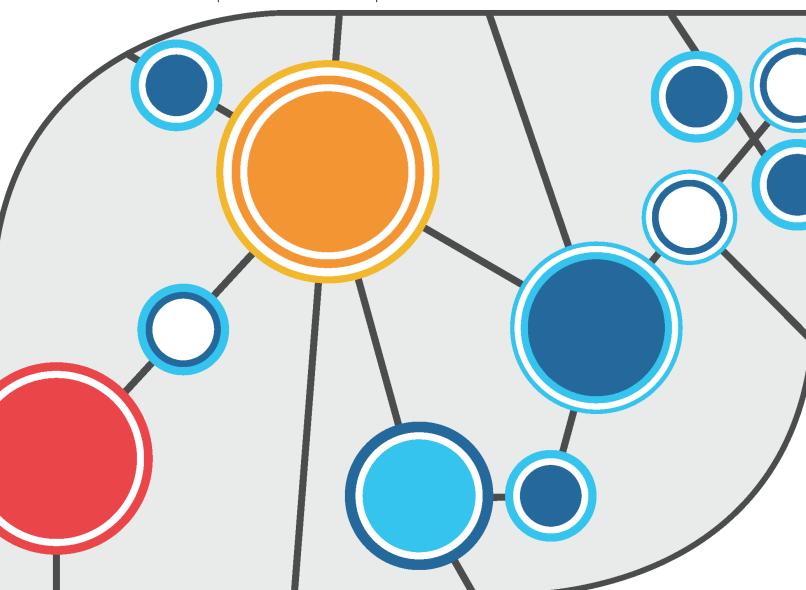
Metropolitan Planning Organization Manual: Executive Summary

Tennessee Department of Transportation



Bristol | Chattanooga | Clarksville | Cleveland | Jackson Johnson City | Kingsport | Knoxville | Lakeway | Memphis | Nashville



History of MPOs

Metropolitan Planning Organizations (MPOs) are federally required agencies serving urbanized areas with a population of more than 50,000 people. The decennial Census derives these urbanized areas. As federally-funded agencies they are tasked with the primary responsibility to ensure regional coordination in the planning and implementation of transportation investments.



- Federal-Aid Highway ACTS
- STAA
- ISTEA
- NHS
- TEA-21
- SAFETEA-LU
- MAP-21
- FAST

First introduced in the Federal-Aid Highway Atc of 1962, the need for a continuing, cooperative, and comprehensive, "3-C", MPO planning process has been maintained with each subsequent piece of transportation legislation. Although each iteration of federal transportation law included changes to reflect current issues of the day, the core activities of MPOs across the country largely have remained the same. With the intention of facilitating regional collaboration between governments, stakeholders, and residents, MPOs generally have the following goals:

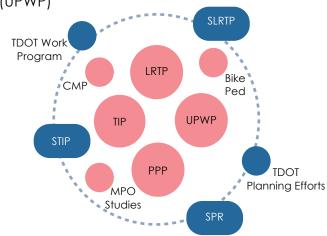
- 1. Examine existing and future investment needs and alternatives
- 2. Plan for improvements that reflect a shared vision of the metropolitan area or region
- 3. Allocate scarce transportation resources appropriately

These goals are accomplished through the following core documents which address various federal requirements and are described in greater detail throughout this summary:

TDOT Efforts

MPO Efforts

- 1. Long Range Transportation Plan (LRTP)
- 2. Transportation Improvement Program (TIP)
- 3. Unified Planning Work Program (UPWP)
- 4. Public Participation Plan (PPP)





MPOs in Tennessee

There are over 400 MPOs across the country. Tennessee has 11 MPOs which include: Bristol, Chattanooga, Clarksville, Cleveland, Jackson, Johnson City, Kingsport, Knoxville, Lakeway, Memphis and Nashville. Five of them: Bristol, Chattanooga, Clarksville, Kingsport and Memphis are bi-state. The four largest urban areas: Chattanooga, Knoxville, Memphis and Nashville are designated as Transportation Management Area (TMA) MPOs since they have an urbanized area population exceeding 200,000. See map below. While this designation impacts some of their planning requirements, as well as how TDOT interacts with them, their function and mission is similar to the smaller non-TMA MPOs. *Note that MPO boundaries do not have to conform to state, municipal or political boundaries

