant to the CATSO area and operations. Professional development conferences offered by the American Planning Association (APA), New Partners for Smart Growth (NPSG), Association of Pedestrian & Bicycle Professionals (APBP), other pedestrian & bicycle related seminars and conferences, and GIS software training courses are possibilities for this category. Costs for such activities will be taken from funds available in the non-salary and benefits portion of the UPWP budget.

*Work Completed in FY 2017:*

- Completed integration of “sidewalk gap” areas into the sidewalk map layer for uniform maintenance, modelling, and analysis.
- Processed and made available 2015 American Community Survey 5-year data for applicable county, MPA, city, tract, block group, and block geographies.
- Improved the single-line Major Roadway Plan database layer to improve route modeling and network analysis.
- Created maps and other necessary graphic additions for UPWP work products and activities.
- Updated structures to 2015 ground condition by adding more than 609 polygons and editing more than 36,811 polygons using 2015 digital surface model and 2015 imagery for structures built since 2009 (previous LiDAR) and 2011 (previous imagery).
- Acquired new high resolution 2017 leaf on and leaf off imagery to serve as the basis for updating the 2007 Natural Resources Inventory.
- Integrated structures footprint data model with employment, business, and public safety databases to populate number of businesses, number of dwelling units, number of bedrooms, estimated occupancy, and estimated employment to support day time and night time population. Developed and implemented workflows to maintain structure footprints based on building permit business triggers and maintained the new attributes.
- Integrated stop-based transit ridership data from passenger counters into spatial

databases. This makes data available for transit and multi-modal transportation modeling uses.

- Student volunteers completed scanning and georeferencing of historical imagery from 1950, 1969, 1970, 1980, and 1992 and scanning of historical imagery from 1956, 1963, 1970, and 1973. Mylar topographic contour maps from 1964, 1965, 1967, 1969, 1970, 1974, 1976, and 1977 were also scanned. Many of these were not previously available in electronic format.
- Staff attended the February, 2017 New Partners for Smart Growth Conference in St. Louis and participated in a number of educational sessions on transportation and land-use planning, including Collaboration for Community Health through Street Design, Lessons Learned in Complete Streets Implementation, Thinking Mega-Regionally in Long-Range Planning and Community Resilience through Green Building and Industrial Site Redevelopment. In addition, staff completed the Census Transportation Planning Products Training provided by the American Association of State Highway and Transportation Officials (AASHTO) and the Federal Highway Administration (FHWA) in Jefferson City. Staff also attended the 2017 Missouri Active Transportation Summit in Jefferson City.

*Products for FY 2018:*

- New maps, updates, and other necessary graphic additions for UPWP work products and activities. Anticipated completion date(s)-Ongoing.
- Develop methods to update the 6 class Natural Resources Inventory land cover map and 16 class vegetation map using 2017 imagery and field data to complete an updated Natural Resources Inventory. Anticipated completion date-FY2019. Responsibility - consultant with CATSO staff assistance.
- Responsibility - consultant with CATSO staff assistance.
- Continued street and transportation network dataset work to improve routing and network analysis. Anticipated completion date - Ongoing.
- Graphics and map products, as well as spatial and network analysis based upon monitoring of US Census Bureau product releases including 2016 American Community Survey and economic census releases for applicable geographic data levels.
- Improve the automation of transit ridership data from external software systems into time-enabled spatial databases. This allows for data availability for transit and multi-modal transportation modeling uses.
- Georeference historical imagery scans from 1956, 1963, 1970, and 1973 and topographic contour scans from 1964, 1965, 1967, 1969, 1970, 1974, 1976. Edge match georeferenced data to create seamless digital map layers. Many of these were not previously available in electronic format easily used with other spatial data. Anticipated completion date - ongoing.

Staff will continue working on potential applications for the metropolitan geographic



information system (GIS) in conjunction with other agencies. Staff will consider additional GIS software training, and attend such training sessions as needed.

*Staffing, Funding Sources and Agencies:*

Staffing will be with the CATSO staff, with assistance from City of Columbia Community Development, Public Works, and the City GIS Office, which provides data development, maintenance, analysis, and support for CATSO and other interested parties. At times, other City departments and the Missouri Department of Transportation (MoDOT) may provide necessary assistance. Funding will come from the City of Columbia and the Consolidated Planning Grant.

Planned capital expenditures of PL funds for FY-2018 include the maintenance costs for existing software; e.g. the travel demand modeling software.

