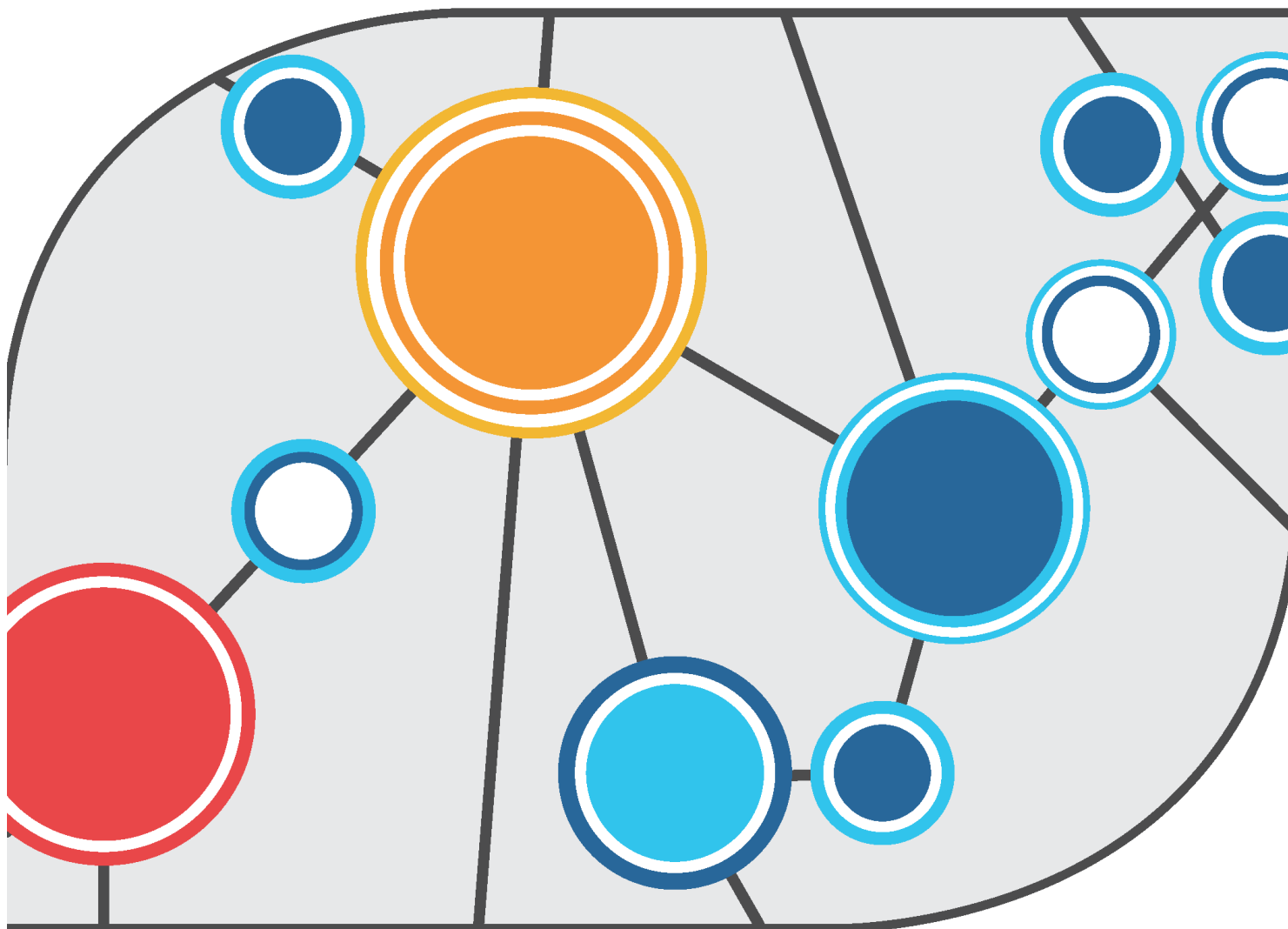


Metropolitan Planning Organization Manual

Tennessee Department of Transportation



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1.0 Purpose

The purpose of the Tennessee Department of Transportation's (TDOT) Metropolitan Planning Organization (MPO) Operating Manual is to provide guidance to the Federal Highway Administration (FHWA), Federal Transit Administration (FTA), Tennessee MPOs, and TDOT staff in the administration and delivery of the metropolitan transportation planning process. The MPO Operating Manual includes procedures, policies, and timelines for developing MPO planning and programming products required by federal and state laws and the related administrative requirements that must be followed by MPOs and TDOT.

The MPO Operating Manual was developed and will be maintained by TDOT staff in the Office of Community Transportation (OCT) within the Long-Range Planning Division. This is intended to become a living document and, as such, will be updated as necessary to reflect changes to state or federal legislation, regulations, or policy. During each update a "Change Log" will be included to track the document updates after an MPO 30-day comment period to review forthcoming edits.

1.1 Defining an MPO

An MPO is a transportation planning body, also referred to as a Metropolitan Transportation Planning Organization (MTPO) and Transportation Planning Organization (TPO), that is required by federal law for metropolitan areas to be eligible to receive funds from United States Department of Transportation (USDOT) or any of its modal administrations.¹ MPOs' primary function is to institutionalize the coordination of federally-funded transportation projects across the multiple political jurisdictions that together comprise the Metropolitan Planning Areas (MPA). In understanding the mission of MPOs, it may be helpful to consider how transportation projects would be planned and programmed in the absence of any such requirement for regional coordination.

Governance of MPOs is defined in each MPO's bylaws or comparable organizing documents. Typically, an MPO Board is comprised of elected and appointed officials that represent transportation planning and programming for local, state, and federal governments as well as local transit agencies. A typical MPO structure in Tennessee includes staff, a technical committee and a policy board. The MPO's role is to develop and maintain the required transportation plans for a metropolitan area to ensure that federal funds support local priorities in a fiscally responsible manner. The OCT serves as an official coordinating entity between TDOT and the MPO to review invoicing and assist MPO planners as needed.

¹ Federal Highway Administration, 23 U.S.C. 134, <https://www.fhwa.dot.gov/fastact/factsheets/metropolitanplanningfs.cfm>

Federal transportation planning requirements for metropolitan urbanized areas have been in place since the 1960s. In 1962, Congress passed the Federal-Aid Highway Act, which made federal-aid highway funding available to areas with populations greater than 50,000, if the establishment of a “Continuing and Comprehensive” transportation planning process is carried out “Cooperatively” by state and local communities (i.e., the 3-C planning process). The 1973 Federal -Aid Highway Act required the creation of MPOs for urbanized areas with a population of 50,000 or more and encouraged regional coordination of transportation planning between local jurisdictions. MPOs are required to implement the 3-C planning process and comply with federal and state transportation planning requirements as a condition of the receipt of federal transportation funds.

In 1991, the Intermodal Surface Transportation Efficiency Act (ISTEA, P. L. 102-240) mandated that MPOs involve the public in the transportation planning process through expanded citizen participation opportunities and requirements. In 1998, the Transportation Equity Act for the 21st Century (TEA-21, P.L. 105-178) added an additional requirement to include public participation during the MPO certification review.

In 2005, the Safe, Accountable, Flexible, Efficient, Transportation Equity Act: A Legacy for Users (SAFETEA-LU, P.L. 109-59), also increased MPO’s responsibilities regarding public participation by requiring a Public Participation Plan (PPP). The PPP requirements must specify reasonable opportunities for all parties to review and provide input to MPO plans. The 2012 Moving Ahead for Progress in the 21st Century Act (MAP-21, P.L. 112-141) and the 2015 Fixing America’s Surface Transportation Act (FAST Act, P.L. 114-94) both continued these public participation requirements. MPOs are also required to consider the 10 Federal Planning Factors in the planning process, which are presented in **Figure 1.1**.

Figure 1.1 – Federal Planning Factors



1.2 What Does the MPO Do?

MPOs have four core documents (**Figure 1.2**) that are required for transportation projects in their planning areas to qualify for and receive federal transportation funds:

1. Develop and maintain a Long-Range Transportation Plan (LRTP/RTP/MTP) also referred to as a Regional Transportation Plan (RTP) and Metropolitan Transportation Plan (MTP), with a minimum of a 20-year planning horizon, updated every five years in attainment areas. In air quality non-attainment or maintenance areas, this Plan is updated every four years.
2. Develop, adopt, and maintain a Transportation Improvement Program (TIP). This is a four-year program of highway and transit improvements that is updated every three years in Tennessee as per an understanding between TDOT and the MPOs. The TIP is directly connected to the LRTP/RTP/MTP.
3. Develop, adopt, and maintain a Unified Planning Work Program (UPWP), which is updated every two years and identifies the MPO's budget and planning activities to be undertaken in the Metropolitan Planning Area (MPA).

4. Develop and maintain a Public Participation Plan (PPP), which describes how the MPO involves the public and stakeholder communities during the transportation planning process. The MPO also must periodically evaluate whether its public participation process continues to be effective.
5. In addition to the four core documents, MPOs are responsible for many additional planning activities.

Figure 1.2 – MPO Primary Activities



The LRTP/RTP/MTP includes the long-range and short-range strategies that assist in the development of an integrated multimodal transportation system. This document demonstrates the best way to safely and efficiently move people and goods while addressing current and future transportation demands [23 CFR 450.324(b)]. The plan is reviewed and updated at least every five years in air quality attainment areas and every four years in non-attainment or maintenance areas. This is to confirm the transportation Plan's validity and consistency with current and forecasted transportation and land use trends and conditions, as well as extending the forecast period to at least a 20-year planning horizon [23 CFR 450.324(a)].

Each MPO's plan must consider the emphasis areas and guiding principles identified in the TDOT 25-Year Transportation Policy Plan, which is the Long-Range Transportation Plan for the State of Tennessee. The current 25-Year Transportation Policy Plan provides a foundation for prioritizing transportation investments across the state and helps accomplish TDOT's vision to serve the public by providing the best multimodal transportation system serving Tennessee's communities. Within each metropolitan area, the state shall develop the Long-Range Statewide Transportation Plan in cooperation with the MPOs [23 CFR 450.216(g)].

Per 23 CFR 450.326, TIPs are required every four (4) years. However, per an understanding between TDOT and the MPOs, the TIP is updated every three years. The MPO, in cooperation with TDOT and the transit agency[ies], shall develop and adopt a fiscally-constrained TIP which shall include the federally-funded and/or regionally significant (regardless of funding source) transportation projects anticipated in the MPA over the next four (4) years. Bi-state MPOs must work with other DOT partners. Only projects consistent with the Long Range Transportation Plan (LRTP), Metropolitan Transportation Plan (MTP), or Regional Transportation Plan (RTP) are eligible for inclusion in the TIP. The TIP shall be adopted by the MPO Policy Board, in accordance with 23 CFR § 450.326.

Every two (2) years, MPOs shall submit to TDOT their Unified Planning Work Program (UPWP) which is a statement of work identifying the planning priorities and activities to be carried out within a metropolitan planning area. The UPWP shall be developed and adopted by the MPO Policy Board, in accordance with 23 CFR § 450.308, and must be approved and authorized by FHWA prior to the MPO carrying out any work items from the UPWP. The UPWP shall be prepared for a period of two (2) years. The UPWP shall reflect only the work that can be accomplished during the time period of the UPWP, in accordance with 23 CFR § 420.113 (a) (5) and 23 CFR § 420.115 (a). The UPWP shall reflect transportation planning work tasks to be funded by federal, state, or local transportation, or transportation-related (e.g.: air quality), planning funds which could include active transportation, transit, air quality, and other planning-related funds. The budget and statement of work will be included in the UPWP. The MPO may not incur costs until final approval of the UPWP with federal authorization at the start of the federal fiscal year.

Each MPO is required to develop and use a PPP that defines a process for outreach and engagement to individuals; affected public agencies; representatives of public transportation employees; public ports; freight shippers; providers of freight transportation services; private providers of transportation (including intercity bus operators, employer-based commuting programs, such as: carpool, vanpool, transit benefit, parking cash-out, shuttle, or telework); representatives of users of public transportation; representatives of users of pedestrian walkways and bicycle transportation facilities; representatives of the disabled; and other interested parties that wish to be involved during the metropolitan transportation planning process [23 CFR 450.316(a)]. MPOs must develop the PPP, in coordination with all interested parties, and describe specific procedures, strategies, and desired outcomes for public participation. MPOs must periodically review the effectiveness of the procedures and strategies from their PPP.

In addition to these core documents, MPOs monitor success of these plans, supporting the Federal Planning Factors, through Performance Based Planning and Programming (PBPP) established in MAP-21. The long-range plan must describe the performance measures (PMs) and targets used in assessing system performance and progress in achieving the performance targets. The TIP must also be developed to make progress toward established performance targets and include a description of the anticipated achievements.

National performance goals include:

- To achieve a significant reduction in traffic fatalities and serious injuries on all public roads
- To maintain the highway infrastructure asset system in a state of good repair
- To achieve a significant reduction in congestion on the National Highway System

- To improve the efficiency of the surface transportation system
- To improve the national freight network, strengthen the ability of rural communities to access national and international trade markets, and support regional economic development
- To enhance the performance of the transportation system while protecting and enhancing the natural environment
- To reduce project costs, promote jobs and the economy, and expedite the movement of people and goods by accelerating project completion through eliminating delays in the project development and delivery process, including reducing regulatory burdens and improving agencies' work practices

The onus is on state DOTs to evaluate and establish PMs that evaluate:

- Pavement condition on the Interstate System and on remainder of the National Highway System (NHS)
- Performance of the Interstate System and the remainder of the NHS
- Bridge condition on the NHS
- Fatalities and serious injuries—both number and rate per vehicle mile traveled--on all public roads
- Traffic congestion
- On-road mobile source emissions
- Freight movement on the Interstate System

Within one year of the DOT final rule on PMs, states were required to set performance targets to support these measures. *Within 180 days of states or providers of public transportation setting performance targets, MPOs are required to set performance targets in relation to their performance measures.* To ensure consistency, each MPO must, to the maximum extent practicable, coordinate with the relevant state and public transportation providers when setting performance targets. [§1201; 23 USC 134(h)(2)]. It is important to note that MPOs may chose to adopt state targets in lieu of defining their own.

MPO Plans requiring targets. Requires the following plans to include state targets (and/or MPO targets, as appropriate):

1. Metropolitan Transportation Plans. [§1201; 23 USC 134(i)(2)(B)]
2. Metropolitan Transportation Improvement Program (TIP). [§1201; 23 USC 134(j)(2)(D)]
 - Additionally, state and MPO targets *should* be included in statewide transportation plans. [§1202; 23 USC 135(f)(7)]

1.2.1 Intelligent Transportation Systems Architecture (ITS) & Congestion Management Process (CMP)

ITS architecture is a regional framework developed and maintained by MPOs and approved by FHWA/FTA. This ensures institutional agreement and technical integration of ITS projects or groups of projects. It must conform to National ITS architecture and standards.

The CMP is also monitored by FHWA/FTA to identify congestion management needs and strategies to address these needs.

Table 1.1 – Statewide and MPO Transportation Planning Products

Planning Product	Who Develops	Who Approves	Time Horizon	Content	Update Requirements
PPP	MPO + TDOT	MPO + TDOT	Not specified	Procedures, and strategies for engaging the public	Periodic review + update
UPWP	MPO	FHWA + FTA	2 years	MPO tasks + planning budget, transit	At least once every 2 years
TIP	MPO	MPO + Governor	At least 4 Years	Transportation Improvements	Every 4 years TN: 3 years
STIP	TDOT	FHWA + FTA	At least 4 Years	Transportation Improvements	Every 4 years TN: 3 years
LRTP, RTP, MTP	MPO RPO	MPO RPO	Minimum of 20 Years	Future goals, strategies + projects	Every 5 years (4 years for non-attainment + maintenance areas)
SLRTP	TDOT	TDOT	25 Years	Future goals, strategies + projects	Not specified
ITS Architectures	MPO + TDOT	FHWA/FTA	Not specified		Not specified
Air Quality Conformity Reports	MPO	FHWA, FTA, in coordination with EPA	Varies	Conformity Demonstration of Federal Air Quality Regulations	As needed with every LRTP/RTP/MTP and TIP adoption and amendment
Congestion Management Process	MPO + TDOT	FHWA/FTA	Not specified		Shall be developed, established, and implemented as part of the metropolitan transportation planning process

1.3 Tennessee MPOs

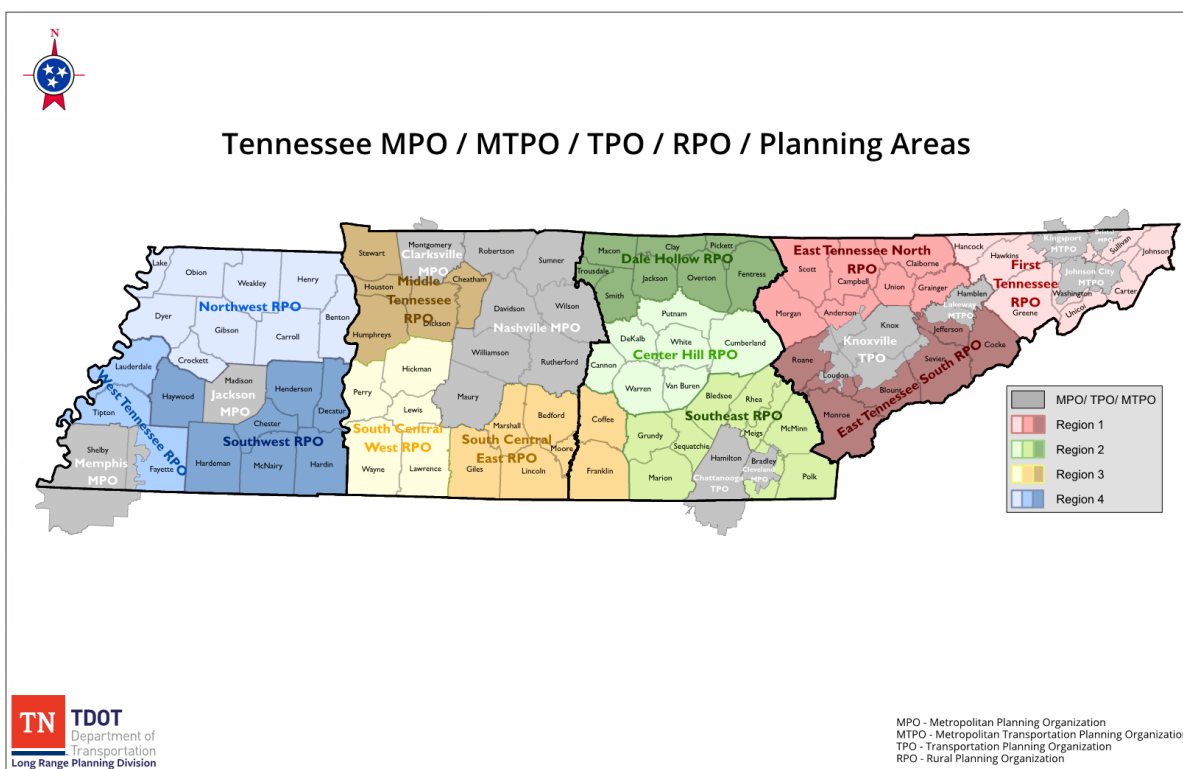
Tennessee has 11 MPOs serving metropolitan areas with a wide range of population sizes. Of these 11 MPOs, four (4) are Transportation Management Areas (TMA). TMAs are urbanized areas with a population greater than 200,000 people. The planning requirements for TMA MPOs and non-TMA MPOs differ slightly.

1.3.1 Bi-State and Multi-State MPOs

The establishment and operation of bi-state and multi-state MPOs requires formal agreements among agencies and government units and formal designation by governors in the participating states. The creation and operation of multi-state MPOs is more complex given differences in state laws, governmental and jurisdictional structures, and institutional and financial arrangements. The nature of multi-state MPOs may also be influenced by the state and local government decision-making context and the ownership of the transportation infrastructure in the various states.

The approaches and mechanisms used to fund various components of the transportation system may vary among member states. These differences add complexity to the transportation planning process conducted by multi-state MPOs. Coordinating different funding sources among states represents a challenge for multi-state MPOs. The actual amount of funding available for various transportation projects depends on the financing mechanisms, the status of the state's economy, and other factors.

Figure 1.3 – Tennessee's MPO/TPO/RPO Planning Areas



1.3.2 MPO Governing Board Organizational Structure

According to U.S.C. 23 § 134 (d)(2), all MPOs operating in a transportation management area (TMAs, or MPOs with population greater than 200,000) are to be governed by a policy board consisting of local elected officials, representatives of agencies that operate major modes of

transportation, and relevant state officials.² Actual board composition is not determined by federal law or regulation, but federal law does encourage participation by other important stakeholders such as school districts, military bases, universities, etc. In some instances, state law requires a representative chosen by the association of county highway officials. The number of seats on each MPO Governing Board is established during the designation of a newly-formed MPO. Once the initial designation is established, each MPO may adopt bylaws that specify the number of seats and voting rights on the governing board. MPOs review the governing board seat allocation after census results are released. Federal law does require a new designation process if the number of seats will change drastically.

