

Executive Summary

The Jackson Area Comprehensive Transportation Study (JACTS), as the Metropolitan Planning Organization (MPO) for the City of Jackson and Jackson County, is charged by the United States Department of Transportation (USDOT) with maintaining a continuing, comprehensive, and cooperative transportation planning program. This includes the development of a long range transportation plan (LRTP) with a minimum horizon of 20 years that is fiscally constrained by reasonably available revenues.

The development and content of the plan is mandated by the federal transportation bill called Fixing America's Surface Transportation (FAST) Act. The last update of the Jackson MPO Long Range Transportation Plan was approved in June 2013. This update of the plan, with a horizon year of 2045, is required to meet federal transportation requirements. The JACTS 2045 Long Range Transportation Plan was approved by the Region 2 Planning Commission on June 14, 2018.

Chapter 1 Introduction

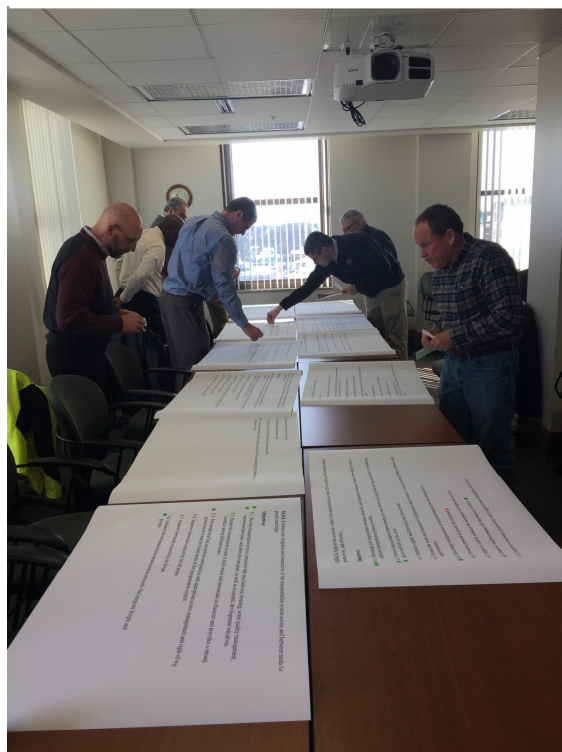
An overview of the need for the transportation planning process and the Jackson MPO structure is in the plan's first chapter. Understanding that the federal government provides federal aid transportation funding as an incentive to complete this work, local, state and federal agencies work collaboratively to accomplish this task.

Chapter 2 Vision, Goals, & Objectives

An important step in any planning effort is the development of vision, goals, and objectives to support and to provide direction for the planning work to come. They can reflect the values and desires of the community, and are also valuable in measuring the effectiveness and success of the plans that are developed.

Federal legislation requires that the Jackson plan involve all levels of government and all surface transportation modes. The plan goals and objectives specifically align with the federal requirements to ensure that the plan meets national initiatives and considers all modes of transportation and users. The Jackson MPO cannot implement projects or improvements to directly satisfy the stated goals and objectives, but can provide a forum for coordinated decisions to be made cooperatively between the City of Jackson and Jackson County for the vision, goals and projects to be realized.

**Figure ES-1
Public Participation in the
Planning Process**



Jackson MPO plans are coordinated with state plans and the statewide planning process. The following goals were affirmed by the JACTS Technical, Policy and Region 2 Planning Commission committees to guide the update of the plan. A complete representation of the plan's goals and objectives is in Chapter 2.

Goal 1. Increase the safety and security of the transportation system for motorized and non-motorized users.

Goal 2. Increase the accessibility and mobility options available to people and freight.

Goal 3. Emphasize the preservation of the existing transportation system.

Goal 4. 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.

Goal 5. Enhance the integration and connectivity of the transportation system across and between modes for people and freight.

Goal 6. Support the economic vitality of Jackson County by enabling global competitiveness, productivity, and efficiency.

Goal 7. Promote efficient system management and operation.

Goal 8. Encourage the public to become involved in the planning and development of transportation facilities and services.

Goal 9. Improve the resiliency and reliability of the transportation system and reduce or mitigate storm water impacts of surface transportation.

