Long Range Transportation Plan (LRTP) Guidance

For Metropolitan Planning Organizations (MPO) and Regional Planning Affiliations (RPA)

Effective July 1, 2026

1. Purpose of the Long Range Transportation Plan (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 extended this requirement to apply to Regional Planning Affiliations (RPAs) statewide. The federal requirements for MPO LRTP documents are outlined in **23 CFR § 450.324**. These requirements are discussed in more detail in Section 6, along with the requirements RPA LRTPs are expected to fulfill. The acronym LRTP is used in this document to maintain consistency between MPOs and RPAs; MPO LRTPs are referred to as metropolitan transportation plans (MTPs) in federal code.

Federal requirements also include required **Planning Factors** outlined in **23 U.S.C 134 (h)(1)** and **23 U.S.C. 135 (d)(1)**. Each State shall carry out a statewide transportation planning process that provides for consideration and implementation of projects, strategies, and services that will:

- Support the economic vitality of the United States, the States, nonmetropolitan areas, and metropolitan areas, especially by enabling global competitiveness, productivity, and efficiency;
- Increase the safety of the transportation system for motorized and nonmotorized users;
- Increase the security of the transportation system for motorized and nonmotorized users;
- Increase the accessibility and mobility of people and freight;
- 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;
- Enhance the integration and connectivity of the transportation system, across and between modes throughout the State, for people and freight;
- Promote efficient system management and operation;
- Emphasize the preservation of the existing transportation system;
- Improve the resiliency and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation; and
- Enhance travel and tourism.

Role of the LRTP in the Planning Process

The LRTP plays an important role in outlining the existing status and future needs of a transportation system. An LRTP sets the direction of planning efforts and programming investments for the MPO or RPA within the determined planning horizon of the plan. The development process for the LRTP enables the planning agency to evaluate demographic, economic, passenger, and freight forecasts for the area to understand the relationship between anticipated growth or decline with expected land use to determine future impacts and 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.

2. Preparation and Submittal Guidelines

At a minimum, an LRTP must be **updated at least every five years** in attainment areas (which currently includes all Iowa MPOs and RPAs), and every four years in nonattainment areas. The LRTP must have a **planning horizon of at least 20 years**, which should be calculated from the end of the anticipated completion date of the plan.

Example: *plans adopted in calendar year 2025 should have a minimum horizon year of 2050 (2025 adoption date + 5-year effective period + 20-year horizon = 2050). The specific plan horizon year is determined by the planning agency but is typically a year ending in 0 or 5. Planning documents with anticipated completion in 2026 or 2027 should begin incorporating a 2055 horizon year.*

Draft LRTP

In addition to following the agency's public participation process documented in the agency's Public Participation Plan (PPP), draft materials and chapters are required to be submitted for state and federal 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.**
- Draft material submittals need to include 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. Requests for Iowa DOT/federal agency review need to be distinct from standard meeting agendas that include draft content.
- **RPA:** submit draft materials electronically to the Iowa DOT Systems Planning Bureau and the agency's District Transportation Planner.
- **MPO:** submit draft materials electronically to the Iowa DOT Systems Planning Bureau and the agency's District Transportation Planner, FHWA, and FTA.

Final LRTP

In addition to following the public participation process documented in MPO or RPA PPP, final LRTPs are required to be submitted to state/federal partners as follows after policy board approval of the LRTP.

- The final document needs to include the date of adoption and a copy of the resolution approving it or meeting minutes showing its approval.
- The adopted plan needs to be posted on the agency's website.
- Agencies must provide an electronic copy to the Iowa DOT Systems Planning Bureau and the agency's District Transportation Planner, FHWA, and FTA.

LRTP Amendments

An LRTP **amendment** is a revision involving a major change to a project, including the addition or deletion of a project or a major change in project cost, project/project phase initiation dates, or in design concept or design scope (e.g., changing project termini or the number of through traffic lanes or changing the number of stations in the case of fixed guideway transit projects). Revisions to projects that are included only for illustrative purposes do not require an amendment. An amendment is a revision that requires public review and comment and a re-demonstration of fiscal constraint. The final document needs to include the date of adoption and a copy of the resolution approving it or meeting minutes showing its approval.

Amendment Process

When an amendment to the LRTP is being considered, agencies must follow the guidelines developed in the agency's approved PPP. The following process must also be followed in coordination with applicable state and federal partners:

1. Notify state and regional partners and provide time for review
    - **RPA:** Notify the Iowa DOT Systems Planning Bureau and the agency's District Transportation Planner of the proposed amendment and provide an opportunity for review and comment.
    - **MPO:** Notify the Iowa DOT Systems Planning Bureau and the agency's District Transportation Planner, FHWA, and FTA of the proposed amendment and provide an opportunity for review and comment.
2. Policy Board approval
3. Final submission
    - Following Policy Board action, **MPO and RPA** agencies must submit amended LRTP materials as follows (electronic is preferred):
        - A resolution or meeting minutes showing the amendment's approval.
        - Modified section(s) of the LRTP, with changes noted/highlighted or a summary of changes from the prior version.
        - Documentation of re-demonstration of fiscal constraint, if applicable.
    - **RPA:** Submit amendment materials to the Iowa DOT Systems Planning Bureau and the agency's District Transportation Planner.
    - **MPO:** Submit amendment materials to the Iowa DOT Systems Planning Bureau, the agency's District Transportation Planner, FHWA, and FTA.
4. Post amended plan on website

An **administrative modification** is a minor revision involving minor changes to project/project phase costs, funding sources of previously included projects, and/or project/project phase initiation dates. An administrative modification is a revision that does not require public review and comment or a re-demonstration of fiscal constraint.

