Chapter 3 The Existing Transportation System

The JACTS area is served by several forms of transportation. Though the focus of transportation planning tends to be on the road network, considering how to safely move goods and people must also be addressed in the long range transportation plan. The chapter is an overview of the transportation system within the Jackson Metropolitan Planning Area.

Guidance from the United States Department of Transportation

Although the original federal transportation legislation has been succeeded by subsequent bills, the "3 C's" process that ISTEA outlined still provides good guidelines for consideration of all transportation interests. The following are important to remember when engaging in the transportation planning process across jurisdictions:

- **Connections:** The convenient, rapid, efficient, and safe transfers of people and goods among modes that characterize comprehensive and economic transportation services.
- **Choices:** Opportunities afforded by modal systems that allow transportation users to select their preferred means of travel.
- Coordination and Cooperation: Collaborative efforts of planners, users, and transportation agencies provides to resolve travel demands by investing in dependable, high-quality transportation service either by a single mode or by two or more modes in combination.

The Road Network

The road network is the largest part of the transportation system with the Jackson Metropolitan Planning Area. The roads are used by people every day by vehicle for work, travel and recreation. They are used by the trucking industry to haul freight. They are used by pedestrians to travel in areas where there is no sidewalk. The road is used by bicyclists who ride on them as part of the non-motorized system. They are the most critical part of the area's transportation infrastructure.

The following is an overview of previous plans, the existing road network, maintenance and funding strategies, important policies, existing traffic conditions and future needs and considerations for the road system.

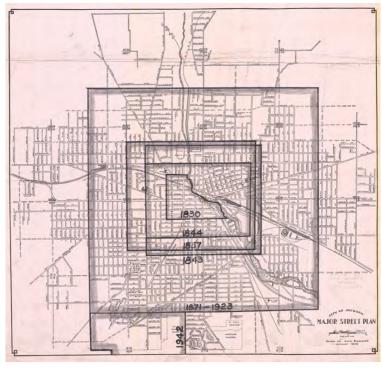
Existing Plans

City of Jackson Thoroughfare Plan 2002

The 2002 Thoroughfare Plan looked at how traffic moved through the downtown and the rest of the city. A series of one-way to two-way conversions were outlined, including Lansing Avenue and Steward Avenue, Cooper Street and Milwaukee Street. Many of the recommendations have been addressed as of early 2018.

City of Jackson Master Street Plan 2010

The 2010 City of Jackson Master Street Plan was an update from 1972 Master Street Plan. In the 2010 plan, Louis Glick was identified as Business I-94 only, and Washington Avenue was converted to a two-way street. Most of the work from this plan has been implemented, and a new plan may be considered soon.



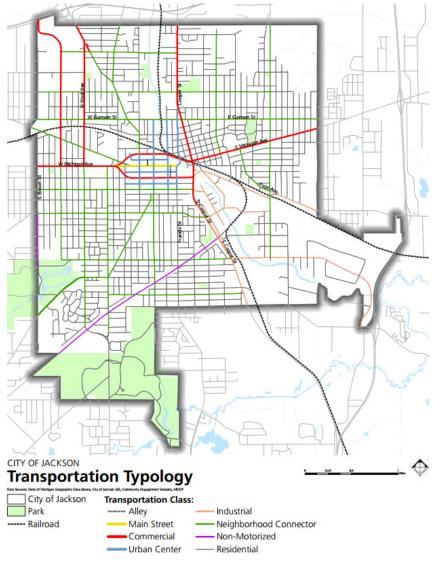
City of Jackson boundaries years and limits

City of Jackson Community Master Plan 2016

The City of Jackson Community Master Plan, completed in 2016, proposes a framework that is focused on the City's long-term stability and redevelopment based on an assessment of the community's existing conditions. The mission of the plan is to build a better future community based on its existing facilities and resources. The road network is seen as valuable infrastructure that can influence growth and development. The plan acknowledges the role the national functional classification system has in providing funding for federal-aid eligible roads. The City also considers street design for the transportation system through proposed "Transportation Typologies," tying together the needs of the different transportation modes available, the City's Complete Streets policy, a broader land use context and community priorities.

Goals and strategies in the plan related to transportation include:

- The City of Jackson will continue to capitalize on its connection to regional and interstate transportation system through good stewardship and by integrating its intra-city transportation network with them. Within the City, all users and modes of transportation will be accommodated in a safe, complete network that balances efficiency of movement with appropriate access to the land uses it supports.
- Decisions will facilitate coordination between land use and transportation and among transportation modes.
- Institute a "culture of complete streets" in which all users are explicitly identified, prioritized and planned for in all transportation projects.



