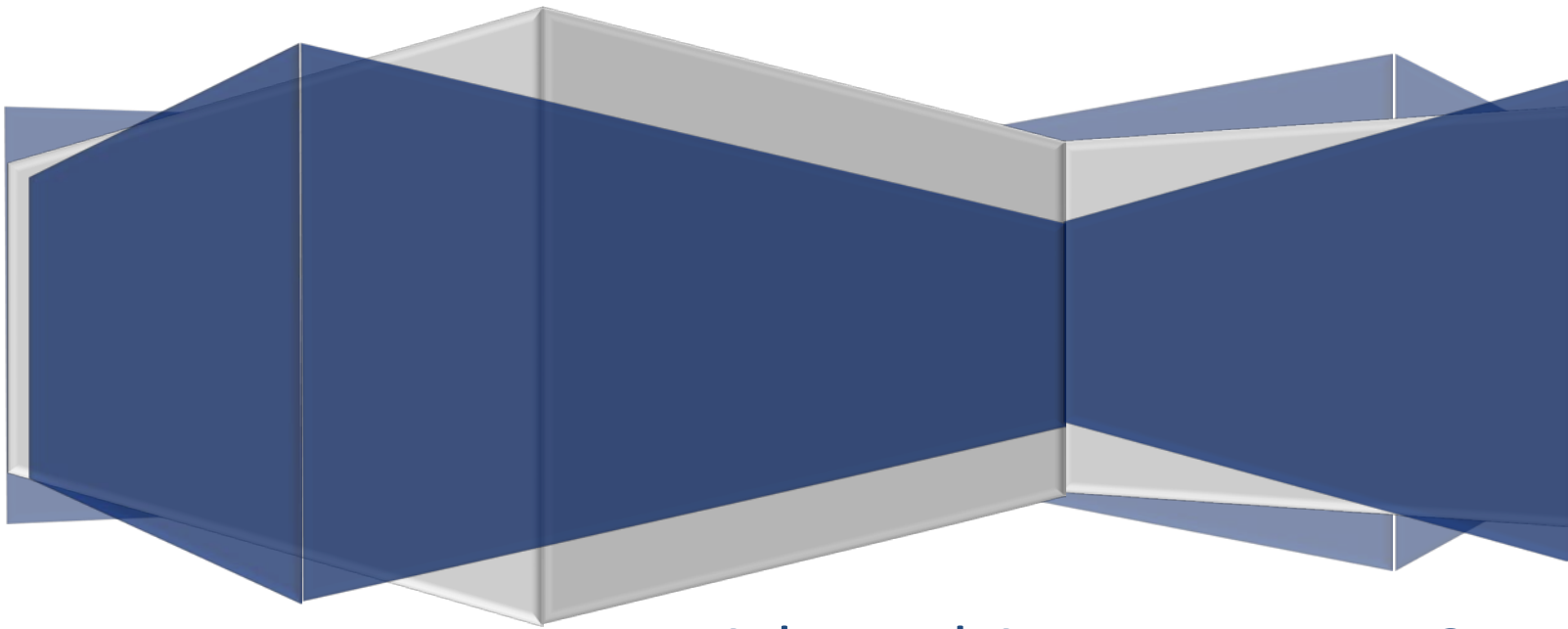




Unified Planning Work Program

Federal Fiscal Years 2017 - 2018
October 1, 2016 to September 30, 2018



Adopted August 25, 2016

Amended March 17, 2017

This Unified Planning Work Program was developed by the Johnson City MTPO, in cooperation with:

U.S. Department of Transportation

Federal Highway Administration

Federal Transit Administration

Tennessee Department of Transportation

An electronic copy of this document can be found on our website at <http://jcmpo.org/upwp.html>.

If you need this document translated into Spanish or another language, please contact the MTPO Coordinator, by phone at (423) 434-6272 or email at jcmpo@jcmpo.org.

Spanish Translation of the above statement:

Si usted necesita este document resumido en espanol contacta por favor al Coordinador del MTPO. Numero de telefono (423) 434-6272, correo electronico: jcmpo@jcmpo.org.

The Johnson City Metropolitan Transportation Planning Organization (MTPO) ensures compliance with Title VI of the Civil Rights Act of 1964; 49 CFR, part 26; related statutes and regulations to the end that no person shall be excluded from participation in or be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance from the U.S. Department of Transportation on the grounds of race, color, sex or national origin.

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RESOLUTION

Of the Executive Board of the Johnson City Metropolitan Transportation Planning Organization to
approve and adopt the Fiscal Years 2017-2018 Unified Planning Work Program

WHEREAS, a comprehensive, cooperative, and continuing transportation process is to be carried out in the Johnson City Metropolitan Planning Area; and

WHEREAS, under federal planning guidelines, Metropolitan Planning Organizations are required to submit a Unified Planning Work Program (UPWP) that identifies the transportation planning projects and planning activities to be undertaken by local, regional, and/or state agencies for the Johnson City Metropolitan Transportation Planning Organization (MTPO) Metropolitan Planning Area (MPA) for Fiscal Year 2016; and

WHEREAS, the various state, local and regional agencies involved with transportation planning for the Johnson City MTPO MPA have cooperatively developed a UPWP for Fiscal Years 2017-2018; and

WHEREAS, the staff of the Johnson City MTPO, Tennessee Department of Transportation, Federal Highway Administration and Federal Transit Administration have reviewed the Fiscal Years 2017-2018 UPWP and found it satisfies federal requirements; and

NOW, THEREFORE, BE IT RESOLVED the Johnson City MTPO Executive Board does hereby approve and adopt the Fiscal Years 2017-2018 UPWP.

Johnson City MTPO Executive Board Chairman

Date

Johnson City MTPO Executive Staff Chairman

Date

List of Abbreviations

| | |
|--------------|---|
| 3DEP | 3D Elevation Program |
| ADA | Americans with Disabilities Act |
| COOP | Continuity Of Operations Planning |
| EDC | Every Day Counts |
| EPA | Environmental Protection Agency |
| FAST Act | Fixing America's Surface Transportation Act |
| FHWA | Federal Highway Administration |
| FTA | Federal Transit Administration |
| FY | Fiscal Year |
| GIS | Geographic Information Systems |
| GPS | Global Positioning System |
| INVEST | Infrastructure Voluntary Evaluation Sustainability Tool |
| ITS | Intelligent Transportation Systems |
| JCT | Johnson City Transit |
| LRTP | Long Range Transportation Plan |
| MAP-21 | Moving Ahead for Progress in the 21 st Century Act |
| MOA | Memorandum of Agreement |
| MPA | Metropolitan Planning Area |
| MPO | Metropolitan Planning Organization |
| MTPO | Metropolitan Transportation Planning Organization |
| PEL | Planning and Environmental Linkages |
| PL 112 | Section 112 of the Federal-Aid Highway Act of 1973 (Public Law 93-87) |
| PPP | Public Participation Plan |
| RFP | Request for Proposals |
| RPO | Rural Planning Organization |
| Section 5303 | U.S. Title 49, Section 5303 (Transit Planning) |
| SHRP | Strategic Highway Research Program |
| SPR | State Planning and Research Funds |
| TDM | Travel Demand Model |
| TDOT | Tennessee Department of Transportation |
| TIP | Transportation Improvement Program |
| TNMUG | Tennessee Model Users Group (Travel Demand Model) |
| TSMO | Transportation System Management and Operations |
| UROP | Urban Operating Assistance Program |
| UPWP | Unified Planning Work Program |
| U.S. DOT | United States Department of Transportation |
| VMT | Vehicle Miles Traveled |

Introduction

The Johnson City Metropolitan Transportation Planning Organization (MTPO) was established in 1982 and is responsible for regional transportation planning activities in the Johnson City region. In order to carry out these duties, the Johnson City MTPO staff develops a work program in the form of a document called the Unified Planning Work Program, or UPWP as it is often referred to by transportation professionals. This UPWP covers federal Fiscal Years (FYs) 2017-2018, beginning on October 1, 2016 and ending on September 30, 2018.

The UPWP is developed by the Johnson City MTPO staff in conjunction with its member jurisdictions, Tennessee Department of Transportation (TDOT), Federal Highway Administration (FHWA), Federal Transit Administration (FTA) and Johnson City Transit (JCT). The draft UPWP is then submitted to TDOT, FHWA, and FTA for comments. Once the comments have been adequately addressed, the UPWP is recommended for adoption by the Johnson City MTPO Executive Board. The Executive Board meeting is advertised at least seven days before the meeting. Then, the adopted UPWP is forwarded to TDOT and approved by FHWA and FTA.

The UPWP identifies tasks ranging from data collection tasks to plan development. Perhaps the two most important tasks in the UPWP are the development and maintenance of the Johnson City MTPO 2040 Long Range Transportation Plan (LRTP), referred to as the “Metropolitan Transportation Plan” in federal legislation, and the Transportation Improvement Program (TIP).

In addition to the development and maintenance of these two tasks, the UPWP identifies ongoing administrative activities and special projects or programs being undertaken by the Johnson City MTPO. As a result, these three core plans and programs support the “continuing, comprehensive and cooperative” planning process.