Amendment and Modification Examples

Examples that would justify a major amendment include:

- Adding a bridge
- Adding lanes
- Adding an interchange
- Moving projects between constrained and unconstrained lists
- Changes in project termini
- Revisions greater than 15% of the original cost
- Deleting a project

Examples that would justify an administrative modification (but not a major amendment) include:

- Revising a description without changing project scope
- Change of funding source
- Change in project lead
- Splitting or combining individually listed projects, assuming no scope, schedule or cost changes
- Adding or deleting projects from a grouping of projects without a scope change

23 CFR § 450.104 provides definitions for amendments and administrative modifications for LRTPs and Transportation Improvement Programs. MPOs and RPAs need to follow the procedures outlined in the agency's PPP regarding public review and comment for LRTP amendments.

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.

A successful LRTP leads to tangible progression of a transportation system. This occurs when:

1. The planning agency and process aims to fully develop all goals and objectives (along with performance measures and targets) within the horizon year of the plan.
2. Goals and objectives reflect the true priorities of the agency and its stakeholders and are not a generic list of idealistic statements.
3. Goals and objectives, along with priorities, selected projects, and fiscally constrained project lists, directly lead to and correlate with annual Transportation Improvement Program (TIP) development and completion.

The FHWA Performance-Based Planning and Programming Guidebook provides the following definitions:

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

- *Example: Provide a safe transportation system.*

Objective: 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 and serious injuries.*

Performance Measure: 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 and serious injuries; fatality and serious injuries rate (per vehicle miles traveled).*

Target: 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 20XX, which will save more than 150 lives.*

  Reduce serious (fatal/incapacitating injury) intersection crashes by 10% by 20XX.

Structure

The structure of an LRTP is developed at the discretion of the agency. Regardless of structure, an LRTP must address the required elements that are outlined in Section 6. The most commonly used document structures fall into three categories detailed below. New or innovative LRTP structuring beyond these categories is encouraged by Iowa DOT; communication with Systems Planning staff is encouraged if pursuing this strategy.

Modal: Provides an area overview of socioeconomic data, then provides individual modal chapters for current conditions and future needs, goals and strategies.

Example Modal Structure

- Introduction and Goals
- Public Input
- Community Overview
- Roads and Highways
- Passenger Transportation
- Non-motorized Transportation
- Freight, Rail, Air and Pipelines
- Safety and Security
- Operations
- Environmental Analysis
- Financial Constraint

Strengths/weakness/opportunities/threats (SWOT): Focuses 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.

Example SWOT Structure

- Planning Process and Stakeholders
- Plan Goal and Objectives
- Background and Trends
- Existing System Strengths and Weaknesses
- Planning and the Environment
- Future Opportunities and Threats
- Key Needs and Issues
- Alternatives
- Short-Term Action Plan
- Long-Range Plan
- Funding the Plan
- Public Involvement Process and Results
- Future Planning Activities

Combined LRTP/Comprehensive Economic Development Strategy (CEDS): RPA LRTP processes can be developed in the transportation section of the CEDS to include all LRTP-required items and results in one combined CEDS/LRTP for the region. Consult with Iowa DOT staff if you are undergoing this structure, as some additional up-front coordination may be necessary with EDA to ensure all requirements are met.

Schedule

Plan the planning process. Setting up a timeline before the process begins is critical to ensuring that the plan is delivered on-time and capable of guiding the other planning work of the region.

Key elements to include in a timeline:

- Detailed schedule (monthly or weekly) at the task and/or component level.
- Staff responsible for tasks, including external resources (such as consultants) will be required.
- Items that will require feedback from the public or stakeholders.

It is suggested that agencies begin developing their timeline 30-36 months before the plan is due. MPO staff must have early discussions with the Iowa DOT regarding travel demand model (TDM) development, to ensure that the model is completed early enough in the planning process to be fully utilized in plan development. The Iowa Standardized Model Structure (ISMS) General Travel Demand Modeling/ Forecasting Protocols and Procedures document provides a coordination process and milestones for model development and will help guide the model development process.

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. MPOs are recommended to set up a coordination meeting with the Iowa DOT, FHWA, FTA, and MPO staff early in the process. RPAs are recommended to set up an early coordination meeting between the Iowa DOT and RPA staff. Iowa DOT will generally 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 for the plan are suggested to occur 24-30 months before the plan due date. Initial coordination meetings for MPO TDM updates are suggested to occur earlier - 30-36 months before the plan due date. An example agenda for an initial plan coordination meeting is included on page 8.

