

**JACKSON AREA COMPREHENSIVE TRANSPORTATION STUDY (JACTS)  
TECHNICAL ADVISORY COMMITTEE (TAC) MEETING**

*Wednesday, July 19, 2023 / 9:30 AM  
Jackson City Hall / 10<sup>th</sup> Floor / 161 W. Michigan Ave., Jackson, MI 49201*

**AGENDA**

1. Call to Order
2. Public Comment
3. Approve Minutes of the Technical Advisory Committee Meeting of June 14, 2023, and Receive the Minutes of the Policy Committee Meeting of June 15, 2023 (see enclosures) – **ACTION**
4. Agency Status Reports – **DISCUSSION**
  - City of Jackson (enclosed)
  - Jackson Area Transportation Authority (enclosed)
  - Jackson County Department of Transportation (enclosed)
  - Michigan Department of Transportation (enclosed)
  - Jackson County Airport-Reynolds Field (not provided)
  - Enterprise Group (<http://www.enterprisegroup.org>)
5. Approval of Amendments to the JACTS FY 2023–2026 Transportation Improvement Program (TIP) (see enclosure) – **ACTION**
  - Jackson Area Transportation Authority
6. 2050 Long Range Transportation Plan Update (see enclosure) – **DISCUSSION**
7. Other Business
8. Public Comment
9. Adjournment

## MINUTES

### JACTS TECHNICAL ADVISORY COMMITTEE

Jackson City Hall  
161 W. Michigan Ave. – 10th Floor  
Jackson, MI 49201

**Wednesday, June 14, 2023**

**Present:** Jon Dowling, City of Jackson  
Angie Kline, JCDOT  
Mark Kloha, MDOT – Lansing  
Alex Masten, The Enterprise Group  
Pat O'Dowd, JATA  
Andrea Strach, MDOT  
Bret Taylor, JCDOT  
Troy White, City of Jackson

**Staff Present:** Brett Gatz, Region 2 Planning Commission  
Jacob Hurt, Region 2 Planning Commission  
Jill Liogghio, Region 2 Planning Commission

**Others Present:** Ashanti Harper, MDOT Intern

#### ITEM 1 **CALL TO ORDER**

Chair Kline called the meeting to order at 9:32 a.m.

Mr. Hurt provided an update on the UWP approval by the R2PC board of directors.

#### ITEM 2 **PUBLIC COMMENT**

No public comments were received.

#### ITEM 3 **APPROVE MINUTES OF THE TECHNICAL ADVISORY COMMITTEE MEETING OF MAY 17, 2023 AND RECEIVE THE POLICY COMMITTEE MINUTES OF MAY 18, 2023**

A motion was made by Mr. Taylor, supported by Mr. White, to approve the Technical Advisory Committee meeting minutes of May 17, 2023, and receive the Policy Committee meeting minutes of May 18, 2023, as presented. The motion carried unanimously.

#### ITEM 4 **AGENCY STATUS REPORTS**

Project status updates were presented by the City of Jackson, Jackson Area Transportation Authority, Jackson County Department of Transportation, and Michigan Department of Transportation.

**ITEM 5****APPROVAL OF AMENDMENTS TO THE JACTS FY 2023-2026  
TRANSPORTATION IMPROVEMENT PROGRAM (TIP)**

The following amendments to the JACTS FY 2023-2026 Transportation Improvement Program (TIP) were submitted by MDOT:

| FY   | Job #  | Phase | Name      | Description   | Federal Budget                    | Federal Fund Source | State Budget                    | Local Budget | Total Phase Cost                 | Amend. Type |
|------|--------|-------|-----------|---|-----------------------------------|---------------------|---------------------------------|--------------|----------------------------------|-------------|
| 2024 | 209391 | PE    | M-50      | Install Center Left Turn Lane   | <del>\$36,619</del><br>\$105,919  | HSIP                | <del>\$4,069</del><br>\$11,769  | \$0          | <del>\$40,688</del><br>\$117,688 | Budget      |
| 2024 | 209391 | CON   | M-50      | Install Center Left Turn Lane   | <del>\$432,350</del><br>\$734,850 | HSIP                | <del>\$48,039</del><br>\$81,650 | \$0          | <del>\$80,369</del><br>\$816,500 | Budget      |
| 2024 | 211675 | ROW   | I-94 BL E | Bridge Replacement, Deck replacement, bearing replacement, full paint, substructure repairs, epoxy crack injection, concrete surface coating, and approach work | \$81,500                          | NH                  | \$16,552                        | \$1,588      | \$100,000                        | Add         |

A motion was made by Mr. Taylor, supported by Mr. Dowling, to approve the amendments to the JACTS FY 2023-2026 TIP as presented. The motion carried unanimously.