On December 4, 2015, the Fixing America’s Surface Transportation Act, or FAST Act, was signed by the President and became federal law. It superseded the Moving Ahead for Progress in the 21st Century Act, commonly referred to as MAP-21. The transportation act provides both funding and requirements for transportation activities, including transportation planning.

One of the requirements of MAP-21 that was continued by the FAST Act is to take a performance based approach in transportation planning by developing “performance measures” and “performance targets” for transportation. FHWA issued the proposed rules regarding the Transportation Performance Management in the years 2014 and 2015. It is anticipated that the final rules will become available starting in February 2016, with the Statewide and Metro Planning final rule anticipated for release in July 2016.

It should be noted that this UPWP may need to be amended should the final rule for national performance measures or a new transportation act require additional or different requirements for transportation planning. The Johnson City MTPO will continue to conduct transportation planning as long as funding is available and it is required to do so under federal law.

Funding

The primary funding source to accomplish tasks identified in the UPWP is provided by two programs. First, the FHWA Section 112 Metropolitan Transportation Planning funds (PL 112) and second, the FTA Section 5303 Transit Planning funds. As with most grants, matching funds are required. Shown in Table 1 below and Table 2 on the next page is the funding program, required matching ratios and the amounts. In addition to these funding sources, TDOT receives State Planning and Research (SPR) funds. TDOT utilizes these funds to assist in transportation planning activities for the Johnson City MTPO.

Table 1 – Funding Sources and Ratios

| Funding Program | Program Description | Federal | State | Local |
|-----------------|--|---------|-------|-------|
| FHWA (PL 112) | Provides funding to the MPOs to establish a cooperative, continuous, and comprehensive framework for making transportation investment decisions in metropolitan areas | 80% | 0% | 20% |
| FTA (Sec. 5303) | Provides funding and procedural requirements to the MPOs for multimodal transportation planning in metropolitan areas | 80% | 10% | 10% |
| SPR | Provides funding to the States to establish statewide planning process, which establishes a cooperative, continuous, and comprehensive framework for making transportation investment decisions throughout the State | 80% | 20% | 0% |

Table 2 – Transportation Planning Funding Programs, FY 2017

| Funding Program | Total | Federal | State | Local |
|--------------------------------------|-----------|-----------|----------|-----------|
| FHWA (PL 112) (Percentages) | 100% | 80% | 0% | 20% |
| FY 2017 Est. Allocation | \$274,004 | \$219,203 | \$0 | \$54,801 |
| FY 2016 Est. Carryover | \$128,000 | \$102,400 | \$0 | \$25,600 |
| FY 2016 Carryover Task C2 | \$25,000 | \$20,000 | \$0 | \$5,000 |
| Prior Year Reserve Balance | \$297,762 | \$238,210 | \$0 | \$59,552 |
| FY 2017 Programmed Funds | \$615,000 | \$492,000 | \$0 | \$123,000 |
| Est. Unprogrammed Balance | \$109,766 | \$87,813 | \$0 | \$21,953 |
| FTA (Sec. 5303) (Percentages) | 100% | 80% | 10% | 10% |
| FY 2014/2015/2016 Distribution* | \$183,747 | \$146,998 | \$18,374 | \$18,375 |
| FY 2016 Carryover | \$9,837 | \$7,869 | \$984 | \$984 |
| Prior Year Reserve Balance | \$30,224 | \$24,180 | \$3,022 | \$3,022 |
| FY 2017 Programmed Funds | \$160,000 | \$128,000 | \$16,000 | \$16,000 |
| Est. Unprogrammed Balance | \$63,808 | \$51,046 | \$6,381 | \$6,381 |

Table 2 (Continued) – Transportation Planning Funding Programs, FY 2017

| Funding Program | Total | Federal | State | Local |
|-----------------------------------|----------|----------|----------|-------|
| SPR (Percentages) | 100% | 80% | 20% | 0% |
| FY 2017 Distribution | \$65,176 | \$52,141 | \$13,036 | \$0 |
| FY 2016 Est. Carryover | \$0 | \$0 | \$0 | \$0 |
| Prior Year Reserve Balance | \$0 | \$0 | \$0 | \$0 |
| FY 2017 Programmed Funds | \$65,176 | \$52,141 | \$13,036 | \$0 |
| Est. Unprogrammed Balance | \$0 | \$0 | \$0 | \$0 |

*The Federal FY 2014, 2015 & 2016 allocation of 5303 grant funds will be distributed from the state during FY 2017.

Table 3 – Transportation Planning Funding Programs, FY 2018

| Funding Program | Total | Federal | State | Local |
|--------------------------------------|-----------|-----------|----------|----------|
| FHWA (PL 112) (Percentages) | 100% | 80% | 0% | 20% |
| FY 2018 Est. Allocation | \$274,004 | \$219,203 | \$0 | \$54,801 |
| FY 2017 Est. Carryover | \$0 | \$0 | \$0 | \$0 |
| Prior Year Reserve Balance | \$84,766 | \$67,813 | \$0 | \$16,953 |
| FY 2018 Programmed Funds | \$353,000 | \$282,400 | \$0 | \$70,600 |
| Est. Unprogrammed Balance | \$5,770 | \$4,616 | \$0 | \$1,154 |
| FTA (Sec. 5303) (Percentages) | 100% | 80% | 10% | 10% |
| No FY 2017/2018 Distribution* | \$0 | \$0 | \$0 | \$0 |
| FY 2017 Est. Carryover | \$0 | \$0 | \$0 | \$0 |
| Prior Year Reserve Balance | \$63,808 | \$51,046 | \$6,381 | \$6,381 |
| FY 2018 Programmed Funds | \$63,808 | \$51,046 | \$6,381 | \$6,381 |
| Est. Unprogrammed Balance | \$0 | \$0 | \$0 | \$0 |
| SPR (Percentages) | 100% | 80% | 20% | 0% |
| FY 2018 Distribution | \$65,176 | \$52,141 | \$13,036 | \$0 |
| FY 2017 Est. Carryover | \$0 | \$0 | \$0 | \$0 |
| Prior Year Reserve Balance | \$0 | \$0 | \$0 | \$0 |
| FY 2018 Programmed Funds | \$65,176 | \$52,141 | \$13,036 | \$0 |
| Est. Unprogrammed Balance | \$0 | \$0 | \$0 | \$0 |

*Section 5303 and PL 112 funds will be combined into a Consolidated Planning Grant from TDOT.

Depending on the task, other funding sources may be used. If so, they are identified in the detail section of each task in the UPWP. However, it should be noted without the FHWA PL 112 and FTA Section 5303 funds, the Johnson City MTPo would not be able to operate in its current capacity as the majority of these funds are used for its operations. Both of these programs are administered by TDOT with the City of Johnson City providing the local matching funds.

The annual allocation for FHWA PL 112 funds are based on official population numbers from the decennial census conducted by the U.S. Census Bureau for the Johnson City Urbanized Area. The official Johnson City Urbanized Area population in the 2010 Census is 120,415. This figure will be valid until the U.S. Census Bureau releases new population figures for urbanized areas after the 2020 Census. This usually occurs within two years after the completion of the decennial census.

Johnson City MTPO Focus Areas

The following accomplishments were the major focus for the Johnson City MTPO in FY 2016:

- Created a new FY 2017-2018 UPWP;
- Maintained the FY 2014-2017 TIP with amendments and adjustments;
- Began drafting the FY 2017-2020 TIP;
- Developed a Continuity Of Operations Planning (COOP) for the Johnson City MTPO;
- Purchased commercial data to use for the next update of the LRTP;
- Began the process of updating the LRTP;
- Assisted TDOT in their update of the Statewide LRTP; and
- Assisted JCT with transit planning.

As mentioned before, FHWA, FTA and TDOT are working together to develop a performance management framework for the State of Tennessee. The performance measures will be established by United States Department of Transportation (U.S. DOT).

While waiting for the final rule with the specific performance measures, one of the basic needs for any performance measures is quality *information*. The first step in developing this information is the collection of raw data. Data can either be obtained through various techniques, including onsite data collection, sharing data with state agencies, or the purchase of data from commercial sources. For this data to become useful, information from it must be *analyzed*.

One of the tools used for this is the Geographic Information Systems (GIS). These systems are a valuable analytical tool that can be used to take raw data and convert it into useful information. Too often various agencies use GIS for a mapping tool and miss the opportunity to transform data into useful information. The Johnson City MTPO uses GIS to support the travel demand forecast model, as well as maintaining the functional classification system, transit infrastructure and data sets. GIS is used to analyze data, but more on a project by project basis. With the advent of performance measures, the Johnson City MTPO has identified the need to enhance and expand both data collection and analysis. In conjunction with this, the Johnson City MTPO continues to explore the FHWA's Infrastructure Voluntary Evaluation Sustainability Tool (INVEST) to evaluate sustainability in large transportation projects. Another tool that is being explored is the Transit Boardings Estimation and Simulation Tool, or TBEST, to assist JCT with transit demand modeling and planning.