*Funding Breakdown:*

Total Costs \$173,571 – Federal \$138,857, Local \$34,714.

Included in the federal total is \$91,859 of non-salary and benefit expenditures such as computer software and related services, e.g. training and licenses, data processing, transcription services, and travel and meeting expenses.

CATSO Staff includes two full-time positions and 2.9 full-time equivalents in other positions. See Appendix C for staff details.

## Budget Summary

FY 2018 Unified Planning Work Program - Columbia, MO MPO (CATSO)					
Approved by the CATSO Coordinating Committee on August 24, 2017					
Consolidated Planning Grant (CPG) Funds					
Activity	Federal	Local	Federal CPG Funds*	Local Match	Total
110 LAND USE PLANNING	80%	20%	\$46,975	\$11,744	\$58,719
120 SHORT RANGE TRANSPORTATION PL	80%	20%	\$58,790	\$14,698	\$73,488
130 LONG RANGE TRANSPORTATION PL	80%	20%	\$100,773	\$25,193	\$125,966
140 TRANSIT PLANNING	80%	20%	\$69,600	\$17,400	\$87,000
220 CPG GRANT MANAGEMENT	80%	20%	\$28,104	\$7,026	\$35,130
240 INFORMATION SYSTEMS	80%	20%	\$138,857	\$34,714	\$173,571
TOTALS	80%	20%	\$443,099	\$110,775	\$553,874
* Of the federal CPG funds listed, non-salary expenditures anticipated in Activities #130, #240 & #140 are as follows:					
#130: \$13,440 is programmed to pilot new bike-ped count technologies.					
#140: \$12,000 is programmed to pay for a transit planning software license.					
#240: \$11,860 is programmed for software/related services, transcription services, & travel/mtg. expenses, with \$80,000 programmed for Natural Resources Inventory data processing.					
Notes					
1. See UPWP Appendix C for CATSO Staff, which has 2 full-time positions and 2.9 FTE in other positions.					
2. CPG funds consist of FHWA PL and FTA Section 5303 planning funds.					
3. A total of \$325,799 in CPG \$ is programmed for CATSO & related staff salaries.					
CPG Funding Summary					
CATSO CPG balance from prior FYs UPWP	\$642,902.43				
FY 2017 CPG allocation	\$264,315.00				
FY 2018 CPG allocation	\$264,315.00				
Estimated programmed FY 2017 CPG \$ left over after 4th Q	\$79,000.00				
Total estimated CPG funds available for FY 2018 UPWP*	\$1,250,532.43				
CPG funds programmed for FY 2018	\$443,099.00				
Remaining Unprogrammed CPG funds balance	\$807,433.43				
*Total estimated CPG funds is a projected figure based on prior available balance, FY 2017 allocation, FY 2018 allocation, and estimated unexpended funds programmed in FY 2017					

CATSO has elected not to program 100% of the anticipated available CPG funds. It is staff's general policy to maintain a reserve of funds for potential large expense planning projects that may become necessary in the future. In addition to this policy, there is a limited number of staff that does planning work, and given this we are unable to program any greater amount of CPG funding for FY 2018. Obtaining an increased amount of local matching funds could also be problematic, although staff has no official confirmation of that.

## *Public Participation*

The proposed FY 2018 UPWP was formally considered for adoption at the August 24, 2017 CATSO Coordinating Committee meeting. A public hearing was held by the Committee. No one from the public spoke at hearing. After the public hearing, the Committee passed a unanimous motion to approve the UPWP as presented.

A display advertisement notifying the public of this meeting was placed in the local newspaper (Columbia Tribune) on July 19, 2017. In addition, the agenda and meeting notice was placed on the City's website. The ad gave emphasis to the public hearing aspect of the meeting, including the consideration of the proposed FY 2018 UPWP.