Any potential delays in the document development or adoption process need to be discussed with the Iowa DOT as soon as possible. If an LRTP is not adopted by its deadline (five years from the adoption date of the previous plan), the TIP for that region will be frozen, meaning it cannot be amended and a new TIP cannot be adopted. This can lead to significant 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.

Example Schedule

30 months out

- Begin goal setting
- Develop timeline
- Have initial coordination meetings
- Discuss timeline with District Planner

24 months out

- Establish goals
- Set up Iowa DOT Coordination Meeting
- Begin public participation process
- Begin initial demographic analysis

18 months out

- Hold public participation open houses and committee meetings
- Sections to be completed
- Socioeconomic
- Modal trends & conditions
- Project Development and Evaluation
- Begin plan document preparation
- Begin preparing document & send appropriate chapters to Iowa DOT, FTA, FHWA for review

12 months out

- Project development and evaluation
- Refining and finalizing goals and project prioritization
- Comparison of revenue and costs
- Perform analysis of needs and forecasted available funds
- Plan document preparation
- Submitting chapters to Iowa DOT
- Begin planning approval by policy and technical boards
- Public Comment Period
- Incorporate Iowa DOT comments

6 months out

- Final review and comments by Iowa DOT
- Submit complete draft for review
- Incorporate public and Iowa DOT comments
- Approval by Policy and Tech Committees
- Submit to Iowa DO

Example LRTP Coordination Meeting Agenda:

- Discuss current PPP & any planned updates.
- Discuss previous LRTP and any applicable planning review recommendations
    - Strengths and areas for improvement
    - Specific components to discuss
        - Plan structure
        - Projects and fiscal constraint
        - Suballocation justification (RPAs if applicable)
        - Resource agency consultation
        - Public and stakeholder input
        - Timeline
- Travel demand model (MPO)
    - Anticipated components of model update
    - Socioeconomic data and forecasting methodology
    - Methodology for use in plan development and project selection
    - Needs/expectations/timeline
    - Review requirements and recommended items for LRTP
- Discuss staffing for LRTP update
    - Staff responsibilities
    - Consultant responsibilities (if applicable)
- Coordination with Iowa DOT, FHWA, and FTA
    - Immediate guidance needs
    - Desired level of input and oversight
    - Schedule regular check-ins

4. Important Considerations

Planning Documents

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 agency staff to focus on strengths and areas for improvement and adjust their plans and schedule for the LRTP update accordingly. The Iowa DOT Systems Planning Bureau can provide this type of review upon request as part of an early coordination meeting.

Another key early activity is to **review existing state, regional, and local plans**. State plans to review can include the State Long-Range Transportation Plan, State Freight Plan, State Transportation Asset Management Plan, Strategic Highway Safety Plan, and many others. Examples of regional plans to review include CEDS documents and other regional planning efforts such as trail plans. Local plans may include comprehensive plans, land use plans, hazard mitigation plans, evacuation plans, and jurisdiction-level transportation plans. In addition to providing information that may be relevant to the MPO or RPA, these plans may offer goals, objectives, performance measures, and targets that can be incorporated into the LRTP planning effort.

Projects of note in these (local, regional, and state plans) which are eligible for formula or competitive grant funding should also be included in the LRTP.

Public Input and Consultation

Input from 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 PPP and meet the requirements of **23 CFR § 450.324 (j)-(k)** (see Section 6). 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 planned public input activities for the LRTP align. **Consultation with environmental resource agencies** is also critical and should be planned early.

Utilize public input and stakeholder consultation to develop project lists in the Fiscal Component section (described later in this document), whether via a public meeting, agenda item in a technical committee, or in-person/online surveying.

Iowa DOT Planning Resources

The following planning documents and resources can be utilized to guide the development of MPO and RPA LRTP plans. These and other Statewide Plans are available on the Iowa Department of Transportation website. Please contact Iowa DOT Systems Planning staff if you have any questions regarding the following planning documents:

State Long Range Transportation Plan
Covers all modes of transportation and provides the long-range vision, policies and decision-making framework to guide investments.

Strategic Highway Safety Plan
Provides a comprehensive framework for reducing highway fatalities and serious injuries on all public roads.

State Freight Plan
Documents long-range freight planning activities and investments. It aims to grow the economy and enhance quality of life.

State Bicycle and Pedestrian Plan
Guides bicycle and pedestrian decision-making. It aims to improve conditions and expand opportunities for bicycling and walking.

State Transportation Asset Management Plan
Addresses how National Highway System and DOT owned pavements and bridges are managed in a 10-year planning horizon and focuses on strategies to achieve and maintain a state of good repair.

State Public Transit Long Range Plan
Guides public transportation efforts in the state. It includes strategies and resources for an effective public transit system.

State Resilience Improvement Plan (RIP)
Guides resiliency efforts in the state. It aims to address impacts of natural hazards on the transportation system.

Travel Demand Model

Introduction

MPO staff are required to use a travel demand model (TDM) or other technical analysis in the development of the LRTP. All Iowa MPOs use a TDM. As noted in Section 6, it is recommended that the Policy Board formally approve both the forecast control totals for socioeconomic data and the calibrated model once these items are finalized. This should occur prior to draft or final document approval. MPOs should also clearly articulate how the model is utilized in project prioritization and selection. The following text provides suggestions for incorporating the TDM into the plan development process through evaluating and prioritizing projects. More information can be found in the Iowa Standardized Model Structure (ISMS) General Travel Demand Modeling/Forecasting Protocols and Procedures.