Plan implementation recommends that improvements occur in phases in different areas of the City. Phase I calls for investments in the transportation system downtown, including:

- Continue to implement the Downtown Jackson Streetscape Plan.
- Implement the recommendations from the 2010 Jackson Rail Passenger State Development Study, including consolidating local bus and bicycle services into a location easily accessible from the Amtrak node.
- Convert the Louis Glick/Washington Street loop to two-way streets.

Phase II focuses on housing and neighborhoods and includes the following priorities for the road network:

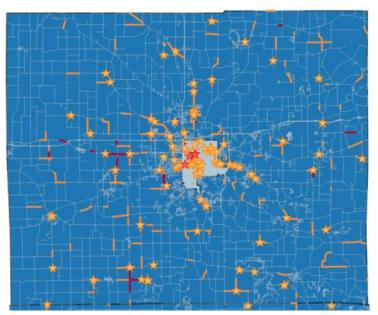
• Develop a vision for a "gateway treatment" along N Cooper Street to welcome visitors from the north, provide wayfinding and introduce the Jackson brand.

Phase III highlights Citizen-Government relations, including:

Using visioning session data [in the 2016 Master Plan] as a starting point, make
preliminary investigations into the feasibility of a node at the corner of High and
Francis Streets that is specifically designed to meet the daily commercial and
service needs of the residents of south Jackson.

2017 Regional Transportation Safety Plan

The 2017 Regional Transportation Safety Plan provides guidance on how to address safety on local roads in Jackson, Lenawee, and Hillsdale counties. Paid for by MDOT, the Jackson County Department of Transportation (JDOT) championed the plan. The overarching goal is the reduction of fatal and serious crash injuries within the three county area by addressing risk within the following 6 emphasis areas:



- At-risk drivers age groups
- Driver behavior
- Impaired drivers
- Intersection related crashes
- Single vehicle crashes
- Non-motorized crashes



Driver Behavior Related Fatal & Incapacitating Injury Crashes

Existing Policies & Programs

Road Maintenance & Funding

The responsibility for maintaining the roads and streets within the City of Jackson lies with the Engineering Division and the Department of Public Works. This Department routinely collects Average Daily Traffic (ADT) volumes and maintains an inventory of pavement conditions in order to develop program improvement and maintenance projects.

Township roads in Jackson County are the responsibility of JDOT. The assessment and determination of road maintenance and improvement project needs is facilitated through the collection of Average Annualized Daily Traffic (AADT) volumes and pavement condition inventories (also called PASER). The six villages - Brooklyn, Concord, Grass Lake, Hanover, Parma and Springport - are responsible for the maintenance and operation of their street systems.

Funding improvements include appropriations from city and village general funds, state funding for general use on major and local streets through the Act 51 Michigan Transportation Fund (MTF) gas tax program, and federal transportation funds for use on the federal-aid eligible roadways. Because of the pattern and rate of development in Jackson County, the majority of the road improvement projects within the JACTS study area have been and are likely to continue to be focused on the preservation and maintenance of the existing road system.



Robinson Road under construction

Complete Streets

Complete Streets is the idea that roads should be designed for all users. The Region 2 Planning Commission, the Jackson County Department of Transportation, and the City of Jackson passed Complete Streets resolutions in 2006. The Michigan Legislature passed Complete Streets legislation in 2010. State law requires that transportation projects consider all users of the roadway system.

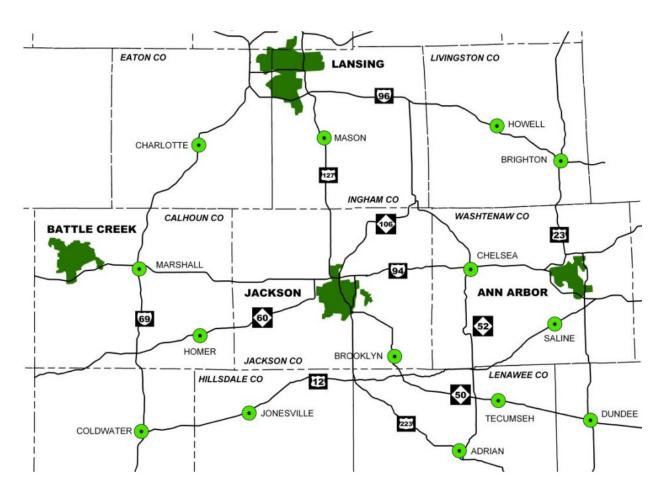
Existing Road Network

Regional Road Network

Jackson County, located in south-central Michigan, is fortunate to be positioned on the freeway network linking Michigan and the Midwest to other areas of the United States. Interstate 94 (I-94), connects the JACTS area to Ann Arbor, Detroit, and Canada to the east and Battle Creek, Kalamazoo and Chicago to the west. The City of Detroit is

approximately 73 miles east of the City of Jackson and the City of Chicago is approximately 205 miles west of Jackson.

