

CHAPTER 1

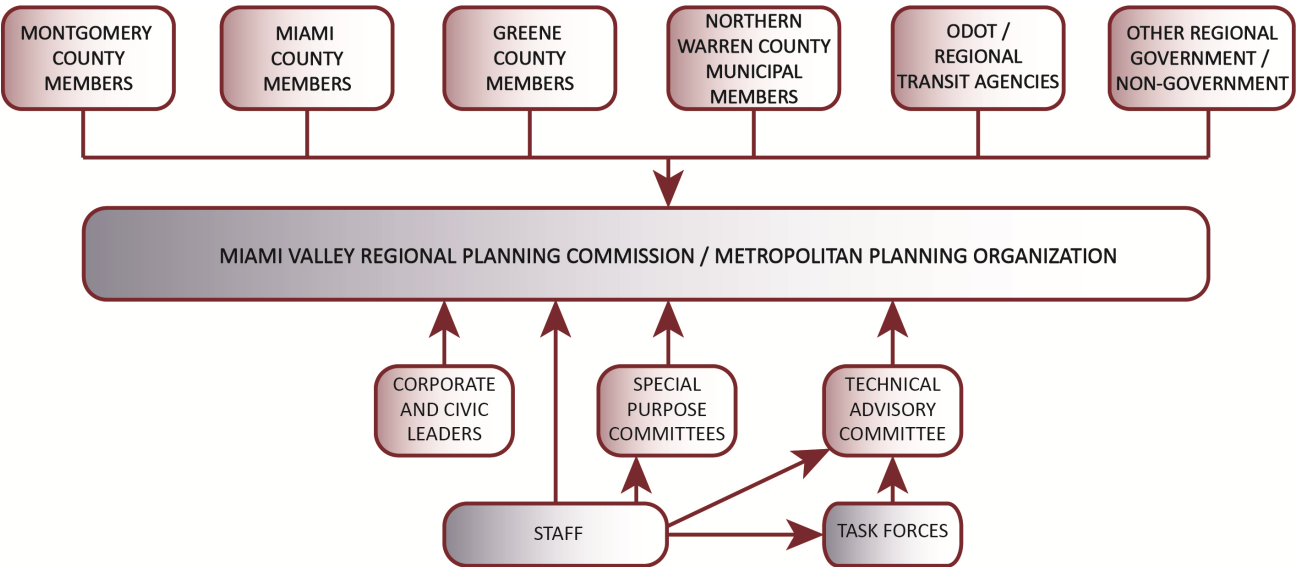
INTRODUCTION

1.1 Transportation Program Structure

The Miami Valley Regional Planning Commission (MVRPC) is the Regional Planning Commission for Darke, Greene, Miami, Montgomery, and Preble counties in west-central Ohio. MVRPC is also the Metropolitan Planning Organization (MPO) for Greene, Miami, and Montgomery counties, the cities of Carlisle, Franklin, and Springboro, and Franklin Township in Warren County (hereafter referred to as northern Warren County) (see Figure 1.2). As such, MVRPC is responsible for developing, implementing, monitoring, and updating a variety of transportation plans that are designed to enhance the Region’s competitive position, promote regional growth, improve personal mobility, and preserve the environment.