Purpose

The TDM can be used to estimate the impacts of proposed transportation projects and should be used in the project evaluation and selection process. Impacts can be calculated on an individual project basis and on a scenario basis that includes multiple projects. Metrics that can be calculated to gauge the impact of the project(s) on the transportation network include vehicle miles traveled (VMT), vehicle hours traveled (VHT), truck VMT or VHT, level of service (LOS), volume-to-capacity (V/C) ratios, and travel time changes. It is recommended that the LRTP document the type(s) of analysis conducted and include summary metrics for scenarios that are considered.

Scenarios will vary by agency, but minimum suggested scenarios include using horizon year socioeconomic forecasts with the following model networks.

Four Key Components

- Existing Network (E), which includes no additional transportation improvements
- Existing + Committed Network (E+C), which also includes programmed transportation improvements
- Existing + Committed + Planned Network (E+C+P), which also includes planned projects that are within the fiscal constraint of the LRTP
- Existing + Committed + Planned + Illustrative (E+C+P+I), which also includes illustrative projects that are beyond the fiscal constraint of the LRTP

Financial Component

The financial section of an LRTP should be started early in the planning process, particularly for MPO LRTPs. It is critical that the financial information in the document meets the following two criteria:

- Specific fiscal constraint requirements from **23 CFR § 450.324(f)(11)** are outlined in Section 6. Items included in the checklist must be included/addressed.
- The revenue, cost, and fiscal constraint information included in the LRTP must be reasonable. Areas where reasonableness will be evaluated include those listed below.

Items to Include:

1. Historic program funding for previous 10-years
    - Surface Transportation Block Grant - Regional (STBG)
    - Highway Bridge Program (STBG)
    - Transportation Alternatives Program – Regional (TAP)
    - Road Use Tax Fund (RUTF) Receipts
    - Local Funding Receipts
    - Operations and Maintenance (O&M) Costs
2. Projected funding for entirety of planning period
    - Projections of funding sources listed above for the 20-year timespan of the plan
        - Funding projections can be grouped into five-year increments
3. Project selection and prioritization criteria
    - Describe in detail the process the MPO/RPA uses to award applications for funding projects.
4. **Separate project list for state-owned (DOT) facilities or projects within the MPO/RPA region**
    - **Consult District Transportation Planner for DOT projects on the state system**
5. Other items to consider
    - Projects which may be funded with competitive grant opportunities
    - Projects which are identified in the planning process but do not have a funding source identified (illustrative projects)
    - Safety projects developed in county safety plans may be a good place to start for future projects, but is not required.
        - Projects included from county safety plans should include the following disclaimer:

23 USC 407: Discovery and admission as evidence of certain reports and surveys
"Notwithstanding any other provision of law, reports, surveys, schedules, lists, or data compiled or collected for the purpose of identifying, evaluating, or planning the safety enhancement of potential accident sites, hazardous roadway conditions, or railway-highway crossings, pursuant to sections 130, 144, and 148 of this title or for the purpose of developing any highway safety construction improvement project which may be implemented utilizing Federal-aid highway funds shall not be subject to discovery or admitted into evidence in a Federal or State court proceeding or considered for other purposes in any action for damages arising from any occurrence at a location mentioned or addressed in such reports, surveys, schedules, lists, or data."

Reasonableness checks for LRTP financial information

- Revenue forecasts should be based on past trends and/or committed funding. An adequate amount of revenue history needs to be considered, and outliers in past funding trends should be represented in a reasonable manner in forecasts.
- Inflation rate for project costs should be based on historic indices such as the construction cost index.
- Unless otherwise justified, inflation rates for both costs and revenues should be simple/straight-line growth, not compound growth.
- The year of expenditure (YOE) for a project should be the year the project is reasonably expected to be constructed. If project time bands are being used in outer years, the midyear of the time band should be the YOE for all projects within it.
- The federal/non-federal split for fiscal constraint for federally funded projects should be reasonable based on typical/anticipated funding percentages in the area.
- Funding sources should be targeted appropriately. For example, the full amount of a projection of $50 million in bridge revenue cannot be used to help fiscally constrain a program that only identifies $10 million in bridge projects.

Developing project and corridor lists (6-20+ year timeframe)

At the culmination of inventorying infrastructure conditions, safety data, socioeconomic trends, and conducting goal setting with stakeholders and members of the public, the LRTP should have a list of specific projects, corridors or wide-ranging strategies which result from these input activities mentioned above.

RPA projects of regional significance on local systems (6-20+ years)
Extending beyond the five-year list of fiscally constrained projects, RPAs must develop a list of projects, through stakeholder and public input, data analysis of infrastructure and socioeconomic conditions, and other input developed in the planning process.

Long term projects on the state system (DOT sponsored)
MPO and RPA staff must consult with their District Transportation Planner on any relevant DOT projects within the fiscally constrained portion of the plan. The District Transportation Planner is responsible for providing regionally significant projects to be added to the LRTP in accordance with internal Iowa DOT Guidance. These projects are not listed with other projects as they utilize different funding sources and are programmed at the state level. Projects beyond FY20XX have not been programmed for funding by the Iowa Transportation Commission as of the adoption of this plan.