US 127 provides a connection to Lansing to the north and continues south into Ohio, traversing Jackson County. M-50 is a state trunkline highway that runs from the northwest to the southeast through the County, connecting the City of Jackson to the Village of Brooklyn. M-50 provides connections outside the County to Charlotte and to the Grand Rapids metropolitan area to the northwest and to Tecumseh and Monroe to the southeast. M-60 is another state trunkline highway that connects Jackson to southwest Michigan. M-60, terminating at I-94, runs through Spring Arbor and Concord before extending beyond the County through the rural countryside to Niles. M-106 is another state trunkline that begins in downtown Jackson and extends beyond the County to the northeast.



Regional Road Network Map

National Functional Classification System

The National Functional Classification (NFC) System is used to identify how individual roads serve the County's road system, including factors like roadway design, speed, capacity and the relationship to existing and future land use development. Designating roads as a part of this system also plays a role in determining eligibility for federal aid funding. Transportation agencies can describe roadway system performance, benchmarks and targets by functional classification, too. As agencies continue to move towards a more performance-based management approach, functional classification will be an increasingly important consideration in setting expectations and measuring outcomes for preservation, mobility and safety. A map can be found on the next page.

There are approximately 1,954 miles of roadway within the NFC system in Jackson County. The Federal Highway Administration (FHWA) provides guidelines for assigning roadways a classification. The Michigan Department of Transportation tracks the number of miles within each county that are a part of the functional classification system. Jackson County's total mileage from the most recent update in 2014 is listed below.

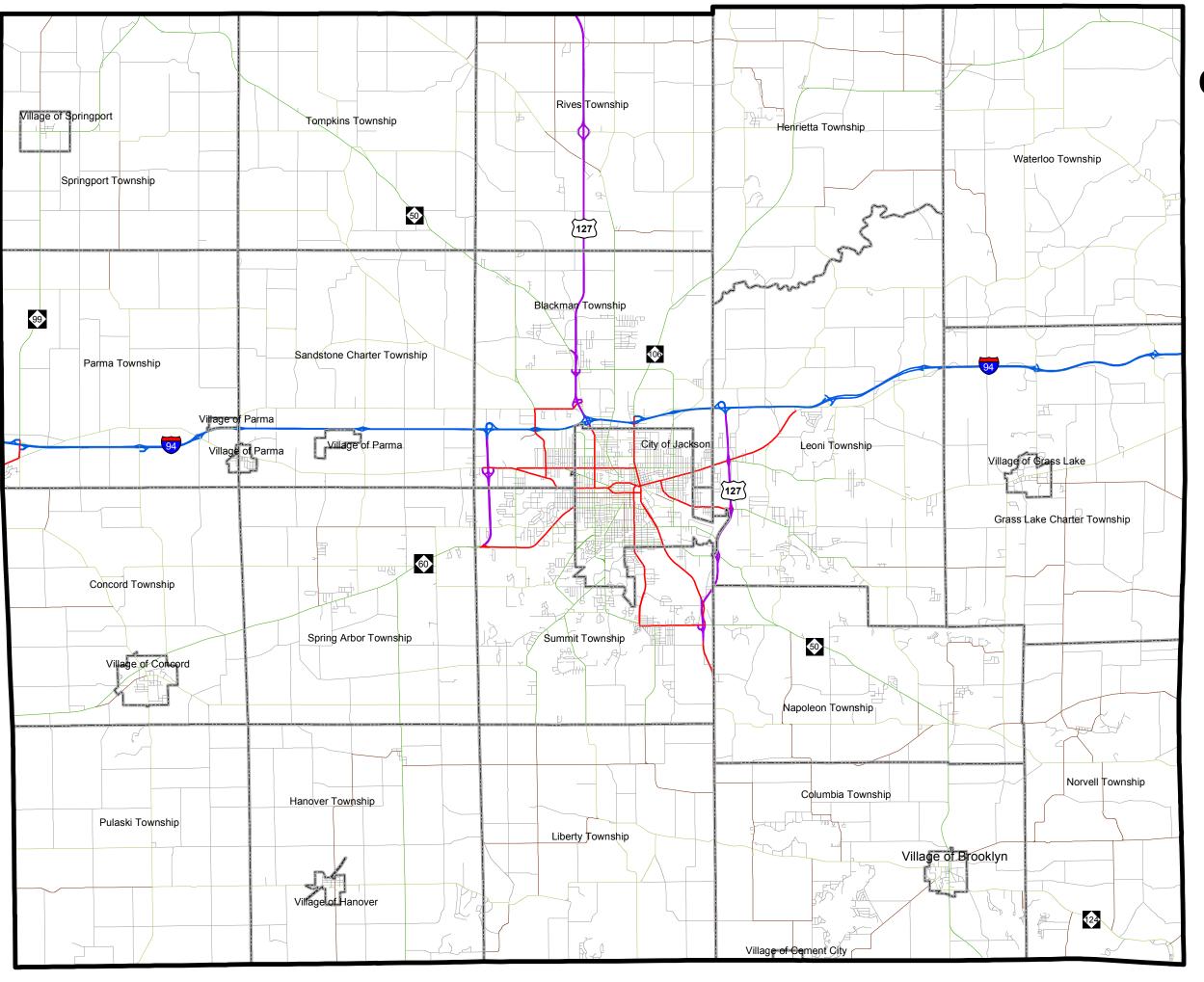
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National Classification Function Type	National Classification Function Number	Urban Miles	Rural Miles	Total Miles
Interstate	1	10	21	
Other Freeway	2	15	5	
Other Principal Arterial	3	36	7	
Minor Arterial	4	80	71	
Major Rural Collector	5	67	280	
Minor Rural Collector	6	10	160	
Local Collector	7	382	811	
Total Mileage		600	1,355	1,955