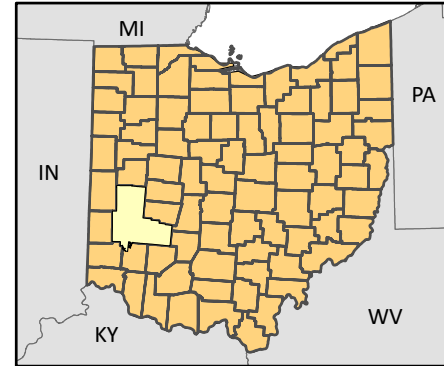
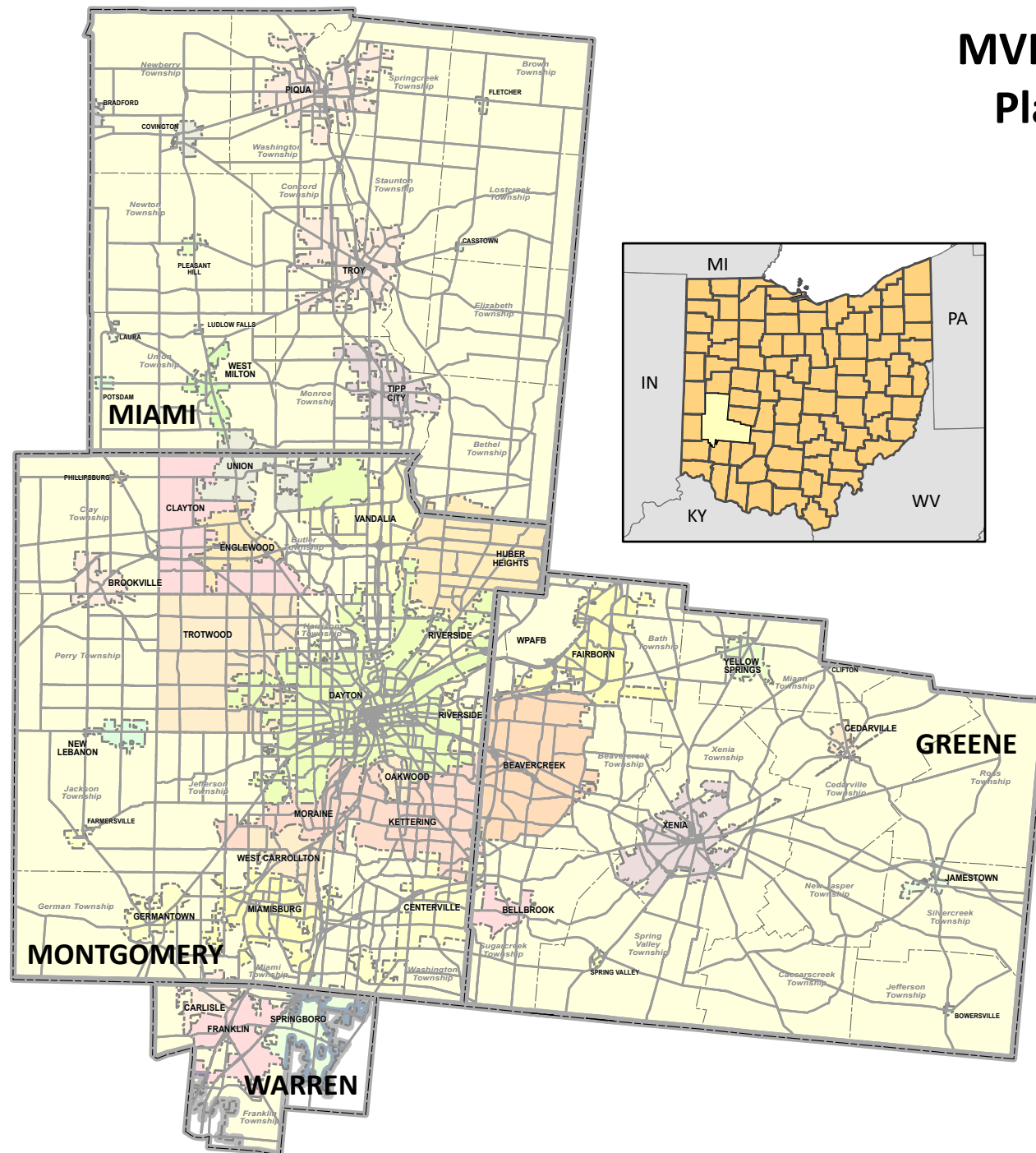
Figure 1.1 gives a brief overview of the transportation program structure at MVRPC.


Figure 1.1 — MVRPC Transportation Program Structure



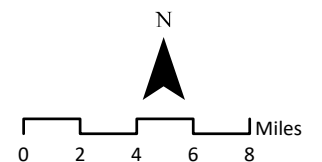
The MVRPC Board of Directors is the policy-making body and consists of local elected officials from the member jurisdictions throughout the Region. The Board also includes representation from corporate and civic leaders, the Ohio Department of Transportation (ODOT), and the regional transit systems. The Board of Directors meets regularly and receives input from the Technical Advisory Committee (TAC) and/or other special committees to make decisions regarding the Regional Planning Commission and the MPO. Only those members of the Board of Directors that are members of the MPO can act on MPO-related issues, such as the adoption of the Long Range Transportation Plan.