Board compositions vary depending on the population of the different MPOs. For example, some MPOs have only five (5) members on their governing board, while others have over thirty (30) members. Each MPO will discuss the details of their governing board in their approved bylaws.

² FHWA, MPO Staffing and Organization Structures,
https://www.fhwa.dot.gov/planning/processes/metropolitan/related_topics/mpo_staffing/chap02.cfm

1.4 Tennessee MPO Contact Information

Table 1.2 – Tennessee MPO Contact Information

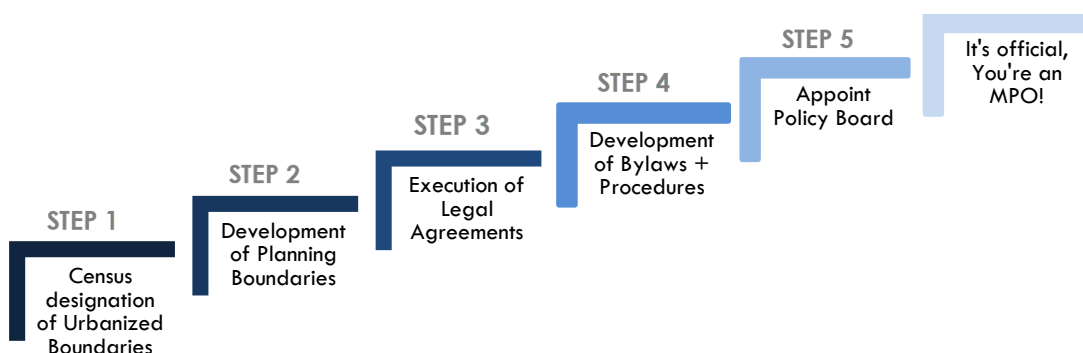
<u>Bristol Metropolitan Planning Organization</u> 104 8 th Street Bristol, TN 37621 423-989-5519 https://www.bristoltn.org/136/Metropolitan-Planning-Organization	<u>Kingsport Metropolitan Transportation Planning Organization</u> 225 West Center Street Kingsport, TN 37660 423-229-9400 www.kptmtpo.com
<u>Chattanooga-Hamilton County/North Georgia Transportation Planning Organization</u> 1250 Market Street, Suite 2000 Chattanooga, TN 37402 423-643-5900 https://chcrpa.org/transportation-planning-organization/	<u>Knoxville Regional Transportation Planning Organization</u> 400 Main Street, Suite 403 Knoxville, TN 37902 865-215-2500 https://knoxtpo.org/
<u>Clarksville Urbanized Area Metropolitan Planning Organization</u> 329 Main Street Clarksville, TN 37040 931-645-7448 http://www.cuamppo.com/	<u>Lakeway Area Metropolitan Planning Organization</u> 100 W 1 st North Street P.O. Box 1499 Morristown, TN 37816-1499 423-585-6277 https://www.lamtpo.com/
<u>Cleveland Urban Area Metropolitan Planning Organization</u> 185 2nd Street NE Cleveland, TN 37311 423-479-1913 http://www.clevelandtn.gov/?nid=153	<u>Memphis Urban Area Metropolitan Planning Organization</u> 125 North Main Street, Suite 450 Memphis, TN 38103 901-636-7190 https://memphismpo.org/
<u>Jackson Area Metropolitan Planning Organization</u> 111 East Main Street, Suite 201 Jackson, TN 38301 731-425-8287 http://www.cityofjackson.net/jackson-area-mpo/	<u>Nashville Area Metropolitan Planning Organization</u> 220 Athens Way, Suite 200 Nashville, TN 37288 http://www.nashvillempo.org/
<u>Johnson City Metropolitan Transportation Planning Organization</u> 137 West Market Street Johnson City, TN 37604 423-434-6272 https://www.jcmapo.org/	

2.0 Roles and Responsibilities

2.1 Purpose

This chapter covers Metropolitan Planning Organization (MPO) designation and re-designation, establishing and reviewing transportation planning boundaries, and required agreements for MPO formation, organization, planning and funding. This section may be used by the Tennessee Department of Transportation (TDOT) staff as a guideline for the formation of an emerging MPO and changes to an existing MPO's membership or boundaries.

Figure 2.1 - MPO Designation and Formation



2.2 Authority

Federal and state statutes, regulations, and rules related to the designation of MPOs are provided in this section (see **Table 2.1**).

2.3 Census Designation of Urbanized Areas

Federal law requires all Census-defined Urbanized Areas (UZA) of 50,000 or more in population to be part of an MPO in order to access federal transportation funds. Therefore, the UZA is the foundational building block of an MPO's Metropolitan Planning Area (MPA). In addition, the MPO must also include areas outside of the UZA that are expected to urbanize over the next 20 years. This is meant to smooth and adjust irregularities.

2.3.1 Census Urbanized Areas (UZA) and MPO/TMA Designation

Until 2000, urban areas were limited to areas with populations of 50,000+ residents. After 2000, the Census Bureau also identified Urban Clusters (UC) with populations of 2,500 to 49,999 residents; however, for purposes of federal transportation funding, UCs can include areas that are rural. UCs may, however, fall within the MPA boundary established by MPOs.

Table 2.1 – MPO Designation Federal and State Guidance

Statute	Summary
Designation/Re-designation	
23 U.S.C.§ 134(d) 49 U.S.C.§ 5303(d) 23 CFR§ 450.310	Describes the requirements for the designation and re-designation of MPOs.
Voting & Apportionment	
23 U.S.C.§ 134(d)(2) 49 U.S.C.§ 5303(d)(2) 23 CFR§ 450.310(d) *T.C.A. § 64-8-301, 302, 303	Describes the MPO voting membership and membership apportionment requirements in TMA areas.
MPO Transportation Planning Boundaries	
23 U.S.C.§ 134(e) 49 U.S.C.§ 5303(e) 23 CFR§ 450.312	Describes the requirements and process for establishing MPO transportation boundaries.
Highway Planning	
*T.C.A. § 54-18-101, 102, 103, 104 23 CFR 450.314	State and federal authorization of cooperative planning agreements, organizational framework, scope of agreements, and its purpose.
Census	
Final Urban Area Criteria for the 2020 Census	Census Bureau, Department of Commerce, Federal Register
Qualifying Urban Areas for the 2020 Census	Census Bureau, Department of Commerce, Federal Register

*Indicates State Statute

2.3.2 Adjusted UZA

Federal transportation legislation allows for state and local officials to cooperatively expand the Census-defined UZA boundaries to include additional territory. This is meant to smooth irregular UZA boundaries and the Adjusted UZA must be submitted to FHWA for approval. The Adjusted UZA must encompass the entire Census-designated UZA and is subject to approval by the Secretary of Transportation (23 USC 101(a)(36)-(37) and 49 USC 5302(a)(16)-(17).

Population derived from the Adjusted UZA is not used in the federal transportation programs where a population count is required for funding allocations. Where a population count is called for, it is the Census-designated UZA population that is used.

The Adjusted UZA:

- Must encompass the entire UZA or UC as designated by the Bureau of Census
- Should be one, single contiguous area

- Should encompass areas outside of municipality boundaries that have urban characteristics with residential, commercial, industrial or national defense land uses that are consistent with or related to the development patterns with the boundary
- Should encompass all large traffic generators that are within a reasonable distance from the urban area (e.g., fringe area public parks, large places of assembly, large industrial plants, etc.). This would include transportation terminals and their access roads (e.g., airports, seaports, etc.)

2.4 MPO Designations

The U.S. Bureau of the Census defines areas of the nation as being either urban or rural, in preparation for classifying and dissemination of demographic data collected through the decennial Census. This determination is made without regard to local municipal boundaries, instead focusing on actual distribution of residential, commercial, and other non-residential land uses across the landscape. The Census defines areas as urban when the density of population or urban activity exceeds a minimum threshold. All portions of the U.S. not included in the urban area definition are considered rural.

Once an urban area is defined, it is categorized as either an Urbanized Area (UZA) or an Urban Cluster (UC).

23 CFR § 450.310(d) allows for multi-state MPOs within TMAs. MPOs that fall under this designation must include local elected officials; officials of public agencies that administer or operate major modes of transportation in the metropolitan area, including representation by providers of public transportation; and appropriate state officials. Multi-state MPOs are not required to go through a re-designation if they must restructure to meet the requirements of a multi-state MPO. 23 CFR § 450.310(k), re-designation of an MPO serving a multi-state Metropolitan Planning Area requires agreement between the Governors of each state served by the existing MPO and units of general purpose local government that together represent at least 75 percent of the existing Metropolitan Planning Area population (including the largest incorporated city, based on population, as named by the Bureau of the Census).

Typically, only one MPO shall be designated for each urbanized area or group of contiguous urbanized areas. However according to 23 CFR § 450.310(e), more than one MPO may be designated to serve an urbanized area only if the Governor(s) and the existing MPO(s), if applicable, determine that the size and complexity of the urbanized area make designation of more than one MPO appropriate. In those cases, the MPOs shall establish official written agreements that clearly identify areas of coordination, and the division of the transportation planning responsibilities among the MPOs.

2.5 Membership Composition

Federal law and regulation allow states and units of local government to largely determine the composition of the MPO. [23 U.S.C. 134(d), 23 CFR 450.310] Each MPO must review the composition of its membership in conjunction with each decennial census as per 23 CFR 450.310. Boards for MPOs serving TMAs shall include: 1. local elected officials, 2. officials of public agencies that administer or operate major modes of transportation in the metropolitan area, including representation by providers of public transportation, and 3. appropriate state officials.

According to TCA 64-8-301 the Policy Board shall ensure one (1) voting member who resides within the MPO's boundaries is chosen in consultation with the Tennessee County Highway Officials Association to represent county highway departments operating within the planning area in some instances. This may not apply to all MPOs. TCA 64-8-302 defines "Local government official" as the elected officials representing any county, municipal, or metropolitan government located within the boundaries of a metropolitan planning organization. Full composition of each MPO policy board may differ as they are created according to their individual bylaws.

2.6 Re-designation and Reapportionment

If an existing MPO wishes to be re-designated, it may only be completed by agreement between the Governor and units of local government that together represent at least 75 percent of the existing MPA population, including the largest incorporated city. [23 CFR 450.310(h)]

A re-designation of an existing MPO is required if an MPO does either of the following: 1) makes a substantial change in the proportion of its voting members; or 2) makes a substantial change in the decision-making authority or responsibility of the MPO or in decision-making procedures established in the MPO's bylaws. [23 CFR 450.310(j)]

According to 23 CFR 450.310(l), the changes below do not require a re-designation of an MPO if the changes are not substantial, as defined in the above paragraph:

- Identification of a new UZA (as determined by the Census Bureau) within an existing MPA;
- Adding members to the MPO that represent new units of general-purpose local government resulting from expansion of the MPA;
- Adding members to satisfy the specific membership requirements for an MPO that serves a TMA; and/or

- Periodic rotation of members representing units of general-purpose local government, as established under MPO bylaws.

2.7 Execution of Memorandums of Agreement (MOA) and/or Memorandums of Understanding (MOU)

A MOA and MOU should clearly state the responsibilities of the MPO, state, and transit agencies involved in carrying out the metropolitan transportation planning process. [23 CFR 450.314(a)] Though it is not required, it is encouraged that each signatory to the agreement be accompanied by a resolution from that municipality/agency.

Copies of the executed agreement shall be provided to the MPO, TDOT, and each signatory municipality/agency participating in the agreement. There is no specific timetable for updating MOAs and MOUs; however, they should be reviewed every two years for consistency to ensure they reflect the way business is being conducted. MOAs and MOUs may needed to be updated to reflect any Metropolitan Planning Area boundary changes.

2.8 Execution of Other Required Agreements

2.8.1 MPO Agreement

According to 23 CFR 450.314(a), the MPO Agreement establishes the cooperative relationship between the MPO and TDOT to accomplish the transportation planning requirements of state and federal law.

2.8.2 MPO Bi-State Agreement

Where the boundaries of the MPA extend across two or more states, the Governors, the MPO(s), and public transportation operators must coordinate transportation planning for the entire multistate area, including jointly developing planning products for the MPA. The states may enter into agreements for cooperative efforts and mutual assistance in support of metropolitan planning activities and may establish agencies to implement the agreements. [23 CFR 450.314(f)]

2.8.3 Multiple MPOs in One Urbanized Area

If more than one MPO has been designated to serve a UZA, there must be a written agreement between the MPOs, the state(s), and the public transportation operator(s) describing how the metropolitan transportation planning processes will be coordinated to ensure the development of consistent LRTP/RTP/MTPs and TIPs across the MPA boundaries. The planning processes must reflect coordinated data collection, analysis, and planning assumptions across the MPAs. Alternatively, a single LRTP/RTP/MTP and/or TIP for the entire UZA may be developed jointly by the MPOs. Coordination also is strongly encouraged for neighboring MPOs

that are not within the same MPA. Coordination efforts and outcomes must be documented in submittals of the UPWP, the LRTP/RTP/MTP, and the TIP to the state(s), the FHWA, and the FTA. [23 CFR 450.314(e)].

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3.0 Unified Planning Work Program

3.1 Purpose

The Unified Planning Work Program (UPWP) is a required document that is developed by Tennessee MPOs. The UPWP serves as a transportation planning work program for each MPO which provides the framework for the tasks and budget that the MPO will administer over a 2-year period.

As defined in 23 CFR §450.104, a UPWP is “a statement of work identifying the planning priorities and activities to be carried out within a metropolitan planning area. At a minimum, a UPWP includes a description of the planning work and resulting products, who will perform the work, timeframes for completing the work, the cost of the work, and the source(s) of funds.” This chapter provides guidance and recommendations for Tennessee MPOs, Transit Agencies, and TDOT to assist with the overall development and administration of the UPWP.

3.2 Authority

Table 3.1 – UPWP Federal and State Guidance

Statute	Summary
Planning and Research Program Administration	
23 CFR 420	Describes the policies and procedures for the administration of activities undertaken by state departments of transportation (state DOTs) and their subrecipients, including MPOs, with Federal Highway Administration (FHWA) planning and research funds.
Unified Planning Work Programs	
23 CFR 450.308	Describes the funding for transportation planning and the development of UPWPs.
Metropolitan Transportation Planning	
23 U.S.C. 134	Describes the transportation planning process for MPOs.
Statewide Planning	
23 U.S.C. 135	Describes the transportation planning process for state DOTs.
*T.C.A. § 54-5-1401, 1402	The Commissioner of the Tennessee Department of Transportation (TDOT) will report quarterly to the State Building Commission regarding the status of road projects approved by the General Assembly as a part of TDOT’s budget. Right-of-way (ROW) acquisitions require special approval.

Statute	Summary
Efficient Environmental Reviews for Policy Decision-Making	
23 U.S.C. 139	Describes the environmental review process for transportation projects.
Financial Management	
31 U.S.C. Subtitle III	Describes the financial management of Federal funds.
Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards	
2 CFR 200	Establishes uniform administrative requirements, cost principles, and audit requirements for Federal awards to non-Federal entities.
Program Guidance for Metropolitan Planning and State Planning and Research Program Grants	
Federal Transit Administration (FTA) Circular 8100.1D	Program guidance and application instructions for applying for grants under the Metropolitan Planning Program (MPP) and the State Planning and Research Program (SPRP) authorized under 49 U.S.C. §5305.
State Funds for Local Aid	
*T.C.A. § 54-4-101, 102, 103, 104, 105	Purpose, distribution, and management of county aid funds for the maintenance and improvement of county systems.
*T.C.A. § 54-4-201, 203, 204, 205	Purpose, distribution, and management of municipal aid funds for municipal street improvements.
*T.C.A. § 54-4-301	Counties with a metropolitan form of government shall keep all Metropolitan Government Aid funds in one fund.
*T.C.A. § 54-4-401, 402, 403, 404, 405, 406	Establishment of State-Aid Highway System, the powers and duties of the commissioner, annual program of work, allocation and expenditure of funds, methods of work, and maintenance of roads.
*T.C.A. § 54-4-503, 504, 505, 506, 507, 508	Purpose of the 1990 Bridge Grant Program Act, selection process of bridges that require replacement or rehabilitation, allocation of funds, and local government contributions.
*T.C.A. § 54-4-601, 602, 603, 604	Eligibility, selection, funding and maintenance of projects for the High Priority Bridge Replacement Program.

*Indicates State Statute

3.3 UPWP Funding

The primary funding sources for UPWPs are FHWA Metropolitan Planning (PL) funds and FTA 5303 funds. These funding sources are to be used for metropolitan transportation planning purposes. Other potential funding sources for metropolitan planning include FHWA State Planning and Research (SPR) Grant Program funds, Surface Transportation Block Grant Program (STBG) funds, CMAQ funds, Transportation Alternatives (TA) funds, or discretionary grants such as USDOT's Better Utilizing Investments to Leverage Development (BUILD) grant program.

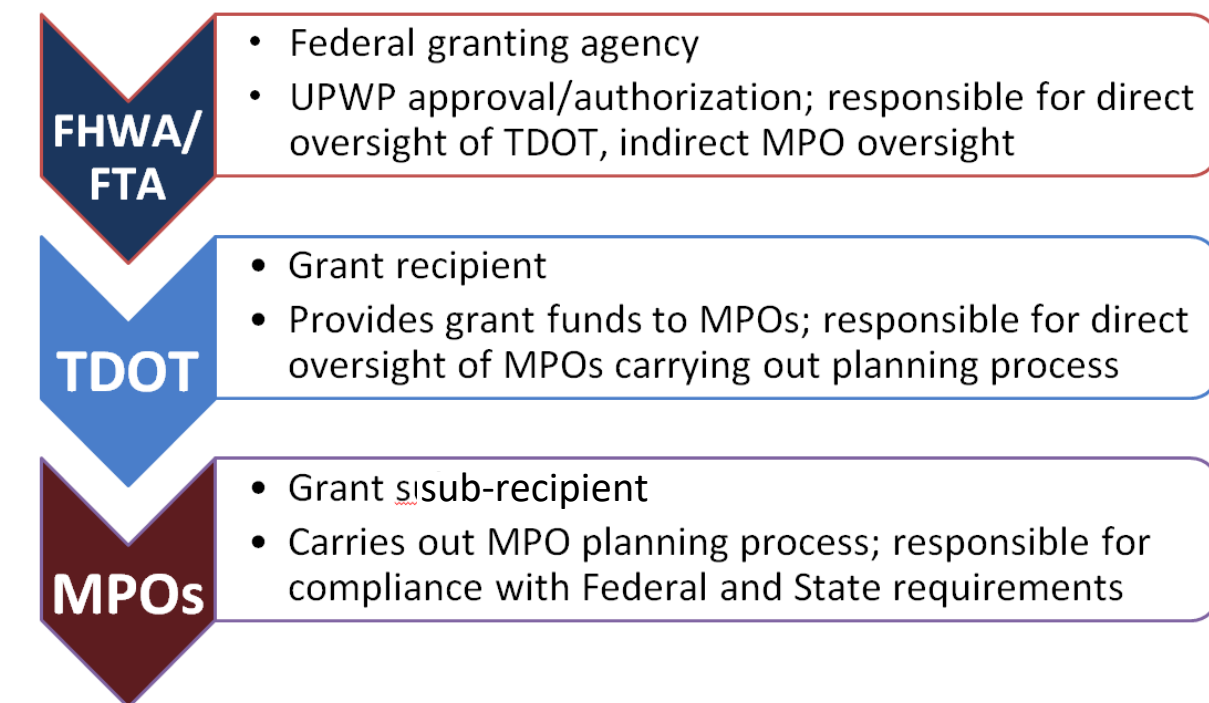
3.3.1 Metropolitan Planning (PL) Funds

Federal PL funds are distributed by the Federal Highway Administration (FHWA) to states according to a formula adopted by the U.S. Congress and are intended to assist MPOs in carrying out federal planning requirements. These funds are included in each federal surface transportation act, the most recent one being the FAST Act. In Tennessee, TDOT's Long Range Planning Division allocates PL funds among the eleven separate MPOs based on a formula agreed to by TDOT and the MPOs. Each MPO receives a base amount, plus an amount based on the population of the Census-defined urbanized area within the MPA. The MPO is responsible for providing the required non-federal match of 20 percent.

3.3.2 Federal Transit Administration Funds

Section 5303 funds are similar in nature to the PL grant program but are distributed by the Federal Transit Administration (FTA). Historically, in Tennessee the MPO is responsible for covering half of the required 20 percent non-federal match while TDOT provides the other half. Although TDOT does have some residual 5303 funds, since FY2017 TDOT has opted to participate in a Consolidated Planning Grant (CPG) arrangement in which FTA 5303 funds are transferred to FHWA for distribution to MPOs along with FHWA PL funds.

Figure 3.1 – MPO Funding Process



3.3.3 FHWA State Planning and Research (SPR) Grant Program Funds

SPR funds are distributed by FHWA for the purposes of assisting state departments of transportation in meeting their federal planning requirements. TDOT shares SPR funds with MPOs whose boundaries extend beyond the Census-defined urbanized areas. A 20 percent match is required and may be provided by either TDOT or MPO local government members, depending on the nature of the project. Currently, SPR funds are listed in the UPWP, but tasks and funds are managed by TDOT and the 20 percent match is provided by TDOT.