Goal 10. Enhance travel and tourism.

In developing the plan's goals and objectives, several existing plans, policy, goals and objectives were considered as input, including: JACTS' 2040 Long Range Transportation Plan, Michigan Department of Transportation (MDOT) MI Transportation Plan; MDOT Freight Plan; and MDOT Rail Plan, and the State of Michigan Strategic Highway Safety Plan. These plans, along with others, are reviewed in Chapter 5.

Chapter 3 Public Participation Plan & Consultation

The Jackson MPO developed the required Public Participation Plan. The Jackson MPO provided updates relative to plan development throughout the process, including at monthly JACTS Technical and Policy committee meetings, periodic Project Steering Committee meetings and through email and mail notifications to the project Contact List. Public meetings and open public comment periods on each final draft chapter of the

plan were made known through advertisements in the local papers, the Region 2 Planning Commission website, and e-mail and mail notifications.

The goal of this process is to eliminate or minimize conflicts with other agencies' plans and programs that impact transportation, or for which transportation decisions may impact them. A complete listing of contact agencies and organizations are in Chapter 3. The Contact is List included in the appendix.

Chapter 4 The Existing Transportation System

The modes/systems reviewed in the plan include: road, air, rail, trucking, non-motorized, transit, taxicab, rideshare, and connected and automated vehicles. Existing plans, policies, and facility networks were recorded in Chapter 4 of the plan. A map of the transportation system is found on the next page.

Chapter 5 Coordination with Local and State Plans

The state's long range transportation plans, along with state and local transportation safety plans are reviewed in this chapter. The plans must be reviewed to ensure that local and state plans align. Reviewed plans include the 2040 Michigan Transportation Plan, the 2017-2018 State of Michigan Strategic Highway Safety Plan, and the 2017 Jackson, Hillsdale and Lenawee Regional Transportation Safety Plan. The Jackson Area Transportation Authority (JATA), the local public transit agency, did not have a plan available to review at the time of this document's development.

Chapter 6 Performance Measures

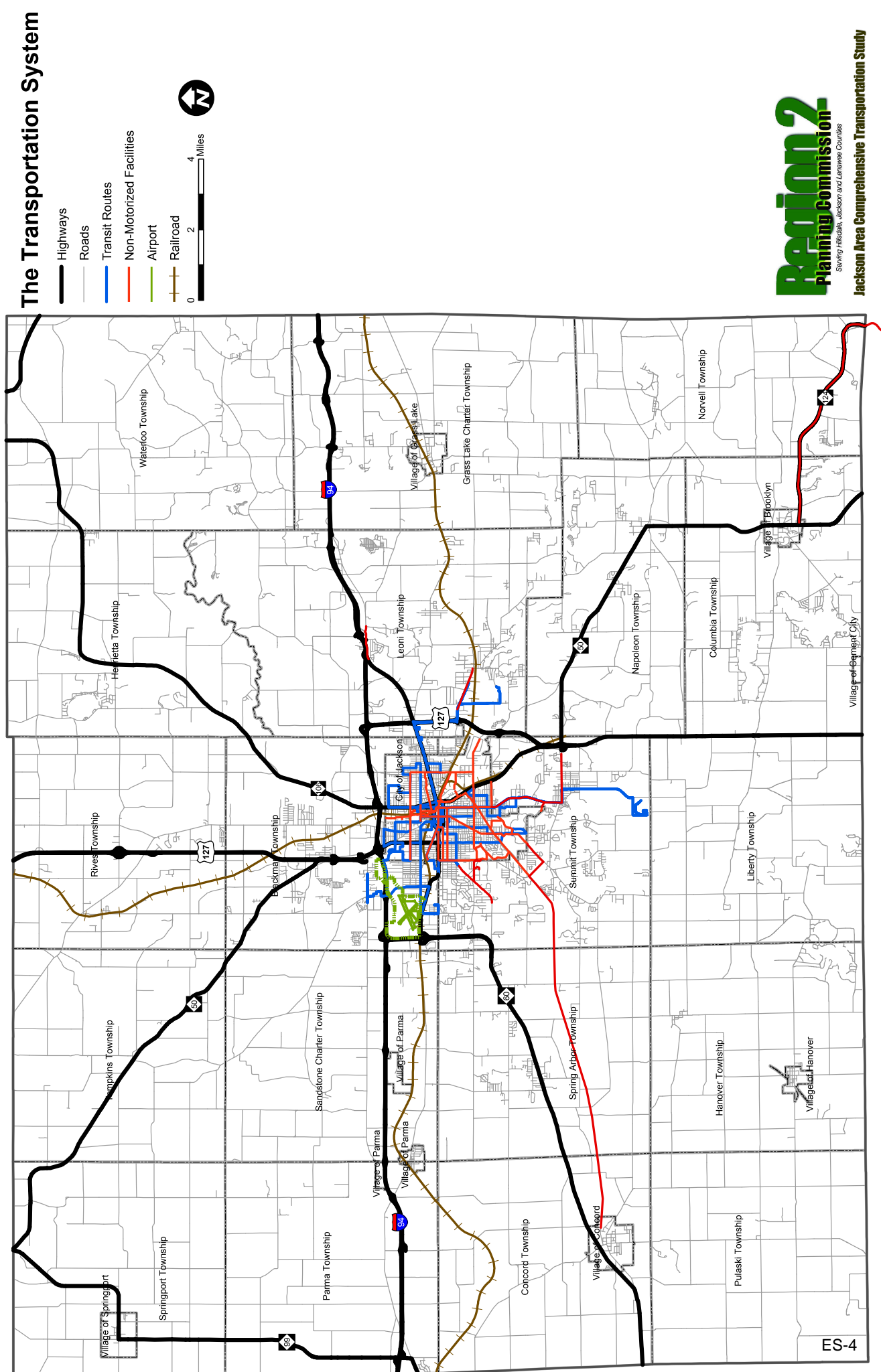
The federal transportation bill requires that transportation systems move toward a performance- and outcome-based program. The objective of this new program is that the investment of resources in projects will be monitored, help drive investment, and fulfill national goals. Public transit authorities, like JATA, are also required to start performance-based planning.