Figure 1.2
MVRPC Transportation
Planning Area Map



 Metropolitan Planning Organization Boundary

Source: MVRPC
May 2021



The TAC is a permanent committee composed primarily of transportation professionals from local jurisdictions and counties, ODOT, transit systems, and other government districts. Together they review and provide technical assistance and make recommendations to the Board on transportation-related projects and programs planned for the Miami Valley Region. Special task forces serve a specific purpose by examining requests for modifications to previously adopted access control plans, thoroughfare plans, and other plans. Technical representatives from the jurisdictions that are likely to be affected by the modification(s) use input from these groups to make well-informed decisions on transportation plans that will affect the Region for years to come.

MVRPC technical staff (planning, engineering, and GIS) generate forecasts, system alternatives, recommendations, and reports for subsequent review and action by the Board of Directors.

1.2 Long Range Transportation Plan Overview

The Long Range Transportation Plan (LRTP) is a long range (20+ year), multimodal strategy and capital improvement program developed to guide the effective investment of public funds in transportation facilities. The LRTP is updated every five years, and may be amended as a result of changes in projected Federal, State, and local funding; major investment studies; the congestion management process; interstate interchange justification/modification studies; environmental impact studies; and federal or state legislation. The LRTP provides the context from which the Region's Transportation Improvement Program (TIP), a capital improvement program for implementing highway, transit, and other multimodal projects, is drawn.

MVRPC last conducted a comprehensive update of its LRTP in 2016, focusing on highway, transit, and bicycle/pedestrian transportation improvements desired between 2016 and 2040. Since the adoption of the LRTP in May 2016, MVRPC staff has worked on the data collection, analysis, and program development necessary to update it. The new plan, titled the 2021 Update to the 2050 Long Range Transportation Plan (hereafter 2050 LRTP or the Plan), adopted on May 6, 2021, is a 30-year multimodal transportation plan



with a base year of 2010 and a planning horizon year of 2050. The 2050 LRTP reflects active involvement by the elected officials, engineers and planners of the MPO's jurisdictions and member agencies, as well as input from the business community, general public, and special interest groups. This update also reflects current and projected land uses, demographics, economic conditions, traffic conditions, environmental analyses, and local/State/Federal priorities, so that the Plan can be actively used and referred to by local decision makers.

There have been numerous new initiatives incorporated into the 2050 LRTP update. The Plan includes a discussion on the latest Federal Transportation law — the FAST Act and the performance management approach compliance requirements. In 2019, MVRPC's Project Evaluation System (PES) was updated to better align the project selection and evaluation criteria with the type of projects that are currently being funded and to incorporate equity criteria and a performance management approach.

MVRPC conducted a basic accessibility services analysis for vulnerable populations and incorporated the results into the Community Impact Assessment (**Chapter 10**). The Plan also includes results from an ODOT-commissioned pedestrian crash risk assessment study that identifies locations in the Miami Valley where conditions exist for pedestrian crashes to occur. For the 2050 LRTP Update, MVRPC also updated its regional report card based on latest safety, congestion, mobility, and land use data. Finally, the Plan includes an extensive discussion on climate change in the environmental planning chapter (**Chapter 9**).