3.3.4 Additional FHWA and FTA Program Funds

Federal regulations allow MPOs and their member jurisdictions to use other types of federal transportation grants to pay for planning activities. Typically, those funds come from the FHWA Surface Transportation Block Grant (STBG) Program or the FTA Urbanized Area Formula Program (5307) and are intended to cover the costs of corridor or project-level planning activities. The U.S. Department of Transportation and other federal agencies periodically make available other grant programs that can be used for the purposes of carrying out regional planning activities. Those programs are typically administered on a competitive basis and require a formal application and proposal.

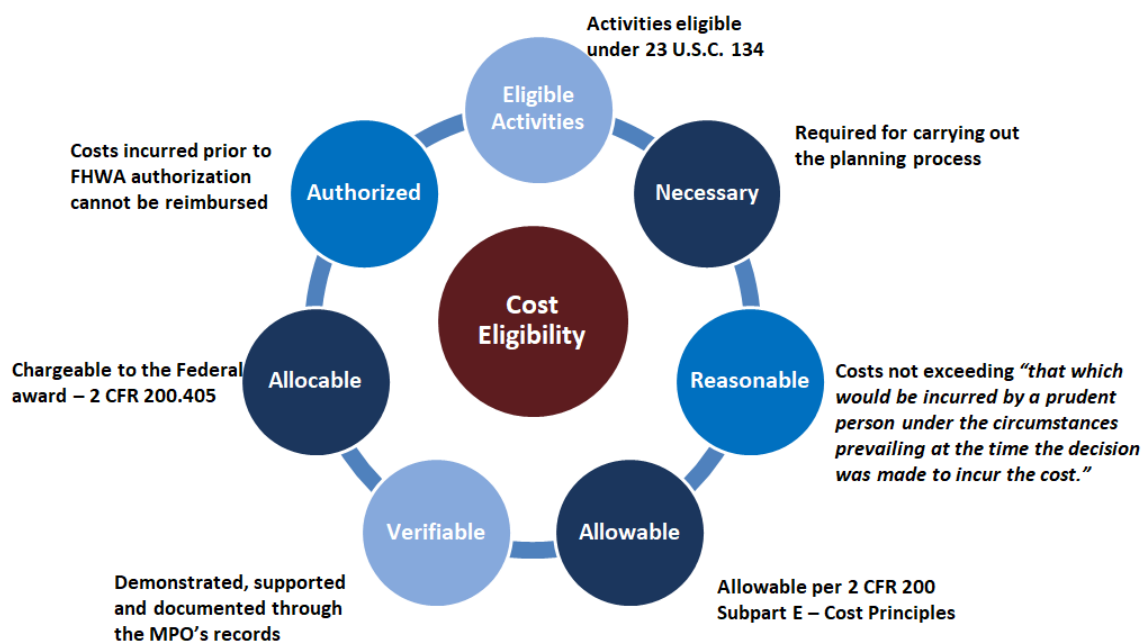
3.3.5 Non-Federal Matching Funds

In most cases, federal grant funds require at least a 20 percent non-federal match. Some matching funds are provided by city and county government members through annual membership dues. Many MPOs are housed within a local city government, which pays the local match through local budgets. Additional contributions may be provided by MPO members, TDOT, or regional partners in order to cover special efforts or those that affect only a subset of the membership.

3.4 Eligibility of Project Expenditures

The types of planning activities that are eligible for Federal and state funding are governed by Federal and state laws and regulations. Costs must meet the requirements listed below to be eligible for TDOT/FHWA participation:

- Title 23 U.S.C. 134 covers the eligible work performed activities
- Verifiable from the state DOT's or sub-recipient's (MPO) records
- Necessary and reasonable for proper and efficient accomplishment of the project
- Included in the approved UPWP or amendment
- Incurred subsequent to FHWA authorization

Figure 3.2 – Cost Eligibility Guidance

3.4.1 Equipment Purchases Using Federal Funds

FHWA allows MPOs to purchase equipment as a direct expense with federal funds, on a case-by-case basis. According to 2 CFR 200.33, equipment is defined as tangible personal property (including information technology systems) that has a useful life of more than one year and a per unit acquisition cost which equals or exceeds the lesser of the capitalization level established by the non-federal entity for financial statement purposes, or \$5,000.

MPOs must program and itemize all equipment purchases in the UPWP, regardless of cost. Equipment purchases must also follow the rules of 2 CFR 200.313, 2 CFR 200.314, and 2 CFR 200 Subpart E Cost Principles, including 2 CFR 200.439.

3.5 UPWP Content and Format

In order to use FHWA planning funds they must be documented in a biennial UPWP that is acceptable to the FHWA. There is no required standardized format but below is a general structure that is acceptable to FHWA and FTA. It is recommended that the UPWP include a cover page, an introduction, and at least the following three (3) sections: Narrative, Work Elements, and Summary Budget Tables.

If there are additional federal funds used for planning purposes, they must be identified separately from PL funds. [23 CFR 420.119(e)] The UPWP shall include a description of the work

to be accomplished and the cost estimates for each activity. [23 CFR 420.111(b)] The cost estimates must be broken out by fiscal year.

MPOs are encouraged (and MPOs within TMAs are required) to include cost estimates for transportation planning, research, development, and technology transfer-related activities funded with local, state, or Federal funds other than those authorized under Title 23. [23 CFR 420.111(e)] The following information must be provided for each planning study:

- Name of the study and a short description of work to be accomplished
- The cost, or the approximate cost, of the study
- The source(s) of funding used to pay for the study
- The lead agency that is conducting the study

If an MPO is providing FHWA funds to an agency/local government to be used for a planning study, this must be reflected as a task in the UPWP.

The UPWP may be modified to add these additional planning studies not carried out or funded by the MPO.

3.5.1 Cover Page

The following items must be included on the Cover Page of the UPWP:

- Name of the MPO
- Identification of agencies providing funds for the UPWP
- Federal Aid Project Number (FAP) (Beginning with FY 2020/2021 UPWPs)
- Federal fiscal years the UPWP covers
- MPO website address and other contact information, including mailing address, telephone and fax numbers

3.5.2 Introduction

The following items must be included in the Introduction Section of the UPWP:

- A brief definition of the UPWP
- A current, concise overview of the status of comprehensive transportation planning activities
- A discussion of the planning priorities for the metropolitan planning area that also identifies local priorities. For example, if a metropolitan planning area is experiencing a significant rate of growth, appropriate planning priorities must be identified to address increased development, traffic volumes, and planning for the area's future transportation system.

- A description of the metropolitan transportation and transportation-related air quality planning activities (if applicable) anticipated in the nonattainment or maintenance area regardless of funding sources or agencies conducting air quality activities
- Planning tasks to be performed with funds under Title 23, U.S.C. and 49 U.S.C. 53
- A description of the public participation process used in the development of the UPWP including methods and results
- Federal Planning Factors

3.5.3 Organization and Management

The following items are discussed in narrative form in the Organization and Management section:

- Identification of participants and a brief description of their respective role(s) in the UPWP metropolitan area transportation planning process
- Discussion of appropriate MPO agreements
- Identification and discussion of operational procedures and bylaws
- Any required forms, certifications, and assurances

3.5.4 UPWP Work Tasks

The Work Tasks section consists of descriptions of the major work products and tasks the MPO proposes to undertake. Several Work Task examples are provided below.

- **Administration.** Tasks required to manage the transportation planning process on a continual basis including program administration, development, review and reporting, anticipated staff development and an annual single audit. **For ease of budgeting, fund encumbering, and invoicing, MPOs are highly encouraged to include all administrative costs for the entire UPWP in one administrative task (or group of subtasks).**
- **Data Collection.** Tasks to monitor area travel characteristics and factors affecting travel such as socioeconomic, community and land use data, transportation system data, natural, physical, and human environmental concerns and issues.
- **Transportation Improvement Program (TIP).** Tasks for the development and management of the TIP.
- **Long-Range Transportation Plan (LRTP/RTP/MTP).** Tasks for development of the plan.
- **Special Project Planning.** Tasks related to recurring planning studies/projects, such as transit, bike/pedestrian, transportation demand management (TDM), freight, or transportation disadvantaged planning.

- **Public Participation.** Tasks to implement the MPO's public participation program during the development of the UPWP, LRTP/RTP/MTP, TIP, and other plans and programs as required.

Additional work elements related to transit, energy, short-range transportation planning including Congestion Management Process (CMP), coordination of human services transportation, intermodal/multimodal planning, Intelligent Transportation Systems (ITS), and air quality (AQ) planning shall be included when applicable as planning tasks. The UPWP should address any issues identified during the MPO's most recent certification review and specify the actions the MPO will take to address them.

3.5.5 Activity/Task Sheets

According to Title 23 CFR 450.308(c), an MPO's UPWP is required to identify the work proposed for the next one to two years by major activity and task; with sufficient detail to indicate who will perform the work; the schedule for completing the work; the resulting products; the proposed funding by activity/task; and a summary of the total amounts and sources of federal and the non-federal match. If an MPO uses local funds to supplement SPR or match PL funds, the local contribution must be shown.

Each task in the UPWP is to be identified under an individual task sheet that includes the following items:

- Task number and title
- Purpose
- Previous work completed
- Required Activities
 - How task will be performed
 - Who will perform the task
- Responsible agency or agencies, i.e., who manages the contract (if being performed by a consultant)
- A schedule that adequately describes the activities that will take place during the year(s), including:
 - A schedule of milestones or benchmarks to be used to measure progress;
 - End Product(s)
 - Estimated completion date(s)
- Proposed funding source(s) with anticipated costs by fiscal year and by budget line item (an **Estimated Budget Detail**)

Table 3.2 – Sample Task Work Sheet for “Administrative Task” – MPO Charging Actual Costs

Sample Task Work Sheet for "Administration Task" – MPO Charging All Actual Costs	
Task 1.1 Administration	
Purpose:	
To properly manage and carry out the continuous, cooperative, and comprehensive metropolitan transportation planning process for the MPO area.	
Previous Work Completed:	
Preparation and distribution of planning documents. Technical assistance and preparation of documents for MPO Board and committee meetings. Coordination with federal, state, and local partners. Preparation of contracts and agreements. Preparation of certification documents. Attendance at workshops and training sessions.	
Required Activities:	
~ Technical assistance and staff support to MPO Policy Board and committees.	~ Review and update agreements and MPO administrative documents
~ Preparation and distribution of MPO materials (agenda packages, meeting minutes, resolutions, plans, documents, etc.).	~ Maintain financial records and perform an annual single audit
~ Coordination with partner agencies, including TDOT, and provide staff support for joint meetings.	~ MPO staff and Board member travel and participation at general trainings, conferences, and meetings
~ Preparation and participation in annual Joint State-MPO Certification and quadrennial TMA Certification.	~ Select and manage consultant support.
~ Prepare and submit progress reports and invoices.	~ Purchase office supplies, postage, and equipment.
End Product:	Completion Date:
MPO Board and committee meetings	Monthly
Joint State-MPO Certification	Jan. 2019; Jan. 2020
Invoices and progress reports	Quarterly
Annual single audit	Nov. 2018; Nov. 2019
General meetings, workshops, trainings	As needed
Maintenance of financial records	Ongoing
Responsible Agency: MPO	

Table 3.3 – Sample Task Work Sheet for “Administrative Task” – MPO Charging Actual Costs

Sample Task Work Sheet for “Administration Task” – MPO Charging All Actual Costs								
Task 1.1. Administration Estimated Budget Detail for FY 2018/19								
Budget Category	Budget Category Description	FHWA (PL)	FHWA (SU)	FTA 5303	FTA State Match	FTA Local Match	Trans Disad.	Total
A. Personnel Services								
	MPO staff salaries, fringe benefits, and other deductions	\$108,360	–	\$22,738	\$4,700	\$4,700	–	\$140,498
	Subtotal:	\$108,360	–	\$22,738	\$4,700	\$4,700	–	\$140,498
B. Consultant Services								
	Contract/Consultant Services	–	–	–	–	–	–	–
	Subtotal:	–	–	–	–	–	–	–
C. Travel								
	Travel Expenses	\$7,200	–	\$1,440	–	–	–	\$8,640
	Subtotal:	\$7,200	–	\$1,440	–	–	–	\$8,640
D. Other Direct Expenses								
	Accounting/Auditing Services	\$14,800	–	\$1,960	–	–	–	\$16,760
	Staffing Services	\$16,274	–	\$3,000	–	–	–	\$19,274
	Attorney Services	\$14,800	–	\$1,960	–	–	–	\$16,760
	Office Building: Lease	\$9,712	–	\$2,424	–	–	–	\$12,136
	Office Building: Repair and Maintenance	\$1,594	–	\$398	–	–	–	\$1,992
	Office Building: Insurance	\$1,588	–	\$396	–	–	–	\$1,984
	Office Building: Utilities	\$1,588	–	\$396	–	–	–	\$1,984
	Office Equipment: Lease	\$1,588	–	\$396	–	–	–	\$1,984
	Communication Expenses	\$1,588	–	\$396	–	–	–	\$1,984
	Office Supplies	\$1,588	–	\$396	–	–	–	\$1,984
	Postage and Freight	\$1,588	–	\$396	–	–	–	\$1,984
	Printing and Binding Services	\$1,588	–	\$396	–	–	–	\$1,984
	Vehicle Allowance	\$2,556	–	\$512	–	–	–	\$3,068
	Books, Publications, Subscriptions, Memberships	\$1,588	–	\$396	–	–	–	\$1,984
	Subtotal:	\$72,440	–	\$13,422	–	–	–	\$85,862
	Total:	\$188,000	–	\$37,600	\$4,700	\$4,700	–	\$235,000

Table 3.4 – Sample Task Work Sheet for “Planning Task” – MPO Charging Actual Costs

Sample Task Work Sheet for "Planning Task" – MPO Charging Actual Costs	
Task 4.1 Transportation Improvement Program (TIP) Development	
Purpose:	
To annually update the four-year Transportation Improvement Program (TIP) and amend as needed, consistent with federal and state requirements.	
Previous Work Completed:	
Development of the FY 17/18-21/22 TIP and FY 18/19-22/23 TIP, and all required amendments.	
Required Activities:	
~ Annually develop, update, and publish the TIP, a four-year program of transportation improvements in the MPO area, in accordance with Federal and state requirements and the MPO's Public Participation Plan.	
~ Perform amendments to the adopted TIP as necessary.	
~ Utilize and maintain an interactive TIP tool.	
~ Publish annual listing of previously obligated projects.	
End Product:	Completion Date:
FY 2018/19 – 2023/24 TIP	Adoption in June 2018
FY 2019/20 – 2024/25 TIP	Adoption in June 2019
TIP Amendments	As needed
Responsible Agency: MPO	

Table 3.5 – Sample Task Work Sheet for “Planning Task” – MPO Charging Actual Costs

Task 4.1. Transportation Improvement Program Estimated Budget Detail for FY 2018/19								
Budget Category	Budget Category Description	FHWA (PL)	FHWA (SU)	FTA 5303	FTA State Match	FTA Local Match	Trans Disad.	Total
A. Personnel Services								
	MPO staff salaries, fringe benefits, and other deductions	\$15,000	–	\$10,000	\$1,250	\$1,250	–	\$27,500
	Subtotal:	\$15,000	–	\$10,000	\$1,250	\$1,250	–	\$27,500
B. Consultant Services								
	Contract/Consultant Services	\$5,000	\$5,000	–	–	–	–	\$10,000
	Subtotal:	\$5,000	\$5,000	–	–	–	–	\$10,000
C. Travel								
	Travel Expenses	–	–	–	–	–	–	–
	Subtotal:	–	–	–	–	–	–	–
D. Other Direct Expenses								
	Other Direct Expenses	–	–	–	–	–	–	–
	Subtotal:	–	–	–	–	–	–	–
	Total:	\$20,000	\$5,000	\$10,000	\$1,250	\$1,250	–	\$37,500

3.5.6 Summary Budget Tables

The summary budget tables below shall be included in the UPWP to identify agency participation and funding sources:

- **Table 1: Agency Participation** identifies participating agencies (e.g., FHWA, FTA, TDOT, local governments) with respective funding commitments by task with line and column totals. A separate column must be used to indicate the dollars that will be billed to consultants. If the MPO uses a mixture of fund types for consultant work (e.g., PL, 5303 and 5307), the table must clearly identify amount by fund type.
- **Table 2: Funding Source** lists current year funding by program source for each task with line and column totals.

Please note: Each UPWP must include one set of Agency Participation and Funding Sources Tables for each year of the UPWP (i.e. one set for year one (e.g., 2019/20) and another set for year two (e.g., 2020/21)).

3.6 Steps in the UPWP Development, Review, and Approval Process

Here is what the Metropolitan Planning Regulations have to say about the UPWP.

Definition - Unified Planning Work Program (UPWP) broadly is a statement of work that identifies the planning priorities and activities to be carried out within a metropolitan planning area. At a minimum, a UPWP includes a description of the planning work and resulting products, who will perform the work, time frames for completing the work, the cost of the work, and the source(s) of funds.

23 CFR 450.308 Funding for UPWP

Each MPO, in cooperation with the state DOT(s) and public transportation operator(s), shall develop a UPWP that includes a discussion of the planning priorities facing the MPA. The UPWP shall identify the work proposed for the next 1- or 2-year period by major activity and task (including activities that address the planning factors in § 450.306(b)), in sufficient detail to indicate who (e.g., MPO, state, public transportation operator, local government, or consultant) will perform the work, the schedule for completing the work, the resulting products, the proposed funding by activity/task, and a summary of the total amounts and sources of federal and matching funds.

- MPOs need to demonstrate how the work tasks address the planning factors and federal initiatives. This can be done using a narrative describing how the individual work tasks contribute towards the achievement of these factors and initiatives.

- In addition to the work tasks, financial summary tables, and discussion of the planning factors and federal initiatives, the UPWP needs to include the following elements:
 - Adopting resolution
 - Brief background explanation of the UPWP and its purpose
 - Brief explanation of how the MPO is set up, its function, and planning area
 - Major accomplishments under the current UPWP
 - Priorities for the next UPWP
 - Process for developing and adopting the UPWP, as well as adjustments and amendments
- Ensure the numbers in each work task add up correctly, and the match is calculated accurately, either 80% federal/20% local or 80% federal/10% state/10% local. The 80/10/10 split is for the portion of funds that were previously FTA Section 5303 and folded into the Consolidated Planning Grant (CPG). The numbers in each work task need to be carried over into the financial summary tables at the back of the UPWP document and added up correctly.
- MPOs are required to program at a minimum their annual allocation of federal planning funds. Additional funds, if available, should also be programmed. Funding should be programmed in work tasks commensurate with the level of effort required. For instance, if a new TIP is being developed, programming \$5,000 in the TIP task doesn't reflect the level of effort required to develop the document.
- Work tasks need to reflect the federally mandated documents due in the fiscal year(s) covered by the UPWP. For example, all MPOs in Tennessee are required to develop, adopt, and submit a new 4-yr. TIP in FY 2019. MPOs with LRTP/RTP/MTPs due in the next 2-3 years need to show when work on the Plan will begin and the steps that will be taken towards Plan development. **Simply saying "develop new FY 2020 – FY 2023 TIP" or "update Long Range Transportation Plan to 2050"—is not enough.** The description of the work to be completed and the level of detail should be commensurate with the level of difficulty and complexity of the document. The MPOs also need to be aware of upcoming deadlines for performance measure targets and reflect them in the UPWP.
- The UPWP is limited to planning activities and the administration of those planning activities. Engineering activities such as land surveying, design, or NEPA document preparation are not eligible for Federal transportation planning funds.
- There needs to be enough detail in the work tasks so that the eligibility of items such as consultant studies, meeting and conference expenses, computer equipment and

software purchases, data packages, etc. can be determined. Work tasks also need to clearly show who will be performing work: MPO staff, consultant, transit operator, etc.

3.6.1 Review of the Draft UPWP

Once the Draft UPWP has been submitted to the TDOT Long Range Planning Senior Planner, the PDF is shared within OCT and other TDOT Division offices, such as the Multimodal and Local Programs Divisions for evaluation and comments. Within 30 business days, these recommendations are collated and returned to the MPO for revision and feedback. Upon satisfying all questions from this round of review, a clean version of the edited UPWP is sent back to TDOT to forward with a transmission letter to FHWA and FTA for their review. FHWA and FTA have twenty (20) business days to complete their respective evaluations and respond to TDOT too, after which TDOT forwards the expanded comments sheet to the MPO for continued revisions, if needed. Once the MPO addresses potential questions and suggestions, FHWA typically takes the lead to resolve any additional questions through a conference call with all stakeholders.

3.6.2 Review Checklist

- Was the UPWP developed in cooperation with state(s) and public transportation operators?
- Does the UPWP include a discussion of the planning priorities facing the MPO?
- Does the UPWP identify the activities that address the planning factors in 23 CFR 450.306(a)?
- Does the UPWP identify work proposed for the next two-year period by major activity and task?
- Does the UPWP identify implementation agency for each task?
- Does the UPWP identify the schedule for completing task?
- Does the UPWP identify the resulting end products for each task?
- Does the UPWP identify the proposed funding by activity/task?
- Does the UPWP identify a summary of the total amounts and sources of federal and matching funds?
- Do programmed funds match MPO authorized funding?
- Do funding tables match with the individual programmed funds per activity?

