Long Range Transportation Plan Guidelines for Iowa MPOs and RPAs

January 2016

1. Purpose of the LRTP

State/Federal Background

A Long Range Transportation Plan (LRTP) is a federally required element for Metropolitan Planning Organizations (MPOs) as part of transportation planning process. The Iowa Department of Transportation (DOT) has also extended this requirement to apply to Regional Planning Affiliations (RPAs). The federal requirements for MPO LRTPs are outlined in 23 CFR 450.322. These requirements are discussed in more detail in Section 4, along with which requirements RPA LRTPs are expected to meet.

Currently, LRTPs must meet the requirements of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). The Moving Ahead for Progress in the 21st Century Act (MAP-21) was signed into law in July 2012, and the Fixing America's Surface Transportation Act (FAST) was signed into law in December 2015. FAST retained most of the planning requirements of MAP-21, and rulemaking for it is still underway. Based on the draft MAP-21 rulemaking for statewide, nonmetropolitan, and metropolitan planning, it is anticipated that MPOs will have two years from the date of the final rule (currently slated for spring 2016) before their LRTP is required to be MAP-21 compliant. Many of the LRTP requirements stayed the same from SAFETEA-LU to MAP-21 and FAST, with the major exception being the addition of a requirement to implement a performance-based planning and programming process. This document has been developed based on SAFETEA-LU language, but includes major changes associated with MAP-21 and FAST. SAFETEA-LU's eight planning factors for the transportation planning process were carried forward to MAP-21. The FAST Act added two additional factors for a total of ten (shown to the right), which MPOs and RPAs should strive to address through their LRTP planning process and document.

Role of the LRTP in the Planning Process

The LRTP plays an important role in outlining the existing status and future needs of an area's transportation system. It helps set the direction of planning efforts and programming investments for the MPO or RPA. The development process for the LRTP enables the planning agency to evaluate population and employment forecasts for the area to understand how anticipated growth or decline will interact with expected land use to impact the demands on the transportation system. The LRTP planning process and document also serve as a forum for documenting existing or potential shifts in travel patterns or funding priorities. Stakeholder involvement and public input is critical during LRTP development, as it helps guide the priorities and projects that will be submitted for federal funding at the MPO/RPA level.

Planning Factors

23 U.S.C 135 (d)(1)
In general. - Each State shall carry out a statewide transportation planning process that provides for consideration and implementation of projects, strategies, and services that will –

(A) support the **economic vitality** of the United States, the States, nonmetropolitan areas, and metropolitan areas, especially by enabling global competitiveness, productivity, and efficiency;

(B) increase the **safety** of the transportation system for motorized and nonmotorized users;

(C) increase the **security** of the transportation system for motorized and nonmotorized users;

(D) increase the **accessibility and mobility** of people and freight;

(E) 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;

(F) enhance the **integration and connectivity** of the transportation system, across and between modes throughout the State, for people and freight;

(G) promote efficient **system management and operation**;

(H) emphasize the **preservation** of the existing transportation system;

(I) improve the **resiliency and reliability** of the transportation system and reduce or mitigate stormwater impacts of surface transportation; and

(J) enhance **travel and tourism**.

(The same planning factors are outlined for metropolitan areas in 23 U.S.C. 134 (h)(1))

2. Preparation and Submittal Guidelines

LRTPs are required to be **updated at least every five years** in attainment areas (which currently includes all of Iowa's MPOs and RPAs), and every four years in nonattainment areas. The LRTP needs to have a **planning horizon of at least 20 years**, which should be calculated from the end of the five year period the plan covers. For example, plans adopted in calendar year 2015 should have a minimum horizon year of 2040 (2015 adoption date + 5-year effective period + 20-year horizon = 2040). The specific plan horizon year is determined by the planning agency, but is typically a year ending in 0 or 5.

Draft LRTP

Draft materials and chapters should be submitted for review as follows.

- Draft materials/chapters should be submitted as they are developed, and not solely as one final draft document at the end of the development process.
- RPAs should submit draft materials electronically to Iowa DOT Office of Systems Planning and their District Transportation Planner.
- MPOs should submit draft materials electronically to Iowa DOT Office of Systems Planning and their District Transportation Planner, FHWA, and FTA.
- Provide a deadline for returning comments. A preferable deadline would be two to four weeks from the date the draft material is sent, depending on its volume and complexity.