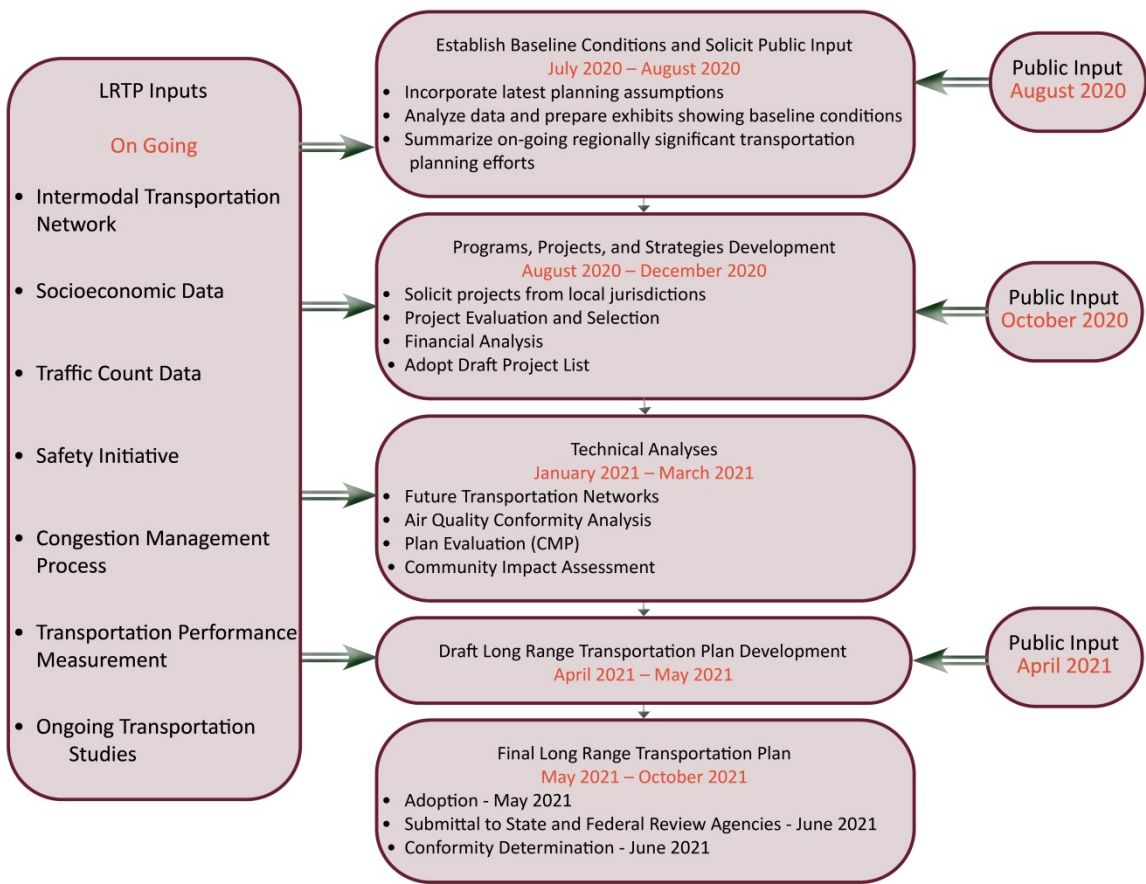
Owing to the COVID-19 pandemic, MVRPC had to make appropriate modifications to its Plan development process by shifting all consultation and coordination processes, including public participation meetings, to the virtual environment. Zoom meetings, emails, and the Plan website were utilized to communicate with stakeholders. At the same time, suitable accommodations were also made for non-internet users as described in **Chapter 11**.

The process for preparing the 2050 LRTP included several steps as shown in Figure 1.3. MVRPC started the update process by collecting data for the base year transportation and land use conditions to be used for transportation modeling and analysis purposes. Data collection was an on-going process throughout the update and included gathering several types of data – highway and transit networks, socioeconomic data, traffic counts, transportation performance measures and targets, and major studies conducted in the Region.

Following the data collection effort, MVRPC prepared exhibits displaying background transportation, socioeconomic, and land use information for the 2050 LRTP Update. The socioeconomic and land use data analysis is presented in **Chapter 3** of this report. A virtual public participation meeting was held in August 2020 to present the background information pertaining to the Plan.

Between August and December of 2020, MVRPC carried out the projects, programs, and strategies development process whereby MVRPC solicited projects from local jurisdictions. The draft (not-fiscally-constrained) project list that resulted from the solicitation process was presented to the public in two virtual meetings in October of 2020. After taking note of public input and working with project sponsors, MVRPC staff completed the project evaluation process to develop a fiscally-constrained proposed project list. The proposed project list was adopted by the Board of Directors in December 2020. **Chapters 4 to 7** of this report provide detailed information on projects, programs, and strategies.