NCF Roadway System Length/Centerline Miles for Jackson County Roadways (2014)

Road Types

There are eight different road classifications within the system. Classes 1-7 are used to identify roads within the system. The higher the class number, the more important the road is to the local road network. Class 0 roads are other roads in a county, but are not a part of the system. An overview of the system within Jackson is listed below.



National Function Classification Map

National Function Classification Class

___ 1 = Interstate

— 2 = Other Freeway

— 3 = Other Principal Arterial

4 = Minor Arterial

5 = Major Collector

— 6 = Minor Collector

7 = NFC Local

0 2 4 Miles



Interstates and Other Freeways. The principal arterial road system includes freeways and non-freeway classifications. The National Classification Function Numbers for the roads found in these categories are 1 for "interstate" and 2 for "other freeway." In the Jackson area, that includes portions of I-94, US-127, and M-60.

Other Principal Arterials. Principal arterial roads in the Jackson area serve the major centers of activity of the metropolitan area, have high traffic volumes, and the longest trip desires. The National Classification Function Number for the roads found in this category is 3. They also carry a high proportion of the total urban area travel on a minimum amount of mileage.

Urban principal arterials that connect to rural minor arterials have been identified as portions of M-99/West Michigan Avenue, Spring Arbor Road, Springport Road/Airport Road/Laurence Avenue, M-50/North West Avenue/Business US-127, Cooper Street/Business US-127, West and East Michigan Avenue/Business 94, Louis Glick Highway, US-127 South, East McDevitt Avenue and Francis Street. The routes also serve major centers of activity and have high traffic volumes. These routes differ from the interstate by allowing automobile access to adjacent property.

Minor Arterials. The minor arterial street system interconnects and augments the principal arterial system, providing service for trips of moderate length at a lower level of travel mobility than major arterials. The National Classification Function Number for the roads found in this category is 4

Urban, Rural and Local Collectors. The collector street system provides land access and traffic circulation within residential neighborhoods, commercial and industrial areas. Collector streets may penetrate residential neighborhoods, distributing traffic from the arterial roads through the area to the ultimate destination. The National Classification Function Number for the roads found in these categories are 5 for "major rural collector," 6 for "minor rural collector," and 7 for "local collector."