Final LRTP

Following MPO/RPA approval of the LRTP, final LRTPs should be submitted as follows.

- MPOs and RPAs should provide an electronic copy to Iowa DOT Office of Systems Planning and their District Transportation Planner, FHWA, and FTA.
- RPAs should submit one hard copy each to Iowa DOT Office of Systems Planning and their District Transportation Planner.
- MPOs should submit one hard copy each to Iowa DOT Office of Systems Planning, their District Transportation Planner, FHWA, and FTA.
- Please make sure the final document includes the date of adoption and a copy of the resolution approving it or meeting minutes showing its approval.
- Post the adopted plan on the agency's website.

Contact Information

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Iowa DOT District Planners
Mike Clayton – DMAMPO; RPAs 5, 6, 11
Krista Rostad – INRCOG; RPAs 1, 2, 7
Dakin Schultz – SIMPCO; RPAs 3, 4, 12
Scott Suhr – MAPA; RPAs 13, 14, 18
Jason Huddle – RPAs 15, 16, 17
Cathy Cutler – Corridor MPO; MPOJC; RPA 10
Sam Shea – Bi-State; DMATS; RPAs 8, 9
Garrett Pedersen/Phil Mescher – AAMPO

Additional district planner contact information:
http://www.iowadot.gov/systems_planning/pdf/DistrictPlannersMap.pdf

FHWA Iowa Division
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This contact information is current as of January 2016. The online version of this guidance will be updated with any changes.

3. Process Overview

General Guidance

Planning is a process, not the plan document itself. A plan document is a product of planning; it simply reflects the steps in the planning process. The plan document is a very important product, but is not the way to judge success in planning. The success of any planning process can only be judged by its results: the tangible actions, changes, and benefits that result from the plan.

Aim to fully develop goals and objectives, along with any performance measures and targets, in the LRTP. This is perhaps the most meaningful way to translate the LRTP development process and document into a guiding influence for the transportation planning and programming process. Goals and objectives should reflect the true priorities of the MPO or RPA, and should not be a generic list of idealistic statements. The goals and objectives should carry through to the discussion of priorities, project selection, and fiscal constraint. The information that goals, objectives, measures, and targets should convey is outlined to the right.

Data and Information

Translate raw data into useful information and analysis. There is a hierarchy or pyramid of planning data. The hierarchy (from lowest level to highest level) is outlined below. Strive to translate data and information into knowledge and wisdom/intelligence, and also be sure to relate data to transportation implications. For example, data regarding the area's socioeconomic conditions should be related to transportation planning implications, such as areas more likely to need alternate modes of transportation due to limited vehicles per household, increased elderly population, or lower incomes.

	Definition	Example
Data	Raw material for planning.	Inventory of all the bridges in a region of Iowa.
Information	Data that have been filtered and/or organized in some way so that they can be more easily understood.	A table of the 50 bridges in a region that are in the worst condition.
Knowledge	Integration of multiple information sources.	A map that shows the 10 bridges in a region that are in poor condition and that also carry more than 1,000 vehicles per day.
Wisdom/Intelligence	Careful evaluation of planning data.	The three bridges in the region that are in such poor shape that they must be replaced in the next few years to avoid a significant economic impact.

Goals, Objectives, Measures, and Targets

- A **goal** is a broad statement that describes a desired end state.

  Example: A safe transportation system.

- An **objective** is a specific, measurable statement that supports achievement of a goal. A good objective should include or lead to development of a performance measure that can be tracked over time and is used to assess different investment or policy alternatives.

  Example: Reduce highway fatalities.

- A **performance measure** is a metric used to assess progress toward meeting an objective. Performance measures can be used in strategy analysis to compare different investment or policy alternatives and can be used to track actual performance over time.

  Examples: Number of highway fatalities, fatality rate per vehicle miles traveled.

- A **target** is a specific level of performance that is desired to be achieved within a certain timeframe. A target can be used as a basis for comparing progress over time toward a desired outcome or for making decisions on investments.

  Example: Reduce fatalities by 5% by 2015, which will save more than 150 lives.