4.0 Long Range Transportation Plan (LRTP/RTP/MTP)

4.1 Purpose

This chapter provides guidance to the MPOs in Tennessee in developing, implementing, and managing the MPO's Long Range Transportation Plan (LRTP/RTP/MTP) required by federal laws and regulations. TDOT's Statewide Long Range Transportation Plan is an important document for the Department and its stakeholders, as the plan allows TDOT to make key long-term funding and policy decisions about transportation investments throughout Tennessee. The LRTP/RTP/MTP brings together the needs for all modes of transportation including rail, transit, ports and waterways, aviation, and active transportation modes (e.g. walking and cycling) in addition to highways. The LRTP/RTP/MTP must address no less than a 20-year planning horizon.

4.2 Authority

Table 4.1 – LRTP/RTP/MTP Federal and State Guidance

Statute	Summary
Federal	
23 U.S.C. § 134(h) and (i)	Scope of the metropolitan planning process and development of the metropolitan transportation plan.
49 U.S.C. § 5303(h) and (i)	
23 CFR § 450.322, 450.324, and Appendix A to Subpart 450	Congestion management process, and development and content of the metropolitan transportation plan.

4.3 Federal Requirements for the LRTP/RTP/MTP

MPOs are required to develop LRTP/RTP/MTPs using a performance-driven, outcome-based approach to planning for metropolitan areas in order to be compliant with Federal regulations. The metropolitan transportation planning process shall be continuous, cooperative, and comprehensive; and provide for consideration and implementation of projects, strategies, and services that will address the federal planning factors: [23 CFR 450.306(a) and (b)]:

1. Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency
2. Increase the safety of the transportation system for motorized and non-motorized users
3. Increase the security of the transportation system for motorized and non-motorized users
4. Increase the accessibility and mobility of people and freight

5. 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
6. Enhance the integration and connectivity of the transportation system across and between modes for people and freight
7. Promote efficient system management and operations
8. Emphasize the preservation of the existing transportation system
9. Improve the resiliency and reliability of the transportation system, and reduce or mitigate storm water impacts of surface transportation
10. Enhance travel and tourism.

In addition to the 10 planning factors, federal law and regulations require the LRTP/RTP/MTP to include, at a minimum:

- The current and projected transportation demand of persons and goods in the MPA over the period of the transportation plan. [23 CFR 450.324(g)(1)]
- Existing and proposed transportation facilities (including major roadways, public transportation facilities, intercity bus facilities, multimodal and intermodal facilities, non-motorized transportation facilities e.g.: pedestrian walkways and bicycle facilities, and intermodal connectors), which should function as an integrated metropolitan transportation system, giving emphasis to those facilities that serve important national and regional transportation functions over the period of the transportation plan. In addition, the locally preferred alternative selected from an Alternative Analysis under the Federal Transit Administration's (FTA) Capital Investment Grant Program needs to be adopted as a part of the plan. [23 CFR 450.324(f)(1)]
- A description of the performance measures and performance targets used in assessing the performance of the transportation system in accordance with the required performance management approach. [23 CFR 450.324(f)(2)]
- A system performance report on the condition and performance of the transportation system with respect to the required performance targets. This report includes progress achieved by the MPO in meeting the performance targets in comparison with system performance recorded in previous reports. The performance targets include baseline data; and, for MPOs that voluntarily elect to develop multiple scenarios, an analysis of how the preferred scenario has improved the conditions and performance of the transportation system, and how changes in local policies and investments have

impacted the costs necessary to achieve the identified performance targets. [23 CFR 450.324(f)(4)]

- Operational and management strategies to improve the performance of existing transportation facilities to relieve vehicular congestion and maximize the safety and mobility of people and goods. [23 CFR 450.324(f)(5)]
- Consideration of the results of the congestion management process in Transportation Management Areas (TMA), including the identification of single-occupancy vehicle (SOV) projects that result from a congestion management process (CMP) in TMAs that are nonattainment for ozone or carbon monoxide. [23 CFR 450.324(f)(6)]
- Assessment of capital investment and other strategies to preserve the existing and projected future metropolitan transportation infrastructure, provide for multimodal capacity increases based on regional priorities and needs, and reduce the vulnerability of the existing transportation infrastructure to natural disasters. The metropolitan transportation plan may consider projects and strategies that address areas or corridors where current or projected congestion threatens the efficient functioning of key elements of the metropolitan area's transportation system. [23 CFR 450.324(f)(7)]
- Transportation and transit enhancement activities, including consideration of the role that intercity buses may play in reducing congestion, pollution, and energy consumption in a cost-effective manner and strategies and investments that preserve and enhance intercity bus systems, including systems that are privately owned and operated, and including transportation alternatives, as defined in 23 U.S.C. 101(a), and associated transit improvements, as described in 49 U.S.C. 5302(a), as appropriate,. [23 CFR 450.324(f)(8)]
- Descriptions of proposed improvements in enough detail to develop cost estimates (e.g., design concept and design scope descriptions). [23 CFR 450.324(f)(9)]
- A discussion of types of potential environmental mitigation activities and potential areas to carry out these activities, including activities that may have the greatest potential to restore and maintain the environmental functions affected by the metropolitan transportation plan. The discussion may focus on guiding policies, programs, or strategies, rather than at the project level. The MPO shall develop the discussion in consultation with applicable federal, state, and tribal land management, wildlife, and regulatory agencies. The MPO may establish reasonable timeframes for performing this consultation. [23 CFR 450.324(f)(10)]
- A financial plan that demonstrates how the adopted transportation plan can be implemented. Revenue and cost estimates must use an inflation rate(s) to reflect "year

of expenditure dollars,” based on reasonable financial principles and information, developed cooperatively by the MPO, state(s), and public transportation operator(s). For illustrative purposes, the financial plan may include additional projects that would be included in the adopted transportation plan if additional resources beyond those identified in the financial plan were to become available. [23 CFR 450.324(f)(11)]

- Pedestrian walkway and bicycle transportation facilities in accordance with 23 U.S.C. 217(g). [23 CFR 450.324(f)(12)]. Bicycle/pedestrian facilities should be considered with all new construction/reconstruction, except where these modes are not permitted, including consideration of safety and contiguity.
- Both long-range and short-range strategies/actions that provide for the development of an integrated multimodal transportation system (including accessible pedestrian walkways and bicycle transportation facilities) to facilitate the safe and efficient movement of people and goods in addressing current and future transportation demand. [23 CFR 450.324(b)]
- The MPO, the state(s), and the public transportation operator(s) shall validate data used in preparing other existing modal plans for providing input to the transportation plan. In updating the transportation plan, the MPO shall base the update on the latest available estimates and assumptions for population, land use, travel, employment, congestion, and economic activity. The MPO shall approve transportation plan contents and supporting analyses produced by a transportation plan update. [23 CFR 450.324(e)]
- Integrate the priorities, goals, countermeasures, strategies, or projects for the metropolitan planning area contained in the Highway Safety Improvement Program (HSIP), including the Strategic Highway Safety Plan (SHSP) required under 23 U.S.C. 148, the Public Transportation Agency Safety Plan (PTASP) required under 49 U.S.C. 5329(d), or an Interim Agency Safety Plan in accordance with 49 CFR Part 659, as in effect until completion of the PTASP; and may incorporate or reference applicable emergency relief and disaster preparedness plans and strategies and policies that support homeland security, as appropriate, to safeguard the personal security of all motorized and non-motorized users. [23 CFR 450.324(h)]

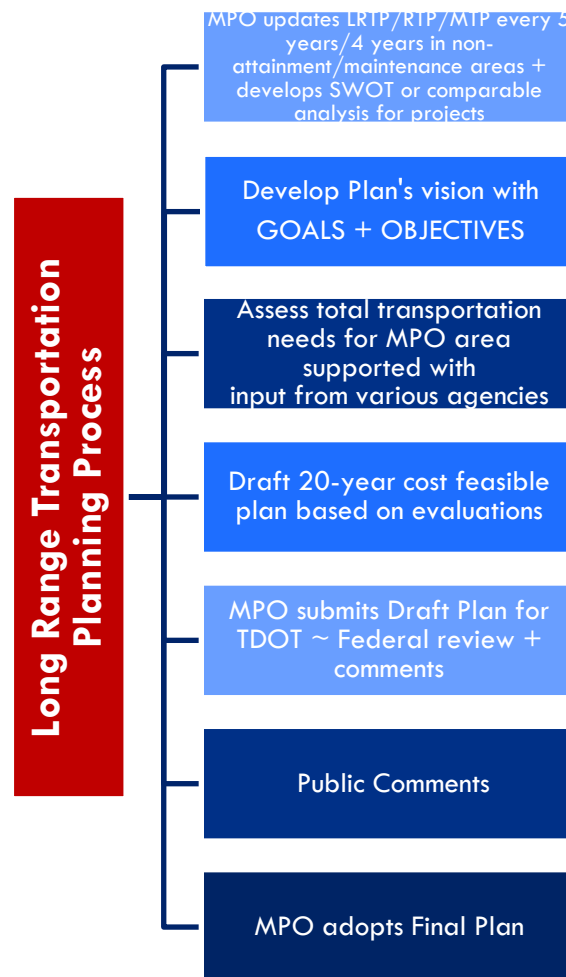
4.4 Methods for Developing the LRTP/RTP/MTP

The LRTP/RTP/MTP provides a framework for how the region intends to invest in the transportation system that is consistent with local and regional goals and objectives. The plan shall include both long-range and short-range strategies that lead to the development of an integrated multimodal transportation system that facilitates the efficient movement of people and goods. [23 CFR 450.324(a)]

4.4.1 All Areas

- TDOT strongly advises MPOs in attainment areas to begin their plan development process at least two (2) years in advance of the due date. In non-attainment and maintenance areas, the MPOs need to begin this process at least three (3) years in advance of the LRTP/RTP/MTP and Conformity due date.
- Due to the increasingly complex nature of LRTP/RTP/MTPs, TDOT recommends that MPOs procure the services of a qualified transportation planning consultant to assist with the technical aspects and writing of the plan document if needed. The consulting firm(s) should be selected and hired using the previously approved Professional Services Procurement Procedures of the MPO or of the jurisdiction where the MPO is housed. Typically, the MPO will issue either a Request for Qualifications (RFQ) or a Request for Proposals (RFP). In either case, TDOT must approve the solicitation(s) before it is released. This allows TDOT to provide input on scope as well as confirm that required federal and state clauses are included in the pro-forma contract. TDOT must also be given the opportunity to serve on the MPO's consultant selection committee and the resulting consultant contract must be reviewed by TDOT prior to signing.
- For MPOs opting to prepare all or most of the plan in-house, a detailed plan and schedule of how the work will be completed must be submitted to TDOT for transparency. There should also be a schedule of how and when the work will be completed in conjunction with the MPO staff's ongoing workload.
- MPO regional travel demand model updates, whether performed in-house or by a consultant, are recommended to follow the most current version of the Minimum Travel Demand Model Calibration and Validation Guidelines for State of Tennessee. This document can be found on the Tennessee Model Users Group (TNMUG) website.
- MPOs should complete the LRTP/RTP/MTP Checklist when developing the plan, see section 4.4.2.

Figure 4.1 – Long Range Transportation Plan (LRTP/RTP/MTP) Development + Approval Process



4.4.2 Long Range Planning Checklist

- Metropolitan Long-Range Transportation Plan (LRTP/RTP/MTP): 23CFR 450.324
 - The plan covers at least a 20-year planning horizon as of the effective date
 - Does the plan include long and short-range planning strategies?
 - Is there a level of consistency between LRTP/RTP/MTP and STIP/TIP as they are developed, including amendments?
 - Is it updated within 4 years for non-attainment and maintenance areas, 5 years for attainment?
 - For TMAs, is Certification Review at least every 4 years?
 - Date of Last Review

- Are the latest available estimates and assumptions for land use, population, travel, employment, congestion and economic activity used in the update of the transportation plan?
- Does the plan address each of the following?
 - Current and projected transportation demand of persons
 - Identified existing and proposed transportation facilities including roads, transit, bicycle and pedestrian facilities, multimodal and intermodal facilities
 - Projected demand of goods transportation on network to meet regional vision for freight
 - Operational and management strategies to improve performance of the existing and proposed transportation facilities to relieve vehicular congestion and maximize safety
 - Identified congestion management strategies (TMAs only)
 - Identified SOV projects that result from congestion management processes (TMAs only)
 - An assessment of capital investment and other strategies to preserve existing and projected future transportation infrastructure and multimodal capacity increases
 - List of all existing and proposed transportation facilities: including design concepts, scope, descriptions and sources of funding
 - General discussions of types of potential environmental mitigation activities at the corridor and/or regional level (i.e. policy/strategy level, not project specific) and potential areas to carry out activities developed in consultation with federal, state, and tribal wildlife, land management and regulatory agencies
 - Discussion of pedestrian and bicycle facilities [23 USC 17(g)]
 - Discussion of transit enhancement activities
- Financial plan that demonstrates how the adopted transportation plan can be implemented and includes strategies for implementation of any new funding sources [23 USC 101(a)(5)]
 - Financial plan contains system level estimates of costs and revenue sources reasonably expected to be available to operate and maintain the Transportation system?
 - Financial plan contains IMPROVE Act revenues reasonably expected to be available to operate and maintain the Transportation system?
 - Public transit operators were included in the cooperative development of funding estimates for the financial plan

- Financial plan includes recommendations on any additional financing strategies to fund projects and programs in the metropolitan transportation plan
 - All projects and strategies proposed for funding reflect “year of expenditure” dollars
- Consultation with state and local agencies responsible for environmental protection, land use management, natural resources, and historic preservation agencies for the development of the metropolitan transportation plan
- Comparison of natural or historic resources with transportation plans (if available)
 - Does the plan include a safety element that incorporates or summarizes the priorities, goals, countermeasures, or projects for the Metropolitan Planning Area contained in the TN Strategic Highway Safety Plan required under 23 USC 148 as well as (as appropriate) emergency relief and disaster preparedness plans, strategies, and policies that support homeland security (as appropriate) and safeguard the personal security of all motorized and non-motorized users?
 - Discussion of requirements for future LRTP/RTP/MTPs such as mitigating storm-water impacts of surface transportation areas and enhancing travel/tourism
- Citizens, state, and local agencies, freight transportation services, providers of freight transportation services, representatives of users of pedestrian walkways and bicycle facilities, disabled persons, private citizens were all given reasonable opportunity to comment on the transportation plan as stated in the Public Participation Plan
 - Summary of public involvement strategies consistent with Title VI which could be a separate doc showing detailed information, strategies used, feedback received and responses to feedback, findings, etc. (23 CFR 450.316(a)(1)(vii))
 - Metropolitan transportation plan published and made electronically accessible on the World Wide Web
- Transportation Performance Management measures and targets selected by the MPO with a required system performance report, {23 CFR 450.306 (d)(4); 23 CFR 450.324(f)(3), (f)(4)}
- Identified proactive components for the next round of planning:
 - Discussion of Intelligent Transportation Systems, Autonomous Vehicle, and Connected Vehicle technologies

- Consultations with agencies tied to tourism and natural disaster risk management
- Impact Analysis and Data Validation including outreach to vulnerable populations
- Sustainability and Livability programming/projects
- Multiple Scenario planning tool using potential investment strategies, assumed population and job distributions, baseline conditions, revenue constrained scenarios, estimated costs and potential available revenue to support each scenario {23 CFR 450.324(i)}

4.4.3 LRTP/RTP/MTP Update Frequency and Planning Horizon

Attainment Areas

The LRTP/RTP/MTP shall address at least a 20-year planning horizon. [23 CFR 450.324(a)] and may include an interim period(s) (5 – 10 years) for the purpose of demonstrating fiscal constraint. The plan should be reviewed and updated at least every five (5) years in attainment areas to extend the forecast period and to confirm its validity and its consistency with current and forecasted transportation and land use conditions and trends. The five-year cycle in attainment areas begins with the MPOs adoption of the plan. [23 CFR 450.324(a)]

Non- Attainment and Maintenance Areas

The LRTP/RTP/MTP shall address at least a 20-year planning horizon. [23 CFR 450.324(a)] At least two (2) interim periods need to be included. The first horizon is 3-5 years after the base year, with the second horizon midway between the base year and the ultimate 20-25-year horizon. MPOs in non-attainment and maintenance areas must coordinate the development of the plan with the State Implementation Plan (SIP) pursuant to the requirements of the Clean Air Act (CAA) [23 U.S.C. 134(g)(1)]. This coordination takes place through the Interagency Consultation for Air Quality (IAC) process. The IAC must concur with the chosen horizon years.

The LRTP/RTP/MTP shall be reviewed and updated at least every four (4) years in non-attainment and maintenance areas to extend the forecast period and to confirm its validity and its consistency with current and forecasted transportation and land use conditions and trends. [23 CFR 450.324(a)] The plan must demonstrate conformity. The four-year cycle for the plan and conformity determination begins when the FHWA/FTA/EPA make a conformity finding on the plan.

4.5 Relationship of the LRTP/RTP/MTP to the Transportation Improvement Program (TIP)/State Transportation Improvement Program (STIP)

There must be an approved LRTP/RTP/MTP or a properly amended plan at the time the MPO submits a new TIP, or requests amendments or modifications to their TIP. The TIP is a program of specific projects within the LRTP/RTP/MTP. The TIP must be incorporated by reference into the State Transportation Improvement Program (STIP) to ensure continued federal funding for the MPO. A TIP cannot be approved for inclusion in the STIP if it does not come from a currently approved LRTP/RTP/MTP or if it includes projects that have not been properly amended into the plan and approved by the MPO. Conformity requirements apply to both the LRTP/RTP/MTP and TIP amendments.

4.6 Public Participation

Before approving an LRTP/RTP/MTP, each MPO must provide a reasonable opportunity for comment to citizens, affected public agencies, representatives of transportation agency employees, private freight shippers, providers of freight transportation services, private providers of public transportation, representatives of users of public transit, and other interested parties on the plan. 23 CFR 450.324(j); 23 U.S.C. 134(i)(6) Pursuant to 23 CFR 450.316(a)(1) the MPO planning process must include a proactive public participation process that provides complete information, timely public notice, full public access to key decisions, and supports early and continuing public participation in developing plans and provides for the following:

- Reasonable public access to technical and policy information used in the development of the plan, including making information available on the MPO's website;
- Adequate public notice of public participation activities plus time for public review and comment at key decisions, such as but not limited to the approval of the plan;
- A demonstration of explicit consideration and response to public input received during the plan development process;
- Consideration of the needs of those traditionally underserved by existing transportation systems, including but not limited to low-income and minority households;
- A summary, analysis and report on significant written and oral comments that are received on the draft plan (including the financial plan) as a result of the public participation process or the interagency consultation process required by the conformity regulations shall be made part of the final plan; and

- If the final plan differs significantly from the one which was made available for public comment and raises new material issues, an additional opportunity for public comment on the revised plan must be made available.