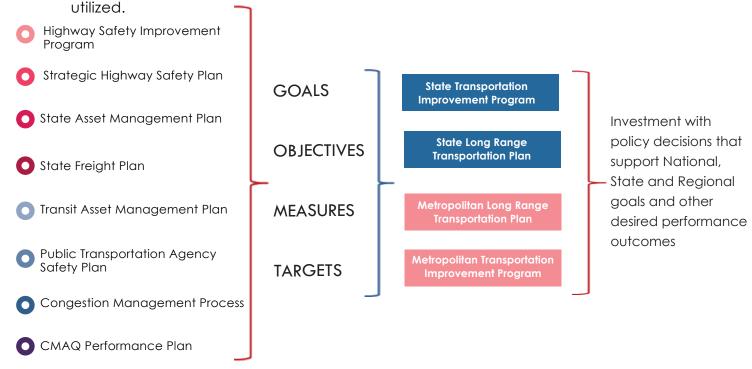


In general, each Tennessee MPO is comprised of staff, a technical committee, and policy board. These groups are governed by a set of by-laws, establishing their composition and operational characteristics such as: members, voting rights, processes, procedures, etc. which are contained in a Prospectus. The Prospectus is designed to serve as a common reference for all parties interested and involved in the regional transportation planning process A technical committee primarily functions as an advisory board, interacting with MPO staff on technical matters related to transportation issues and then presenting recommendations on projects and programs to the policy board. An MPO policy board serves as the decision-making authority for the organization and is comprised of elected officials (mayors and county executives) who serve as representatives of the MPO's member jurisdictions. Many MPOs publish an annual calendar for all technical and executive board meetings planned for the year on their website.

LRTP+ Performance-Based Planning

The first phase to deliver transportation projects for every MPO must be in the development of a Long Range Transportation Plan (LRTP), Metropolitan Transportation Plan (MTP) or Regional Transportation Plan (RTP). This integrates the objectives outlined by the MPO and the State with respect to the development of the region's multimodal transportation network. This plan must identify how the metropolitan area will manage and operate a multimodal transportation system (including transit, highway, bicycle, pedestrian, and other modes) to meet the region's economic, transportation, development, and sustainability goals for no less than a 20-year horizon. This plan must be fiscally constrained.

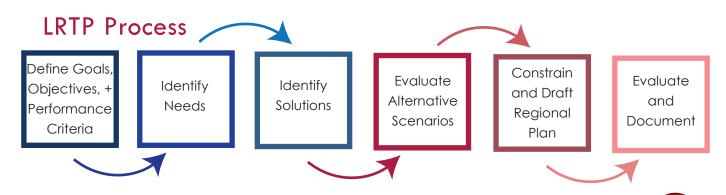
Federal legislation requires that LRTP development be performance-based and incorporate 10 planning factors. Through this process and integrating these factors, MPOs use their own regional goals, objectives, and performance trends to develop a strategic direction. These guidelines, set forth in MAP-21, guide the development and prioritization of strategies included in the LRTP that are intended to help the MPO meet its desired performance outcomes. In working towards achieving performance goals, TDOT and MPOs are tasked with collaborating to establish performance measures and targets that are used to evaluate progress towards achieving the goals and objectives. Although not required for individual projects, the MPO's overall plan must address each of the Performance Measures and how to reach identified targets and goals. The State's Long Range Plan must include a System Performance Report reflecting on how project return on investment is



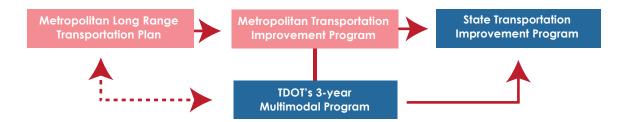
Overview of the LRTP

LRTPs are used to holistically evaluate the existing and future conditions, demands, and performance of the transportation system. From that analysis, engaging with public and regional stakeholders, the plan identifies a fiscally-constrained list of projects and strategies that accomodate future growth trends in the multimodal transportation sytem. LRTPs generally follow this consistent structure, which is mostly dictated by regulations. Areas identified as TMAs have some additional requirements within the overall LRTP process. One of these items is the development of a Congestion Management Process (CMP). Noting the increased levels of traffic congestion in larger urban areas, this process is meant to help MPOs indentify locations and sources of congestion as well as strategies to mitigate impacts. Urban areas that have been designated as a non-attainment area related to national air-quality standards are required to first consider demand and operational management strategies in the programming of projects resulting from the CMP process. This process, including the development of the LRTP, is thoroughly reviewed by FHWA, FTA with TDOT, at least once every four years for MPOs that serve a TMA. The purpose of this Certification Review is to ensure that the planning processes being carried out, comply with Federal regulations. For non-TMA MPOs, TDOT conducts and certifies compliance of these MPOs on the behalf of FHWA/FTA.