Source: FHWA Performance-Based Planning and Programming Guidebook

Strike a balance in the planning process between what is anticipated (based on current trends and initiatives, such as complete street efforts, aggressive economic development growth, momentum for higher or lower density development, new vehicle technologies, etc.) versus what is known (based on the existing area and system as well as past trends and data). The point is to ensure that the LRTP stays grounded in the area's current reality, but also considers the long-term and big picture.

Other data-related tips include:

- It is important that maps, graphs, and charts clearly communicate the information being conveyed. Assume that the average reader of the document is not very familiar with the planning area – will they understand what you are showing or referencing with these visual aids?
- Cite data sources.
- Add photos or illustrations when relevant – besides adding visual interest to the document, they can help convey points more clearly than words at times, such as what good versus poor pavement condition looks like.

Structure

The way the LRTP is structured is at the discretion of the MPO/RPA, so long as it addresses the required elements that are outlined in Section 4. The most commonly used document structures fall into three categories, two of which are outlined to the right.

- **Modal** – generally provides an area overview of socioeconomic data, then provides a separate chapter or section for each mode, focusing on its current status and future needs.
- **Strengths/weakness/opportunities/threats** and variations – tend to focus on various characteristics of the transportation system in a systematic order, reviewing the current status, strengths, and weaknesses of all modes, followed by future needs, opportunities, and threats for all modes.
- **Combined LRTP/Comprehensive Economic Development Strategy** – RPAs can explore this option, which further develops the transportation section of the CEDS to include all LRTP-required items and results in one combined CEDS/LRTP for the region.

Schedule

Plan the planning process. Setting up a timeline before the process gets underway is critical to ensuring that the plan is delivered on-time. There are several key elements to include in a timeline.

- Detailed schedule (monthly or weekly) at the task and/or component level
- Identify staff responsible for tasks, and whether any outside resources (such as consultants) will be required
- Items that will require feedback from the public or stakeholders

Example outline – modal structure

1. Introduction and Goals
2. Public Input
3. Community Overview
4. Roads and Highways
5. Passenger Transportation
6. Non-motorized Transportation
7. Freight, Rail, Air, and Pipeline Transportation
8. Safety and Security
9. Operations
10. Environmental Analysis
11. Financial Constraint

Example outline – SWOT structure

1. Planning Process and Stakeholders
2. Plan Goal and Objectives
3. Background and Trends
4. Existing System Strengths and Weaknesses
5. Planning and the Environment
6. Future Opportunities and Threats
7. Key Needs and Issues
8. Alternatives
9. Short-Term Action Plan
10. Long-Range Plan
11. Funding the Plan
12. Public Involvement Process and Results
13. Future Planning Activities

Example Gantt charts are available for MPO and RPA plans, and Iowa DOT staff will work with interested agencies on a one-on-one basis to develop a timeline. It is suggested that agencies begin developing their timeline 30-36 months before the plan is due. It is particularly critical that MPOs have early discussions with the Iowa DOT regarding travel demand model development, to ensure that the model is completed early enough in the planning process to be fully utilized in plan development.

Any potential delays in the document development or adoption process should be discussed with the Iowa DOT as soon as possible. If an MPO LRTP is not adopted by its deadline (five years from the adoption date of the previous plan), the MPO's Transportation Improvement Program (TIP) will be frozen, meaning that it cannot be amended and that a new TIP cannot be adopted. This can lead to serious delays at the project level. Additionally, should an MPO or RPA LRTP be past-due, the Iowa DOT may withhold all planning fund reimbursements requested by the planning agency until a new LRTP is adopted.

Coordinate with state and federal partners throughout the LRTP development process. The Iowa DOT will touch base with agencies at regular intervals throughout the plan development process. For MPOs, a coordination meeting with Iowa DOT, FHWA, FTA, and MPO staff is recommended early in the process. For RPAs, an early coordination meeting between the Iowa DOT and RPA staff is also recommended. The Iowa DOT will touch base with agency staff at 30, 24, 18, 12, and 6 months out from the plan due date, unless an alternate schedule is agreed upon. Initial coordination meetings are suggested to occur 24-30 months before the plan due date. An example agenda for an initial coordination meeting is included to the right.

A **good starting point** for developing your next LRTP is reviewing your current plan. As the LRTP is updated every five years, there should be some level of consistency between documents. Reviewing the prior plan also enables planning agency staff to focus on strengths and areas for improvement, and adjust their plans and schedule for the LRTP update accordingly.