In addition, technical aspects required to develop and maintain good transportation information must support the transportation planning process. The Johnson City MTPO also supports the policy initiatives in MAP-21 and the FAST Act, as explained further in this document. With this in mind, the Johnson City MTPO has developed the following priorities for FY 2017 and 2018.

Priorities for Fiscal Years 2017-2018

The following represents the major focus areas for the FY 2017-2018 UPWP:

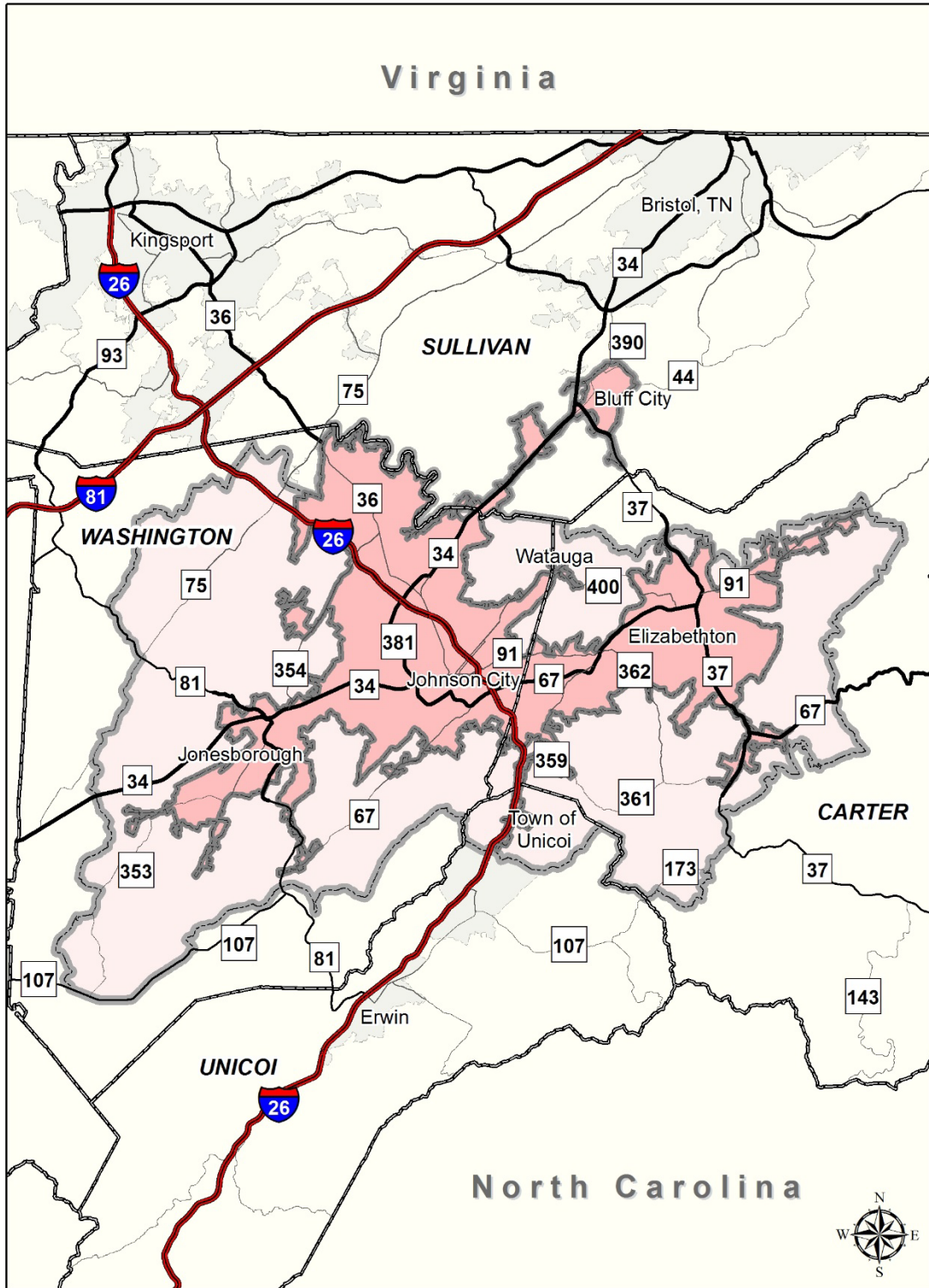
1. After U.S. DOT establishes a performance management framework through publishing the final rule, TDOT, Johnson City MTPO, and public transportation providers will work together to establish performance targets for the Johnson City MTPO;
2. Continue to work with TDOT in the update and maintenance of the Statewide LRTP in conjunction with maintaining the Johnson City MTPO LRTP;
3. Maintain the Johnson City MTPO 2040 LRTP with adjustments and amendments as needed;
4. Assist JCT with an update to the Coordinated Public Transit – Human Services Transportation Plan by the end of FY 2017;
5. Assist JCT by using TBEST to model transit demand and planning;
6. Update the Johnson City MTPO LRTP prior to March 2018;
7. Maintain the current FY 2014-2017 TIP with adjustments and amendments as needed;
8. Prepare the FY 2017-2020 TIP for submission to TDOT, FHWA, and FTA;
9. Maintain the FY 2017-2020 TIP with adjustments and amendments as needed;
10. Maintain the FY 2017-2018 UPWP through any necessary adjustments or amendments;
11. Develop the FY 2019-2020 UPWP for submission to TDOT, FHWA, and FTA;
12. Expand GIS capabilities and databases, including data from the U.S. Census Bureau, to support transportation planning efforts by the Johnson City MTPO; and
13. Monitor air quality regulations to prepare for potential impacts of new regulations from the Environmental Protection Agency (EPA).

Johnson City MTPO Metropolitan Planning Area

The Johnson City MTPO Metropolitan Planning Area (MPA) consists of the Town of Bluff City, the City of Elizabethton, the City of Johnson City, the Town of Jonesborough, a portion of the Town of Unicoi, and parts of Carter, Sullivan and Washington Counties. Under current federal law, at a minimum any urbanized area with a population over 50,000 must be in an MPA for a Metropolitan Planning Organization (MPO). The map in Figure 1 on the next page shows the Johnson City MTPO Urbanized Area, as well as the MPA boundaries for the Johnson City MTPO. The current boundary was adopted by the Johnson City MTPO Executive Board at its meeting on October 9, 2014 and approved by the Governor of the State of Tennessee on December 17, 2014.

Figure 1

Johnson City MTPO MPA Boundary

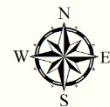


Legend

- Johnson City 2010 Urbanized Area - Smoothed
- Johnson City MTPO MPA Boundary - October 2014



SCALE 1:400,000



Organizational Structure

The Johnson City MTPO is comprised of an Executive Board, Executive Staff and administrative staff. The Executive Board is the overall governing body for the Johnson City MTPO and is supported by the Executive Staff and the Johnson City MTPO administrative staff.

Executive Board

The Executive Board is the governing body of the Johnson City MTPO and has the authority to adopt plans, programs, and policies. The Executive Board is comprised of the top elected officials from the member jurisdictions.

- Mayor of the City of Johnson City – Executive Board Chairman
- Mayor of the City of Elizabethton – Executive Board Vice Chairman
- Mayor of the Town of Bluff City - Member
- Mayor of the Town of Jonesborough – Member
- Mayor of the Town of Unicoi – Member
- Mayor of Carter County – Member
- Mayor of Washington County – Member
- Governor of Tennessee – Member
- Tennessee County Highway Officials Association – Chosen Representative – Member

Members of the Executive Board may designate a representative to serve on the board in their absence. Due to the duties and responsibilities of their office, the Governor of Tennessee usually sends a representative to meetings on their behalf. FHWA and FTA are non-voting members of the Executive Board.

Executive Staff

The Executive Staff is the next level of organization for the Johnson City MTPO. The Executive Staff assists in the development of plans and programs for the Johnson City MTPO MPA, keeps the Executive Board informed of transportation activities, and makes recommendations to the Executive Board for their consideration. Similar to the Executive Board, the Executive Staff is composed of representatives from each of the participating jurisdictions with additional agencies represented. The top administrator from each agency makes up the Executive Staff. Generally these administrators are staff positions and not elected to office; however, in some cases, such as the Highway Superintendents, they are elected officials or appointed to their position.

- City Manager, City of Johnson City – Executive Staff Chairman
- City Manager, City of Elizabethton – Executive Staff Vice Chairman
- City Manager, Town of Bluff City – Member
- Administrator, Town of Jonesborough – Member
- Town Recorder, Town of Unicoi – Member
- Highway Superintendent, Carter County – Member

- Highway Superintendent, Washington County – Member
- JCT – Member
- First Tennessee Development District – Member
- TDOT – Member

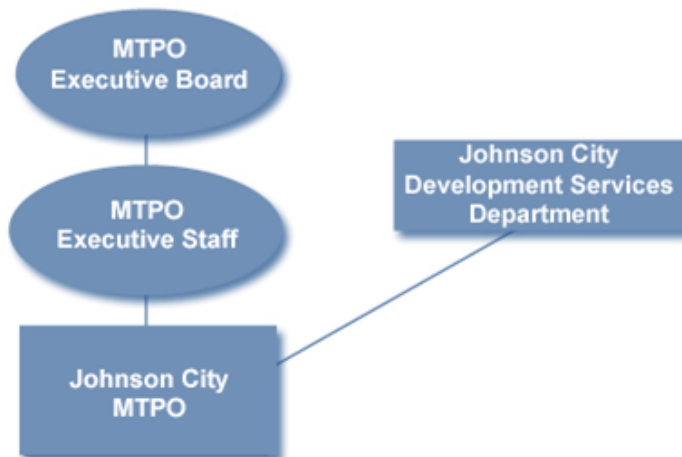
FHWA and FTA are non-voting members of the Executive Staff. When necessary, the Executive Staff can assign tasks to other employees of their agency to assist with transportation projects.