Fiscally unconstrained projects
Projects identified in the planning process, which do not have projected funding should have a separate list in the financial section. This project list allows for elected officials, planning agencies, and the State DOT to see where anticipated funding is not reaching anticipated needs. Adding these projects to the LRTP (among other long-range planning documents) enhances the competitiveness of a project when a new state or federal competitive grant is announced and is sometimes a requirement.

Data and Information

Translating raw data into useful information and analysis: Planning data follows a hierarchical structure, or pyramid, progressing from the most basic to the most advanced levels, as outlined below. The goal is to transform raw data into meaningful knowledge and actionable insight. Data must be interpreted and connected to transportation-related implications to provide value in a planning document.

Example: *data regarding 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.*

Strike a balance in the planning process between what is anticipated (based on current trends and initiatives, such as complete streets 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 current reality, but also considers long term vision and big picture trends. While it is impossible to predict with certainty what an area population, employment and transportation needs will be 20-30 years in the future, the purpose of an LRTP is to identify the most likely scenarios and establish a flexible framework that can adapt to future changes.

<u>Other data-related tips include:</u>

- It is important that maps, graphs, and charts clearly communicate the information being conveyed. Assume that the average reader of the document is unfamiliar with the planning area and consider if they be able to understand what you are showing or referencing with visual aids?
- Interpret data in large tables for the reader. Can data be better visualized with a chart, graph, or map? If not, can trends or highs and lows be identified to help the reader grasp the data?
- 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 the difference between good and poor pavement conditions.

Transforming data

Data is an important basis for a long-range plan, but a successful planning effort means taking the next steps with data to transform it into useful, actionable information. This example helps show how raw data can become a more meaningful component of long-range planning.

- **Data**: Raw material for planning.
    - *Example: 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.
    - *Example: A table of the 50 bridges in a region that are in the worst condition.*
- **Knowledge**: Integration of multiple information sources.
    - *Example: 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.
    - *Example: 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.*

5. Performance-Based Planning

Performance measures and associated targets are the centerpiece of a performance based transportation plan. They provide an objective means to inform decisions about strategies and investments in the transportation plan and serve as indicators to assess progress toward achieving desired outcomes. Performance measures selected for the transportation plan should meaningfully reflect the goals and objectives of the plan, and targets should define a level of performance to be achieved by a specific timeframe.

Federal regulations require States and MPOs to set targets in relation to the Federally- defined national performance measures. MPOs and State DOTs must also include the national performance measures and these performance targets in their transportation plans. Performance-based transportation plans may also include a range of additional performance measures and targets beyond those established for the national measures.

Incorporating Performance-Based Planning Requirements into the LRTP

The following guidance includes the information necessary for an MPO LRTP to be in compliance with the performance-based planning requirements and can be used as a starting point, but MPOs are encouraged to customize and/or expand upon these topics based on each MPO's planning process.

Integrating Performance-Based Plans

Per 450.306(d)(4), MPOs need to integrate other state and transit agency performance-based plans into their planning process. The LRTP should incorporate discussion of applicable documents and planning processes, including the following.

- State Transportation Asset Management Plan (TAMP)
- Asset management plans from local transit agencies
- Strategic Highway Safety Plan (SHSP)
- State Freight Plan
- State LRTP
- Public Transportation Agency Safety Plans for urban transit providers

References to these documents and their goals, objectives, and/or strategies should be tied into the LRTP. Discussion of these topics at a statewide level is included in the introduction of the Statewide Transportation Improvement Program (STIP). MPOs are encouraged to incorporate area-specific information from these plans where applicable. For example, the State Freight Plan includes a bottlenecks prioritization and the State LRTP includes a highway needs analysis. Locations in the MPO region that are identified in these plans could be highlighted in the MPO LRTP.

System Performance Report

MPO LRTPs must include a system performance report. That report must include an evaluation of the condition and system performance of the transportation system with respect to the performance targets, including progress towards meeting targets in comparison to baseline or prior data. System performance report content should include the following.

- Background information regarding MPO requirements.
- Baseline data and targets.
    - These would be State baseline data and targets for any measures where an MPO is supporting the State.
- The methodology for determining performance targets.
    - For any targets where the MPO is supporting the State, the MPO can reference where the State methodology can be found rather than including the State's detailed methodology.
- How the measures (as specific measures or general topics) tie into the LRTP process.
    - This is essentially a broader discussion of the text related to performance management that MPOs are asked to include in their Transportation Improvement Programs (TIPs).
    - This could include a discussion of programming responsibilities, and how some performance targets are for highway systems the MPO does not generally provide funding for.
    - This could also tie to discussion of other (non-federal) performance measures the MPO will be tracking and how the performance measures interact with programming decisions.
- Subsequent adoptions of MPO LRTPs must continue to include a system performance report. These reports must describe the progress of the MPOs in meeting the performance targets in comparison with system performance recorded in previous years.