Public Input and Consultation

Input from two main groups, the public and stakeholders, is critical during the LRTP planning process, and public/stakeholder input plans should be built into the LRTP development schedule. At a minimum, MPOs and RPAs must follow the guidelines for public input outlined in their Public Participation Plan (PPP), and meet the requirements of CFR 450.322 (i)-(j) (see section 4). The beginning of the LRTP update process is an ideal time for an agency to **review and update the PPP** to ensure that the PPP and public input activities for the LRTP align. **Consultation with environmental resource agencies** is also critical and should be planned early.

Example agenda items for a coordination meeting between planning agency staff and state/federal partners

1. Discuss previous LRTP and any applicable planning review recommendations
    a. Strengths
    b. Areas for improvement
2. Review requirements and recommended items for LRTP
    a. SAFETEA-LU requirements
    b. MAP-21 items to consider implementing
    c. Recommended items/best practices
3. Discuss staffing for LRTP update
    a. Staff responsibilities
    b. Consultant responsibilities (if applicable)
4. Travel demand model (MPOs)
    a. Discuss components of model update
    b. Socioeconomic data and forecasting methodology
    c. Methodology for use in plan development and project selection
    d. Needs/expectations/timeline
5. Plan document
    a. Plan outline (chapter structure)
    b. Methodology for project selection and fiscal constraint
    c. Environmental review/resource agency coordination
    d. Public input methods
    e. Timeline
6. Coordination with DOT, FHWA, and FTA
    a. Immediate guidance needs
    b. Desired level of input and oversight
    c. Schedule regular meetings

4. Required Elements

The following table includes the federal requirements of 23 CFR 450.322, Development and Content of the Metropolitan Transportation Plan. Highlights and color-coding in the requirement column were added by the Iowa DOT for this guidance document. The third column of the table provides a checklist for MPOs and RPAs to follow in development of their LRTPs. Items in this list are applicable to both MPOs and RPAs, except for items labeled as specific to MPOs, TMAs, or non-attainment areas.

This table has been developed based on CFR that references SAFETEA-LU. Once MAP-21 rulemaking related to planning is complete, this guidance will be updated to cite MAP-21 CFR. In the interim, major additions or changes due to MAP-21 have been added at the end of the table. These items are technically optional until the effective date specified in the final MAP-21 rulemaking for planning.

CFR Language		**Items to include** (*items only required for MPOs or TMAs are noted)*
450.322 (a)	The metropolitan transportation planning process shall include the development of a transportation plan addressing no less than a **20-year planning horizon** as of the effective date. In nonattainment and maintenance areas, the effective date of the transportation plan shall be the date of a conformity determination issued by the FHWA and the FTA. In attainment areas, the effective date of the transportation plan shall be its date of adoption by the MPO.	☐ Ensure planning horizon is at least 20 years (from end of document's life)
450.322 (b)	The transportation plan shall include **both long-range and short-range** strategies/actions that lead to the development of an **integrated multimodal transportation system** to facilitate the **safe and efficient movement of people and goods** in addressing **current and future transportation demand.**	☐ Goals and objectives ☐ Long-range and short-range strategies/actions that lead to the development of an integrated multimodal transportation system
450.322 (c)	The MPO shall review and update the transportation plan at least every four years in air quality nonattainment and maintenance areas **and at least every five years in attainment areas** to confirm the transportation plan's validity and consistency with current and forecasted transportation and land use conditions and trends and to extend the forecast period to at least a 20-year planning horizon. In addition, the MPO may revise the transportation plan at any time using the procedures in this section without a requirement to extend the horizon year. The transportation plan (and any revisions) shall be approved by the MPO and submitted for information purposes to the Governor. Copies of any updated or revised transportation plans must be provided to the FHWA and the FTA.	☐ Ensure plan is updated at least every five years ☐ Ensure plan outlines revision/amendment process ☐ Provide copies of LRTPs and any revisions to Iowa DOT, FHWA, and FTA as prescribed in Section 2
450.322 (d)	In metropolitan areas that are in nonattainment for ozone or carbon monoxide, the MPO shall coordinate the development of the metropolitan transportation plan with the process for developing transportation control measures (TCMs) in a State Implementation Plan (SIP).	☐ *Non-attainment areas only – currently not applicable*