An MPO should maintain documentation of its public participation process. Documentation may include:

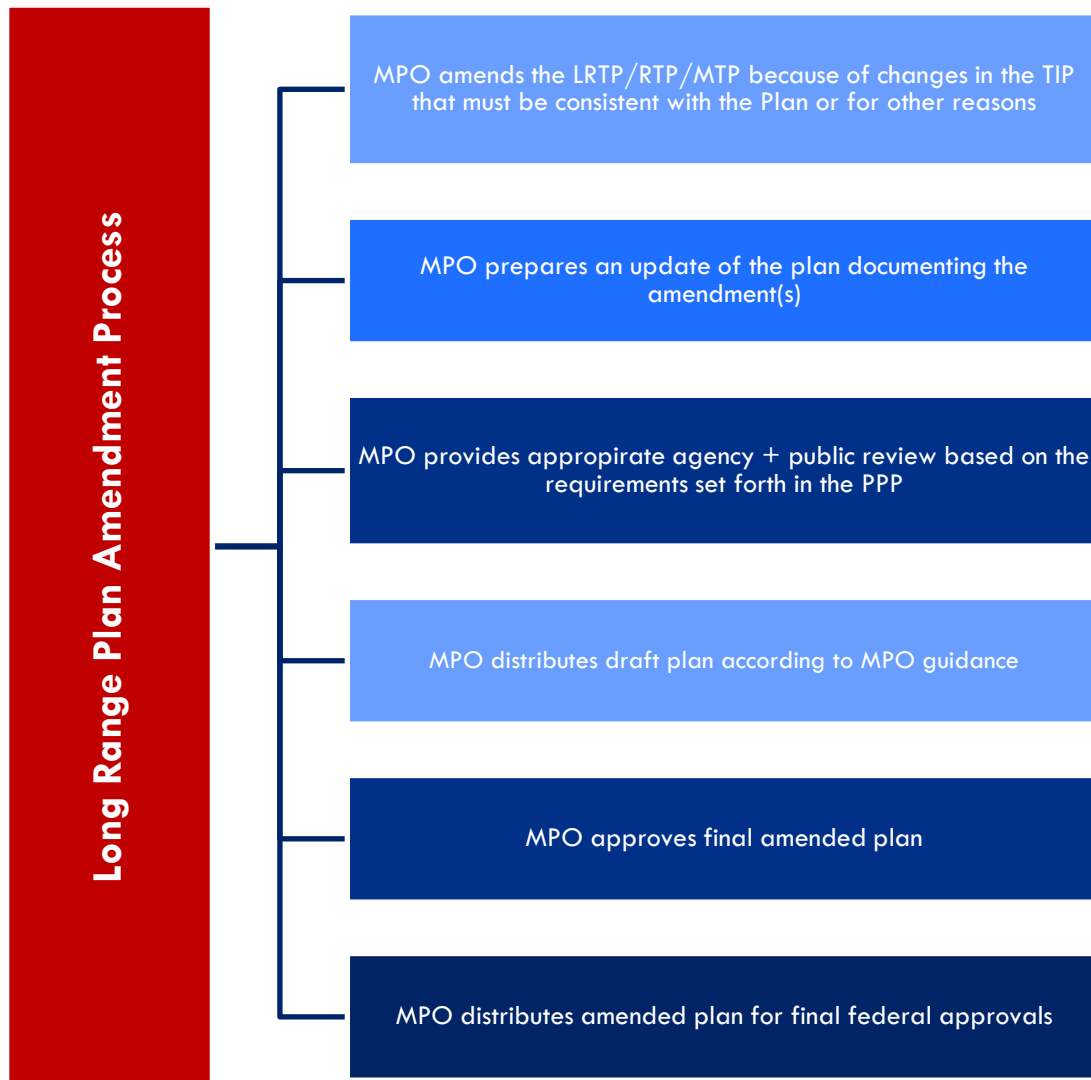
- Copies of published public notices of meetings designed to receive public input on the draft plan
- Screen shots of public notices provided on the MPO's website
- Minutes, attendance sheets, comments cards or other media that document public participation in the plan development
- Locations and times for meetings and media used to communicate with the community (e.g.: internet resources, local radio and television announcements)
- Identification of major transportation providers (such as aviation, freight and transit) who participated in the process
- Documentation of outreach efforts to racial/ethnic minorities, low income persons, the elderly, individuals with disabilities, Limited English Proficiency (LEP) individuals, and other groups that have been traditionally underserved by the transportation system
- Newsletters, mailings, surveys, or other systematic ways to reach the public
- A summary and analysis that identifies the significant written and oral comments received on the draft plan and how the MPO considered those comments.

4.7 LRTP/RTP/MTP Amendments

Amendments to the LRTP/RTP/MTP may result from changes to the financial plan, the addition of new projects, the deletion of projects, or changing priorities. The plan may be amended at any time and each MPO can determine their own schedule for processing amendments to the plan. For the plan amendments to become effective, the MPO Policy Board must adopt them. The plan amendment process is subject to all the requirements of a plan update, including public participation.

Documentation shall include, but is not limited to, a revised analysis of the impacts of the proposed plan revision to the transportation system, documentation of the public participation process, a revised balancing of project costs versus forecasted revenues, and for non-attainment and maintenance areas, a finding of conformity on the amended plan.

Figure 4.2 – LRTP/RTP/MTP Amendment Process Flow Chart



4.8 Review, Approval, + Distribution of the LRTP/RTP/MTP

4.8.1 Attainment Areas

- The MPO prepares a draft LRTP/RTP/MTP and provides three (3) hard copies of the draft to TDOT, along with e-mailing a PDF version. The document is distributed for a 30-business day review period. Divisions and Offices within TDOT that review the draft plan include Long Range Planning, Environmental, Multimodal Transportation Resources, Programming, Local Programs, and Civil Rights. The draft should also be provided to the MPO Technical Coordinating Committee and the MPO Policy Board for review at this time.

- Once all Division comments have been collated, TDOT returns suggested revisions back to the MPO. The MPO responds to the comments, as appropriate, and re-submits a draft with changes and additions highlighted, along with a written response to each comment indicating the action taken and the nature of any changes to the document.
- In addition, the MPO should consider incorporating comments received, in accordance with the PPP, from the public input process to date, as well as input from the MPO Technical Coordinating Committee (TCC) and MPO Policy Board.
- Once the state comments have been satisfactorily addressed, the MPO provides clean electronic copies and three (3) hard copies of the revised draft to TDOT for distribution to FHWA and FTA for the 20-business day federal review period. The MPO should also conduct the state and federal environmental consultation process at this time.
- FHWA and FTA provide comments to the MPO through TDOT. The MPO responds to the comments, as appropriate, and re-submits a draft to TDOT with changes and additions highlighted, along with a written response to each comment indicating the action taken and the nature of any changes to the document. TDOT will determine if the comments have been addressed and request concurrence from FHWA and FTA.
- The MPO TCC and MPO Policy Board approve releasing the draft plan for a public comment period according to the adopted PPP. Comments received during the public review period should be provided to the MPO TCC and MPO Policy Board, including how the comments were resolved.
- If there are significant differences, the MPO revises the draft plan based on public input, according to 23 CFR 450.316 (a)(1)(viii).
- The MPO Policy Board approves the new LRTP/RTP/MTP. Although transportation plans do not have to be approved by FHWA/FTA, copies of new/revised plans must be provided to both agencies. [23 CFR 450.323(e)]

4.8.2 Non-Attainment and Maintenance Areas

- The MPO prepares a draft LRTP/RTP/MTP and draft conformity determination report (CDR) and provides copies to the IAC. This initial review takes approximately 30 calendar days. After the IAC has provided comments and the MPO has incorporated them into the documents, the MPO provides two (2) hard copies of the draft LRTP/RTP/MTP and draft-CDR to TDOT, along with e-mailing a PDF version. The document is distributed for a 30-business day review period. Divisions and Offices within TDOT that review the draft Plan include Long Range Planning, Environmental, Multimodal Resources, Programming & Scheduling, Local Programs, and Civil Rights. The draft plan should also be provided to the MPO TCC and MPO Policy Board for review at this time.

- Once all Division comments have been collated, TDOT returns suggested revisions back to the MPO. The MPO responds to the comments, as appropriate, and re-submits a draft plan and conformity report with changes and additions highlighted, along with a written response to each comment indicating the action taken and the nature of any changes to the document.
- In addition, the MPO should consider incorporating comments received from the public input process to date, as well as the, MPO TCC and MPO Policy Board.
- Once the state comments have been satisfactorily addressed, the MPO provides two (2) hard copies of the revised drafts and PDFs to TDOT for distribution to FHWA and FTA for the 30-business day federal review period. The MPO should also conduct the state and federal environmental consultation process at this time.
- FHWA and FTA provide comments to the MPO through TDOT. The MPO responds to the comments, as appropriate, and re-submits drafts to TDOT with changes and additions highlighted, along with a written response to each comment indicating the action taken and the nature of any changes to the document. TDOT will determine if the comments have been addressed and request concurrence from FHWA and FTA before moving forward.
- The MPO TCC and MPO Policy Board approve releasing the draft plan and conformity report for a public comment period according to the adopted PPP. Comments received during the public review period should be provided to the MPO TCC and MPO Policy Board, including how the comments were responded to.
- If needed, the MPO revises the draft plan and draft CDR based on public input.
- The MPO Policy Board approves the conforming plan.
- The MPO submits three (3) hard copies of the approved LRTP/RTP/MTP, along with the conformity determination documentation, to the TDOT LRP Office senior planner for formal distribution to FHWA/FTA.
- FHWA will transmit one (1) copy of each of the documents to Environmental Protection Agency (EPA). FHWA/FTA, in cooperation with the EPA, will review the plan and conformity determination documentation. A minimum of 30 calendar days is needed for FHWA/FTA to review the plan and CDR. In certain circumstances, this timeframe may be adjusted with prior concurrence of all agencies through the IAC process. If the plan and CDR meet all federal requirements, then FHWA/FTA, in cooperation with EPA, will make a finding of conformity on the plan and will provide an approval letter to the MPO.

- The MPO provides TDOT with copies of the approved LRTP/RTP/MTP and CDR. TDOT in turn distributes the documents to FHWA and FTA.

4.9 LRTP/RTP/MTP Conformity Checklist

The conformity report must address each item below for FHWA/FTA to approve Conformity Finding.

- The conformity report specifies that the LRTP/RTP/MTP complies with:
 - State Implementation Plan (SIP)
 - Clean Air Act
 - Tennessee Transportation Conformity Regulation
 - SAFETEA-LU, Planning Regulations Development and Content of the Metropolitan Transportation Plan (23 CFR 450.324)
 - The conformity report demonstrates Analysis Results for all applicable pollutants; and provides documentation that the appropriate conformity test was met for each analysis year.
- The report includes a copy of signed Adopting Resolutions by the MPO Board for:
 - LRTP/RTP/MTP
 - Conformity Determination
- The conformity report documents that the plan has a minimum 20-year planning horizon (23 CFR 450.324(a))
- The CDR documents financial constraint for all projects identified in the plan including the operations and management of the existing transportation system for:
 - The entire LRTP/RTP/MTP
 - Relative Constraint for each Horizon Year
- The conformity report verifies that the plan provides the appropriate level of detail required by 40 CFR 93.106 of the conformity regulations.
- The conformity report specifies all assumptions agreed to through inter-agency consultation for:
 - Exempt Projects
 - Relative Financial Constraint by Horizon Year
 - Regionally Significant Projects
- The conformity report lists all projects considered for conformity by horizon year and includes the following for each project:
 - Project name

- Type of project or activities to be completed (widening, signalization, replacement, new facility)
- Exempt status
- Cross-reference between the plan and TIP
- Regional significance status
- Horizon year
- The conformity report documents the review and implementation of the latest planning assumptions including:
 - Demographics
 - Employment
 - Land use
 - Other
- The conformity report identifies the non-attainment designation or re-designation dates and specifies the criteria and precursor pollutants for which the designation applies.
 - Designation Dates
 - Precursors
- The report documents comments raised verbally or in writing by IAC partners and how the MPO addressed each issue; or the report states that no significant comments were received.
- The report documents the public participation process of the plan and conformity analysis including any comments raised verbally or in writing and how the MPO addressed such issues; or the report states that no significant comments were received.
- The report explains how the plan and conformity analysis were developed according to the consultation procedures outlined in 40 CFR 93.105 and 93.112 including but not limited to, model evaluation and selection, minor arterials and other transportation projects treated as regionally significant, and determining if a project otherwise exempt under 40 CFR 93.126 should be treated as non-exempt.
- If the plan contains any SIP TCMs the requirements of 40 CFR 93.110(e) and 93.113 are met; or, the report states the Transportation Plan contains no SIP TCMs. For all TCMs, the report provides the compliance schedule, any explanation for delays and description of how all schedule deficiencies are being addressed.
 - TCMs
 - Compliance Schedule
- The analysis/horizon years were selected by the MPO through the IAC process.

- The analysis/horizon years meet the requirements of 40 CFR 93.106(a)(1), 93.118 (b), or 93.119(e), whichever is applicable.
 - Applicable Requirement
- The report documents the use of the latest emissions estimation model, consistency with the SIP assumptions and provides copies of the input and output files used in the analysis.
 - Emissions Model used
- The report documents how the requirements of the Emission Budget Test in 40 CFR 93.118 or the Emissions Reduction Test in 40 CFR 93.119 were met for each pollutant the area is designated nonattainment or maintenance.
- If the Emission Budget Test was used, the report documents that the emission budgets used in the conformity analysis are those found in the latest approved SIP or latest SIP budget found adequate by the EPA for transportation conformity and the appropriate Federal Register notice is also identified.
 - Federal Register Notice Date
- If the Emissions Reduction Test was used, the report documents that the “Baseline” scenario includes, the entire future transportation system resulting from all existing (built) regionally significant highway and transit facilities; all travel demand management and regionally significant projects that are currently under construction or undergoing right-of-way acquisition, regardless of funding source.
- If the Emissions Reduction Test was used, the report documents that the “Action” scenario includes all facilities, services, and activities in the “Baseline” scenario as well as the entire future transportation system resulting from the implementation of the proposed Transportation Plan, including all proposed regionally significant projects and additional projects described in 40 CFR 93.119(g).
- The report documents that the requirements of 40 CFR 93.122 are met, including, but not limited to: explaining how the Vehicle Miles of Travel (VMT) from projects which are not regionally significant are estimated; and the methods used to estimate VMT for off-model transportation projects.
- As applicable, the report explains how the travel demand model VMT has been reconciled and calibrated to the Highway Performance Monitoring System VMT for the year of validation and future estimates of VMT.

5.0 Transportation Improvement Program (TIP)

5.1 Purpose

The purpose of this chapter is to provide guidance to the TDOT staff for the review of MPO Transportation Improvement Programs (TIPs) and TIP revisions. This also serves as a beneficial tool for MPOs and contains pertinent information regarding MPO TIP requirements.

5.2 Authority

Table 5.1 – TIP Federal and State Guidance

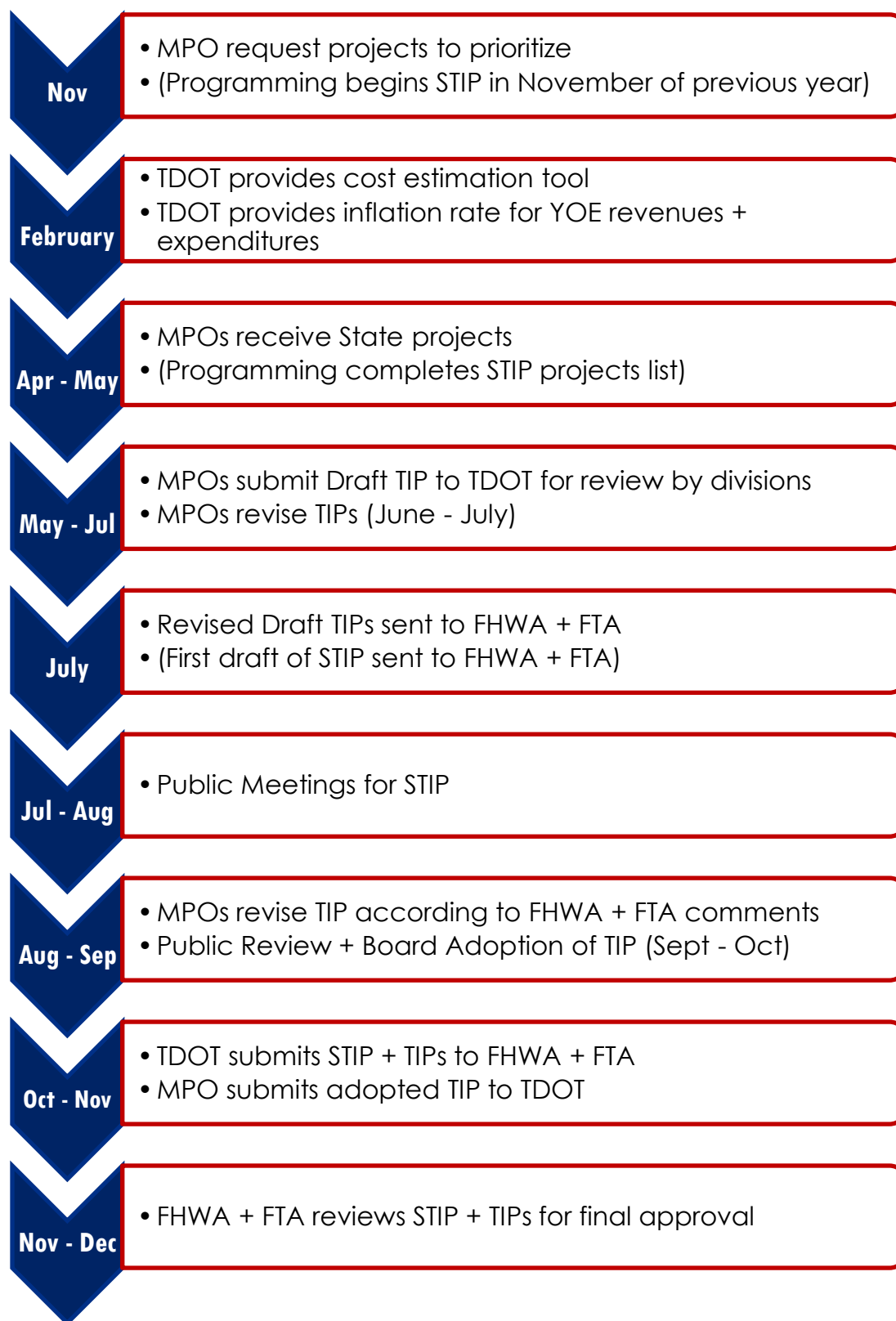
Statute	Summary
Federal	
23 U.S.C. § 134(j) and (k)(3) and (4)	Scope of the metropolitan planning process and development of the TIP.
49 U.S.C. § 5303	
23 U.S.C. 204	Roads on Federal lands to be included in the TIP, where applicable.
23 CFR Part 450 Sections 326, 328, 330, 332, and 334	Development and content of the TIP, TIP revisions and relationship to the STIP, TIP action by FHWA and FTA, project selection from the TIP, and Annual Listing of Projects.

5.3 Federal Requirements for Developing the TIP

Based on 23 U.S.C. 134(j), MPOs are required to develop a TIP. The Code of Federal Regulations (CFR) defines the TIP as a prioritized list of transportation projects covering a period of four years that is developed and formally adopted by an MPO as part of the metropolitan transportation planning process, consistent with the metropolitan transportation plan, and required for projects to be eligible for funding under Title 23 U.S.C. and 49 U.S.C. Chapter 53 [23 CFR 450.324]. TIPs cover a four-year period. MPOs work in cooperation with TDOT, public transportation operators, and partner DOTs for bi-state MPOs when developing their TIPs. [23 CFR 450.326(a)]

5.3.1 TIP Schedule

FHWA and the FTA make a joint finding that each MPO's TIP is consistent with their Long-Range Transportation Plan (LRTP/RTP/MTP) during TIP Adoption reviews and TIP Amendment reviews. The finding is based on the self-certification statement, submitted by the state and the MPO, on their review of the plan and on other reviews deemed necessary. [23 CFR 450.330(a)]

Figure 5.1 – TIP Development Schedule Flow Chart

5.3.2 Public Participation

Public input is a critical element in the transportation planning process. According to 23 CFR 450.316 (a), MPOs are required to develop and use a documented PPP that defines a process for providing reasonable opportunities to be involved in the metropolitan transportation planning process to individuals; affected public agencies; representatives of public transportation employees; public ports; freight shippers; providers of freight transportation services; private providers of transportation (including intercity bus operators, employer-based commuting programs, such as carpool, vanpool, transit benefit, parking cash-out, shuttle, or telework program); representatives of users of public transportation; representatives of users of pedestrian walkways and bicycle transportation facilities; representatives of the disabled; and other interested parties.

MPOs must fulfill the TIP commitments/comment periods outlined in the PPP during development of the TIP. MPOs should consult with agencies/officials responsible for other planning activities within the MPA that are affected by transportation; or coordinate its planning process (to the maximum extent practicable) with such planning activities. In addition, according to 23 CFR 450.316(b) MPOs shall develop long range transportation plans and TIPs while taking into consideration other related planning activities within the metropolitan area.

When the MPA includes ancestral tribal lands, the MPO shall appropriately consult with Native American tribal governments. The Governor has delegated the responsibility for consulting and coordinating with sovereign nations to a representative in the Archaeology Section of TDOT's Environmental Division. In addition, if the MPA includes federal public lands, the MPO shall appropriately involve Federal Land Management Agencies in the process.

5.3.3 Performance Management

Federal statute establishes national performance goals for federal-aid highway programs and directs U.S. Department of Transportation (USDOT) to establish performance measures (PMs) for fatalities and serious injuries on all public roadways, pavement conditions on the Interstate and non-Interstate National Highway System (NHS), bridge conditions on the NHS, freight movement on the Interstate system, traffic congestion, on-road mobile source emissions, system reliability, project delivery delays, transit safety, and transit state of good repair/asset management relating to transit services. [23 U.S.C. 150] USDOT has finalized the rulemaking for these PMs. States were required to set performance targets for the measures within one year of the effective date of the rule, [23 CFR 450.206(c)(2)] and MPOs will then set performance targets **no later than 180 days after the state sets targets.** [23 CFR 450.306(d)(3)]

Now that performance management rules have become effective, the TIP must be designed such that, once implemented, it makes progress toward achieving the performance targets established by the MPO under 23 CFR 450.306(d). The TIP shall include, to the maximum extent

practicable, a description of the anticipated effect of the TIP toward achieving the performance targets identified in each MPO's LRTP/RTP/MTP linking investment priorities to those performance targets. [23 CFR 450.326(c)(d)]

5.3.4 Financial Constraint

According to 23 CFR 450.326(k), an MPO must demonstrate a financially constrained TIP by year and maintain that financial constraint. Fiscal constraint is demonstrated by estimating future revenues, based primarily on funding mechanisms that are currently in place, and indicating that estimated project costs for each fiscal year do not exceed the available funding of that fiscal year. [23 CFR 450.326(j)] The TIP shall include a project or project phase only if full funding for it is anticipated to be available within the timeframe contemplated for completion. [23 CFR 450.326(k)]

5.3.5 TIP Project Selection and Implementation Process

According to federal law, projects selected for inclusion in the TIP depends on whether the metropolitan area is designated as a TMA or a non-TMA. In metropolitan areas not designated as a TMA, the state and/or public transportation operator(s), in cooperation with the MPO, selects projects to be implemented using 23 U.S.C. and 49 U.S.C. Chapter 53 funds, except for Tribal Transportation Program, Federal Lands Transportation Program, and Federal Lands Access Program projects. Those projects will be selected by the appropriate federal agencies in cooperation with TDOT and the MPO and must be included in the TIP. [23 CFR 450.332(b)]

In areas designated as TMAs, the MPO selects all 23 U.S.C. and 49 U.S.C. Chapter 53 funded projects for implementation in consultation with TDOT and public transit operators (except projects on the NHS and Tribal Transportation Program, Federal Lands Transportation Program, and Federal Lands Access Program projects which shall be selected by the appropriate federal agencies in cooperation with the MPO). Tribal Transportation Program, Federal Lands Transportation Program, and Federal Lands Access Program projects shall be selected by the appropriate federal agencies in cooperation with TDOT and the MPO and must be included in the TIP. [23 CFR 450.332(c)]

Federal laws and regulations do not prescribe a process that state DOTs, MPOs and affected public transportation operators must follow to develop their respective TIPs and statewide STIP. Transportation needs vary widely, and it is up to each state to establish a process that meets their particular goals and objectives and those of the local jurisdictions within a state. There are, however, common elements in both state and federal law that govern TIP project selection and implementation. MPOs can select projects using MPO-managed funding sources and work with transit providers to select projects using FTA funds. TDOT selects projects utilizing state funding sources.