The transition to performance-based planning is underway at the Jackson MPO and will continue as the federally-required performance measures continue to be identified, understood, and move toward maturity, with guidance from MDOT. As planning agencies around the country gain experience in working with the federally-required measures, tools will likely be developed to help agencies understand the impact that investments will have on outcomes. This will allow for the consideration of the tradeoffs in pursuing or focusing on one measure over another to produce results that are important to the stakeholders in the Jackson MPO. A review of where Jackson is in demonstrating performance-based planning is in Chapter 6.

Chapter 7, 8 & 9 The State of Socio-Economics & Travel Congestion for the Jackson MPO

Socio-economic data from 2014 - population, households, and employment – were gathered, publically vetted, and analyzed to determine the model base year data for the plan's travel demand model. The model is used to develop a simulation of traffic

Figure ES-2 The Transportation System Map



volumes and conditions on Jackson roads. From that baseline information, the projection of future socio-economic data helps determine what future traffic volumes may be on local roads, and, therefore, is used to identify locations of future potential congestion (too many vehicles for the road design). These future potential congestion areas can help inform what major improvements that may need to take place on the road network, and these are called capacity improvement projects. Capacity improvement projects, a major component of the plan, come from this analysis.

For Jackson, there are no future congestion issues projected on the road network that meet local, state or federal road expansion criteria in this modeled and publically vetted information. This means that a majority of finances will be spent on preserving and maintaining the existing road network in the Jackson MPO. MDOT is still moving forward with the 5 recommended capacity projects for the I-94 Modernization Project that will address safety concerns on the interstate. A complete list of the proposed capacity improvement projects is in Chapter 9.

Chapter 10 Operation and Management Strategies

MAP-21 requires that the Jackson MPO include “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.” A number of transportation strategies have been identified to meet this requirement. Some of these strategies include: asset management, capital preventative maintenance, general maintenance, safety management, intelligent transportation system activities, access management, congestion management, pedestrian and non-motorized improvement, and public transit management. More can be found in Chapter 10.