450.322 (e)	The MPO, the State(s), and the public transportation operator(s) shall **validate data** utilized 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.	☐ Use a travel demand model or other technical analysis in the development of the plan **(MPOs)** ☐ It is recommended that the Policy Board approves forecast control totals for population and employment, as well as a calibrated model, when these items are determined/completed (prior to draft or final document approval) **(MPOs)** ☐ It is recommended that plans clearly articulate how the model is utilized in project prioritization and selection **(MPOs)**
450.322 (f)	**The metropolitan transportation plan shall, at a minimum, include:**	
450.322 (f)(1)	The **projected transportation demand of persons and goods** in the metropolitan planning area over the period of the transportation plan	☐ Trends or projections for person movements. Modes can include vehicular, transit, bicycle, pedestrian, air, and rail. ☐ Trends or projections for freight movements. Modes can include truck, rail, water, air, and pipeline.
450.322 (f)(2)	**Existing and proposed transportation facilities** (including major roadways, transit, multimodal and intermodal facilities, pedestrian walkways and bicycle facilities, and intermodal connectors) that 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 Alternatives Analysis under the FTA's Capital Investment Grant program (49 U.S.C. 5309 and 49 CFR part 611) needs to be adopted as part of the metropolitan transportation plan as a condition for funding under 49 U.S.C. 5309	☐ Inventory and current conditions of infrastructure/facilities ☐ Highways ☐ Bridges ☐ Bicycle facilities ☐ Pedestrian facilities ☐ Public transportation facilities ☐ Rail ☐ Aviation ☐ Pipeline ☐ Waterways ☐ Future transportation infrastructure/facilities for regionally significant projects ☐ Current and forecasted land use ☐ Freight data and trends ☐ Current socioeconomic conditions (to understand use of system) ☐ Projected transportation demand of persons and goods over the horizon of the LRTP ☐ Projections of population growth/decline ☐ Projections of employment growth/decline
450.322 (f)(3)	**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	☐ Non-capacity related strategies related to improving performance of the transportation system, such as ITS, incident management, etc. **(MPOs)**

450.322 (f)(4)	Consideration of the results of the **congestion management process in TMAs** that meet the requirements of this subpart, including the identification of SOV projects that result from a congestion management process in TMAs that are nonattainment for ozone or carbon monoxide	☐ Results of the congestion management process, which should guide the region and the direction of the plan **(TMAs)**
450.322 (f)(5)	Assessment of **capital investment and other strategies** to preserve the existing and projected future metropolitan transportation infrastructure and provide for multimodal capacity increases **based on regional priorities and needs**. 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	☐ Discussion of project evaluation criteria and selection process ☐ Discussion of financial strategies (s*ee also 450.322 (f)(10)*) ☐ Use of scenario planning for analyzing strategies (optional) ☐ If scenario planning is used, a preferred scenario must be selected as the 'approved' scenario for the LRTP
450.322 (f)(6)	Design concept and design scope descriptions of all existing and proposed transportation facilities in sufficient detail, regardless of funding source, in **nonattainment and maintenance areas** for conformity determinations under the EPA's transportation conformity rule (40 CFR part 93). **In all areas** (regardless of air quality designation), all proposed improvements shall be described in sufficient detail to develop cost estimates	☐ Proposed projects should have enough detail to result in a planning-level cost estimate **(MPOs)** ☐ *Detail related to conformity determinations only applies to non-attainment and maintenance areas, and thus is currently not applicable*
450.322 (f)(7)	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 policies, programs, or strategies, rather than at the project level. The discussion shall be developed in consultation with Federal, State, and Tribal land management, wildlife, and regulatory agencies. The MPO may establish reasonable timeframes for performing this consultation	☐ Program-level discussion of potential environmental mitigation activities (provide examples of activities) ☐ Consultation with resource agencies ☐ Describe and map environmentally-sensitive areas that should be avoided (*see also 450.322 (g)*)
450.322 (f)(8)	**Pedestrian walkway and bicycle transportation facilities** in accordance with 23 U.S.C. 217(g) (provided below) *(g) Planning and Design.—* *(1) In general.— Bicyclists and pedestrians shall be given due consideration in the comprehensive transportation plans developed by each metropolitan planning organization and State in accordance with sections 134 and 135, respectively. Bicycle transportation facilities and pedestrian walkways shall be considered, where appropriate, in conjunction with all new construction and reconstruction of transportation facilities, except where bicycle and pedestrian use are not permitted.* *(2) Safety considerations.— Transportation plans and projects shall provide due consideration for safety and contiguous routes for bicyclists and pedestrians. Safety considerations shall include the installation, where appropriate, and maintenance of audible traffic signals and audible signs at street crossings.*	☐ Current status and potential projects/challenges related to pedestrian and bicycle facilities ☐ Summary of 23 U.S.C. 217(g): bicyclists and pedestrians shall be given due consideration, including with regard to safety and contiguous routes, in transportation plans and bicycle and pedestrian facilities shall be considered where appropriate