Administrative Staff

The administrative staff of the Johnson City MTPO is housed as a division of the Development Services Department of the City of Johnson City. As required by federal law, the Johnson City MTPO is still responsible for coordinating transportation planning activities for all its member jurisdictions, as shown in Figure 2 below. The administrative staff is also responsible for ongoing administration and day to day operations for the Johnson City MTPO.

Figure 2

Johnson City MTPO Organizational Chart



Public Participation

In accordance with the Johnson City MTPO Public Participation Plan (PPP), after TDOT, FHWA and FTA have reviewed the UPWP, it is made available on the Johnson City MTPO website at <http://www.jcmpo.org> for review. The UPWP is reviewed and discussed at meetings of the Johnson City Executive Board and Executive Staff and adopted by the Executive Board. The Executive Board meeting is advertised at least seven days in advance. Any comments made are recorded and addressed before the UPWP is adopted. The document is available on the website and copies available at the MTPO administrative offices.

Amendments and Adjustments

The UPWP can be amended throughout the year if needed. An amendment is required if funding for a required task needs to be increased over 20% of the amount programmed for that task, if a new task is added, or if new or previously unprogrammed funds are added. Before an amendment to the UPWP is final, the amendment is placed on the Johnson City MTPO Executive Board agenda for their approval and adoption. The adopted amendment is then forwarded to TDOT and officially reviewed and approved by FHWA and FTA.

The UPWP can be adjusted if funding for a required task is not over 20% of the amount programmed for that task or a technical correction is made to a task that does not change its scope. The adjustment is sent to TDOT and forwarded to FHWA and FTA for their files.

Title VI / Environmental Justice / ADA

The Johnson City MTPO will continue to advocate for the fair treatment and meaningful involvement of all people regardless of race, color, national origin, sex, income, and disability. The Johnson City MTPO maintains an active Title VI program which is reviewed by TDOT Civil Rights Office on a triennial basis. The most recent Title VI assessment report submitted to TDOT in July 2013 can be found on the website at <http://jcmpto.org/civilrights.html>. The report is due to be updated in July 2016. The webpage currently provides contact information for the Title VI coordinator, along with forms for the complaint process. All projects using federal highway and transit funds for the Johnson City MTPO comply with Title VI, Environmental Justice and the Americans with Disabilities Act (ADA).

Federal Planning Factors and Federal Initiatives

Federal transportation legislation defines ten specific planning factors to be considered when developing transportation plans and programs in MPO areas. The planning factors are found in Title 23 of the United States Code, Section 134(h). The Johnson City MTPO will continue incorporating the ten federal planning factors and associated federal initiatives into the works tasks and resulting products provided for in this UPWP. The ten planning factors and related federal initiatives are:

1. **Economic Vitality – Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency.**
 - **Associated Federal Initiatives:**
 - *Transportation Performance Management*
 - *Economic Development*
 - *Financial Planning and Forecasting*
 - *Multimodal and intermodal freight planning and performance*

- *Public Private Partnerships*
 - *Strategic Highway Research Program (SHRP)*
 - *Every Day Counts (EDC)*
2. **System Safety – Increase the safety of the transportation system for motorized and non-motorized users.**
- ***Associated Federal Initiatives:***
 - *Transportation Safety Planning and Performance*
3. **System Security – Increase the security of the transportation system for motorized and non-motorized users.**
- ***Associated Federal Initiatives:***
 - *Disaster Preparedness and Continuity of Operations (COOP) Planning*
 - *Climate Trends and Extreme Weather*
4. **Accessibility & Mobility – Increase the accessibility and mobility of people and freight.**
- ***Associated Federal Initiatives:***
 - *Access Management and Corridor Management*
 - *ADA Accessibility*
 - *Congestion Management, Travel Time Reliability, and System Performance*
 - *Active Transportation and Transportation Alternatives*
 - *Multimodal and intermodal freight planning and performance*
5. **Enhance Environment – Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns.**
- ***Associated Federal Initiatives:***
 - *Livability*
 - *Sustainability*
 - *Title VI and Environmental Justice*
 - *Planning and Environmental Linkages (PEL)*
 - *Air Quality and Public Health*
 - *Integrating Transportation and Land Use*
6. **Integration and Connectivity – Enhance the integration and connectivity of the transportation system, across and between modes throughout the metropolitan region, for people and freight.**
- ***Associated Federal Initiatives:***
 - *Active Transportation and Transportation Alternatives*
 - *Multimodal and Intermodal Freight Planning and Performance*
7. **System Management and Operations – Promote efficient system management and operation.**
- ***Associated Federal Initiatives:***

- *Planning For Operations*
- *Congestion Management, Travel Time Reliability, and System Performance*
- *Transportation System Management and Operations (TSMO)*

8. System Preservation – Emphasize the preservation of the existing transportation system.

- ***Associated Federal Initiatives:***
 - *Asset Management*
 - *Pavement and Bridge Performance*

9. System Resiliency – Improve the resiliency and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation.

- ***Associated Federal Initiatives:***
 - *Sustainability*
 - *Transportation Safety Planning and Performance*
 - *Climate Trends and Extreme Weather*

10. Travel & Tourism – Enhance travel and tourism.

- ***Associated Federal Initiatives:***
 - *Transportation Performance Management*
 - *Economic Development*
 - *Livability*

The UPWP is organized into work tasks. Table 3 on the next page illustrates each of the planning factors and summarizes which of the work tasks address that factor.

Table 4

Summary of Planning Factors Matrix

| <i>Planning Factors</i> | Tasks | | | | |
|---|----------------------------|----------------------------|---------------|--------------|---------------------------|
| | Task A1 – Admin Activities | Task A2 – Data Inventories | Task B – LRTP | Task C – TIP | Task D – Transit Planning |
| <i>Economic Vitality</i> | ✓ | ✓ | ✓ | ✓ | ✓ |
| <i>System Safety</i> | ✓ | ✓ | ✓ | ✓ | |
| <i>System Security</i> | ✓ | ✓ | ✓ | ✓ | |
| <i>Accessibility & Mobility</i> | | ✓ | ✓ | ✓ | ✓ |
| <i>Enhance Environment</i> | | | ✓ | ✓ | ✓ |
| <i>Integration & Connectivity</i> | ✓ | ✓ | ✓ | ✓ | ✓ |
| <i>System Management & Operations</i> | ✓ | ✓ | ✓ | ✓ | ✓ |
| <i>System Preservation</i> | | ✓ | ✓ | ✓ | ✓ |
| <i>System Resiliency</i> | ✓ | ✓ | ✓ | ✓ | |
| <i>Travel & Tourism</i> | ✓ | ✓ | ✓ | ✓ | ✓ |

Federal Planning Emphasis Areas

The U.S. DOT has also identified three Planning Emphasis Areas that the Johnson City MTPO will incorporate into the work tasks and resulting products provided for in this UPWP.

1. Models of Regional Planning Cooperation

The Johnson City MTPO will promote cooperation and coordination across MPO boundaries to ensure a regional approach to transportation planning. A memorandum of agreement (MOA) between the Johnson City MTPO and the Kingsport MTPO designates that the Johnson City MTPO will conduct planning activities in the portion of the Kingsport Urbanized Area which is currently within the Johnson City city limits. The Kingsport and Johnson City Urbanized Areas are adjacent and the MPA boundaries overlap. The MOA defines the planning responsibilities for each MTPO MPA boundary.

2. Access to Essential Services

The Johnson City MTPO, as part of the transportation planning process, will identify transportation connectivity gaps in access to essential services. The Coordinated Public Transit – Human Services Transportation Plan is a joint effort of the Johnson City MTPO and Johnson City Transit that identify gaps in transit services and determines cost effective improvements that result in a better transit system. It should be noted not all gaps may be met due to funding limitations. However, the opportunity to coordinate between transit systems, service providers, and other human services agencies is crucial in planning an efficient system focusing the services on the population in need of transit. In addition, the Johnson City MTPO will finalize a revision to the PPP by the end of FY 2016.

3. MAP-21 and FAST Act Implementation

Once the U.S. DOT has issued the final rule regarding the performance framework and TDOT and the Johnson City MTPO has set performance targets, the Johnson City MTPO will participate in the development and implementation of a performance management approach to transportation planning and programming, which will include the development and use of performance measures, target setting, performance reporting, and transportation investments that support the achievement of performance targets. These components will ensure achievement of transportation system performance outcomes.

Table 4 below illustrates each of the emphasis areas and summarizes which of the work tasks meet that factor.

