



Chapter 1: Introduction



1

Purpose of the Plan

The Michiana on the Move: 2045 Transportation Plan acts as a blueprint for how the Michiana region will address its transportation needs and how federal, state and local funds will be invested into highways, public transit, freight, bikeways and pedestrian walkways. The Plan also references other local and regional plans in order to coordinate multimodal and intermodal services throughout the community.

Guided by input from public officials, agency staff, key stakeholders, and citizens of the region, Michiana on the Move is a roadmap for implementing multimodal transportation improvements in the Michiana region through the year 2045. The regional transportation system is evaluated in order to identify and formulate the best solutions to topic areas such as safety, congestion, highway, public transit, bike and pedestrian and multi-modal systems for the local communities. The 2045 Transportation Plan emphasizes the use of existing roads and alternate modes of transportation as invaluable in addressing and identifying solutions to congestion problems.

MPO Background

A Metropolitan Planning Organization (MPO) is a transportation policy-making body made up of representatives from local government and transportation agencies with authority and responsibility in metropolitan planning areas. Federal legislation passed in the early 1970's required the formation of an MPO for any urbanized area with a population greater than 50,000 residents. MPOs were created in order to ensure that existing and future expenditures for transportation projects and programs

were based on a continuing, cooperative and comprehensive planning process. Federal funding for transportation projects and programs is channeled through the MPO.

The Michiana Area Council of Governments (MACOG) is a regional organization serving Elkhart, Kosciusko, Marshall, and St. Joseph Counties in Indiana. MACOG was originally organized under the 1964 Amendments to the Interlocal Cooperation Act of the Indiana General Assembly, Section 53-1101 to 53-1107 and the Urban Cooperation Act No. 7, Michigan Public Acts of 1967. Bylaws were adopted by the organization on December 2, 1970.

MACOG serves as a forum for regional discussion and cooperation. MACOG, as a regional organization, is the U.S. DOT designated Metropolitan Planning Organization (MPO) for the region's urban counties of Elkhart and St. Joseph and a Rural Planning Organization (RPO) for the region's rural counties of Kosciusko and Marshall. In addition, MACOG operates the Interurban Trolley, a public fixed-route transit service in the cities of Elkhart and Goshen; serves as the designated Economic Development District by the United States Economic Development Administration; and staffs the St. Joseph River Basin Commission representing seven Indiana counties.

MACOG is governed by a Policy Board and Transportation Technical Advisory Committee that provides guidance and assistance to MACOG in its regional planning activities.

The MACOG Policy Board

The Policy Board is the body responsible for policy formulation, project guidance, and administrative coordination of all policy relating to the development of the transportation plan and its implementation within the Michiana region. Official action taken by MACOG must be approved by the Policy Board.

The Policy Board includes elected officials representing the cities and counties within the metropolitan and rural planning areas. A list of the current Policy Board members is included in the acknowledgements.

Transportation Technical Advisory Committee

The Transportation Technical Advisory Committee (TTAC) is comprised of planners, engineers, and other professional staff from various departments representing the local public agencies in the planning area. TTAC serves as the advisory group to the MACOG Policy Board. MACOG staff works closely with TTAC members on project development, planning and oversight. A list of current TTAC members is listed in the acknowledgements.