450.322 (f)(9)	**Transportation and transit enhancement activities**, as appropriate	☐ Enhancement activities
450.322 (f)(10)	A **financial plan** that demonstrates how the adopted transportation plan can be implemented	**MPO fiscal constraint requirements** are outlined in the next eight sections (450.322 (f)(10)(i)-(viii)) **RPA fiscal constraint requirements** ☐ Financial history for STP and TAP/TE funds, along with projections for the life of the plan ☐ Financial history and projections for other federal, state, and local funding sources as applicable ☐ Operations and maintenance costs history and projections ☐ Short-term, fiscally constrained plan (first five years) ☐ Long-term projects, corridors of interest/concern, or planning approach (years 6-20+) ☐ Not required to be fiscally constrained ☐ Not required to be project specific ☐ Needs can be shown by providing estimates of cost to maintain the system in its current condition or improve the system to a better condition ☐ For RPAs that suballocate part or all of their funding, an explanation for the reasonableness of that process within the context of regional planning
450.322 (f)(10)(i)	For purposes of transportation system operations and maintenance, the financial plan shall contain **system-level estimates of costs and revenue sources** that are reasonably expected to be available to adequately operate and maintain Federal-aid highways (as defined by 23 U.S.C. 101(a)(5)) and public transportation (as defined by title 49 U.S.C. Chapter 53).	☐ System-level estimates of costs and revenue sources anticipated to be available for the federal aid system and public transportation **(MPOs)** ☐ Operations and maintenance costs history and projections **(MPOs)**
450.322 (f)(10)(ii)	For the purpose of developing the metropolitan transportation plan, the MPO, public transportation operator(s), and State shall cooperatively develop **estimates of funds that will be available** to support metropolitan transportation plan implementation, as required under §450.314(a). All necessary financial resources from public and private sources that are reasonably expected to be made available to carry out the transportation plan shall be identified.	☐ Estimates of funds reasonably expected to be available, based on historical funding levels **(MPOs)** ☐ STP ☐ TE/TAP ☐ Other federal sources (ICAAP, STP-HBP, etc.) ☐ State/local funding available for transportation (road use tax fund, local option sales tax, etc.)