Table 5

Summary of Emphasis Areas Matrix

| <i>Emphasis Areas</i> | Tasks | | | | |
|---|----------------------------|----------------------------|---------------|--------------|---------------------------|
| | Task A1 – Admin Activities | Task A2 – Data Inventories | Task B – LRTP | Task C – TIP | Task D – Transit Planning |
| <i>Models of Regional Cooperation</i> | ✓ | | ✓ | ✓ | ✓ |
| <i>Access to Essential Services</i> | | | ✓ | ✓ | ✓ |
| <i>MAP-21 / FAST Act Implementation</i> | ✓ | ✓ | ✓ | ✓ | ✓ |

Work Program

Task A1 – Administrative Activities (PL 112)

Responsible Agencies: Johnson City MTPO, TDOT – Long Range Planning Division, Office of Local Programs, Program Development Division and the Division of Multimodal Transportation Resources, FHWA, FTA

Purpose: (Johnson City MTPO and TDOT) To conduct continuing, cooperative, and comprehensive transportation planning activities consistent with the MPA’s comprehensive general plans and ensure that all transportation projects meet federal and state requirements.

Previous Work: This is a continuing work activity. However, the following accomplishments were made in FY 2016:

For the Johnson City MTPO:

- Conducted a major review and update of the Functional Classification System for the Johnson City MTPO MPA region;
- Developed and submitted FY 2017-2018 UPWP;
- Developed FY 2017-2020 TIP;
- Revised Public Participation Plan;
- Developed a COOP for the Johnson City MTPO using a template provided by FHWA;
- Submitted an updated Title VI Report to TDOT;
- Attended meetings held by First Tennessee Rural Planning Organization (RPO), Tennessee Model Users Group (TNMUG), TDOT, and other conferences; and
- Issued Request for Proposals and chose a consultant to begin the update the LRTP.

Activities for FY 2017-2018

For the Johnson City MTPO:

- Continue to facilitate better coordination with the TDOT Office of Local Programs for the implementation of projects as they relate to the LRTP and TIP with member jurisdictions;
- Attend FHWA, TDOT, and other sponsored training and workshops, as available, to improve and maintain proficiency in the field;
- Continue to coordinate and develop outreach activities for the Title VI Program;
- Work with TDOT, FHWA, and FTA to prepare and submit technical reports (Financial Quarterly Reports);
- Review the FY 2017-2018 UPWP for any necessary updates (FY 2017);
- Develop and submit the FY 2019-2020 UPWP (FY 2018);
- Check for effectiveness of the PPP and make modifications if needed;

- Attend meetings of the Johnson City MTPO, First Tennessee RPO, TNMUG, local, regional, state, and federal sponsored meetings related to transportation planning as needed;
- Update and maintain any required Memorandums of Understanding with other MPOs or agencies;
- Facilitate Traffic Incident Management activities with regional first responders to enhance safety, reduce traffic congestion, and reduce secondary traffic crashes on highways;
- Maintain the Johnson City ITS Regional Architecture;
- Prepare and maintain Johnson City MTPO committee contact lists as needed;
- Relay information about meetings and updates to all Executive Board and Executive Staff members;
- Review and submit various contractual documents;
- Update By-Laws and Prospectus as needed; and
- Purchase of items & services, such as office supplies and computers, necessary for day to day operations.

For TDOT:

The Long Range Planning Division, Tennessee Department of Transportation, will work jointly with the MPO to establish the required administrative and technical procedures and prepare contractual agreements. In addition, the Long Range Planning Division will attend technical and policy board meetings, distribute information on federal transportation planning guidelines and requirements, conduct seminars and work sessions, review the MPO's transportation planning studies and reports, and undertake general administrative activities.

The TDOT Office of Local Programs will coordinate, review and assist the Johnson City MTPO in maintenance of the TIP as it relates to the successful implementation and deployment of local projects. The Office of Local Programs will coordinate projects with FHWA on behalf of the Johnson City MTPO and participate in Johnson City MTPO meetings.

The Multimodal Transportation Resources Division, Tennessee Department of Transportation, will administer state and federal programs regarding river transportation, urban public transportation, rail service, ride-sharing, and transportation systems management. Representatives of this office will participate in MPO meetings, distribute federal transit guidelines and requirements, conduct seminars and work sessions, and review MPO studies and reports. This office will coordinate FTA Section 5303, 5307 and 5310 funding programs in Tennessee. It should be noted that there are no "navigable rivers" in the Johnson City MTPO MPA; however, there are two class 1 and one class 3 railroads.

End Products (Schedule)

| End Product | By Whom | When |
|--|-------------------------|--|
| FY 2017-2018 UPWP Activities | Johnson City MTPO Staff | Ongoing |
| Contracts and Agreements | Johnson City MTPO Staff | As Needed |
| Day to Day Operations | Johnson City MTPO Staff | Ongoing |
| Travel to Meetings & Workshops | Johnson City MTPO Staff | As Needed |
| Executive Board & Staff Meetings | Johnson City MTPO Staff | As Needed |
| Title VI Report submitted to TDOT Civil Rights Office | Johnson City MTPO Staff | Summer 2016 |
| Traffic Incident Management meetings | Johnson City MTPO Staff | As Needed |
| Evaluate, maintain and develop all plans and documents | Johnson City MTPO Staff | Ongoing |
| Quarterly Invoices and Progress Reports | Johnson City MTPO Staff | November, February, May and August 2017/2018 |
| Update FY 2017-2018 UPWP | Johnson City MTPO Staff | August 2017 |
| Develop, adopt and submit FY 2019-2020 UPWP | Johnson City MTPO Staff | August 2018 |

Planning Factors Considered: This task considers seven of the ten FAST Act Planning Factors, as shown in Table 3 on page 16, while conducting administrative activities.

Budget and Funding Source

| Task A1 – Administrative Activities – FY 2017 | | | | | | |
|---|-------------|-------------------------|-----------|-----------------|-----------------|-----------|
| PL 112 | Local Match | Johnson City MTPO Total | State SPR | State SPR Match | State SPR Total | Total |
| \$112,000 | \$28,000 | \$140,000 | \$10,702 | \$2,676 | \$13,378 | \$153,378 |

| Task A1 – Administrative Activities – FY 2018 | | | | | | |
|---|-------------|-------------------------|-----------|-----------------|-----------------|-----------|
| PL 112 | Local Match | Johnson City MTPO Total | State SPR | State SPR Match | State SPR Total | Total |
| \$112,000 | \$28,000 | \$140,000 | \$10,702 | \$2,676 | \$13,378 | \$153,378 |

Task A2 – Maintenance of Data Inventories and Surveillance (PL 112)

Responsible Agencies: Johnson City MTPO, TDOT – Long Range Planning Division

Purpose

For the Johnson City MTPO:

- Inventory of transportation, demographic, and land-use data;
- Johnson City MTPO Urbanized Area and MPA boundaries;
- Database development;
- Maintenance and improvement of equipment necessary for data inventories; and
- Maintenance of the Johnson City MTPO website for dissemination of information.

For TDOT: Inventory of Transportation Data

Previous Work

For the Johnson City MTPO:

- Collection and analysis of the following data on a local and regional basis for input into the next LRTP update and TIP:
 - Population datasets from the 2010 Census, American Community Survey and other Census Bureau products;
 - Commuter patterns;
 - Bicycle and pedestrian facilities;
 - Freight information;
 - Land use;
 - Traffic data; and
 - Access to ETRIMS.
- Upon review of commercial data products, ReferenceUSA was purchased;
- Conducted a major review and update of the Functional Classification System for the Johnson City MTPO MPA;
- Acquired GIS data for the MTPO, specifically with the United States' Geological Survey Division Broad Agency Announcement Award for 3D Elevation Program (3DEP); and
- Maintained the Johnson City MTPO website with all documents, meetings, public notices, procurement, and upcoming events for public viewing.

For TDOT:

- Traffic volumes were collected annually throughout the Johnson City MTPO MPA by TDOT;
- Special count data collected for design projects as required;
- Crash data from Tennessee Department of Safety coded and filed; and

- High hazard accident data furnished for safety studies as needed.

Activities for FY 2017-2018

For the Johnson City MTPO:

- Update and purchase/collect data on traffic, freight, bicycle and pedestrian facilities, population, land use, and socioeconomic data, if available and needed;
- Maintain databases necessary for the LRTP, Travel Demand Model, and any other data that may need to be purchased. This would also include any data needed for any potential air quality attainment changes;
- Regional traffic count information is maintained (via interactive mapping system) on the Johnson City MTPO website via a link to the TDOT statewide count information;
- Maintain databases and mapping systems capable of storing, retrieving, correlating, analyzing, and displaying geographic information. This includes purchases of equipment needed by the Johnson City MTPO for storing data and for display purposes for various visualization techniques;
- Although TDOT collects traffic count data at established stations, special traffic counts may be conducted by the local agencies within the Johnson City MTPO MPA;
- Continual updating of Johnson City MTPO website to provide up to date information and enhanced access to transportation planning products to the public and Johnson City MTPO member agencies;
- Updating and maintenance of data including products for GIS analysis and advanced visualization techniques for the Johnson City MTPO and website;
- Utilize professional services to assist in data collection, organization, traffic count, collection, and maintenance of GIS databases, as needed;
- Continue acquisition of GIS data for the MTPO, specifically with the United States' Geological Survey Division Broad Agency Announcement Award for 3DEP;
- Maintain license for existing software: Travel Demand Model, GIS, Global Position System (GPS) data collection units, and visualization software such as Google Earth Pro, website development software, and other software packages;
- Maintain the database for TransCAD model, which includes economic, population and socioeconomic data, for the future update of the LRTP and TIP. This would include purchase of databases if available; and
- Update and maintain the functional classification system for the Johnson City MTPO MPA.