In the LRTP development process, TDOT serves as a reviewing agency with various internal divisions being provided the opportunity for reviewing the draft LRTP prior to public distribution. Following TDOT's divisional review and subsequent MPO corrections, TDOT facilitates FHWA/FTA's review of the LRTP document as well.



Contents of the TIP



MPOs are responsible for programming all federal transit and highway funding within their planning areas in a Transportation Improvement Program (TIP). This is a coordinated effort between an MPO, TDOT and local transit providers. The TIP effectively serves as a short-term programming document that lists three years of federally-funded transportation projects as well as regionally significant projects. Typically this includes all state funded projects within an MPO area and sometimes locally funded projects depending on the scale and size. These projects are intended to address performance measures to improve regional and statewide transportation systems identified within the MPO's long range plan. The TIP must be fiscally constrained, having funding mechanisms currently in place to implement regional transportation priorities. Though adopted only once every four years, by the MPO policy board, it can be amended to account for changes in funding or project needs.

As the agency responsible for implementing projects in both rural and urban areas, TDOT plays a significant role in the development of MPO TIPs. TDOT programs projects for rural areas across the state (outside of MPO boundaries) in the Statewide Transportation Improvement Program (STIP). It also includes all state-led projects in MPO areas by reference to the MPO TIPs. In the development of MPO TIPs, TDOT is responsible for providing federal and state funding allocations to each MPO, including special projects. TDOT can request changes to the MPO TIPs to reflect changes in funding programs, project costs, and timeframe for implementation. This occurs either as a TIP amendment or modification. Lastly, MPOs are required to publish an annual listing of projects for which funding has been obligated in the preceding year as a record of project delivery and progress report for public information and disclosure.

Contents of the UPWP

MPOs are also required to develop a Unified Planning Work Program (UPWP). This serves as a framework for operational tasks and budget items that the MPO will administer for a two-year period. The UPWP itemizes the work to be accomplished by the MPO using federal transportation funds and the necessary costs for each activity by fiscal year. The primary funding source for UPWP activities is FHWA's Planning (PL) funds, FTA's transit planning funds, and the distribution of TDOT's Statewide Planning and Research (SPR) program. Other funding programs can include: Surface Transportation Block Grant (STBG) funds, Congestion Mitigation and Air Quality (CMAQ) funds, Transportation Alternatives (TA) funds or discretionary grants. There is a recipient and subrecipient relationship between TDOT and the MPOs as federal funding is processed. Each of these funding types passes through TDOT, the recipient, prior to being allocated to the MPO, subrecipient, for programming in the UPWP.

Common elements found in the UPWP include the development of the LRTP and TIP, administrative tasks, data collection and analysis, special studies such as a bike/ped plan, and public engagement efforts. The UPWP provides transparency to stakeholders and the public regarding the use of federal funds by MPOs, transit agencies, and TDOT. TDOT takes the lead on the initial review of each MPO's UPWP and then coordinates the review for FHWA/FTA for final approval with funding authorization. Additionally, TDOT develops formal contracts with each MPO in order for them to access their FHWA and FTA planning funds. TDOT also oversees use of funding, ensuring appropriate expenditiure, documentation, and ultimate reimbursement of expended dollars.



Contents of the PPP

The Public Participation Plan is a federally mandated, core document that supports all planning processes carried out by the MPO. Within this plan all methods for stakeholder input are developed. It outlines where this outreach occurs for each planning activity and defines the methods to accomplish this successfully. It also serves as a resource for MPO boards, staff, the general public, anchor institutions, and affected businesses within the MPO. After every plan or project is developed, it is presented to the public for comment. At the close of this period, comments are processed and resolved, with inclusion to the plan or project.



In addition to the PPP, MPOs are required to ensure compliance with various federal laws that pertain to nondiscrimination on the basis of: age, race, color, gender, ethnicity, or disability. This includes Environmental Justice (EJ) communities of low-income, minorities, and limited English proficiency (LEP) populations in its programs, activities, or employment policies and procedures. While not exclusive to the MPO's public involvement process, MPOs are required to develop and maintain a Title VI Compliance Plan which TDOT reviews for alignment with federal laws.

In addition to core documents such as the LRTP, TIP, UPWP and PPP, MPOs carry out a number of vital planning tasks and maintain many technical tools. These tools aid in their planning processes and in meeting federal requirements. As a key collaborator, TDOT often plays a role in the development of the following items as either a reviewing agency or key stakeholder.