Regarding the requirement for both the Work Program and the STIP to incorporate MPO TIPs into the statewide programs and STIP:

- Title 23 U.S.C. 134 and 23 CFR 450.326 requires each MPO to develop a TIP in cooperation with the state DOT and any affected public transportation operator.

Regarding the order of the selection of projects for implementation from the approved Statewide Transportation Plan and four-year STIP, there are common elements in federal Law:

- Title 23 CFR 450.332 states that the projects in the first year of an approved TIP shall constitute an agreed list of projects for funding and implementation, and no further action is required by the implementing agency to proceed. This is also applicable to all the projects in the statewide STIP, including those outside the jurisdiction of the MPOs.

Regarding the need to revise, modify, advance, or delete projects in the approved Work Program, STIP and/or TIPs, federal laws and regulations make provisions for this flexibility:

- Title 23 CFR 450.326 states that an MPO TIP may be revised at any time under procedures agreed to by the state, MPOs, and public transportation operators, consistent with TIP development procedures established in that section of federal regulations.

5.3.6 Projects to Be Included in the TIP

The TIP must include:

- Capital and noncapital surface transportation projects (or phases of projects) within the boundaries of the metropolitan planning area proposed for funding under 23 U.S.C. and 49 U.S.C. Chapter 53 (including transportation alternatives, associated transit improvements; Tribal Transportation Program, Federal Lands Transportation Program, and Federal Lands Access Program projects; HSIP projects; trails projects; accessible pedestrian walkways; and bicycle facilities). [23 CFR 450.326(e)]
- All regionally significant projects requiring an action by FHWA or FTA, regardless of funding source. [23 CFR 450.326(f)]
- For information purposes, all regionally significant projects proposed to be funded with federal funds other than those administered by the FHWA or FTA, as well as all regionally significant projects to be funded with non-federal funds. [23 CFR 450.324(f)]

The following types of projects may be included in the TIP, but are not required: [23 CFR 450.326(e)]

- Safety projects funded under 23 U.S.C. 402 and 40 U.S.C. 31102

- Metropolitan planning projects funded under 23 U.S.C. 104(d), and 49 U.S.C. 5305(d)
- State planning and research projects funded under 23 U.S.C. 505 and 49 U.S.C. 5305(e)
- At the discretion of the state and MPO, metropolitan planning projects funded with Surface Transportation Block Grant, if available to the MPO
- Emergency relief projects (except those involving substantial functional, locational, or capacity changes)
- National planning and research projects funded under 49 U.S.C. 5314
- Project management oversight projects funded under 49 U.S.C. 5327

The TIP must include, for each project or phase (e.g., preliminary engineering (PE), environment/National Environmental Protection Act (NEPA), right of way (ROW), design, or construction), the following: [23 CFR 450.326(g)]

- Phase (type of improvement/service)
- Start and finish termini, where applicable
- Length, where applicable
- Maps to ensure that citizens and stakeholders have a clear understanding of the location where the proposed improvements or services will occur *(Not federally required but it is a good practice.)*
- Estimated total project cost, which may extend beyond the four years of the TIP
- The amount of federal funds proposed to be obligated during each program year for the project or phase (for the first year, this includes the proposed category of federal funds and source(s) of non-federal funds. For the second, third, and fourth years, this includes the likely category or possible categories of federal funds and sources of non-federal funds)
- Identification of the agencies responsible for carrying out the project or phase
- Amount of federal and non-federal funds to be obligated in each fiscal year
- In areas with Americans with Disabilities Act (ADA) required paratransit and key station plans, identification of those projects that will implement these plans

The MPO may group projects that are not considered to be of appropriate scale for individual identification in a given program year. [23 CFR 450.326(h)]

Each project or project phase included in the TIP must be consistent with the approved LRTP/RTP/MTP. [23 CFR 450.326(i)]

5.4 Relationship of the LRTP/RTP/MTP to the TIP/STIP

MPO's TIPs must be incorporated into the statewide STIP by reference. In order to be included in the STIP, an MPO must have an approved LRTP/RTP/MTP in place at the time they submit their TIP (every four years) for approval. TIP projects are required to be consistent with the plan [23 CFR 450.326 (i)]; however, some exempt projects can be programmed as consistent with the plan. TIP projects that are of appropriate scale may be shown as groupings within the plan, i.e.: Bicycle and Pedestrian, ITS/Signalization, Bridge, etc. In these cases, the plan grouping will be referenced.

5.5 Format and Content of the TIP

There currently is no preferred format for the TIP specified in federal laws, but the following outline meets legal requirements and is acceptable to both the FHWA and the FTA.

5.5.1 Introductory Materials

- The official MPO name, state fiscal years covered, and the MPO Board approval date or amendment date should be included on the Cover or Title Page. An endorsement that states the TIP was developed by following federal requirements must be included. This can either be in the form of an MPO resolution approving the TIP or a signature block on the document cover page signed by the MPO chairperson.
- The table of contents should include the title of each section and the beginning page number.
- A list of definitions, abbreviations, acronyms, funding and phase codes should also be included in the TIP.

5.5.2 Narrative

The TIP's narrative should include a statement that the purpose of the TIP is to provide a list of all prioritized transportation projects (including regionally significant projects regardless of funding source) that will cover the next four-year period and that it is consistent with the MPO's plan. It should be indicated that the TIP contains all transportation projects within the designated metropolitan planning area to be funded by 23 U.S.C. and 49 U.S.C. Chapter 53 funds.

The TIP's financial plan should explain how the TIP is financially constrained for each year and demonstrate how to implement it. All financial resources, public and private, that are reasonably expected to be available to the program need to be identified. If an MPO plans to

use innovative financing techniques to fund any needed projects or programs those techniques should also be identified in the financial plan.

The narrative should also include a description of how the MPO developed the TIP in cooperation with the state and public transit agencies, who will provide the MPO with estimates of available federal and state funds for the MPO to develop the financial plan. [23 CFR 450.326(j)]

Describe the project selection process and state that it is consistent with the federal requirements in 23 CFR 450.332(b) for non-TMA MPOs or 23 CFR 450.332(c) for TMA MPOs.

Determine what criteria and process the MPO uses for prioritizing implementation of the transportation plan elements (including multimodal projects) for inclusion in the TIP and explain any changes in priorities from the previous TIP. [23 CFR 450.326(n)(1)] The MPO's TIP project priorities must be consistent with the plan.

TDOT produces the annual listing of projects for which FHWA funds have been obligated in the preceding year. The annual listing of projects for which FTA funds have been utilized in the preceding year needs to be cooperatively developed with the appropriate transit agencies. The MPO should either include this list in the TIP or state in the TIP that it has been published and otherwise made available for public review. [23 CFR 450.334]. MPOs produce an Annual Listing of Obligated Projects (ALOP) at the end of each fiscal year.

Describe what activities the MPO uses to seek public input and how the draft TIP was made available for public review. [23 CFR 450.316 and 23 CFR 450.326(b)] Each MPO should document the techniques used to reach citizens, such as Internet access to documents, flyers, meeting notices, billboards, media outreach, and community meetings, etc. All comments received from the public through this process need to be documented and any revisions that were a result of the feedback received. This process may vary by MPO as it is not standardized. TDOT allows each MPO to set its own criteria and priorities.

According to 23 CFR 450.322, TMAs are required to have a congestion management process (CMP) that provides for the effective management and operation of new and existing facilities using travel demand reduction and operational management strategies. MPOs should include a discussion of the CMP that is in place at the MPO.

By listing the status of current projects, the MPO will have identified any project(s) that have been rescheduled in the proposed TIP that had advanced to the design stage of preliminary engineering and was removed from a previous TIP.

5.6 TIP Submittal and Review Process

The MPO must make the draft TIP available to all reviewing agencies and affected parties and provide adequate opportunity to review and comment on the draft TIP at the time it is circulated for public review.

Before MPO adoption of the final TIP, the MPO must circulate the TIP for review and comment to a variety of state, federal, and public agencies.

Submittal of DRAFT TIP for TDOT Review - ALL MPOs/TPOs

Submit three (3) hard copies and a PDF version (see note at end of instructions) of the draft TIP to:

Senior Planner, Long Range Planning
TN Department of Transportation
Suite 900, James K. Polk Bldg.
505 Deaderick Street
Nashville, TN 37243

The draft TIP will be reviewed by the Long-Range Planning Division, Local Programs Office, Programming and Scheduling Office, Civil Rights, and the Multimodal Division. TDOT divisions have 30-business days to review the draft and provide comments back to the MPO/TPO. To avoid duplication of comments or conflicting comments, the Long-Range Planning Division Senior Planner coordinates the review effort and transmits all TDOT questions and comments in one package back to the MPO/TPO. After all comments have been addressed and the TIP revised and reviewed again by TDOT, the draft TIP will be ready to submit for federal review.

Submittal of DRAFT TIP for FHWA/FTA Review

Once the TDOT review process is complete (comments addressed, TIP revised if needed), MPOs send three (3) hard copies and an electronic version of the Revised Draft TIP to the senior planner in the Long-Range Planning Division for submittal to the federal agencies for their 20-business day review. Please allow up to five (5) days for submittal to the federal agencies to officially start the review process.

Federal comments will be returned after the 20-business day review period. After any comments have been addressed and the draft TIP revised, MPOs should then proceed with their public comment period and Board approval process. It is acceptable, but not advised, for the TIP to undergo federal review and public comment concurrently.

Non-Attainment MPOs/TPOs - Draft Conformity Determination Report

The draft TIP and draft CDR should be submitted to your IAC for review during the timeframe of the TDOT/ federal Review period.

Submittal of FINAL TIP for Inclusion into the STIP

Submit Final TIPs to:

Program Development & Scheduling Office
Tennessee Department of Transportation
Suite 600, James K. Polk Bldg.
505 Deaderick Street
Nashville, TN 37243

Attainment MPOs/TPOs

After the MPO Board has approved the Final TIP, the MPO will submit six (6) hard copies of the Final TIP in 3-ring binders along with an electronic version of the TIP to the Programming Division for submittal to the federal agencies for inclusion in the STIP. Final TIP submission must include Board signed resolution approving the TIP and Board signed Planning Process Certification.

Non –Attainment MPOs/TPOs – Conformity Finding

After the Board has approved the Final TIP and CDR, MPOs submit four (4) hard copies each of the TIP and Conformity Determination Report along with an electronic version of both to the TDOT Long Range Planning Division’s Senior Planner. These will be submitted to FHWA, FTA, and EPA for the 30-business day Conformity Finding period. These copies do not have to be in 3-ring binders. Please allow up to five days for submittal to the federal agencies to officially start the review process.

Non-Attainment MPOs/TPOs – Final TIP Submittal

Once the MPO receives the Conformity Finding Approval Letter from FHWA, the MPO submits six (6) hard copies each of the Final TIP in 3-ring binders and the CDR along with an electronic version of both to TDOT Programming Division for submittal to the federal agencies for inclusion in the STIP. Final TIP submission must include: Conformity Finding Approval letter from FHWA, CDR, Board-signed Resolution approving the CDR, Board-signed Resolution approving the TIP, and Board-signed Planning Process Certification. The TIP cannot be submitted for incorporation into the STIP until it includes a Conformity Finding Approval Letter.

Note: TDOT and FHWA/FTA ask that draft and final PDF documents have search functionality and are posted on a public website.

5.6.1 TIP Review Criteria

During TDOT’s review of the MPO’s TIP, TDOT staff will evaluate whether the TIP is consistent with the following:

- Federal regulation, 23 CFR 450

- TDOT’s programs, including changes in priorities, phasing, project cost estimates, and funding resources and categories, as required by 23 CFR 450.326
- The MPO’s plan’s priorities, projects, funding and policy, goals, and objectives, as required by 23 CFR 450.326(i)

TDOT’s review will also ensure that estimates of total costs and revenues for the program time period are accurate. [23 CFR 450.326(j)]

If TDOT is not able to recommend TIP approval after its review, TDOT staff and the MPO should coordinate to address the deficiencies and issues before forwarding its comments and the TIP submittal package to the TDOT OCT in Long Range Planning at TDOT headquarters.

5.7 STIP and TIP Revisions

To streamline the Statewide Transportation Improvement Program/Transportation Improvement Program (STIP/TIP) operations and meet federal requirements, two categories of actions are hereby established. One category is a “STIP/TIP Amendment” and the other is a “STIP/TIP Administrative Modification.”

5.8 STIP/TIP Amendment

The amendment, when required, must be consistent with 23 CFR 450 including public participation procedures, air quality conformity, and fiscal constraint.

An amendment is a major change in the approved STIP/TIP. It is defined as follows and shown in Table 5.2:

- Adding new funds not currently identified either in a specific project or as available in the STIP/TIP; or
- Adding a new project or deleting a project from the STIP or TIP’s; or
- A major change of project scope, such as a change that is inconsistent with the NEPA documentation or will change the NEPA determination, or a change that affects the approved Air Quality conformity finding; examples include changing the number of through lanes, adding/deleting non-motorized facilities, changing mode (FTA - rolling stock or facility type), changing capital category (FTA), and may include changing termini; or
- Any change requiring a new regional air quality conformity finding; or

- Moving funds between an MPO TIP and the Rural STIP unless a written agreement exists between the MPO and TDOT that such an action may be processed as an administrative modification; or
- Moving funds between an MPO TIP and another MPO TIP unless a written agreement exists between each MPO and TDOT that such an action may be processed as an administrative modification; or
- A greater than 30% cost increase in any phase of a project listed in the current STIP/TIP, except for grouping to grouping transfers as described under administrative modifications.

Table 5.2 – TIP/STIP Amendment Thresholds

Total programmed funding within the approved STIP/TIP	Amendment	Administrative Modification
Up to \$2 million	≥75%	< 75%
\$2 million to \$15 million	≥50%	< 50%
\$15 million to \$75 million	≥40%	<40%
\$75 million and above	≥30%	<30%

The STIP/TIP may be amended at any time, and amendments require federal approval. TDOT will formally send the amendments to either FHWA or FTA by email for approval.

As TIPs are amended, the MPO will send a memorandum and a resolution to TDOT clearly explaining the changes and when action took place, along with the required supporting documentation listed below in section 5.8.1. In order to expedite the review and approval process, TIP amendment and administrative modification correspondence and documentation should be sent to a central email address set up specifically for this purpose: **STIP.Requests@tn.gov**. In the subject line of the e-mail, please indicate whether the amendment or modification is for a highway project or a transit project.

The MPOs do not need to send hard copies of these requests. Scanning in the documents and emailing them to STIP.Requests@tn.gov will be enough for TDOT to process the requests.

5.8.1 Amendment Documentation and Authorization Procedures

Documentation:

- TDOT will send a cover letter to the approving agency (i.e., FTA for transit projects) with a cc to the other agency (i.e., FHWA for highway projects).

- Included in this cover letter will be certification that TDOT has evaluated the documentation and determined that the federal requirements have been met and that the Department endorses the amendment adoption.
- A copy of the original and amended STIP/TIP page, along with documentation supporting fiscal constraint, interested parties' participation (i.e., public participation, stakeholder involvement, and consultation), air quality conformity (in non-attainment and/or maintenance areas only), and documentation of required MPO certifications.
- For projects included in a TIP, the cover letter will be accompanied by the MPO resolution adopting the amendment.

Amendments will be reviewed by the federal agencies within 10 business days with a formal written approval for all amendments meeting the federal regulations.

Authorization:

Project authorization requests are matched to the STIP prior to approval. Therefore, all amendments to the STIP need to be approved by FHWA prior to authorization approvals.

STIP/TIP Administrative Modification:

A STIP/TIP change not requiring a "STIP/TIP Amendment" as described above is defined as a "STIP/TIP Administrative Modification."

A STIP/TIP Administrative Modification is a minor change from the approved STIP/TIP. It is to meet requirements of the 23 CFR 450 and is defined as follows:

- A minor change in project description that does not change the Air Quality conformity finding in maintenance and non-attainment areas or change the project scope; or
- Shifting funds between projects (i.e., funding sources and projects already identified in the STIP/TIP); or
- Adding an amount of funds already identified in the STIP/TIP for the current or previous year(s) if the funds are currently identified in the STIP/TIP either in an existing project or as available funds; or
- Moving projects from year to year within an approved STIP/TIP, except those that cross air quality horizon years; or
- A change not meeting the definition of an amendment that does not add or delete a project from the STIP/TIP; or
- Adding a prior phase, such as environmental or location study, preliminary engineering or right-of-way, to a project in the STIP/TIP.

- Moving funds between two similarly labeled groupings, regardless of the percent of change.

5.8.2 Administrative Modification Documentation and Authorization Procedures:

Documentation:

Administrative modifications do not require federal approval, since administrative modifications will be submitted on an as-needed basis to TDOT LRP, FHWA, and FTA. The documentation provided will include the revised project pages clearly indicating changes as administrative modification and the revised financial tables relating to these changes.

Authorization:

- In the Financial Management Information System (FMIS) authorization request, under “State Remarks”, TDOT will provide a brief clarification that the STIP has been modified and that the modification will be documented through the next quarterly submittal – providing the date of the next submittal.

5.8.3 Project Groupings:

Project groupings (23 CFR 450.326 (h)) may only include projects that meet the following conditions: non-regionally significant; environmentally neutral; and in non-attainment and maintenance areas exempt from air quality conformity. Additionally, all projects located within an urbanized area must be included in the MPO TIP, including those projects that are eligible for grouping. Therefore, projects eligible for groupings that are located within the urbanized MPO planning area, may be grouped within the MPO TIP or listed individually in the MPO TIP.

6.0 Public Participation

6.1 Purpose

MPOs are required to develop and maintain Public Participation Plans (PPP) in order to meet federal requirements. The PPP defines the process for which the MPO will provide interested parties reasonable opportunities to review and comment on MPO core documents and products such as the UPWP, the LRTP/RTP/MTP, and the TIP. MPOs are required to make information available to the public and interested parties throughout the transportation planning process.

6.2 Authority

Table 6.1 – Public Participation Federal and State Guidance

Statute	Summary
Federal	
23 CFR 450.316	Describes the requirement for MPOs to develop a PPP and provide reasonable opportunities for all parties to participate and comment on MPO planning products.
23 U.S.C. 134	Describes the requirement for MPOs to provide reasonable opportunities for all parties to participate and comment on LRTP/RTP/MTPs and TIPs.
Title VI of the Civil Rights Act	Prohibits federally assisted programs from discrimination based on race, color, or national origin.
Executive Order 12898	Describes requirements for federal actions to address environmental justice (EJ) concerns for low-income and minority populations.
Executive Order 13166	Describes requirements to develop plans for people for whom English is not their native language or who have limited ability to read, speak, write, or understand English (LEP).
Americans with Disabilities Act (ADA)	Prohibits discrimination and ensures equal opportunity for persons with disabilities.
State	
*T.C.A. Title 8, Chapter 44, Part 1	Describes general provisions and policies regarding public meetings including public notice, minutes, participation, electronic communication, etc.

**Indicates State Statute*

6.3 Federal Requirements for Public Participation

FHWA and FTA set the federal regulations for MPOs in conducting public participation activities during the transportation planning process. There are also additional federal regulations and

executive orders that determine how an MPO's public participation activities are planned and conducted.

6.3.1 Development of a Public Participation Plan

23 CFR 450.316 details the requirements for MPOs when developing their Public Participation Plans (PPP). Each MPO is required to have a PPP.

According to 23 CFR 450.316(a), MPOs are required to develop and maintain a PPP that defines the process for which the MPO provides citizens, stakeholders, public agencies, and other interested parties with reasonable opportunities to be involved in the metropolitan transportation planning process.