**Figure ES-3
Construction on West Michigan Avenue**



Chapter 11 Financial Analysis

Federal legislation requires a review of the financial feasibility of projects and programs. The plan must be financially constrained, which means that there must be sufficient and reasonably available funds to complete projects listed in the document. The regulations require that all revenues and costs be inflated to “year of expenditure dollars.” In tables ES-1 and ES-2, the costs for the operations and maintenance of the existing system for the plan horizon is shown for the Jackson MPO.

Table ES-1

Summary of 2045 Long Range Transportation Plan Operations/Maintenance & Capital Expenditures 2015-2045

Operations/Maintenance (O/M) Expenditures for Local & State Roads	Total \$'s
Estimated Expenditures for O/M on Local Roads	\$ 303,312,995
Estimated Expenditures for O/M on State Roads	\$ 344,802,000
PLANNED CAPITAL EXPENDITURES	\$ 303,657,797
Local Road Projects	
Capacity Improvement Projects (0)	\$ 0
Preservation	\$ 16,685,566
Safety	\$ 0
Non-Motorized	\$ 442,023
Total	\$ 18,028,467
Transit Projects	
Operating Expenses	\$ 285,002,840
Vehicle Replacement (83 Vehicles)	\$ 15,589,603
Vehicle Addition	\$ 5,624,000
Other Capital	\$ 1,062,100
Security Improvements	\$ 703,862
Total	\$ 307,982,405
State Projects	
Capacity Improvement (5 Projects)	\$ 196,037,000
Preservation	\$ 880,762,884
Total	\$ 1,076,799,884
GRAND TOTAL EXPENDITURES	\$ 2,050,925,751

The total expenditures are within the total federal, state, and local revenues estimated for the Plan. As shown in Table 2 below, there is projected to be adequate revenue available for capital and operations, and maintenance expenditures for the transportation system. For more details, see Chapter 11.

Table ES-2
Demonstration of Financial Constraint for the
2045 Long Range Transportation Plan of the Jackson Area
Comprehensive Transportation Study

Total federal, state, and local revenues estimated to be available for road related construction, transit capital/operating and road related operations and maintenance of the major street/primary road system and state roadway system within the Jackson MPO.	\$ 3,452,885,539
Expenditures for Operations/Maintenance of Local & State Roads	\$ 648,114,995
Expenditures for Local Road Improvement Projects	\$ 18,028,467
Expenditures for Transit Improvement Projects	\$ 307,982,405
Expenditures for State Improvement Projects	\$ 1,076,799,884
REMAINING BALANCE	\$ 1,401,959,788

Chapter 12 Environmental Justice

In accordance with federal guidelines on Environmental Justice, there is a focus on the need to incorporate environmental justice principles into the transportation planning process. This is a regular component of the planning process and Transportation Improvement Program (TIP) evaluation. The analysis shows that there will be impacts to non-minority as well as minority and low-income populations as a result of the capacity improvement projects. However, construction related project impacts, such as noise, dust, and access inconvenience will be short-lived and confined to the traditional construction season. When looking at the most directly impacted residents (those within 0.10 mile of the recommend improvements) there is no glaring disproportional impact to any of the identified groups as compared to the area as a whole. More information can be found in Chapter 12.

Chapter 13 Environmental Mitigation

MAP-21 requires that the plan includes a review of potential environmental mitigation activities and potential areas to carry out these activities. Areas of concern include: farmlands, wetlands, drainage, flood plains, threatened and endangered species, impaired streams and other water bodies, air quality, and noise. The goal of the process

is to eliminate or minimize environmental impacts from the capacity improvement projects in the plan. Addressing this issue in the plan is not intended to be project specific, and the owners of any future project are still required to meet all of the necessary requirements of the National Environmental Policy Act (NEPA) process. The environmental guidelines, assessment table, and project overlay maps related to this issue are in Chapter 13.

Chapter 14 Emergency Management & Natural Hazards

The FAST Act requires that the Jackson MPO consider how natural hazards may impact local governments, transportation agencies, and the transportation system. The chapter includes a thorough review of existing plans, policies, and formal and informal agreements that have been used by area agencies in times of distress. There are also a set of recommendations to help improve coordination and management of the transportation system.

Figure ES-4
Winter Weather on I-94 in Jackson