Planning Area

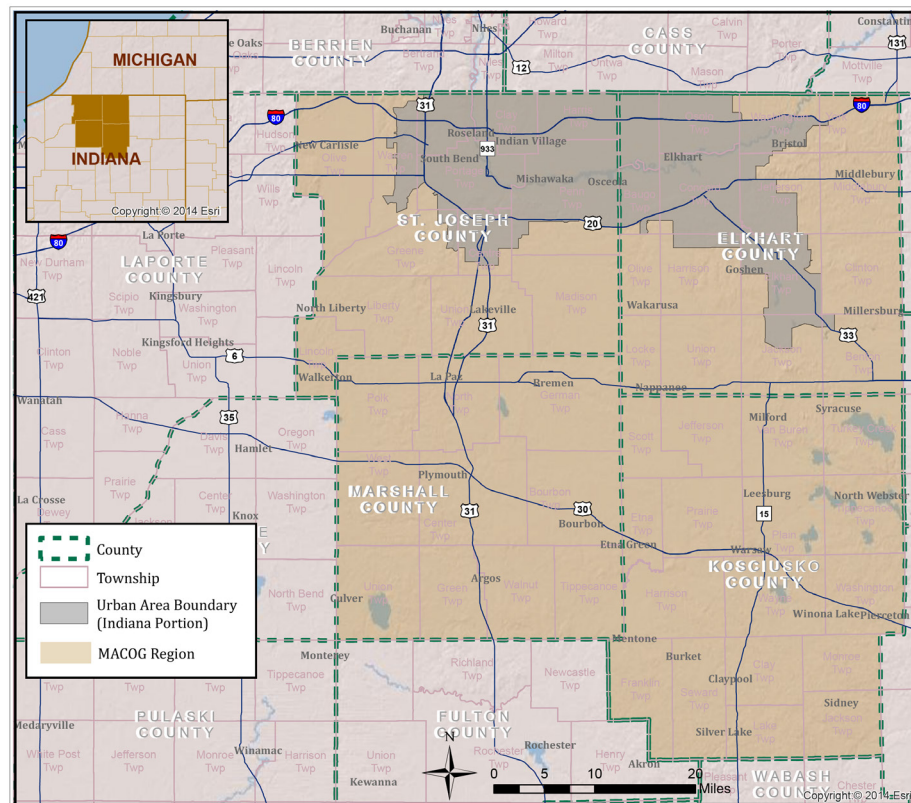
The MACOG planning area consists of the federally designated urbanized areas of Elkhart and St. Joseph Counties. MACOG also serves as a rural planning organization to Kosciusko and Marshall Counties. The 4-county region contains an estimated 601,923 people (2018 Census Population Estimates), covers 1,921 square miles, and includes 35 cities and towns.

MACOG is unique in the sense that it is an MPO representing two urbanized areas (the South Bend Urbanized Area and the Elkhart/Goshen Urbanized Area). In addition to the two urban areas, a portion of the South Bend Urbanized Area extends into Michigan around the City of Niles. MACOG coordinates with the Southwest Michigan Planning Commission (SWMPC) for planning in the Niles area.

Fast Act Planning Factors

Fixing America's Surface Transportation Act was signed into law by President Obama in 2015, building upon much of the former Act's (Moving Ahead for Progress in the 21st Century MAP-21) directive to address transportation infrastructure issues through performance-based planning frameworks. An MPO must have a 20-year long-range transportation plan and a transportation improvement program that implements the plan. Together, the plan and program work on comprehensive development and management

Figure 1-1: MACOG Planning Area



of transportation systems that considers all transportation modes.

The FAST Act lists ten (10) Planning Factors, which MACOG took into consideration during the planning and development of the 2045 Transportation Plan.

- Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency.
- Increase the safety of the transportation system for motorized and non-motorized users.
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- Increase 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, 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.
- Enhance travel and tourism.

Planning Process

The Michiana on the Move plan was developed through coordination with other plans and agencies including federal, state and local partners. Additionally, an overarching component to the planning process is public participation. The Plan is a reflection of the needs of the public on transportation investments for the future.

This plan is required to be realistic and fiscally constrained.

An extensive planning process was followed in the development of the 2045 Transportation Plan. Essential elements included the identification of needed projects and resource allocation. These were supported by the following tasks.

MACOG 2045 Transportation Planning Process

- Public Outreach
- Forecasting socioeconomic data
- Existing conditions and needs analysis
- Forecasting travel demand
- Scenario Planning
- Identification of problem areas and project development
- Red flag analysis
- Title VI and Environmental Justice

Public Outreach

MACOG conducted a variety of public outreach efforts throughout the development of the Michiana on the Move 2045 Transportation Plan. In the Fall of 2018, two surveys were released, gathering input on future development in our region and transportation concerns. Collecting similar input, MACOG staff held a series of pop-up events at 11 locations throughout the region, engaging with over 150 individuals.

MPO staff also held and attended numerous meetings with elected officials, engineers, planners, and other key stakeholders to gather feedback on a vision, goals, and strategies for transportation investments.

MACOG utilized meetings for Policy Board and the Transportation Technical Advisory Committee (TTAC) to provide updates on planning activities for the Michiana on the Move plan. Additionally, information was distributed via social media, email, newsletters, the MACOG website and press releases to inform the public on key milestones.