MPOs must develop their PPP in coordination with all interested parties and must, at least, detail explicit procedures, strategies, and desired outcomes for [23 CFR 450.316(a)(1)]:

- Provide enough public notice of public participation activities and the time for public review and comment at key decision points thus providing a reasonable opportunity to comment on the proposed LRTP/RTP/MTP and the TIP
- Provide adequate notice and reasonable access to information about transportation issues and processes
- Use of visualization techniques to describe complex information found in Performance Based Planning and Programming
- Utilize technology for public information (technical information and meeting notices)
- Ensure all public meetings are held at convenient times and accessible locations
- Catalog all comments received from the public during the planning process and how those comments affected changes to the development
- Ensure that those traditionally underserved by existing transportation systems, individuals who have a hard time accessing employment and other services, are included in the transportation planning process, (e.g.: low-income and minority households)
- Allow additional opportunity for public comment, if a core document final version is significantly different from the version that was made available during the public comment period
- Coordination between the MPO and statewide transportation planning public participation and consultation process

- Periodic reviews of the effectiveness of the public participation activities included in the PPP to ensure that the procedures and strategies are allowing for a full and open participation process.

It is important to allow enough time for the public to give input into the process when developing the PPP, while also finding a balance between addressing appropriate public comments and adopting the LRTP/RTP/MTP within the required timeframe, including any meetings or hearings that take place during this timeframe. It is also important to make sure that the MPO allows enough time to respond to all comments received.

- If comments that are received make a significant contribution to a draft plan or TIP, it is important to document them whether they are received in written or oral form. The comments should be documented as either a summary or analysis and included in the final plan or TIP, as required by 23 CFR 450.316(a)(2).
- When a PPP is shared for public comment, it is required to have a minimum comment period of at least 45 calendar days. If no significant changes have been made to the draft document after the 45-day comment period, it may be adopted by the MPO. If significant changes occur, the MPO determines the additional window of public comment. When the PPP has been approved, copies of the document must be provided to FHWA and FTA for informational purposes. The document must also be posted on the MPO's website until another version of the document is adopted. [23 CFR 450.316(a)(3)]

MPOs should coordinate with agencies and officials responsible for other types of planning activities within the MPO area when developing their plan and TIPs, such as planning for growth, economic development, tourism, human services programs, natural disaster risk reduction, environmental protection, airport operations, and freight movement. In addition, the MPO must develop the plan and TIPs with due consideration of other related planning activities within the metropolitan area, and the process must provide for the design and delivery of transportation services within the area that are provided by 23 CFR 450.316(b).

- MPOs that include agencies that receive FTA assistance under 49 U.S.C. Chapter 53
- Governmental agencies and nonprofit organizations (including representatives of the agencies and organizations) that receive federal assistance from a source other than the USDOT to provide non-emergency transportation services
- MPOs that receive assistance under the federal lands and the Tribal Transportation Program, 23 U.S.C. 201-204.

- According to 23 CFR 450.316(c), if tribal lands are included in an MPO area, the MPO must appropriately coordinate with the tribal government(s) in the development of the LRTP/RTP/MTP and the TIP.
- 23 CFR 450.316(e), states that MPOs must develop a documented process that outlines the roles, responsibilities, and key decision points for consulting with other governments and agencies. This process may be included in the MPO's Metropolitan Planning Agreement.
- MPOs are required to engage and fulfill the activities that they include in their PPP. If they include it in the PPP, then the MPO must abide by what is included for each activity.

6.3.2 Federal Public Participation Requirements Specific to the LRTP/RTP/MTP

MPOs are required to provide interested parties reasonable opportunity to comment on the LRTP/RTP/MTP during development, using the techniques identified in the MPOs adopted PPP. Some MPOs develop a PPP specific to the plan as part of the scope of the project. MPOs that develop project specific PPPs are required to ensure that the project specific PPP is consistent with the overall PPP that the MPO has adopted. [23 CFR 450.324(j)]

MPOs must make the plan available for public review in both paper copies and electronic format, such as the internet. [23 CFR 450.324(k)]

6.3.3 Federal Public Participation Requirements Specific to the TIP

According to 23 CFR 450.326(b) and 23 U.S.C. 134(j), MPOs are required to provide interested parties adequate opportunity to comment on the proposed TIP, as required by the PPP. The MPO must also make the TIP available for public review in both hard-copy and electronic format.

6.3.4 Public Participation for the Federal Certification Review

During a certification review for a TMA/MPO, the FHWA and FTA provide opportunities for public participation within the metropolitan planning area under review. The FHWA and the FTA are required to consider the public input received in arriving at a decision on a certification action. This process can be used by the MPOs to improve the overall delivery of future public outreach based on the input received during the certification review process. [23 CFR 450.336(b)(4)]

6.4 Civil Rights

6.4.1 Americans with Disabilities Act

The Americans with Disabilities Act of 1990 (ADA) prohibits the exclusion of persons with disabilities from participation in services, programs, or activities of a public entity, including

MPOs. MPOs also have the responsibility to provide reasonable accommodations to those with disabilities who require special services to access information or participate in MPO activities. [42 U.S.C. 12131-12134]

Table 6.2 below lists out the frequently asked questions regarding Metropolitan & Rural Planning Organizations ADA Transition Plans submissions.

Table 6.2 – Metropolitan & Rural Planning Organizations ADA Transition Plan F.A.Q.s

Question	Response
If an agency completes their ADA plan by Dec 31, 2019, do they need to submit the self-certification form, signed by the Mayor?	Yes
Can agencies list two (2) officials instead of one?	Yes, they need to make sure that all stakeholders work together and keep uniformly informed
We are currently asking agencies who are still working on their ADA plans to fill out only the self-evaluation form. Are they required to complete the self-certification form after their ADA plan is complete?	Yes, every year they will need to provide an update on what has been checked off on the plan.
Who signs the “Certified by” section?	Whoever is the highest ranking official. Most are the Mayors, but a City Manager is acceptable too. This also depends on form of government when dealing with municipalities: either a strong mayor or city manager/administrator form of government.
Who would be the Official in charge of implementing the Transition Plan?	It depends on who is responsible for the work. Is the city manager the one dictating the work, or maybe it is posted to the city engineer? ADA Coordinators rarely have power to change budgets.
Where is the form for the ADA Self-Evaluation found?	TDOT’s website https://www.tn.gov/tdot/government/g/ada-office0/transition-plan.html
Who should oversee developing the Transition Plan?	This generally is an ADA Coordinator, but can be the person who is most knowledgeable about the development
Does TDOT have any examples of TN communities that have passed PROWAG standards?	No. They just say that they have adopted the standards.

7.0 Performance Management

7.1 Purpose

In accordance with 23 CFR § 450.314 (h), the MPO, TDOT, and the transit agency[ies] shall jointly agree upon and develop specific written provisions for cooperatively developing and sharing information related to transportation performance data, the selection of performance targets, the reporting of performance targets, the reporting of performance to be used in tracking progress toward attainment of critical outcomes for the region of the MPO (see 23 CFR § 450.306(d)), and the collection of data for the state asset management plan for the National Highway System (NHS).

7.2 Authority

Table 7.1 – Performance Management Federal and State Guidance

Statute	Summary
Federal	
23 U.S.C. 150	Describes the national goals, establishment of performance measures and performance targets, and reporting requirements for the federal-aid highway program.
49 U.S.C. 5301	Describes the national policy and purposes for funding public transportation systems.
23 U.S.C. 134	Describes the metropolitan transportation planning process.
49 U.S.C. 5303	
23 CFR 450	Describes planning assistance and standards.
23 CFR 490	Describes national performance management measures.

7.3 Performance Management Terminology

Listed below are key performance-based planning and programming (PBPP) terms:

Goal: a broad statement that describes a desired end state. ³

Objective: a specific, measurable statement that supports achievement of a goal. ⁴

Performance Measure: an expression based on a metric that is used to establish targets and to assess progress toward meeting the established targets. [23 CFR 450.104 and 23 CFR 490.101]

Metric: a quantifiable indicator of performance or condition. [23 CFR 490.101]

³ FHWA Performance-Based Planning and Programming Guidebook, page 12.

http://www.fhwa.dot.gov/planning/performance_based_planning/pbpp_guidebook/.

⁴ FHWA Performance-Based Planning and Programming Guidebook, page 12.

http://www.fhwa.dot.gov/planning/performance_based_planning/pbpp_guidebook/.

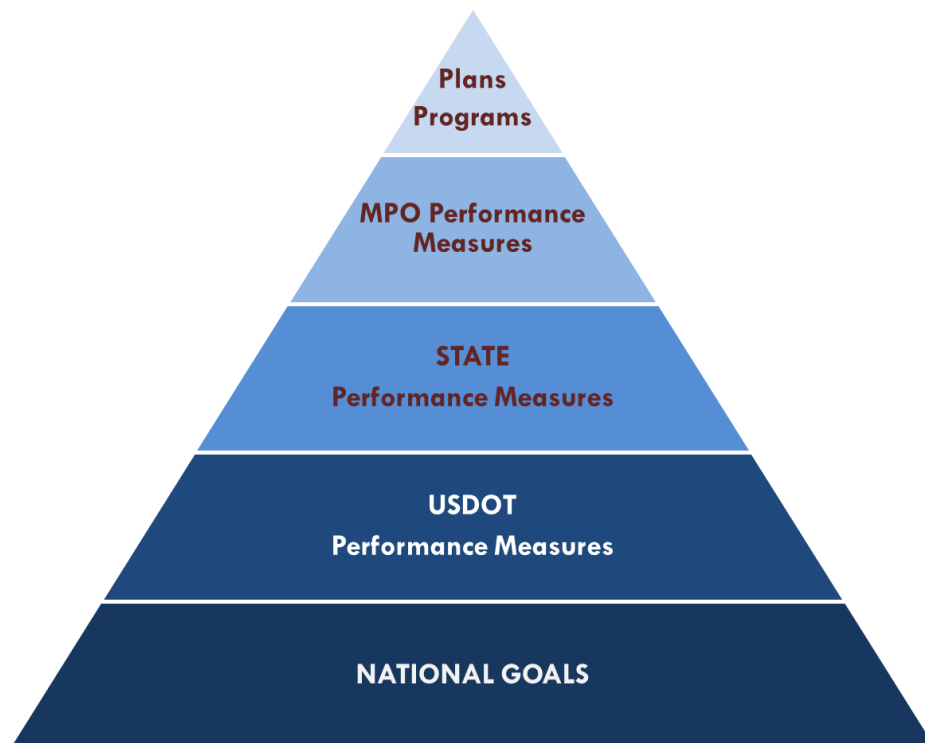
Target: a quantifiable level of performance or condition, expressed as a value for the measure, to be achieved within a time period. [23 CFR 490.101]

7.4 National Transportation Performance Management Framework

When the MAP-21 legislation was enacted it established a framework for transportation performance management. The FAST Act includes provisions to support and enhance these reforms. The USDOT is now required to establish PMs related to the seven national goals defined by Congress: *Safety, infrastructure Condition, Congestion Reduction, System Reliability, Freight Movement and Economic Vitality, Environmental Sustainability, and Reduced Project Delivery Delays*. Transportation agencies are required to set performance targets to support the measures and monitor and report on progress toward achievement of the targets. There are several federal regulations associated with Transportation Performance Management. Table 7.1 provides those statutes applicable to the MPO process.

Figure 7.1 shows the role that Congress, USDOT, states, MPOs, and public transportation providers each play in performance management.

Figure 7.1 – Performance Reporting Process



7.4.1 Establish National Goals

23 U.S.C. 150(a), state that the MAP-21 legislation regarding performance management will transform the federal-aid highway program and provide a means to the most efficient investment of federal transportation funds by refocusing on national transportation goals, increasing the accountability and transparency of the federal-aid highway program, and improving project decision-making through PBPP.

7.4.2 Establish Performance Measures

According to 23 U.S.C. 150(c), USDOT is required to promulgate rulemakings that establish performance measures tied to the seven (7) national goal areas. There are three primary categories for the federal performance measure rules: safety, system maintenance, and system performance.

- **Safety** performance measures track the number and rate of highway and transit fatalities and serious injuries; and the number of pedestrian and non-motorist fatalities and serious injuries.
- **System maintenance** measures track the condition of roads, bridges, and transit capital assets including equipment, rolling stock, and transit infrastructure and facilities to assess how well these assets are being maintained.
- **System performance** measures track highway congestion and travel reliability, freight movement reliability, and on-road mobile source emissions to assess how well a corridor is moving people, not just vehicles.

Table 7.2 shows the performance measure rules that have been finalized as of May 2017.

Table 7.2 - Performance Measures Rules

Rule	Performance Measures
Highway Safety Safety Performance Management Measures <i>Final Rule published March 15, 2016. Effective date April 14, 2016.</i>	<ul style="list-style-type: none"> • Number of fatalities. • Rate of fatalities per 100 million vehicle miles traveled (VMT). • Number of serious injuries. • Rate of serious injuries per 100 million VMT. • Number of non-motorized fatalities and serious injuries.

Highway Infrastructure Condition Assessing Pavement and Bridge Condition for the National Highway Performance Program <i>Final Rule published January 18, 2017. Effective date May 20, 2017.</i>	<ul style="list-style-type: none"> • Percent of pavements on the Interstate system in good condition. • Percent of pavements on the Interstate system in poor condition. • Percent of pavements on the non-interstate NHS in good condition. • Percent of pavements on the non-interstate NHS in poor condition. • Percent of NHS bridges classified as in good condition. • Percent of NHS bridges classified as in poor condition.
Highway System Performance Assessing Performance of the NHS, Freight Movement on the Interstate System, and Congestion Mitigation and Air Quality Improvement Program <i>Final Rule published January 18, 2017. Effective date May 20, 2017.</i>	<ul style="list-style-type: none"> • Percent of person-miles traveled on the Interstate system that are reliable. • Percent of person-miles traveled on the Non-Interstate NHS that are reliable. • Percent change in tailpipe CO2 emissions on the NHS from 2017. * • Percent of Interstate system mileage providing for reliable truck travel times. • Annual hours of peak-hour excessive delay per capita. • Percent of non-SOV travel. • Total emissions reduction.
Transit Asset Management Transit Asset Management and National Transit Database <i>Final Rule published July 26, 2016. Effective date October 1, 2016.</i>	<ul style="list-style-type: none"> • Percent of revenue vehicles that have met or exceeded their useful life benchmark. • Percent of non-revenue vehicles that have met or exceeded their useful life benchmark. • Percentage of track segments with performance restrictions. • Percentage of facilities rated in poor condition.

*As of May 2017, FHWA delayed the CO2 emissions performance measure effective date indefinitely.

7.4.3 Use of a Performance-Based Planning and Programming (PBPP) Process

According to 23 CFR 450.306(a), MPOs must develop plans and TIPs through a performance-driven, outcome-based approach to planning for the metropolitan areas of the state, in cooperation with the state and public transportation operators.

An MPO's planning process should support the national goals, with the establishment and use of a performance-based approach to transportation decision-making. [23 CFR 450.306(d)(1)]

As part of the MPO's metropolitan planning process, MPOs need to include transportation plans and processes of other state or public transportation providers either directly or by reference, the goals, objectives, performance measures, and targets used for performance-based programs. Here is a list of the plans that should be referenced:

- The state asset management plan for the NHS.

- The Transit Asset Management Plan (TAMP).
- Applicable portions of the Highway Safety Improvement Program (HSIP), including the Strategic Highway Safety Plan (SHSP).
- The Public Transportation Agency Safety Plan (PTASP **pending*).
- Other safety and security planning and review processes, plans, and programs, as appropriate.
- The Congestion Mitigation and Air Quality (CMAQ) Improvement Program performance plan, as applicable.
- Appropriate metropolitan portions of the State Freight Plan.
- The congestion management process, if applicable.
- Other state transportation plans and transportation processes required as part of a performance-based program.

7.4.4 Coordination Requirements

Federal legislation and regulations require states, MPOs and public transit providers to coordinate when establishing targets and assessing progress. This is because they have overlapping performance management roles and responsibilities such as using the same data sources when addressing performance measures.

23 CFR 450.104 defines coordination as the cooperative development of plans, programs, and schedules among agencies and entities with legal standing and adjustment of such plans, programs, and schedules to achieve general consistency, as appropriate.

MPOs are required to coordinate the selection of targets with the relevant state(s) and public transportation providers to ensure consistency. [23 CFR 450.306(d)] As a result, each state should select and establish performance targets in coordination with the MPOs. [23 CFR 450.206(c)(2)]

The coordination process must be formalized. All parties (MPO, state, and providers of public transportation) must jointly agree to develop specific written provisions for the following: [23 CFR 450.314(h)]

- Coordinate and develop information related to transportation performance data.
- Selection of performance targets.
- Reporting of performance targets.

- Reporting of performance to be used in tracking progress toward attainment of critical outcomes for the MPO.
- Collection of data for the state asset management plans for the NHS.

According to 23 CFR 450.314(h), these provisions must be documented as either part of the metropolitan planning agreements required under 23 CFR 450.314(a), (e), and (g) or in some other way outside of the metropolitan planning agreements as agreed upon by all parties to the agreement.

7.4.5 Establish Performance Targets

Performance targets must be established for each of the performance measures USDOT identified, by states, MPOs, and public transportation providers. Note that bi-state MPOs must adopt the targets of each state DOT or establish single performance targets for their planning area. Performance measurement for total emissions, non-SOV travel, and peak-hour excessive delay has special features, and requires a unified target for the entire urban area if not in air quality attainment.

No later than one year after effective dates of the USDOT performance measure rules, states must establish performance targets. [23 CFR 450.206(c)(2)] MPOs have no later than 180 days after the state or public transportation provider establishes performance targets to establish their own performance targets. [23 CFR 450.206(d)(3)]

Deadlines for establishing targets vary by performance measure area. MPOs can either adopt the state targets or they may establish their own targets for each measure. If an MPO chooses to establish their own targets they agree to plan and program projects that contribute toward the accomplishment of the relevant state DOT targets or committing to quantifiable target unique to the MPO's metropolitan planning area.

7.4.6 Monitor and Report

To ensure accountability and transparency in transportation decision-making, MAP-21 set requirements for states, MPOs, and public transportation providers to report on progress towards meeting performance targets.

MPOs must include a description of the performance measures and targets used in assessing the performance of the transportation system in the development of the Long-Range Transportation plan. [23 CFR 450.324(f)(3)] A system performance report evaluating the condition and performance of the transportation system must also be included in the plan with respect to the MPO's targets, and report on progress achieved by the MPO in meeting the performance targets in comparison with system performance recorded in previous reports and baseline data. [23 CFR 450.324(f)(4)]

An analysis report must be included for MPOs that develop multiple scenarios in their plan. The report should describe how the preferred scenario (i.e.: No-Build, current funding, added funding linked to Return on Investment (ROI)) compares the conditions and performance of the transportation system and how changes in local policies and investments could impact the costs necessary to achieve the identified performance targets. [23 CFR 450.324(f)(4)(ii)]

When MPOs develop the Transportation Improvement Program (TIP), it should be consistent with achieving the MPO's performance targets. [23 CFR 450.326(c)]. The TIP should include a description of the anticipated effect of the TIP toward achieving the performance targets identified in the plan, linking investment priorities to those performance targets. [23 CFR 450.326(d)]

7.5 Transportation Performance Measurement in Tennessee

As part of TPM, state DOTs are required to establish performance targets for national performance measures related to safety, infrastructure conditions, and system performance. states are currently in the process of reporting these targets which, when finalized, will be available for public review through FHWA's TPM website.

TPM is also used to make decisions about where to invest resources. Asset management plans provide the framework for making these investment decisions while transportation and planning agencies document processes, investment strategies and trade-off decisions in various management plans.

TDOT has implemented targets for the following measures:

- PM1 Safety Performance;
- PM2 Bridge;
- PM2 Pavement; and
- PM3 System Performance.
- Transit Asset Management

8.0 Title VI and Nondiscrimination Program

Guidance for MPO

8.1 Purpose

This section provides guidance to MPOs and TDOT staff to follow when developing, maintaining, and reviewing the metropolitan planning process for consistency with Title VI of the Civil Rights Act of 1964 and other nondiscrimination authorities.

8.2 Authority

Federal financial assistance recipients must comply with several federal civil rights requirements. One of which is the Title VI of the Civil Rights Act of 1964. The Title VI of the Civil Rights Act of 1964 states that, “No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance.[42 U.S.C. 2000d]

There are several other nondiscrimination statutes that prohibit discrimination based on sex, age, or disability. Section 162(a) of the Federal-Aid Highway Act of 1973, [23 U.S.C. 324], prohibits discrimination based on sex. The Age Discrimination Act of 1975 [42 U.S.C. 6101], prohibits discrimination based on age and both Section 504 of the Rehabilitation Act of 1973 [29 U.S.C. 701] and the Americans with Disabilities Act (ADA) of 1990 [42 U.S.C. 12131] prohibit discrimination based on disabilities.