450.322 (f)(10)(iii)	The financial plan shall include **recommendations on any additional financing strategies** to fund projects and programs included in the metropolitan transportation plan. In the case of new funding sources, strategies for ensuring their availability shall be identified.	☐ Recommendations for other funding sources or financing strategies, such as new local option sales tax or bonding. Must provide reasonable basis for any new sources of funding considered in fiscal constraint analysis. **(MPOs)**
450.322 (f)(10)(iv)	In developing the financial plan, the MPO shall take into account all projects and strategies proposed for funding under title 23 U.S.C., title 49 U.S.C. Chapter 53 or with other Federal funds; State assistance; local sources; and private participation. Starting December 11, 2007, revenue and cost estimates that support the metropolitan transportation plan 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).	☐ Projects must be inflated to year of expenditure dollars **(MPOs)** ☐ Inflation rates must be based on documented information, such as construction cost index. A rate of 4% can be used if applicable data is not available. ☐ For projects in cost bands or time ranges, inflate costs to the middle year of the timeframe **(MPOs)**
450.322 (f)(10)(v)	For the outer years of the metropolitan transportation plan (i.e., beyond the first 10 years), the financial plan may reflect **aggregate cost ranges/cost bands**, as long as the future funding source(s) is reasonably expected to be available to support the projected cost ranges/cost bands.	☐ Outside of initial years of the plan, projects can be grouped into timeframes. For example, projects can be listed in five or ten-year periods. **(MPOs)**
450.322 (f)(10)(vi)	For **nonattainment and maintenance areas**, the financial plan shall address the specific financial strategies required to ensure the implementation of TCMs in the applicable SIP.	☐ *Non-attainment and maintenance areas only – currently not applicable*
450.322 (f)(10)(vii)	For **illustrative purposes**, the financial plan may (but is not required to) 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.	☐ Illustrative projects can be included in the LRTP. They should be shown separately from the fiscally-constrained plan and are not part of it, but can be amended into the fiscally-constrained plan if additional funding is identified or priorities change. **(MPOs)**
450.322 (f)(10)(viii)	In cases that the FHWA and the FTA find a metropolitan transportation plan to be fiscally constrained and a revenue source is subsequently removed or substantially reduced (i.e., by legislative or administrative actions), the FHWA and the FTA will not withdraw the original determination of fiscal constraint; however, in such cases, the FHWA and the FTA will not act on an updated or amended metropolitan transportation plan that does not reflect the changed revenue situation.	☐ Fiscal constraint does not need to be redemonstrated unless a plan is amended **(MPOs)**
450.322 (g)	The MPO shall consult, as appropriate, with State and local agencies responsible for land use management, natural resources, environmental protection, conservation, and historic preservation concerning the development of the transportation plan. The consultation shall involve, as appropriate: (1) Comparison of transportation plans with State conservation plans or maps, if available; or (2) Comparison of transportation plans to inventories of natural or historic resources, if available.	☐ Resource agency consultation (*see also 450.322 (f)(7)*) ☐ Consideration of environmental resources during project selection and review of potential environmental impacts due to proposed projects ☐ Obtain maps/inventories for consideration/analysis in the planning process and document ☐ Outreach to and coordination with resource agencies

450.322 (h)	The metropolitan transportation plan should include a safety element that incorporates or summarizes the priorities, goals, countermeasures, or projects for the MPA contained in the Strategic Highway Safety Plan required under 23 U.S.C. 148, as well as (as appropriate) emergency relief and disaster preparedness plans and strategies and policies that support homeland security (as appropriate) and safeguard the personal security of all motorized and non-motorized users.	☐ Reference the State Strategic Highway Safety Plan ☐ Provide area crash background and analysis ☐ Other safety/security elements ☐ Top 200 SICL list locations (if applicable) ☐ Top 5% locations (if applicable) ☐ Emergency preparedness/evacuation plans
450.322 (i)	The MPO shall provide citizens, affected public agencies, representatives of public transportation employees, freight shippers, providers of freight transportation services, private providers of transportation, representatives of users of public transportation, representatives of users of pedestrian walkways and bicycle transportation facilities, representatives of the disabled, and other interested parties with a **reasonable opportunity to comment** on the transportation plan using the participation plan developed under §450.316(a).	☐ Follow the participation process outlined in agency's Public Participation Plan ☐ Provide interested parties with a reasonable opportunity to comment on the plan, including, but not limited to: ☐ Individuals ☐ Affected public agencies ☐ Representatives of public transportation employees ☐ Freight shippers ☐ Providers of freight transportation services ☐ Private providers of transportation ☐ Representatives of users of public transportation ☐ Representatives of users of pedestrian walkways and bicycle transportation facilities ☐ Representatives of the disabled ☐ Have the draft and final documents readily available for public review, including electronically accessible formats
450.322 (j)	The metropolitan transportation plan shall be **published or otherwise made readily available** by the MPO for public review, including (to the maximum extent practicable) in electronically accessible formats and means, such as the World Wide Web.	☐ Draft and final plan must be readily available to the public, including physical copies and electronic copies
450.322 (k)	A State or MPO shall not be required to select any project from the illustrative list of additional projects included in the financial plan under paragraph (f)(10) of this section.	☐ Illustrative projects are not required to be selected
450.322 (l)	In nonattainment and maintenance areas for transportation-related pollutants, the MPO, as well as the FHWA and the FTA, must make a conformity determination on any updated or amended transportation plan in accordance with the Clean Air Act and the EPA transportation conformity regulations (40 CFR part 93). During a conformity lapse, MPOs can prepare an interim metropolitan transportation plan as a basis for advancing projects that are	☐ *Non-attainment and maintenance areas only – currently not applicable*

	eligible to proceed under a conformity lapse. An interim metropolitan transportation plan consisting of eligible projects from, or consistent with, the most recent conforming transportation plan and TIP may proceed immediately without revisiting the requirements of this section, subject to interagency consultation defined in 40 CFR part 93. An interim metropolitan transportation plan containing eligible projects that are not from, or consistent with, the most recent conforming transportation plan and TIP must meet all the requirements of this section.	