Figure 1.3 — 2050 Long Range Transportation Plan Update Process Overview



Based on the proposed project list and the previously gathered transportation, socioeconomic, and land use data, MVRPC completed the required plan analyses between January 2021 and March 2021. Travel demand forecasts were produced for various scenarios, including: the base year (2010); the horizon year assuming implementation of existing and committed projects only (2050 E+C); and the horizon year assuming the implementation of all congestion management projects in the Plan (2050 Plan). All regionally significant congestion management projects were analyzed for potential environmental impacts and possible mitigation measures were suggested. Community impact analysis was also conducted to identify and address environmental justice issues. Analyses conducted as part of the 2050 LRTP update are explained in further detail in **Chapters 4, 9 and 10**. **Chapter 8** documents the FAST Act requirements for implementing performance management as part of the metropolitan transportation planning process, and provides a summary description of the performance measures and targets applicable to the MVRPC MPO Region.

MVRPC held a final virtual public participation meeting in April 2021 to present the draft 2050 LRTP update to the public for their input and comments. The final draft Plan was also presented to the TAC for their recommendations and comments. The 2021 Update to the Long Range Transportation Plan was adopted on May 6, 2021 by the MVRPC Board of Directors. Following the adoption of the Plan by the Board, the draft report was submitted to ODOT, U.S. Environmental Protection Agency (U.S. EPA), Federal Highway Administration (FHWA), and Federal Transit Agency (FTA) for their review and approval.

As described above, MVRPC made extensive public outreach efforts in every step of the 2050 LRTP update process to increase the likelihood of public participation. Public participation efforts are summarized in **Chapter 11** of this report.

1.3 Transportation Goals and Objectives

MVRPC's transportation goals and objectives were redefined in 2003 as a result of a community-based visioning process known as TransAction 2030. The objective was to identify the collective transportation values of the communities in the Region and develop a shared transportation vision, along with measurable criteria that could be applied to potential projects to gauge their consistency with the vision. TransAction 2030 involved soliciting input from stakeholders in the Region by applying various tools and methods. Based on this input, transportation goals were identified and incorporated into the MVRPC Strategic Plan. In May of 2007, MVRPC revised the Plan's goals and objectives to incorporate "security" into its transportation system management objective as per SAFETEA-LU requirements.

The Board of Directors reaffirmed the goals and objectives for use in the 2021 LRTP update in October 2020. The transportation goals are included in MVRPC's Strategic Plan under the larger umbrella of Regional Stewardship, Vibrant Communities, Partnerships (Vigorous Economy), and Sustainable Solutions.

Regional Stewardship

Develop Regional Priorities — Continue to address regional transportation needs that further the shared social, economic, transportation, and environmental goals of the Region.

Vibrant Communities

Transportation Choices — Encourage a stronger multi-modal network in the Region to ensure that people and goods reach their destination safely, efficiently, and conveniently.

Transportation System Management — Continue to maintain and upgrade the regional transportation system by providing safety, security, aesthetic, and capacity improvements as needed.

Transportation and Land Use — Incorporate regional land use strategies into the transportation policy and the investment decision making process.

Vigorous Economy

Transportation — Continue to address regional transportation needs to enhance economic development in order to attract and retain businesses in the Region while improving the quality of life of its residents.

Sustainable Solutions

Clean Air — Encourage the pursuit of alternative fuels and transportation to reduce emissions and our reliance on petroleum-based products.

1.4 Federal, State, and Local Requirements

MVRPC complies with Federally-mandated planning requirements that the Long Range Transportation Plan is meant to satisfy. An explanation of the requirements is provided in **Chapter 2**.

1.5 Fiscal Constraint

Fiscally constrained lists for highways, transit, and sustainable growth strategies for the 2050 LRTP were developed based on:

- LRTP Project Sponsors;
- Public comments on transportation system needs and opportunities;
- Review by the local jurisdiction’s engineers and planners, ODOT Districts, and Transit Agencies; and
- Review by MVRPC staff.

For each mode, the costs of the 2021 through 2050 plan projects are balanced against projected revenues and, following the FAST Act requirements, are expressed in year of expenditure dollars. The fiscal constraint for each transportation mode are summarized in Table 1.1. Extensive documentation of project costs, revenues, and fiscal constraint for highway, transit, and bikeway/pedestrian strategies is provided in **Chapters 5, 6, and 7**, respectively.