For TDOT:

- Continue to collect annual traffic count data at established stations;
- Conduct special traffic counts as needed for planning and design projects;
- Maintain accident file and furnish high hazard listings and other safety data as required; and
- Travel time studies will be conducted if needed for special studies.

End Products (Schedule)

| End Product | By Whom | When |
|---|--|---|
| Local and Regional Population and Land Use Data | Johnson City MTPO Staff | As Needed |
| Purchase or collect socioeconomical data, if available | Johnson City MTPO Staff | As Needed |
| Maintain Johnson City MTPO website at http://www.jcmpo.org | Johnson City MTPO Staff | Ongoing |
| Maintain software licenses (GIS, Travel Demand Model, etc) | Johnson City MTPO Staff | Annually |
| 3D Elevation Data collected, received and analyzed | Johnson City MTPO Staff; State of Tennessee Staff; U.S. Geological Survey Staff Consultant | March 2017 for data to be received, then Ongoing for analysis |
| Maintenance of Functional Classification System | Johnson City MTPO Staff | Ongoing |
| Develop maps of Urbanized Area, MPA, demographics, Functional Classification System, and other maps as needed | Johnson City MTPO Staff | As Needed |
| Database Management for the Travel Demand Model | Johnson City MTPO Staff | Ongoing |
| Traffic Counts (including peak hour volumes, vehicle classification, directional distribution, etc) | TDOT Staff | September – November |
| Vehicle Miles Traveled (VMT) | TDOT Staff | Ongoing |
| Accident Data | TDOT Staff | Ongoing |

Planning Factors Considered: This task considers nine of the ten FAST Act Planning Factors, as shown in Table 3 on page 16, while collecting and analyzing data.

Budget and Funding Source

| Task A2 – Maintenance of Data Inventories & Surveillance – FY 2017 | | | | | | |
|--|-------------|----------------------------|-----------|--------------------|--------------------|-----------|
| PL 112 | Local Match | Johnson City MTPO Total | State SPR | State SPR Match | State SPR Total | Total |
| \$148,000 | \$37,000 | \$185,000 | \$12,806 | \$3,202 | \$16,009 | \$201,008 |

| Task A2 – Maintenance of Data Inventories & Surveillance – FY 2018 | | | | | | |
|--|-------------|----------------------------|-----------|--------------------|--------------------|-----------|
| PL 112 | Local Match | Johnson City MTPO Total | State SPR | State SPR Match | State SPR Total | Total |
| \$88,000 | \$22,000 | \$110,000 | \$12,806 | \$3,202 | \$16,009 | \$126,008 |

Task B – Long Range Transportation Plan – Maintenance (PL 112)

Responsible Agencies: Johnson City MTPO, TDOT – Long Range Planning Division

Purpose: (Johnson City MTPO and TDOT) To provide a continuously updated comprehensive transportation plan that will provide for the long-range transportation needs of the Johnson City MTPO MPA.

Previous Work:

- The Johnson City MTPO continued to maintain the 2040 LRTP that was adopted by the Johnson City MTPO Executive Board on March 13, 2013; and
- A Request for Proposals was issued and a consultant chosen to update the LRTP.

Activities for FY 2017-2018

For the Johnson City MTPO:

- Maintain the 2040 LRTP and make any necessary adjustments or amendments (As needed);
- Begin the process to work with consultant to update the 2040 LRTP to the year 2045 for completion and adoption by March 2018;
- Ensure all projects within the current TIP comply with the 2040 LRTP and the updated 2045 LRTP;
- Attend any workshops or class that may be beneficial for updating the future LRTP;
- Update LRTP with performance measures that comply with U.S. DOT’s performance framework, TDOT’s performance targets and Johnson City’s performance targets;
- Assist TDOT with maintaining Statewide LRTP;
- Make any necessary updates to the current LRTP for requirements issued by new transportation authorizations; and
- If future air quality standards change and affect the Johnson City MTPO MPA, the Johnson City MTPO will update or develop necessary plans, models, and documents to make the Johnson City MTPO MPA air quality compliant. (Note: At this time, the Johnson City MTPO MPA is in attainment status).

End Products (Schedule)

| End Product | By Whom | When |
|--|-------------------------------------|------------|
| Maintain 2040 LRTP with amendments and adjustments | Johnson City MTPO Staff | As Needed |
| Prepare and adopt an updated 2045 LRTP | Johnson City MTPO Staff; Consultant | March 2018 |

Planning Factors Considered: All ten FAST Act Planning Factors are considered when making any updates to the LRTP.

Budget and Funding Source

| Task B – Long Range Transportation Plan Maintenance – FY 2017 | | | | | | |
|---|-------------|----------------------------|-----------|--------------------|--------------------|-----------|
| PL 112 | Local Match | Johnson City MTPO Total | State SPR | State SPR Match | State SPR Total | Total |
| \$192,000 | \$48,000 | \$240,000 | \$28,632 | \$7,158 | \$35,790 | \$275,790 |

| Task B – Long Range Transportation Plan Maintenance – FY 2018 | | | | | | |
|---|-------------|----------------------------|-----------|--------------------|--------------------|----------|
| PL 112 | Local Match | Johnson City MTPO Total | State SPR | State SPR Match | State SPR Total | Total |
| \$48,000 | \$12,000 | \$60,000 | \$28,632 | \$7,158 | \$35,790 | \$95,790 |

Task C – Transportation Improvement Program – Maintenance (PL 112)

Responsible Agency: Johnson City MTPO, JCT

Purpose: To prepare and maintain an accurate, timely, and fiscally constrained TIP.

Previous Work

For the Johnson City MTPO:

- Adjustments and amendments were completed as needed to the FY 2014-2017 TIP;
- Annual Listing of Obligated Projects for FY 2015 was made available to the public; and
- Prepared draft of FY 2017-2020 TIP for submission by TDOT to FHWA and FTA in November 2016.

Activities for FY 2017-2018

For the Johnson City MTPO:

- Maintain the accuracy of the FY 2014-2017 TIP through amendments and adjustments when necessary while remaining fiscally constrained;
- Coordinate existing TIP projects with local, state, and federal agencies;
- Prepare, adopt and submit FY 2017-2020 TIP for approval (November 2016);
- Maintain the accuracy of the FY 2017-2020 TIP through amendments and adjustments when necessary while remaining fiscally constrained;
- Continue to explore INVEST for large projects in the Johnson City MTPO MPA;
- Publish the FY 2016 Annual Listing of Obligated Projects (December 2016); and
- Publish the FY 2017 Annual Listing of Obligated Projects (December 2017).

End Products (Schedule)

| End Products | By Whom | When |
|---|-------------------------|---------------|
| Update FY 2014-2017 TIP with amendments and adjustments | Johnson City MTPO Staff | As Needed |
| Prepare, adopt and submit FY 2017-2020 TIP | Johnson City MTPO Staff | November 2016 |
| FY 2016 Annual Listing of Obligated Projects will be made available | Johnson City MTPO Staff | December 2016 |
| Update FY 2017-2020 TIP with amendments and adjustments | Johnson City MTPO Staff | As Needed |
| FY 2017 Annual Listing of Obligated Projects will be made available | Johnson City MTPO Staff | December 2017 |

Planning Factors Considered: All ten FAST Act Planning Factors will be considered during the development and maintenance of the TIP.

Budget and Funding Source

| Task C – Transportation Improvement Program – Maintenance – FY 2017 | | | | | | |
|---|-------------|----------------------------|-----------|--------------------|--------------------|----------|
| PL 112 | Local Match | Johnson City MTPO Total | State SPR | State SPR Match | State SPR Total | Total |
| \$20,000 | \$5,000 | \$25,000 | \$0 | \$0 | \$0 | \$25,000 |

| Task C – Transportation Improvement Program – Maintenance – FY 2018 | | | | | | |
|---|-------------|----------------------------|-----------|--------------------|--------------------|----------|
| PL 112 | Local Match | Johnson City MTPO Total | State SPR | State SPR Match | State SPR Total | Total |
| \$20,000 | \$5,000 | \$25,000 | \$0 | \$0 | \$0 | \$25,000 |

Task D – Transit Planning (Section 5303)

Responsible Agencies: Johnson City MTPO, JCT, TDOT, FTA

Purpose: To collect, analyze, and store data necessary for conducting a viable transit planning process. To administer funds, coordinate planning activities, and to encourage citizen knowledge and awareness of public and private transit services.