For MPOs that voluntarily elect to develop multiple scenarios when developing the LRTP, the MPO must conduct an analysis as part of the system performance report addressing 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.

Performance Measures

There are a number of performance measures defined by FHWA and FTA that State DOTs, MPOs, and public transportation providers are required to set targets for. Brief descriptions of each set of targets and links to applicable federal code and resources are provided in the following sections.

FHWA Safety Performance Measures

State DOTs and MPOs must set targets for the following five safety performance measures:

- Number of fatalities.
- Rate of fatalities per hundred million vehicle miles traveled (HMVMT).
- Number of serious injuries.
- Rate of serious injuries per HMVMT.
- Number of non-motorized fatalities and non-motorized series injuries.

Targets are set annually as a 5-year rolling average for all public roads within a State or MPO. States submit targets in their Highway Safety Improvement Program (HSIP) annual report by each August 31. MPOs must decide to support the State's targets or set their own by February 27 of the year after the State sets targets.

Additional Resources:

- Code of Federal Regulations (CFR) for safety performance measures
- FHWA safety performance management resources

FHWA Traffic Congestion and On-Road Mobile Source Emissions Performance Measures

There are two traffic congestion performance measures and one on-road mobile source emissions performance measure established by FHWA. These are only applicable in areas that are in nonattainment or maintenance for ozone, caron monoxide, or particulate matter. None of these measures are currently applicable to Iowa DOT or Iowa MPOs.

Additional Resources:

- CFR for traffic congestion performance measures
- CFR for on-road mobile source emissions performance measures
- FHWA transportation performance management resources

FHWA Pavement, Bridge, System Performance, and Freight Performance Measures

State DOTs and MPOs must set targets for the following four pavement performance measures.

- Percentage of pavements of the Interstate System in Good condition.
- Percentage of pavements of the Interstate System in in Poor condition.
- Percentage of pavements of the non-Interstate National Highway System (NHS) in Good condition.
- Percentage of pavements of the non-Interstate NHS in Poor condition.

State DOTs and MPOs must set targets for the following two bridge performance measures.

- Percentage of NHS bridges classified as in Good condition.
- Percentage of NHS bridges classified as in Poor condition.

State DOTs and MPOs must set targets for the following two system performance measures.

- Percent of person-miles traveled on the Interstate that are reliable.
- Percent of person-miles traveled on the non-Interstate NHS that are reliable.

State DOTs and MPOs must set targets for the following freight performance measure.

- Truck Travel Time Reliability Index for the Interstate System.

For pavement, bridge, system performance, and freight performance measures, States submit 2-year and 4-year targets by October 1 every four years starting in 2018 (e.g., October 1, 2022; October 1, 2026). State 4-year targets can be adjusted two years after they are submitted (e.g., October 1, 2024; October 1, 2028). MPOs must decide to support the State's 4-year targets or set their own 4-year targets within 180 days of State setting or adjusting 4-year targets.

Additional Resources:

- CFR for pavement performance measures
- CFR for bridge performance measures
- CFR for system performance (travel time reliability) performance measures
- CFR for freight performance measures
- FHWA transportation performance management resources

FTA Transit Asset Management Performance Measures

Public transportation providers must develop asset management plans, and providers and MPOs must set targets for the following four transit asset management performance measures. Note that the fourth measure is not currently applicable in Iowa as it pertains to public transportation via rail.

- Rolling Stock: The percentage of revenue vehicles by asset class (type of rolling stock) that have met or exceeded the useful life benchmark (ULB).
- Equipment: The percentage of non-revenue service vehicles by asset class (type of rolling stock) that have met or exceeded the ULB.
- Facilities: The percentage of facilities by group (administrative/maintenance or passenger/parking) that are rated less than 3.0 on the Transit Economic Requirements Model (TERM) Scale. Condition assessments must be no more than four years old.
- Infrastructure: The percentage of track segments (by mode) that have performance restrictions. Track segments are measured to the nearest 0.01 of a mile.

Iowa DOT completes a group asset management plan for small urban and rural transit providers. Large urban (MPO) transit providers complete their own plans. The plans must be updated every four years, while targets are set annually. MPOs can update targets as appropriate or as outlined in any agreements between the MPO and transit provider. Examples include updating MPO targets following the transit provider's annual target update, or during TIP or LRTP development.

Additional Resources:

- CFR for transit asset management performance measures
- FTA transit asset management resources

FTA Transit Safety Performance Measures

Public transportation providers that receive 5307 funding are subject to the Public Transportation Agency Safety Plan (PTASP) regulation. In Iowa, this includes large urban providers that serve MPOs These transit providers must develop a PTASP that includes safety performance measures outlined in the National Public Transportation Safety Plan. The PTASP is updated annually. MPOs must also establish targets for their planning areas and can update targets as appropriate or as outlined in any agreements between the MPO and transit provider. Examples include updating MPO targets following the transit provider's annual PTASP update, or during TIP or LRTP development.

The current NPTSP established 14 performance measures for all agencies subject to the PTASP requirement.