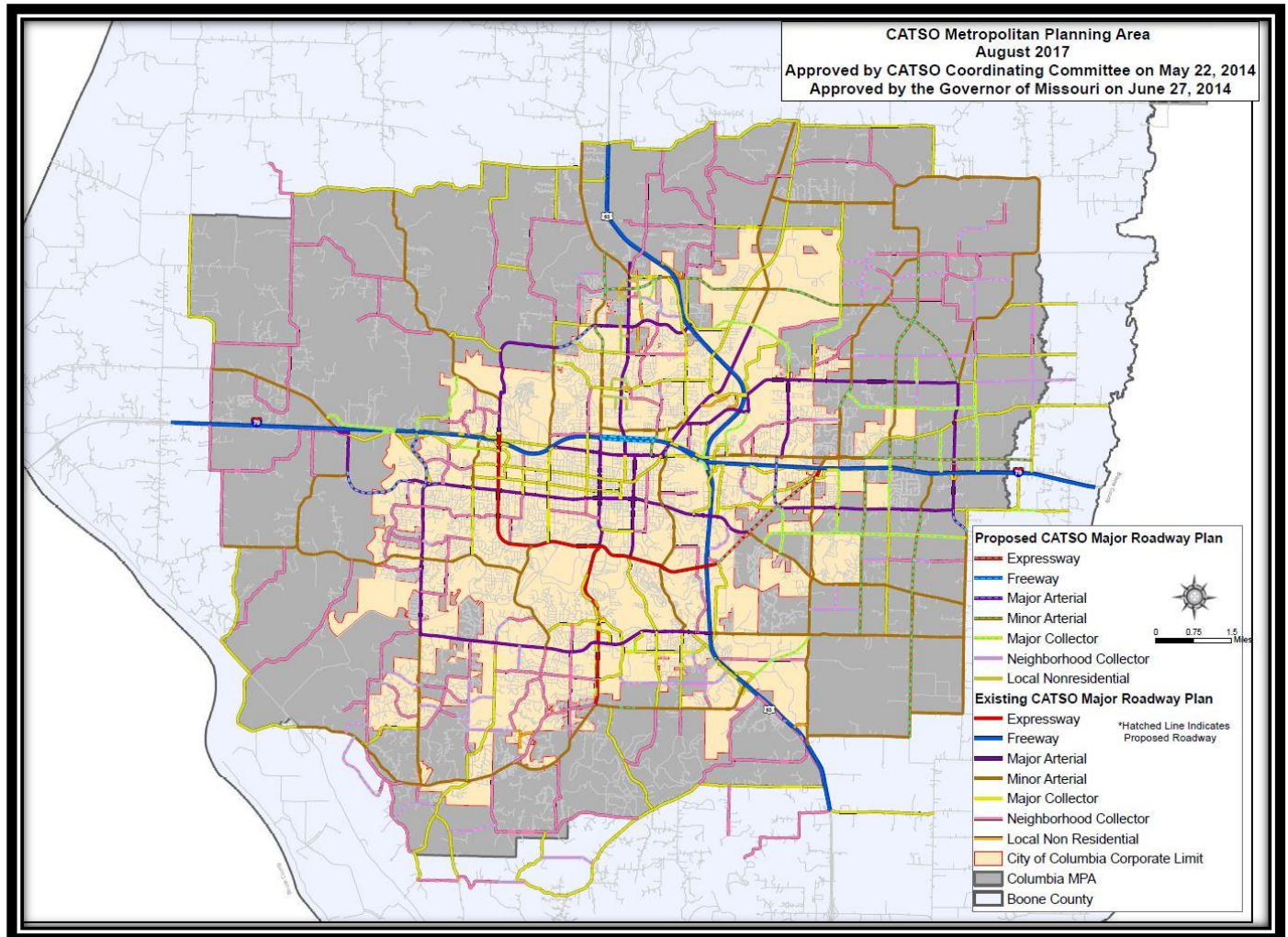
The CATSO Public Participation Plan, adopted by the CATSO Coordinating Committee on December 4, 2014, may be found at the Daniel Boone Regional Library, 100 West Broadway, Columbia, MO; City of Columbia Community Development Department, 701 East Broadway, Columbia, MO and at the City of Columbia's website:

[http://www.gocolumbiamo.com/community\\_development/planning/boards\\_and\\_commissions/cats/PPPlan.php](http://www.gocolumbiamo.com/community_development/planning/boards_and_commissions/cats/PPPlan.php)

## **Appendices**

## Appendix A

### *Map of Metropolitan Planning Area (MPA) Boundary*



## Appendix B

### *List of Acronyms Used in this Document*

ADA	Americans with Disabilities Act
APA	American Planning Association
APBP	Association of Pedestrian & Bicycle Professionals
CATSO	Columbia Area Transportation Study Organization
CHSTP	CATSO Coordinated Public Transit Human Services Transportation Plan
CPG	Consolidated Planning Grant
DBE	Disadvantaged Business Enterprise
FAST Act	Fixing America's Surface Transportation Act
FHWA	Federal Highway Administration
FLUM	Future Land Use Map
FTA	Federal Transit Administration
FTE	Full-time equivalent
FY	Fiscal Year
GIS	Geographic Information System
Go COMO	Columbia Transit System
HIA	Health Impact Assessment
LiDAR	Light Detection and Ranging surveying technology
LOS	Level of Service