Previous Work

For the Johnson City MTPO and JCT:

- Maintained data from previous transit studies and the U.S. Census Bureau, such as 2010 Census and American Community Survey;
- Assisted JCT with maintenance of records of ridership, fare revenue, and cost by route;
- Assisted JCT with training new staff members;
- Collected census data information to assist in the development of plans, including the LRTP and TIP; and
- Conducted public participation activities for transit projects in the LRTP and TIP.

Activities for FY 2017-2018

For the Johnson City MTPO and JCT:

- Continue to collect data that includes information on the elderly, disabled, and low-income populations;
- Continue to collect data on socioeconomic patterns, population density, financial costs, revenues, and ridership characteristics;
- Data collection and analysis techniques include patron surveys, GIS analysis, data collected by mobile data terminals on transit vehicles, and other methods;
- Continue to maintain database on JCT's bus stop inventory, bus routes, bus schedules, and other public transit data relevant to the GIS database;
- Transit activities associated with Disadvantaged Business Enterprise, Equal Employment Opportunity, and Title VI programs, and specialized programs for the elderly and disabled, including programs associated with the ADA will be ongoing throughout the year;
- Assist FTA, TDOT, and local transit providers in the development of public transportation plans, such as performance measures, development plans or safety plans, based on MAP-21 and FAST Act provisions;
- Continue to coordinate to include transit ITS projects in updates to the Johnson City Regional ITS Architecture;

- Continue to assist with TIP and LRTP additions, adjustments, amendments, and public participation on transit projects, including projects funded with FTA Section 5307, 5309, 5310, 5339 and the state’s Urban Operating Assistance Program (UROP);
- Assist the local community by reviewing submissions for the TDOT Multimodal Access grant, with approval by the Johnson City MTPO Executive Board to forward to TDOT;
- Assist JCT by using TBEST for transit demand modeling and planning;
- Conduct quarterly meetings with local transit agencies, both urban and rural, to review ridership and operating trends to facilitate increase use of transit services;
- The Johnson City MTPO will assist JCT with surveying transit passengers to collect data for the new LRTP and Coordinated Public Transit – Human Services Transportation Plan update;
- The Johnson City MTPO will assist JCT with an update to the Coordinated Public Transit – Human Services Transportation Plan;
- The Johnson City MTPO will assist JCT by utilizing professional services in developing a comprehensive operational analysis of JCT’s system;
- The Johnson City MTPO will assist JCT by utilizing professional services in developing technical specifications to be used in the procurement process (Request for Proposal) for replacement buses in the JCT fleet that have reached the end of their useful life cycle; and
- Continue to be a stakeholder in the First Tennessee District Regional Coordinated Human Services Plan by working with TDOT and its consultant to assess transportation needs and identify gaps in public transportation.

End Products (Schedule)

| End Product | By Whom | When |
|--|---|-------------------------------------|
| Quarterly Invoices and Progress Reports | Johnson City MTPO Staff | November, February, May, and August |
| Review and Submit Multimodal Access Grants, if received | Johnson City MTPO Executive Board | December 2016 and 2017 |
| Utilize TBEST for transit demand modeling and planning | Johnson City MTPO Staff; JCT Staff | Ongoing |
| Passenger Survey will be conducted | Johnson City MTPO Staff; JCT Staff; Temporary Workers | By end of FY 2017 |
| Update Coordinated Public Transit – Human Services Transportation Plan | Johnson City MTPO Staff; JCT Staff; Consultant | By end of FY 2017 |
| Issue Request for Proposals (RFP) for consultant services to start comprehensive operational analysis of JCT | Johnson City MTPO Staff; JCT Staff; Consultant | February 2017 |
| Issue Request for Proposals (RFP) for consultant services to develop technical specifications for bus purchase for JCT | Johnson City MTPO Staff; JCT Staff; Consultant | April 2017 |

| | | |
|---|--|---------------|
| Complete comprehensive operational analysis of JCT | Johnson City MTPO Staff; JCT Staff; Consultant | December 2017 |
| Complete development of technical specifications for bus purchase for JCT | Johnson City MTPO Staff; JCT Staff; Consultant | December 2017 |

Planning Factors Considered: This task considers seven of the ten FAST Act Planning Factors, as shown in Table 3 on page 16, during the transit planning process.

Budget and Funding Source

| Task D – Transit Planning – FY 2017 | | | | | | | |
|-------------------------------------|------------|-------------|-------------------------|-----------|-----------------|-----------------|-----------|
| Sec. 5303 | TDOT Match | Local Match | Johnson City MTPO Total | State SPR | State SPR Match | State SPR Total | Total |
| \$128,000 | \$16,000 | \$16,000 | \$160,000 | \$0 | \$0 | \$0 | \$160,000 |

| Task D – Transit Planning – FY 2018 | | | | | | | |
|-------------------------------------|------------|-------------|-------------------------|-----------|-----------------|-----------------|----------|
| Sec. 5303 | TDOT Match | Local Match | Johnson City MTPO Total | State SPR | State SPR Match | State SPR Total | Total |
| \$51,046 | \$6,381 | \$6,381 | \$63,808 | \$0 | \$0 | \$0 | \$63,808 |

Task E – Contingency

Responsible Agency: Johnson City MTPO

Purpose: This line item will be available to support any cost overruns or new projects for the FY 2017-2018 work program. Use of the contingency fund will require an amendment to the UPWP, which requires approval by the Johnson City MTPO Executive Board, along with TDOT and FHWA/FTA.

Budget and Funding Source

**Task E
Contingency
Fiscal Year 2017**

| FEDERAL HIGHWAY ADMINISTRATION | | | | |
|--------------------------------|-----------------|----------------|------------|-----------------|
| AGENCY | FHWA PL-112 | LOCAL MATCH | TDOT MATCH | TOTAL |
| Federal | \$20,000 | \$0 | \$0 | \$20,000 |
| State | \$0 | \$0 | \$0 | \$0 |
| MPO | \$0 | \$5,000 | \$0 | \$5,000 |
| TOTAL | \$20,000 | \$5,000 | \$0 | \$25,000 |

**Task E
Contingency
Fiscal Year 2018**

| FEDERAL HIGHWAY ADMINISTRATION | | | | |
|--------------------------------|-----------------|----------------|------------|-----------------|
| AGENCY | FHWA PL-112 | LOCAL MATCH | TDOT MATCH | TOTAL |
| Federal | \$14,400 | \$0 | \$0 | \$14,400 |
| State | \$0 | \$0 | \$0 | \$0 |
| MPO | \$0 | \$3,600 | \$0 | \$3,600 |
| TOTAL | \$14,400 | \$3,600 | \$0 | \$18,000 |

Carryover Task from FY 2016 UPWP

Old Task C2 – Transportation Improvement Program (TIP) Software Database Application (PL 112)

Responsible Agency: Johnson City MTPO

Purpose: To develop/procure software application (database) for maintaining TIP projects.

Previous Work

For the Johnson City MTPO:

A Purchase Order was issued to purchase the software in June 2015. This task will need to be carried over to facilitate completion of this purchase. Upon successful software deployment and the receipt and payment of an invoice, this task will be complete.

Activities for FY 2017

For the Johnson City MTPO:

- Develop/procure a software application and programming service to convert the existing spreadsheet-based TIP for the Johnson City MTPO into a true database application that does the following:
 - Provides standard FHWA/TDOT approved “TIP Sheets”;
 - Automatically update funding balances when data is entered;
 - Include the capability to store project location maps, either in image file and/or GIS formats;
 - Produce financial reports;
 - Have the capability to publish the information on the Internet for public information (may require customized programming)

End Products (Schedule)

For the Johnson City MTPO:

- A fully functional, user friendly, software application (database) to organize and maintain TIP projects for the Johnson City MTPO. (Late 2016)

Planning Factors Considered: All FAST Act Planning Factors will be considered during the use of the TIP software application.

Budget and Funding Source

| Old Task C2 – TIP Software Database Application – FY 2017 | | | | | | |
|---|-------------|----------------------------|-----------|--------------------|--------------------|----------|
| PL 112 | Local Match | Johnson City MTPO Total | State SPR | State SPR Match | State SPR Total | Total |
| \$20,000 | \$5,000 | \$25,000 | \$0 | \$0 | \$0 | \$25,000 |

Budget Summary – Funding Sources

Table 6

Funding Sources- Johnson City Urban Area

Fiscal Year 2017

| TASK | FEDERAL HIGHWAY ADMINISTRATION | | | | FEDERAL TRANSIT ADMINISTRATION | | | TOTAL |
|-----------------------------|--------------------------------|------------------|-----------------|-----------------|--------------------------------|-----------------|-----------------|------------------|
| | PL 112 | LOCAL MATCH | SPR | TDOT MATCH | Sec. 5303 | TDOT MATCH | LOCAL MATCH | |
| A1. Administration | \$112,000 | \$28,000 | \$10,702 | \$2,676 | \$0 | \$0 | \$0 | \$153,378 |
| A2. Data Inventories | \$148,000 | \$37,000 | \$12,806 | \$3,202 | \$0 | \$0 | \$0 | \$201,008 |
| B. LRTP | \$192,000 | \$48,000 | \$28,632 | \$7,158 | \$0 | \$0 | \$0 | \$275,790 |
| C. TIP | \$20,000 | \$5,000 | \$0 | \$0 | \$0 | \$0 | \$0 | \$25,000 |
| D. Transit Planning | \$0 | \$0 | \$0 | \$0 | \$128,000 | \$16,000 | \$16,000 | \$160,000 |
| E. Contingency | \$20,000 | \$5,000 | \$0 | \$0 | \$0 | \$0 | \$0 | \$25,000 |
| TOTAL | \$492,000 | \$123,000 | \$52,140 | \$13,036 | \$128,000 | \$16,000 | \$16,000 | \$840,176 |

Carryover Task from Fiscal Year 2016*

| TASK | FEDERAL HIGHWAY ADMINISTRATION | | | | FEDERAL TRANSIT ADMINISTRATION | | | TOTAL |
|--------------------------|--------------------------------|-------------|--------|------------|--------------------------------|------------|-------------|--------------------|
| | PL 112 | LOCAL MATCH | SPR | TDOT MATCH | Sec. 5303 | TDOT MATCH | LOCAL MATCH | |
| C2. Software Dev. | \$20,000.00 | \$5,000.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$25,000.00 |

* Purchase Order was issued in June 2015; anticipate deploying software late in 2016 to complete this task.