TECHNICAL T

MPOs utilize **Travel Demand Models** that estimate travel behaviors and demand for their 20-year planning horizon in the LRTP. This data analysis is reviewed and approved by their boards.

Intelligent Transportation
System Architectures (ITS)
outline the deployment,
integration and operation of ITS
in urban regions. These
documents allow stakeholders
to base plans on needs that
allows work to be implemented
as funding becomes available.

To forecast future growth and its impacts of the region, transportation system deficiences and travel behaviors, MPOs develop and maintain **Land Use Models.** This is common for MPOs with large urban areas and facilitates public decision making for system investments.

Freight plays a vital role within the state and TN's MPOs develop area specific Freight Plans, evaluating investments supporting the industry as well as research to find solutions.

TN's MPOs
are responsible for assessing Air
Quality considerations +
demonstrating conformity
to reduce emissions
established by the 1990
Clean Air Act, National
Ambient Air Quality Standards,
and the TN State
Implementation Plans (SIPs).

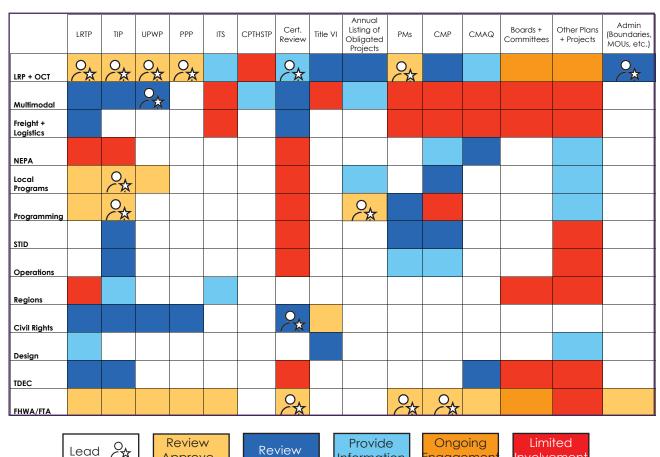
Sub-Regional Plans address specific issues that require in-depth analysis exceeding the regional plans. These can include Corridor studies, transit studies, Resiliency and Congestion research, Mobility on Demand, Safety, operational studies, and Active Transportation plans

Multimodal

Recognizing the importance of non-motorized transportation on overall performance of the transportation network and livability, MPOs develop plans targeted to the levels of service for both pedestrians and bicyclists. These plans identify connectivity, continuity, and deficiences in the multimodal infrastructure as well as investment priorities. These Multimodal plans are developed through public engagement efforts. Coordinated Public Transit and Human Service Transportation Plans (CPTHSTP) is a comprehensive strategy for delivering public transportation services in an urban area, specifically for individuals with disabilities, low-income households, and adults over age 65. The result is a list of prioritized services and investments needed to meet the conditions of these EJ population groups. Development of these plans is required by Federal law for an urban area to receive certain types of transit funding.

Divisional Involvement

The table below highlights the interaction between various divisions within TDOT as well as other agencies to participate in the MPO processes.



Information

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Involvement

Review

Approve



Project Delivery Lifecycle

The Federal-aid projects typically follow 6 fundemental phases that lead to project delivery: **Planning, Environmental, Design/Preliminary Engineering (PE), Right of Way, Construction,** and **Maintenance**. Each phase is a building block, leading to final project delivery.

Transportation needs are conceptualized during the planning phase of the Long Range Transportation Plan. As a project passes through each phase, the local public agencies (LPAs) must account for three major approval milestones:

- 1. Environmental Document Approval
- 2. Plans, Specifications, and Estimates
- 3. Closing the Projects.

PRE-AWARD Activities

POST AWARD Activities



Planning phase (LRTP + TIP)
All projects must be included in the STIP to receive federal funding. Once a project is in approved the STIP, it can be considered for Federal-aid funds.



The NEPA phase evaluates project impacts. NEPA provides purpose + need, conceptual location + design, selected alternatives based on scope of work.



Design/Preliminary Engineering phase construction details are defined. The plans, specifications and estimated costs (PS&E) package is submitted for review to move into construction.



The **ROW** phase includes the coordination with utilities and railroads. ROW may include the purchase of property or land use agreements aligned with the Uniform Act.



Construction phase is when the project is built. It includes physical construction by the contractor and administration of the contract and quality control by the LPA.



Milestones of the **Maintenance** and operations phase include opening the project for public use and keeping it in good working order.