The public was also given the opportunity to provide comments on the Plan and projects in its final draft state during an open public comment

period from September 3, 2019 to October 2, 2019. An open house was held on September 17th from 3:00 p.m. to 6:00 p.m. in order to provide all a chance to ask questions and give feedback.

Socioeconomic Forecasts

Socioeconomic data such as population, number of households, household income, and employment levels are important to assess the future transportation needs of the MPA. This data can greatly inform future travel behavior. The historic and current socioeconomic data available along with projections developed by Woods & Poole and other economic forecasts were used to develop the future population and employment numbers of the MPA. The regional socioeconomic data was allocated to Traffic Analysis Zones (TAZs) and incorporated into a hybrid travel demand model for the 2045 Transportation Plan. The data was used in the travel demand model to assess the current conditions and future travel demand within the MPA.

Existing Condition and Needs Analysis

MACOG used various planning tools to conduct an existing condition and needs analysis. A detailed description of the region's current conditions, trends and projections are laid out in Chapters 2 and 3. A brief discussion of analysis factors and methodology used to conduct the needs analysis is given below.

Providing safe and efficient movement of goods and people, with access to employment, shopping, recreational and other facilities is the primary role of the transportation system. This system should be available to everyone in the region, which is why the Michiana on the Move plan considers all forms of transportation. The Plan addresses the impact of connectivity between various land uses and between various communities within the region. The safety of individuals using all modes of transportation was considered throughout the Plan.

Forecasting Travel Demand

Forecasting travel demand is an important part of transportation planning. Anticipating the demands of future travel assists local governmental agencies in identifying the future

needs of the region and planning to account for and fulfill those needs. The travel demand model not only forecasts the generation of future trips but also forecasts the modal splits based on the affordability of a personal vehicle, availability of alternative modes of transportation, and travel behavior of the users based on time of day, facility types and travel conditions of the roadways.

MACOG uses a hybrid tour based model developed for the 2040 Transportation Plan to forecast future travel demand. For the 2045 Transportation Plan, the model was expanded to not only include Elkhart and St. Joseph Counties, but also Marshall and Kosciusko Counties and Niles, Michigan. The model is sensitive to conditions such as the availability of alternative modes of transportation, urban design elements, types of controls existing at the intersections, speeds and delays, and fuel prices. Unlike the traditional 4-step trip-based travel demand model, MACOG's hybrid model includes 12 steps. A description of the modeling process is provided in Appendix C.

Scenario Planning

Scenario planning was integrated into Michiana on the Move, to be used as a tool to evaluate and recognize how development and land use impact our region's transportation network. Multiple scenarios were developed including high and baseline growth alternatives, as well as urban growth development patterns. These scenarios were not generated to choose a preferred scenario, but rather to attempt to understand the impact of different growth patterns on the transportation network. Scenario planning offers a way to help assess different needs and prepare for possible future conditions.

Identification of Problem Areas

The hybrid travel demand model and scenario development was used to evaluate the existing transportation network's performance with the anticipated alternatives for future population and employment growth. To accomplish this task MACOG conducted no-build scenario model runs with the projected socioeconomic data on the existing transportation network, only including

future projects currently under construction or that have otherwise been listed in the MACOG 2020-2024 Transportation Improvement Program (TIP). Three (3) other scenarios were run including high and low growth, as well as urban growth development patterns. The results of these model runs were examined to identify the areas of the transportation network that are performing at levels of service E and F, which are considered unacceptable driving conditions. Consideration was given to all modes of transportation including auto, freight, transit, bike and pedestrian.

Red Flag Investigation

In order to help determine potential environmental impacts of potential transportation projects, MACOG conducted a red flag analysis on most projects included in the 2045 Transportation Plan. A red flag analysis uses GIS and available datasets compiled by the Office of Environmental Policy at INDOT to identify the existence of environmental items of concern with respect to:

- Infrastructure
- Water Resources
- Mining/Mineral Exploration
- Hazardous Materials
- Ecological Information
- Cultural Resources

An inventory of the Red Flag Investigations are provided in Appendix E.

Title VI and Environmental Justice

MACOG believes that Title VI and Environmental Justice are critical elements to the transportation planning process. Title VI and Environmental Justice are about the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income. In Appendix F, MACOG conducted a study on Environmental Justice populations which summarizes the potential impacts of the proposed projects.