Table 7
Funding Sources- Johnson City Urban Area
Fiscal Year 2018

| TASK | FEDERAL HIGHWAY ADMINISTRATION | | | | FEDERAL TRANSIT ADMINISTRATION | | | TOTAL |
|-----------------------------|--------------------------------|-----------------|-----------------|-----------------|--------------------------------|----------------|----------------|------------------|
| | PL 112 | LOCAL MATCH | SPR | TDOT MATCH | Sec. 5303 | TDOT MATCH | LOCAL MATCH | |
| A1. Administration | \$112,000 | \$28,000 | \$10,702 | \$2,676 | \$0 | \$0 | \$0 | \$153,378 |
| A2. Data Inventories | \$88,000 | \$22,000 | \$12,806 | \$3,202 | \$0 | \$0 | \$0 | \$126,008 |
| B. LRTP | \$48,000 | \$12,000 | \$28,632 | \$7,158 | \$0 | \$0 | \$0 | \$95,790 |
| C. TIP | \$20,000 | \$5,000 | \$0 | \$0 | \$0 | \$0 | \$0 | \$25,000 |
| D. Transit Planning | \$0 | \$0 | \$0 | \$0 | \$51,046 | \$6,381 | \$6,381 | \$63,808 |
| E. Contingency | \$14,400 | \$3,600 | \$0 | \$0 | \$0 | \$0 | \$0 | \$18,000 |
| TOTAL | \$282,400 | \$70,600 | \$52,140 | \$13,036 | \$51,046 | \$6,381 | \$6,381 | \$481,984 |

Budget Summary - Agency Participation

| Table 8 | | | |
|--|-----------------|------------------|--------------------|
| Agency Participation- Johnson City Urban Area | | | |
| Fiscal Year 2017 | | | |
| TASK | TDOT/SPR | MPO | TOTAL |
| A1. Administration | \$13,378 | \$140,000 | \$153,378 |
| A2. Data Inventories | \$16,008 | \$185,000 | \$201,008 |
| B. Long Range Planning | \$35,790 | \$240,000 | \$275,790 |
| C. TIP | \$0 | \$25,000 | \$25,000 |
| D. Transit Planning | \$16,000 | \$144,000 | \$160,000 |
| E. Contingency | \$0 | \$25,000 | \$25,000 |
| TOTAL | \$81,176 | \$759,000 | \$840,176 |
| Carryover Task from Fiscal Year 2016 | | | |
| TASK | TDOT/SPR | MPO | TOTAL |
| C2. TIP Database Software Dev. | \$0.00 | \$25,000.00 | \$25,000.00 |

| Table 9 | | | |
|--|-----------------|------------------|------------------|
| Agency Participation- Johnson City Urban Area | | | |
| Fiscal Year 2018 | | | |
| TASK | TDOT/SPR | MPO | TOTAL |
| A1. Administration | \$13,378 | \$140,000 | \$153,378 |
| A2. Data Inventories | \$16,008 | \$110,000 | \$126,008 |
| B. Long Range Planning | \$35,790 | \$60,000 | \$95,790 |
| C. TIP | \$0 | \$25,000 | \$25,000 |
| D. Transit Planning | \$6,381 | \$67,046 | \$73,427 |
| E. Contingency | \$0 | \$18,000 | \$18,000 |
| TOTAL | \$71,557 | \$420,046 | \$491,603 |

Budget Summary – Agency Participation by Funding Source

| Table 10 | | | | | | | | |
|---|--------------------------------|-------------------|-----------------|-----------------|--------------------------------|-----------------|-----------------|--------------------|
| Agency Participation by Funding Source | | | | | | | | |
| Fiscal Year 2017 | | | | | | | | |
| | FEDERAL HIGHWAY ADMINISTRATION | | | | FEDERAL TRANSIT ADMINISTRATION | | | |
| AGENCY | TN PL | LOCAL MATCH | TN SPR | TDOT MATCH | TN 5303 | TDOT MATCH | LOCAL MATCH | TOTAL |
| TDOT - PD* | \$0 | \$0 | \$52,140 | \$13,036 | \$0 | \$16,000 | \$0 | \$81,176 |
| MPO | \$492,000 | \$123,000 | \$0 | \$0 | \$128,000 | \$0 | \$16,000 | \$759,000 |
| TOTAL | \$492,000 | \$123,000 | \$52,140 | \$13,036 | \$128,000 | \$16,000 | \$16,000 | \$840,176 |
| * PD = Program Development | | | | | | | | |
| Carryover Task from Fiscal Year 2016 | | | | | | | | |
| | FEDERAL HIGHWAY ADMINISTRATION | | | | FEDERAL TRANSIT ADMINISTRATION | | | |
| AGENCY | TN PL | LOCAL MATCH | TN SPR | TDOT MATCH | TN 5303 | TDOT MATCH | LOCAL MATCH | TOTAL |
| TDOT - PD* | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 |
| MPO | \$20,000.00 | \$5,000.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$25,000.00 |
| TOTAL | \$20,000.00 | \$5,000.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$25,000.00 |

Table 11
Agency Participation by Funding Source
Fiscal Year 2018

| AGENCY | FEDERAL HIGHWAY ADMINISTRATION | | | | FEDERAL TRANSIT ADMINISTRATION | | | TOTAL |
|---------------|--------------------------------|-----------------|-----------------|-----------------|--------------------------------|----------------|----------------|------------------|
| | TN PL | LOCAL MATCH | TN SPR | TDOT MATCH | TN 5303 | TDOT MATCH | LOCAL MATCH | |
| TDOT - PD* | \$0 | \$0 | \$52,140 | \$13,036 | \$0 | \$6,381 | \$0 | \$71,557 |
| MPO | \$282,400 | \$70,600 | \$0 | \$0 | \$51,046 | \$0 | \$6,381 | \$410,427 |
| TOTAL | \$282,400 | \$70,600 | \$52,140 | \$13,036 | \$51,046 | \$6,381 | \$6,381 | \$481,984 |

* PD = Program Development

Appendix A – Criteria for TIP Project Selection

The Johnson City MTPO considered several factors that were important to the MTPO area. They are as follows: clean air, existing plans, the aging population, maintaining existing roads, the State LRTP, growth areas, connectivity, rail, Title VI, economic development, transportation mode choices, route choices, congestion, and safety. These factors were then used to develop criteria for the selection of projects for the Local STP funding. The Johnson City MTPO Executive Staff reviews the projects submitted for Local STP funding. They then rank the projects using weighted criteria (see below) and develop a recommendation for the Johnson City MTPO Executive Board. The Executive Board will adopt the ranking of the projects if they feel the ranking is suitable. The Executive Board may choose to amend or reorder the ranking of the projects before adopting.

| Criteria | Points available |
|--|------------------|
| CONSISTENCY WITH PLANS | |
| In previous TIP or related project in TIP | 15 |
| Consistent with growth plan/land use plans | 8 |
| CONGESTION MANAGEMENT | |
| Reduces/manages travel demand (TDM) | 8 |
| Improves traffic operations (ITS) | 10 |
| Transit capital improvement | 2 |
| Alternative Mode (incl. Bike/Pedestrian and other modes) | 5 |
| Intelligent Transportation System (ITS) project | 2 |
| TRAFFIC CIRCULATION | |
| Improves access to major highways | 5 |
| Provides/enhances connection between modes | 4 |
| Enhances connectivity of street network | 14 |
| ECONOMIC DEVELOPMENT | |
| Improves facility for freight movement (air, distribution, rail) | 2 |
| Enhances economic development investments | 10 |
| AIR QUALITY | |
| Promotes positive effect on air quality | 2 |
| SAFETY MANAGEMENT | |
| Promotes safety | 7 |
| VALUE ADDED | |
| Match greater than minimum required | 2 |
| Right of way was donated, eng. already complete, etc. | 4 |
| | |
| Total | 100 |