- Major events
- Major event rate
- Collision rate
- Pedestrian collision rate
- Vehicular collision rate
- Fatalities
- Fatality rate
- Transit worker fatality rate
- Injuries
- Injury rate
- Transit worker injury rate
- Assaults on transit workers
- Rate of assaults on transit workers
- System reliability

Agencies subject to the PTASP requirement in urban areas over 200,000 in population are also required to have a safety risk reduction program, with the following eight targets set by the Safety Committee. Some of these measures overlap with the 14 measures required by all agencies.

- Major events
- Major event rate
- Collisions
- Collision rate
- Injuries
- Injury rate
- Assaults on transit workers
- Rate of assaults on transit workers

6. Required Elements

The following table includes the federal requirements of **23 CFR § 450.324**, Development and Content of the Metropolitan Transportation Plan. The right column 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.

CFR Code	CFR Language	Items to Include
450.324 (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 formulating the transportation plan, the MPO shall consider factors described in § 450.306 as the factors relate to a minimum 20-year forecast period. 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) ☐ 10 planning factors must be considered in the planning process
450.324 (b)	The transportation plan shall include 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.	☐ Goals and objectives ☐ Long-range and short-range strategies/actions that lead to the development of an integrated multimodal transportation system

450.324 (c)	The MPO shall review and update the transportation plan at least every 4 years in air quality nonattainment and maintenance areas and at least every 5 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 MPO shall approve the transportation plan (and any revisions) and submit it 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 amendments to the Iowa DOT, FHWA, and FTA as prescribed in Section 2
450.324 (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*
450.324 (e)	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.	☐ Use a travel demand model or other technical analysis in the development of the plan **(MPO)** ☐ 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) **(MPO)** ☐ Clearly articulate how the model is utilized in project prioritization and selection **(MPO)**
450.324 (f)	**The metropolitan transportation plan shall, at a minimum, include:**	

450.324 (f)(1)	The current and projected transportation demand of persons and goods in the metropolitan planning area over the period of the transportation plan.	☐ Current data and trends or projections for person movements. Modes can include vehicular, transit, bicycle, pedestrian, air, and rail. ☐ Current data and trends or projections for freight movements. Modes can include truck, rail, water, air, and pipeline.
450.324 (f)(2)	Existing and proposed transportation facilities (including major roadways, public transportation facilities, intercity bus facilities, multimodal and intermodal facilities, nonmotorized transportation facilities (e.g., 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.	☐ Inventory and current conditions of infrastructure/facilities (include state-owned facilities) ☐ Highways ☐ Bridges ☐ Bicycle facilities ☐ Pedestrian facilities ☐ Public transportation facilities ☐ Intercity bus facilities ☐ Rail ☐ Aviation ☐ Pipeline ☐ Waterways ☐ Multimodal and intermodal facilities and connectors ☐ Future transportation infrastructure/facilities for regionally significant projects – major surface transportation projects that support or otherwise impact the operation of the federally-supported transportation system, including, but not limited to, capacity changes, new accesses, and new roadways ☐ Current and forecasted land use ☐ Freight data and trends ☐ Current socioeconomic conditions (to understand system use) ☐ Projected transportation demand of persons and goods over the horizon of the LRTP ☐ Projections of population and employment growth/decline
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).	☐ Provide performance measures and current targets **(MPO)** *(See list of required performance measures in Section 5)*

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— - 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 - 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.	☐ System performance report evaluating the condition and performance of the transportation system with respect to targets described in the LRTP, including progress towards meeting targets in comparison to baseline or prior data **(MPO)** ☐ If scenario planning is used (see 450.324(i)), a preferred scenario must be selected and its impacts on condition and performance of the transportation system need to be described **(MPO)**
450.324 (f)(5)	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 Intelligent Transportation Systems (ITS), incident management, etc. **(MPO)**
450.324 (f)(6)	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 **(TMA)**
450.324 (f)(7)	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.	☐ Discussion of project evaluation criteria and selection process ☐ Discussion of financial strategies *(see also 450.324 (f)(11))* ☐ Discussion of strategies to reduce the vulnerability of transportation infrastructure to natural disasters

450.324 (f)(8)	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.	☐ Discussion of transportation enhancement activities, including those related to transit and intercity buses
450.324 (f)(9)	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 regulations (40 CFR part 93, subpart A). 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 **(MPO)** ☐ *Detail related to conformity determinations only applies to non-attainment and maintenance areas, and thus is currently not applicable*
450.324 (f)(10)	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 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;	☐ Program-level discussion of potential environmental mitigation activities (provide examples of activities) ☐ Description of how consultation with resource agencies was carried out and any input received ☐ Describe and map environmentally sensitive areas that should be avoided (*See also 450.324 (g)*)

450.324 (f)(11)	A **financial plan** that demonstrates how the adopted transportation plan can be implemented.	**MPO fiscal constraint requirements** are outlined in the next eight sections (450.324 (f)(11)(i)-(viii))
		
		RPA fiscal constraint requirements
		- Financial history for STP/STBG 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 projects list** (first five years)
		  - Full list of fiscally constrained projects (years 1-5)
		
		RPA Project Lists (non-fiscally constrained)
		- **Long-term projects and corridors of interest/concern** (years 6-20+)
		  - Include any corridors of interest, especially projects which could be funded with existing funding sources (STBG, TAP), or competitively through other competitive/discretionary sources
		  - Projects of higher priority should be listed, but not necessarily all projects between years 6-20 need to be listed.
		  - 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
		- **RPA must consult with District Transportation Planner on any relevant DOT projects to include in the plan.**
		  - The District Transportation Planner is responsible for providing regionally significant projects to be added to the RPA LRTP in accordance with internal Iowa DOT guidance.
		  - It is recommended that these projects be included as separate lists with the following language: "These projects are not listed with other projects as they utilize different funding sources and are programmed at the state level. Projects beyond FY20XX have not been programmed for funding by the Iowa Transportation Commission as of the adoption of this plan."
		- For RPAs that suballocate part or all of their funding, identify how specific LRTP goals and strategies are achieved through suballocation.