Existing Traffic Conditions

From the basis of traffic volumes in the study area, the major traffic movements identified within Jackson County are as follows:

- To and from retail and hotel establishments at US-127 North near I-94 to retail and office activities along W. Michigan Avenue and the City of Jackson Central Business District (CBD)
- 2. From US-127 South to commercial and industrial areas along E. Michigan Avenue, High Street and the CBD
- 3. From US-127 South into the CBD along S. Cooper Street (US-27 BR /M-50)
- 4. From the southwest at M-60 north to Michigan Avenue
- 5. From the southwestern residential areas along Horton Road and Kibby Road to S. West Avenue and Fourth Street into retail areas on N. West Avenue, W. Michigan Avenue and the CBD

Traffic movements exist along Airport Road from County Farm Road to Wildwood Avenue; Brown Street from Michigan Avenue to Spring Arbor Road; and, along the Francis Street corridor which carries traffic from M-50 and the traffic generated by Jackson Community College.

Some of the primary issues include the north-south movement on the west side of the City, movement from I-94 downtown into the area. access into the downtown area from the east and movement between the southeast and the southwest portions of the City. These movement problems are characterized by discontinuous north/south and east/west The physical routes. arrangement of the streets and railroads and the physical location of I-94 has resulted in



Jackson, Michigan

the north/south routes that terminate south of I-94 at/or near the CBD. Parks, schools, and other recreational facilities also prevent the development of continuous routes. Because of these obstacles, many motorists travel a circuitous path from one side of the urban area to the other.

West Avenue provides for good access from the urban center to the major commercial areas to the north and the residential areas to the south. This is due largely to an absence of railroad and automobile conflicts. A new bridge over the Norfolk Southern railroad at N. West Avenue was completed in 2012, as well as intersection improvements at Ganson Street, improving traffic flow. Vehicles traveling to or from the CBD with destinations at commercial uses along N. West Avenue can also use Wildwood Avenue or W. Michigan Avenue as a connector.

Lansing Avenue is a minor arterial which provides for travel between the urban center and the north. The route terminates near the urban center. A moderately traveled route, Lansing Avenue experiences some delays for northbound traffic at the intersection of Lansing Avenue and North Street during peak periods. Southbound traffic along Lansing Avenue flows smoothly as it is diverted onto Steward Avenue. Traffic flow between Lansing Avenue and the CBD is occasionally interrupted by the railroad at Steward Avenue and Blackstone Street. Access to the north along Lansing Avenue is good as the route extends over and beyond I-94 and into Ingham County.

Cooper Street (M-106) provides the best access from I-94 and the northeast Jackson County area into the CBD. It also links I-94 traffic to industrial areas east of Cooper Street near the urban center. Travel from Cooper Street traverses through the CBD and continues south as M-50/US-127 BR (Brooklyn Road) eventually connecting to US-127 South. A railroad crossing exists at the Cooper Street/E. Michigan Avenue intersection

compounds access problems between the CBD and I-94. The City will complete the conversion of Washington Street and Louis Glick Highway from one-way to two-way between Michigan Avenue and Cooper Street by early 2018.

There are difficulties relating to the transition of flow between East Michigan Avenue, the CBD and West Michigan Avenue. Michigan Avenue, other than I-94, is the only major route that directly traverses the entire width of the urban area. West Michigan is a major route linking the western section of the City to office development and retail uses near and in the downtown area. East Michigan Avenue is also the major east-west route linking the CBD with the eastern sections of the urban area. Westbound travel is occasionally hindered by railroad closures at the downtown Amtrak station.

The I-94 Freeway Modernization Study, completed in 2005, evaluated the need and feasibility of upgrading nine miles of the interstate between M-60 and Sargent Road in Jackson County. The Hawkins Road, Dettman Road and Sarge Road bridges have been replaced. More improvements are being programmed in the next 5 years.

Future Forecasts and Needs

The City of Jackson will be considering an update to the 2002 Thoroughfare Plan and the 2010 Master Street Plan, as most of the recommendations of each of the plans have been implemented. The City is continuing to look at what it can do to provide an intentional street system for moving goods and people.

As the Jackson County Department of Transportation continues its transition from being the Jackson County Road Commission, staff is considering a number of projects to enhance the road system. With the change to becoming a Department of Transportation in January 2013, there has been a larger focus on long-term planning across the transportation system. Based upon the recommendations of the Regional Safety Plan, the department is considering doing an inventory, analysis, and improvements to the top 50 worst intersections in the county. Doing a corridor study along Airport Road and considering modernizing traffic signals county wide is another priority. JDOT is also supportive of installing non-motorized facilities, and looks to plan recommendations to invest in strategic projects.



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