Table 8.1 – Title VI Federal and State Guidance

Statute	Summary
20 U.S.C. 1681 et seq., Civil Rights Restoration Act of 1987	Clarifies congressional intent to prohibit discrimination in all programs and activities of federal-aid recipients, regardless of whether they are federally assisted.
23 U.S.C. 324, Highway Act of 1973	Adds sex as a protected class and authorizes the use of Title VI enforcement measures for sex discrimination.
29 U.S.C. 701 et seq., Section 504 of the Rehabilitation Act of 1973	Prohibits discrimination based on disability in federally funded programs or services.
42 U.S.C. 2000d-2000d-7, Title VI of the Civil Rights Act of 1964	Provides that no person in the United States shall, on the grounds of race, color, or national origin, 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.
42 U.S.C. 6101 et seq., Age Discrimination Act of 1975	Prohibits discrimination based on age in any federally funded program or activity.
42 U.S.C. 12131 et seq., ADA of 1990	Prohibits discrimination based on disability in programs or services operated by government entities.

Statute	Summary
49 CFR 27, Nondiscrimination Based on Disability in U.S. DOT – Assisted Programs	Codifies ADA/504 for U.S. DOT programs, services, and activities.
Title VI	
23 CFR 200 et. seq., State Transportation Agency Nondiscrimination	Codified Title VI for FHWA programs, services and activities.
23 CFR 450.336, Self-certifications and federal Certifications	Requires the metropolitan transportation planning process be carried out in accordance with Title VI and other nondiscrimination requirements.
49 CFR 21 et seq., Nondiscrimination in U.S. DOT Assisted Programs	Codifies Title VI for U.S. Department of Transportation programs, services, and activities.
Disadvantaged Business	
49 CFR 26, DBE	Establishes federal guidelines for DBE participation in U.S. DOT-funded contracts.
Environmental Justice	
Executive Order 12898 (1994)	Directs federal agencies to address disproportionately high and adverse human health or environmental effects in programs, policies, and activities on minority populations and low-income populations.
DOT Environmental Justice Order 5610.2(a) (2012)	Reaffirms U.S.DOT commitment to EJ and provides steps to prevent and/or address disproportionately high and adverse effects to minority or low-income populations through Title VI analyses and environmental justice analyses conducted as part of federal transportation planning and National Environmental Policy Act (NEPA) provisions.
FHWA Environmental Justice Order 6640.23A (2012)	Provides FHWA policies and procedures for use in complying with Executive Order 12898.
Limited English Proficiency	
Executive Order 13166 (2000)	Requires federal agencies to improve access to programs and services for those who are limited English proficient, and to provide guidance to federal-aid recipients on taking reasonable steps to provide meaningful access for those who are Limited English Proficient (LEP).

8.3 Documentation

It is very important to document nondiscrimination policies, procedures, outreach, and other similar information that demonstrates compliance with Title VI and related nondiscrimination requirements. Here is a list of recommended items for documentation:

- All complaint information, including a tracking log of complainant, date of complaint, basis for complaint, and complaint disposition.
- Scrapbook all outreach events intended to increase participation and solicit feedback from low-income and minority communities.
- Measures of effectiveness reports detailing representative public participation.

- Lists of MPO committee members by race, ethnicity, age, and whether disabled.
- Updated community characteristics inventories showing the MPO's geographic area broken down by socioeconomic factors.
- Community Impact Assessments that evaluate the enhancements and negative impacts of the MPO's plans.
- The MPO's LEP, Title VI, EJ, and nondiscrimination assurance documents. Samples of MPO meeting advertisements, contracts, and other documents containing nondiscrimination information.
- Records of all internal and external Title VI/Nondiscrimination reviews, results, and corrective action, if any.
- Lists of staff nondiscrimination training including the date, number of attendees, and the training subject.
- Documents showing strong practices, lessons learned, nontraditional partnerships, etc.

8.4 Limited English Proficiency (LEP)

EO 13166 directs recipients of federal financial assistance to take reasonable steps to provide LEP individuals with meaningful access to its programs, activities and services.

The key to providing meaningful access for LEP persons is to ensure that effective communication exists between the service provider and the LEP person. To accomplish effective communication, the following actions and discussions are considered appropriate at a division/program level:

- Perform a needs assessment.
- Provide for oral language assistance.
- Notify LEP customers of the availability of language assistance services.
- Translate vital documents in languages other than English into appropriate language.
- Train staff.
- Develop written procedures.
- Monitor and evaluate access to language assistance.

TDOT uses a Four Factor Analysis to Which MPOs can Refer. However, it is acceptable for MPOs to use FHWA's definition of traditionally underserved populations in their analyses rather than TDOT's.

Factor 1: Number or Proportion of LEP Persons eligible to be served or likely to encounter TDOT programs, activities or services. To determine the number of LEPs in TDOT's service area

(statewide), the Civil Rights Division (CDR) utilized the population estimations provided in the 2010 US Census. This data was used to determine 1) the LEP populations represented in the state, 2) Percentages of LEPs in the service areas, 3) whether LEP groups reach and/or exceed 5% the Safe Harbor stipulation, and 4) where the greatest population of LEPs reside in Tennessee.

According to the 2010 census, Tennessee's population is estimated to be 6,346,105. White persons not Hispanic represent 75.6%; African Americans represent 16.7%; persons of Latino/Hispanic origin represent 4.6%; Asian persons represent 1.4%; American Indian and Alaska Native persons represent .3%; and Native Hawaiian and Other Pacific Islanders represent .1% of the total population.

Based on the relatively high percentage of Latino/Hispanic residents in the state, the CRD focused its analysis on this group.

Factor 2: Frequency with which LEP individuals encounter TDOT programs, activities or services.

Based on the assessments conducted in the area of LEP utilization, there has been little to no contact with LEP individuals in the service areas during the reporting period.

TDOT's 5311 subrecipients reported little to no contact with LEP individuals during the reporting period, including Southwest TN Human Resource Agency, First TN Human Resource Agency, Mid- Cumberland Human Resource Agency, Upper Cumberland Resource Agency, Southeast TN Human Resource Agency, Northwest TN Human Resource Agency, Delta Human Resource Agency, South Central TN Human Resource Agency, East TN Human Resource Agency, Hancock County Rural Transportation, and the City of Pigeon Forge. The City of Gatlinburg serves as a transportation provider in a tourist/resort area. Subsequently, this service provider reflects a substantial amount of contact with LEP individuals (20%). It is assumed that the riders are tourist, and that this number will fluctuate with the tourist seasons.

Factor 3: Nature and importance of the program, activity or services provided by TDOT to the LEP population.

Transportation plays an important role in the lives of the LEP individuals and the citizens of Tennessee. When transportation decisions are made, the LEP and minority communities are normally impacted the greatest. TDOT is committed to providing safe and reliable transportation services to the LEP population as well as all citizens of Tennessee.

TDOT's most critical services are those related to public transportation, right of way acquisitions, public participation (public information or planning meetings), safety during construction, and providing the ability to file complaints.

Factor 4: Resources available to TDOT and overall costs to provide LEP assistance.

Currently, TDOT's resources consist of a department employee volunteer list.

In situations where TDOT employees cannot provide services, i.e., an unfamiliar Language or dialect, a legal matter or need for expert testimony, TDOT utilizes AVAZA for its translation and interpreting needs. Payment for these professional services is expended when services are rendered.

Tennessee, according to the 2010 US Census, has 6,346,105 people living throughout the 95 counties.

TDOT Divisions/Program Directors are responsible for ensuring that meaningful services to LEP persons are provided in their respective divisions/programs. Additionally, the designated Title VI Liaison will continuously monitor their respective division/programs to ensure LEP requirements are fulfilled, report quarterly on LEP service usage, and report annually on the accomplishments and upcoming goals relating to LEP activities to the TDOT CRD Title VI Program.

To date, the Title VI Program staff assesses whether TDOT's division/program's procedures allow LEP persons to overcome language barriers and participate in a meaningful way in the division/program's activities and services. The division/program's appropriate use of methods and options detailed in this LEP Plan is monitored to ensure the agency complies with LEP requirements and the Title VI of the Civil Rights Act of 1964 mandates.

8.5 Environmental Justice (EJ)

TDOT complies with Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations along with the Department of Transportation Order 5610.2(a), which defines three fundamental principles:

- To avoid, minimize, and/or mitigate disproportionately high and adverse human health and environmental effects, including social and economic effects on minority and low-income populations.
- To ensure the full and fair participation by all potentially affected communities in the transportation decision making process.
- To prevent the denial of, reduction in or significant delay in the receipt of benefits by minority and low-income populations.

TDOT has established a process to ensure the appropriate application of these principles in the decision-making process. The planning and environmental divisions utilize GIS mapping to collect and analyze data.

During the development of a project, the departments conduct a benefits and burdens analysis, focusing on the traditionally underserved populations. TDOT defines these traditionally underserved populations to include these citizens:

- Environmental justice populations (traditionally underserved communities)
- Elderly
- Disabled
- Public Transportation dependent (those listed by the Census as “occupied units with no vehicle”)
- Low literacy (those with Level 1 literacy)
- Those with limited English proficiency

TDOT’s current Long-Range Plan, which focuses on the transportation trends and issues that often have different implications for the traditionally underserved, serves as an example of the due diligence used in addressing the needs of the low-income and minority populations. The full report is available on TDOT’s website at: <https://www.tn.gov/tdot/long-range-planning-home/25-year-transportation-policy-plan.html>.

The Title VI Program Staff works collaboratively with all divisions, departments and regions to ensure that strict attention is paid to the low-income and minority populations. When environmental and planning documents are developed, they are routed to the Civil Rights Division for review. The Title VI Program Staff reviews all documents for Title VI issues/ramifications. Following the review, a letter of concurrence or a letter with recommendations is issued.

8.6 Disadvantaged Business Enterprise (DBE) Guidance

Each state that has Department of Transportation (DOT)-assisted contracts must have a Disadvantaged Business Enterprise (DBE) program that conforms to the requirements of USDOT’s Uniform Certification Program. The USDOT’s modal agencies are responsible for ensuring implementation of state programs in accordance with applicable laws and regulations.

The Small Business Development Program, within the Civil Rights Office, is charged with the responsibility of ensuring that Tennessee’s Disadvantaged Business Enterprise (DBE) program complies with 49 CFR Part 26. The Tennessee Department of Transportation (TDOT) receives federal financial assistance from the DOT, and as a condition of receiving this assistance, the Civil Rights Office has signed an assurance that it will comply with 49 CFR Part 26.

The DBE program is intended to remedy past and current discrimination against disadvantaged business enterprises, to ensure a “level playing field,” to foster equal opportunity in DOT-assisted contracts, improve the flexibility and efficiency of the DBE program, and to reduce burdens on small businesses.

“The integrity and credibility of the Disadvantaged Business Enterprise (DBE) Program depends upon the establishment of systematic procedures to ensure that only bona fide small business firms owned and controlled by socially and economically disadvantaged individuals participate in the Department of Transportation (DOT) DBE program.” Therefore, ascertaining the eligibility of prospective DBEs is a critically important component of a state’s DBE program. The procedure established to fulfill this aspect of the DBE program is what is known as the Certification Process. This process consists of four sequential steps to certify that the prospective DBE is eligible to participate in the program. The four steps are:

1. Collecting the specified and necessary information from the prospective DBE;
2. Performing an on-site review to ascertain true ownership, management, control and capacity to operate in their selected work category or NAICS code;
3. Applying the criteria for eligibility set forth in the state’s program; and
4. Certifying (or denying) that the prospective DBE is eligible to participate in the state’s DBE program.

Implementation of the DBE program is accorded the same priority as compliance with all other legal obligations incurred by TDOT in its financial agreements with the DOT.

This administration is committed to be open to “outside the box” thinking and proposals to develop a climate of support and inclusion. We intend to involve prime contractors and their association representatives in forums to develop workable alternatives with DBEs, to address matters unique to the industry.

Finally, with the help of the FHWA stewardship initiative, we will continue to direct a new emphasis of “leveling the playing field” in the TDOT construction process.

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9.0 Other Planning Products and Processes

9.1 Congestion Mitigation and Air Quality Improvement Program (CMAQ)

The federal Congestion Mitigation and Air Quality (CMAQ) program provides dedicated federal funding to state Departments of Transportation for projects that improve air quality and reduce congestion. The CMAQ program improves air quality by funding transportation projects and programs that reduce air emissions from cars, trucks and buses (mobile sources) in areas that are currently or have been previously designated air quality non-attainment and maintenance areas, which are the only areas eligible for CMAQ funding.

9.1.1 CMAQ Requirements

CMAQ requirements for TMA MPOs are guided by 23 U.S.C. 149. The purpose is to address congestion management through the transportation planning process while providing safe and effective integrated management and operation of the multimodal transportation system. Types of projects that may be considered are travel demand reduction, job access projects, operational management strategies, retrofit control equipment for diesel engines, bicycle and pedestrian facilities and programs, public-private partnerships to implement projects that reduce emissions, alternative fuels infrastructure, Intelligent Transportation Systems, etc.

For a project to be considered it must first meet the following eligibility criteria:

1. Must be a transportation project.
2. Must be in (or benefit) either a non-attainment or maintenance area.
3. Must have an emissions reduction benefit.

All applications must follow the requirements below:

1. Applications must be submitted using the online e-Grants application software.
2. A separate application package is required for each project proposal.
3. A Letter of Intent is required for each proposed project.

9.1.2 CMAQ Guidance

State DOTs use a range of approaches to develop and implement Congestion Mitigation and Air Quality Improvement (CMAQ) projects. TDOT selects CMAQ projects through a competitive project proposal process. TDOT develops and publishes project evaluation criteria and assigns numerical scores to each criterion. These numerical scores vary depending on the criterion. Proposals that better address each criterion are awarded higher scores.

Project sponsors (e.g., local governments or nonprofit organizations) prepare project proposals, including air emission reduction analyses, and submit them to the MPO that includes a non-attainment/maintenance county within its boundaries. The MPO submits a package of proposals from that region to TDOT. TDOT reviews, evaluates and scores the proposals that are received. Based on that review, staff recommends selected projects be funded. TDOT's Commissioner reviews those recommendations and makes the final selection of projects for funding.

All CMAQ projects must be included in a local transportation improvement program (TIP) developed by the MPO or in the statewide transportation improvement program (STIP) developed by TDOT. All CMAQ projects must also comply with National Environmental Policy Act (NEPA) requirements.

9.2 Freight Planning

Freight planning is an important component of state and metropolitan transportation planning processes. Because of its strategic central location, Tennessee's freight infrastructure is critical to trade flows throughout the country. TDOT's Freight & Logistics Division's Freight Planning Office is responsible for collaborating with transportation agencies and public and private partners to coordinate statewide freight planning efforts. Freight movement accounts for 40% of Tennessee's Gross Domestic Product (GDP) and most of the freight movement in the state is by truck. The key drivers for freight movement in Tennessee are agriculture, automotive and advanced manufacturing. Additionally, FedEx operates their major logistic hub in Memphis. Freeway congestion that impacts travel time reliability of freight movement is a concern for many stakeholders. Tennessee is showing a steady growth in its economy, and that means movement of freight will increase and exacerbate congestion in the urbanized areas and in turn slow movement of freight in the state. Stakeholders recommend the deployment of ITS among other strategies to enhance freight movement throughout the state.

9.2.1 Freight Planning Requirements and Guidelines

According to 23 CFR 450.300(a), MPOs are not required to develop a freight plan, but they are required to maintain a multimodal transportation planning process that encourages and promotes the safe and efficient development, management, and operation of surface transportation systems to serve the mobility needs of people and freight.

23 CFR 450.306(b)(6) states that the planning process must provide for consideration and implementation of projects, strategies, and services that will increase accessibility and mobility of people and freight. The process should also enhance the integration and connectivity of the transportation system, across all modes, for people and freight [23 CFR 450.30(b)(6)].

MPOs must provide reasonable opportunities for input to public ports, freight shippers, and freight transportation service providers throughout the metropolitan planning process [23 CFR 450.316(a)]. MPOs must also allow for input and comment during the LRTP/RTP/MTP planning process [23 CFR 450.324(j)].

The goals, objectives, performance measures, and targets that are included in the State Freight Plan must also be included in the metropolitan transportation planning process, either directly or by reference. [23 CFR 450.306(4)(vi)]

During the development of the plan and TIP, MPOs should coordinate with agencies and officials that are responsible for other planning activities within the MPO area that are affected by transportation. For freight-related transportation projects within MPO boundaries, MPOs should consider the following points as they address freight-related planning activities:

- Many freight-related, transportation projects qualify for National Highway Freight Program (NHFP) dollars. When considering freight-related projects, it is important for the Freight Planning Office to ensure that the respective MPOs are aware of all avenues of funding and that MPOs are coordinating with TDOT to ensure that funding is utilized in the best way possible.
- MPOs need to proactively address downtown urban core strategies as the landscape for freight deliveries evolves. MPO freight planning in these core areas should address planning from construction to urban freight strategies and land use. These strategies will not all look the same as not all MPOs in Tennessee have the same levels of development in their downtown cores.

For more information on how MPOs and TDOT can partner in these efforts, please contact the Bureau Chief of Freight & Logistics, Freight Planning Manager, or Multimodal Freight Planner, to keep them informed of freight-related planning and projects in their respective MPOs. TDOT Freight & Logistics Division's Freight Planning Office can also proactively assist MPOs with freight planning efforts during down times as well.

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10.0 Intelligent Transportation Systems (ITS)

TDOT currently operates four Transportation Management Centers (TMCs) 24 hours per day, 7 days per week in the following MPOs: Knoxville, Chattanooga, Nashville, and Memphis. The TMCs are responsible for identifying and managing incidents as well as working to prevent secondary crashes. TMC operators are provided a variety of tools to perform their duties including closed circuit television (CCTV) Cameras, dynamic message signs (DMS), radar detection systems (RDS), video detection systems (VDS), highway advisory radio (HAR), height and speed warning systems, a fog warning system, portable variable message signs (PVMS), and portable CCTV (PCCTV) Cameras. The type of and number of devices deployed in each region are shown in **Table 10.0** below.

Table 10.1 – Type and Number of ITS Devices Deployed by Region

Existing ITS Devices Deployed by Region Device	Region 1 Knoxville	Region 2 Chattanooga	Region 3 Nashville	Region 4 Memphis
CCTV Cameras	112	112	201	126
DMS	32	27	76	48
RDS	232	218	431	226
VDS	29	-	-	20
HAR	20	7	14	16
Over Height Warning	3	-	-	5
Overturn Warning	1	-	-	-
Fog Gates	-	6	-	-
Fog Sensors	-	9	-	-
VSL Signs	-	10	-	-
PVMS	5	-	3	-
PCCTV Cameras	5	1	2	-

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11.0 LIST OF ACRONYMS

3-C	Continuing, Comprehensive, and Cooperative
AC	Advanced Construction
ADA	Americans with Disabilities Act
ADT	Average Daily Traffic
ALOP	Annual Listing of Obligated Projects
AQ	Air Quality
CAA	Clean Air Act 1990
CRD	Civil Rights Division
CFR	Code of Federal Regulations
CMP	Congestion Management Process
CPG	Consolidated Grant Program
DBE	Disadvantaged Business Enterprise
DOT	Department of Transportation
EJ	Environmental Justice
EPA	Environmental Protection Agency
FAC	Freight Advisory Committee
FAST Act	Fixing America's Surface Transportation Act
FHWA	Federal Highway Administration
FLAP	Federal Lands Access Program
FTA	Federal Transit Administration
FY	Fiscal Year
FFY	Federal Fiscal Year
GA	Georgia
GDP	Gross Domestic Product
GIS	Geographic Information System
HSIP	Highway Safety Improvement Program
IAC	Interagency Consultation Committee
INVEST	Infrastructure Voluntary Evaluation Sustainability Tool
ITS	Intelligent Transportation System

KY	Kentucky
LOS	Level of Service
LRTP/RTP/MTP	Long Range Transportation Plan
MAP-21	Moving Ahead for Progress in the 21st Century Act
MI	Mississippi
MOD	Mobility on Demand
MPA	Metropolitan Planning Area
MPO	Metropolitan Planning Organization
MTP	Metropolitan Transportation Plan
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NHPP	National Highway Performance Program
NHS	National Highway System
PE	Preliminary Engineering
PE-D	Preliminary Engineering Design
PE-N	Preliminary Engineering NEPA
PL	Metropolitan Planning Funds
PPP	Public Participation Plan
ROI	Return on Investment
ROW	Right of Way
RPO	Rural Planning Organization
RTP	Regional Transportation Plan
Section 5303	Transit Planning Funds (U.S. Title 49, Section 5303)
SLRTP	State Long Range Transportation Plan
SPR	State Planning and Research Funds
SRTS	Safe Routes to School
STBG	Surface Transportation Block Grant
STIP	State Transportation Improvement Program
SWOT	Strength, Weakness, Opportunity, Threat Analysis Tool
TAM	Transit Asset Management
TAZ	Traffic Analysis Zone
TCM	Transportation Control Measure

TDM	Travel Demand Model
TDOT	Tennessee Department of Transportation
TDP	Transit Development Plan
TIP	Transportation Improvement Program
TN	Tennessee
TNMUG	Tennessee Model Users Group
TRIMS	Tennessee Roadway Information + Management System
TSM	Transportation Systems Management
UPWP	Unified Planning Work Program
U.S.C.	United States Code
USDOT	United States Department of Transportation
UZA	Urbanized Area
VA	Virginia
VDOT	Virginia Department of Transportation
VMT	Vehicle Miles Travelled
YOE	Year of Expenditure

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