Table 1.1 — Fiscal Constraint of the 2050 LRTP Projects
(in millions of Year of Expenditure dollars)

Project Type	Total Revenues	Total Cost	Total Revenues - Total Cost
Highway Maintenance/Reconstruction	\$4,240.00	\$4,240.00	0.00 (Fiscally Constrained)
Highway Operational/Safety/Capacity	\$2,959.46	\$2,326.89	+\$632.57 (Fiscally Constrained)
Transit	\$3,810.45	\$3,810.45	0.00 (Fiscally Constrained)
Ridesharing/Air Quality	\$27.18	\$27.18	0.00 (Fiscally Constrained)
Bikeway/Pedestrian	\$20.25	\$20.25	0.00 (Fiscally Constrained)

Source: MVRPC

1.6 Air Quality Conformity

On March 6, 2015, U.S. EPA published the final rule for the Implementation of the 2008 NAAQS for Ozone: State Implementation Plan Requirements, 80 FR 12264, effective April 6, 2015. The final rule revoked the 1997 ozone standard for all purposes including transportation conformity but on February 16, 2018, the U.S. Court of Appeals for the District of Columbia Circuit on the South Coast II Court Case held that transportation conformity determinations must continue to be made in those areas (“orphan areas”). As an ozone orphan area, and consistent with U.S. EPA’s November 29, 2018 guidance and interagency consultation, MVRPC will advance a qualitative Long Range Transportation Plan (LRTP) conformity determination for the Dayton/Springfield Region.

The conformity analysis demonstrates that the transportation programs in the Dayton/Springfield and northern Warren County areas conform to applicable air quality standards. The current air quality status and the associated requirement and procedures by which MVRPC performed the 2050 LRTP update transportation conformity analysis are discussed in detail in **Chapter 9**.

1.7 Project Implementation

All federally and non-federally funded surface transportation projects (that are regionally significant and that increase capacity, extend roadways, or add new roadways) are implemented via the following steps:

- The project must be in the Long Range Transportation Plan;
- The Long Range Transportation Plan must continue to meet financial constraints and air quality conformity;
- The project must be placed on MVRPC's TIP;
- The project receives funding and can move towards implementation.

It is important to note that non-federally funded projects (that are regionally significant and that increase capacity, extend roadways, or add new roadways) are treated the same as federally funded projects because of their potential air quality impacts. Further, ODOT, local jurisdictions, and modal agencies might need to work to break up large projects into smaller, more manageable components (i.e., preliminary engineering, environmental, right-of-way, construction, as well as smaller segments) in order to improve project funding capability and facilitate project development and implementation.



1.8 Amending and Updating the Long Range Transportation Plan

Amendments to the Plan may occur either as part of the comprehensive update (every five years), annual TIP-related updates, or at other times as needed. The comprehensive update is a federal mandate and consists of re-examining the basic assumptions behind the Plan and the resulting projects and strategies. Amendments to the Plan requiring a comprehensive update consist of reassessing:

- Land use, demographic, and economic forecasts;
- Projected traffic and travel deficiencies;
- Financial Analyses (Cost/Revenues);
- Regional Air Quality Analyses; and
- Other aspects of the vision and plan.

Amendments to the Plan requiring a comprehensive update would need to be adopted by MVRPC's Board of Directors, after the opportunity for general public review and comment.

A comprehensive update is normally initiated by staff on a timetable that ensures the continuation of at least a 20 year horizon for the Plan, and that meets the federal update timeframe requirements (currently every 5 years). On those other rare occasions when a comprehensive or major update might be requested by a jurisdiction due to unforeseen changes to a major project or due to drastic and immediate changes in land use/demographics/economics, staff would develop a timeline to conduct the update in a timely manner.

The following outlines the anticipated process for Plan amendments:

- Receive a formal jurisdictional request for a Plan amendment;
- Complete the Project Profile and Evaluation Forms;
- Determine if additional revenues are available to cover the project or modified project;
- If sufficient additional revenues cannot be projected, submit recommendations to redesignate Long Range Transportation Plan projects as non-plan projects; any agreements with other jurisdictions or agencies to redesignate projects should be so noted;
- Submit justification for the amendment.

MVRPC staff would then finalize the project evaluation, review the appropriateness of the proposed amendment, review the financial constraints, conduct the air quality conformity analysis, and make a recommendation for the Board's action.