L RTP	Long-Range Transportation Plan
MAP-21	Moving Ahead for Progress in the 21 <sup>st</sup> Century
MCRS	Missouri Coalition for Roadway Safety
MoDOT	Missouri Department of Transportation
MPA	Metropolitan Planning Area
MPO	Metropolitan Planning Organization
MRP	Major Roadway Plan
OneDOT	Federal Highway Administration/Federal Transit Administration
PPP	Public Participation Plan
PTAC	Public Transportation Advisory Commission
STIP	Statewide Transportation Improvement Program
TAZ	Traffic Analysis Zone
TIP	Transportation Improvement Program
UDC	Unified Development Code
UPWP	Unified Planning Work Program
USA	Urban Services Area
VMT	Vehicle Miles Traveled

## Appendix C

### CATSO Staff

#### Full-Time Staff:

Mitch Skov, Senior Planner  
Leah Christian, Planner

#### Part-Time Staff:

Timothy Teddy, Director (.3 FTE)  
Amy Modrell-Miller, Sr. Administrative Supervisor (.25 FTE)  
John Fleck, GIS Analyst (.5 FTE)  
Tim Connet, GIS Technician (.3 FTE)  
Other GIS support: (.55 FTE)  
Transit (1 FTE)

There are two full time staff positions.

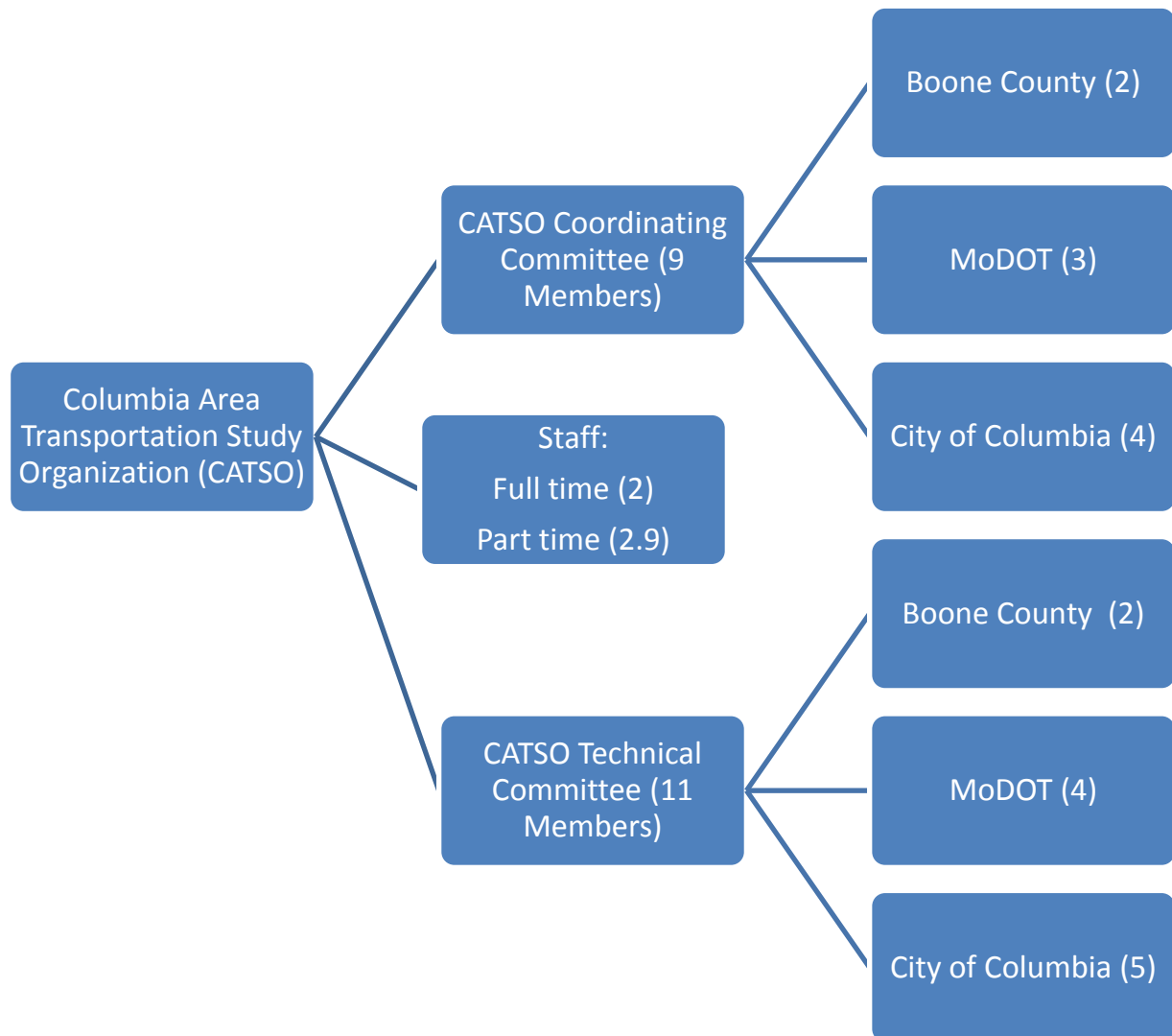
In addition, there are two staff persons within Community Development that have CATSO staff work responsibilities - with CATSO funding covering .3 and .25 of their total work hours respectively. There is also a GIS Analyst part time position completely dedicated to the CATSO metropolitan planning work and an additional .55 full-time equivalent in the GIS Division for CATSO level work. Additionally, 1 full time equivalent, made up of a number of transit employees, is dedicated to transit management and planning. This adds up to 2.9 FTE that is shown under the category of Part-Time Staff.