450.324 (f)(11)(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 the 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; comparison of costs versus revenues **(MPO)** ☐ Operations and maintenance costs history and projections **(MPO)**
450.324 (f)(11)(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 **(MPO)** ☐ STBG ☐ TAP ☐ Other federal sources (such as CMAQ/ICAAP, STBG-HBP, NHPP, NHFP, etc.) ☐ State funding sources (road use tax fund, etc.) ☐ Local funding available for transportation (local option sales tax, etc.)
450.324 (f)(11)(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. 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.	☐ 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. **(MPO)**

450.324 (f)(11)(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. 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 **(MPO)** □ 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 **(MPO)**
450.324 (f)(11)(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. **(MPO)**
450.324 (f)(11)(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*
450.324 (f)(11)(vii)	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.	□ 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. **(MPO)**
450.324 (f)(11)(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 **(MPO)**

450.324 (f)(12)	Pedestrian walkway and bicycle transportation facilities in accordance with 23 U.S.C. 217(g).	☐ Current status and potential projects/challenges related to pedestrian and bicycle facilities ☐ Per 23 USC 217g, bicyclists and pedestrians shall be given due consideration, including with regard to safety and contiguous routes, in transportation plans; bicycle and pedestrian facilities shall be considered where appropriate
450.324 (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: - Comparison of transportation plans with State conservation plans or maps, if available; or - Comparison of transportation plans to inventories of natural or historic resources, if available.	☐ Resource agency consultation (*see also 450.324 (f)(10)*) ☐ 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

450.324 (h)	The metropolitan transportation plan should integrate the priorities, goals, countermeasures, strategies, or projects for the metropolitan planning area contained in the HSIP, including the SHSP required under 23 U.S.C. 148, the Public Transportation Agency Safety Plan 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 Public Transportation Agency Safety Plan, 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.	☐ **MPO must consult with District Transportation Planner on any relevant DOT projects to include in the plan.** ☐ The District Transportation Planner is responsible for providing regionally significant projects to be added to the MPO LRTP in accordance with internal Iowa DOT guidance. ☐ It is recommended that these projects be included as separate lists with the following language: "These projects are not listed with other projects as they utilize different funding sources and are programmed at the state level. Projects beyond FY20XX have not been programmed for funding by the Iowa Transportation Commission as of the adoption of the plan." ☐ Reference the State Strategic Highway Safety Plan and any public transportation agency safety plans ☐ Include any projects within the region from this plan in the LRTP ☐ Provide area crash background and analysis ☐ Potential for Crash Reduction rankings and Iowa Crash Analysis Tool ☐ Other safety/security elements ☐ Multi-disciplinary safety team activities ☐ Emergency preparedness/evacuation plans

450.324 (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 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)* Consider multiple scenarios in plan development in areas such as: ☐ Funding availability ☐ Population and employment growth/decline ☐ Land use ☐ Modal use ☐ Technology adoption ☐ Outcomes for performance measures

450.324 (j)	The MPO shall provide 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 program, vanpool program, transit benefit program, parking cashout program, shuttle program, 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 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 ☐ Public ports ☐ Freight shippers ☐ Providers of freight transportation services ☐ Private providers of transportation, including intercity bus operators and employer-based commuting programs ☐ Representatives of users of public transportation ☐ Representatives of users of pedestrian walkways and bicycle transportation facilities ☐ Representatives of the disabled ☐ Other interested parties ☐ Have the draft and final documents readily available for public review, including electronically accessible formats ☐ Follow the requirements in section 2 for state and federal partner review
450.324 (k)	The MPO shall publish or otherwise make readily available the metropolitan transportation plan 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
450.324 (l)	A State or MPO is not required to select any project from the illustrative list of additional projects included in the financial plan under paragraph (f)(11) of this section.	☐ Illustrative projects are not required to be selected ☐ **MPO should consider listing non-constrained long-term projects outside of fiscal constraint which could be funded through opportunities not mentioned in the LRTP Document.**

450.324 (m)	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, subpart A). A 12-month conformity lapse grace period will be implemented when an area misses an applicable deadline, in accordance with the Clean Air Act and the transportation conformity regulations (40 CFR part 93, subpart A). At the end of this 12-month grace period, the existing conformity determination will lapse. During a conformity lapse, MPOs can prepare an interim metropolitan transportation plan as a basis for advancing projects that are 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, subpart A. 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.	☐ *Non-attainment and maintenance areas only – currently not applicable*