Significant MAP-21 Changes (CFR references will change with MAP-21, and there are other minor changes that will be integrated into the above guidance following the finalization of the planning rule.)

CFR language		**Items to include**
450.324 (a)	In formulating the transportation plan, the MPO shall **consider factors** described in § 450.306 as the factors relate to a 20-year forecast period.	☐ Explicit consideration of the eight planning factors throughout the forecast period
450.324 (f)(3)	A description of the **performance measures and performance targets** used in assessing the performance of the transportation system in accordance with § 450.306(d);	☐ Performance measures and targets for transportation system, including the following measures: ☐ Number of fatalities on all roads ☐ Rate of fatalities on all roads ☐ Number of serious injuries on all roads ☐ Rate of serious injuries on all roads ☐ Percentage of pavements on the Interstate System in Good condition ☐ Percentage of pavements on the Interstate System in Poor condition ☐ Percentage of pavements on the NHS (excluding Interstate System) in Good condition ☐ Percentage of pavements on the NHS (excluding Interstate System) in Poor condition ☐ Percentage of NHS bridges classified as in Good condition ☐ Percentage of NHS bridges classified as in Poor condition ☐ Measures on congestion and freight (TBD)

450.324 (f)(4)	A **system performance report** and subsequent updates evaluating the condition and performance of the transportation system with respect to the performance targets described in § 450.306(d), including: (i) **Progress achieved** by the metropolitan planning organization in meeting the performance targets in comparison with system performance recorded in previous reports, including baseline data; and (ii) For metropolitan planning organizations 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.	☐ Baseline data and progress towards meeting performance targets ☐ If scenario planning is used, an analysis of the preferred scenario
450.324 (f)(7)	The metropolitan transportation plan should be **informed by** the financial plan and investment strategies from the **State asset management plan** for the NHS (as defined in 23 U.S.C. 119(e)) and investment priorities of the **public transit asset management plan**(s) (as discussed in 49 U.S.C. 5326).	☐ Consider the investment strategies from the State's asset management plan ☐ Consider the investment priorities from public transit asset management plans (PTMS in Iowa)
450.324 (f)(11)(iii)	The financial plan may include an assessment of the appropriateness of innovative finance techniques (for example, tolling, pricing, bonding, public private partnerships, or other strategies) as revenue sources for projects in the plan.	☐ (Optional) Include assessment of innovative financing techniques
450.324 (i)	(i) An MPO may, while fitting the needs and complexity of its community, **voluntarily elect to develop multiple scenarios** for consideration as part of the development of the metropolitan transportation plan. (1) An MPO that chooses to develop multiple scenarios under this paragraph (i) is encouraged to consider: (i) Potential **regional investment strategies** for the planning horizon; (ii) Assumed **distribution of population and employment**; (iii) A scenario that, to the maximum extent practicable, maintains **baseline conditions** for the performance areas identified in § 450.306(d) and measures established under 23 CFR part 490; (iv) A scenario that **improves the baseline conditions** for as many of the performance measures identified in § 450.306(d) as possible; (v) **Revenue constrained scenarios** based on the total revenues expected to be available over the forecast period of the plan; and (vi) **Estimated costs and potential revenues** available to support each scenario. (2) In addition to the performance areas identified in section 23 U.S.C. 150(c), 49 U.S.C. 5326(c), and 5329(d), and the measures established under 23 CFR part 490, MPOs may evaluate scenarios developed under this paragraph using **locally developed measures**.	☐ (Optional) Develop various scenarios for the LRTP based on one or more factors ☐ Population and employment growth and distribution (such as high, dense growth versus moderate, sprawl growth) ☐ Revenue forecasts (such as conservative versus aggressive) ☐ Performance measures (for example, varying weights for project/scenario scoring among performance measures) ☐ Investment strategies (for example, investing in alternate modes rather than highways) ☐ If scenario planning is used, a preferred scenario must be selected as the 'approved' scenario for the LRTP