All of the full time and part time CATSO staff members are housed within City Hall in downtown Columbia. CATSO staff within Community Development is housed on the Fifth Floor, while GIS Division and Transit CATSO staff is housed on the Third Floor.



## Appendix D

### CATSO Organizational Chart Columbia Metropolitan Planning Area Columbia, MO



## **Appendix E**

### **Adopted CATSO Public Participation Plan re: UPWP**

#### **5. Unified Planning Work Program (UPWP)**

**5.1 Definition of the UPWP.** The Unified Planning Work Program (UPWP) is a description of the proposed work activities of CATSO. The program is prepared annually and serves as a basis for requesting federal planning funds from the U. S. Department of Transportation. It also serves as a management tool for scheduling, budgeting, and monitoring the planning activities of the participating agencies. This document is prepared by CATSO staff with assistance from various agencies, including the Missouri Department of Transportation, the Federal Highway Administration, the Federal Transit Administration, the Columbia Transit System, and members of the Technical Committee.

#### **5.2 Procedure and Schedule for Preparation of the UPWP.**

The UPWP is developed by CATSO with input from local governments, area private transit providers, and the Missouri Department of Transportation (MoDOT). When comments are being solicited during the public review period, notice will be posted on the CATSO web site. All public comments received pertaining to the UPWP will be reviewed and considered. An effective means of incorporating public input into the UPWP is to review comments received the previous year that relate to similar new projects. When developing the work program, the UPWP project manager should take this public comment into consideration.

The UPWP is updated annually beginning in June, and released for public review and comment for a minimum of 30 days prior to formal adoption. Included is the posting of the draft UPWP on the CATSO website, as well as providing the draft UPWP to contacts at MoDOT, FHWA, FTA, and local transportation providers for their review. Final approval is made in August at the Technical and Coordinating Committee meetings. Amendments can be made throughout the year and are released for public comment when tasks are either added or deleted, or when significant changes are made to the document

#### **5.3 Changes to the UPWP.**

**1. UPWP Amendments: (Major changes).** UPWP Amendments are major revisions which require the official approval of the CATSO Coordinating Committee. The approval is followed by submission to the MoDOT for approval and subsequent approval by FHWA and FTA. An example of a major change is revising the UPWP budget to include additional CPG federal funding. Amendments require a public comment period of 15 days prior to consideration by the Coordinating Committee, with a public hearing according to the procedure in Section 5.2. Public notice will be given by a press release, and listed on the CATSO website.

**2. UPWP Administrative Revisions (Minor changes).** UPWP Administrative Revisions are minor changes which can be made directly by CATSO staff once it has been verified that the change applies to this category. Notification of administrative modifications will be provided to the Technical Committee, Coordinating Committee, MoDOT, FHWA and FTA. UPWP Administrative Modifications will require no public comment period.