**ITEM 6****2050 LONG RANGE TRANSPORTATION PLAN UPDATE**

Timeline for approval was discussed. The document will be reviewed by the JACTS committees at their November meetings and the Region 2 Planning Commission will approve at the December meeting.

**ITEM 7****POST 2020 UNITED STATES ADJUSTED CENSUS URBAN BOUNDARY UPDATE**

Mark Kloha provided the Census Urban Boundary update. David Fairchild, MDOT, will be setting up a meeting with the MPO and local jurisdictions to adjust the 202 Census Boundary.

**ITEM 8****OTHER BUSINESS**

There was no other business.

**ITEM 9****PUBLIC COMMENT**

No public comment was received.

**ITEM 10****ADJOURNMENT**

There being no further business, Chair Kline adjourned the meeting at 10:18 a.m.

Staff  
Region 2 Planning Commission

## MINUTES

### JACTS POLICY COMMITTEE

Jackson County Tower Bldg.  
120 W. Michigan Ave. – 5th Floor  
Jackson, MI 49201

Thursday, June 15, 2023

**Present:** Tony Bair, Region 2 Planning Commission  
Charlie Briner, JCDOT  
Jon Dowling, JACTS TAC  
Jeff Franklin, MDOT – Lansing  
Jonathan Greene, City of Jackson  
Ashanti Harper, MDOT  
David Herlein, Spring Arbor Township  
Pete Jancek, Blackman Township  
Angela Kline, JACTS TAC  
Mike Overton, JCDOT  
Laura Schlechte, City of Jackson  
Jim Shotwell, Jackson County Board of Commissioners  
Andrea Strach, MDOT  
Bret Taylor, JCDOT  
Kelby Wallace, MDOT – Jackson TSC

**Public Present:** Tina Beagle

**Staff Present:** Brett Gatz, Region 2 Planning Commission  
Jacob Hurt, Region 2 Planning Commission

#### ITEM 1      CALL TO ORDER

Vice-Chair Jancek called the meeting to order at 8:08 a.m.

#### ITEM 2      PUBLIC COMMENT

No public comments were received.

#### ITEM 3      APPROVE MINUTES OF THE POLICY COMMITTEE MEETING OF MAY 18, 2023 AND RECEIVE THE TECHNICAL ADVISORY COMMITTEE MINUTES OF MAY 17, 2023

A motion was made by Ms. Schlechte, supported by Mr. Bair, to approve the Policy Committee meeting minutes of May 18, 2023, and receive the Technical Advisory Committee meeting minutes of May 17, 2023, as presented. The motion carried unanimously.

#### ITEM 4      AGENCY STATUS REPORTS

Project status updates were presented by the City of Jackson, Jackson County Department of Transportation, and Michigan Department of Transportation.



**ITEM 5****APPROVAL OF AMENDMENTS TO THE JACTS FY 2023-2026  
TRANSPORTATION IMPROVEMENT PROGRAM (TIP)**

The following amendments to the JACTS FY 2023-2026 Transportation Improvement Program (TIP) were submitted by MDOT:

| FY   | Job #  | Phase | Name      | Description   | Federal Budget                    | Federal Fund Source | State Budget                    | Local Budget | Total Phase Cost                 | Amend. Type |
|------|--------|-------|-----------|---|-----------------------------------|---------------------|---------------------------------|--------------|----------------------------------|-------------|
| 2024 | 209391 | PE    | M-50      | Install Center Left Turn Lane   | <del>\$36,619</del><br>\$105,919  | HSIP                | <del>\$4,069</del><br>\$11,769  | \$0          | <del>\$40,688</del><br>\$117,688 | Budget      |
| 2024 | 209391 | CON   | M-50      | Install Center Left Turn Lane   | <del>\$432,350</del><br>\$734,850 | HSIP                | <del>\$48,039</del><br>\$81,650 | \$0          | <del>\$80,369</del><br>\$816,500 | Budget      |
| 2024 | 211675 | ROW   | I-94 BL E | Bridge Replacement, Deck replacement, bearing replacement, full paint, substructure repairs, epoxy crack injection, concrete surface coating, and approach work | \$81,500                          | NH                  | \$16,552                        | \$1,588      | \$100,000                        | Add         |

A motion was made by Ms. Schlechte, supported by Mr. Jancek, to approve the amendments to the JACTS FY 2023-2026 TIP as presented. The motion carried unanimously.

**ITEM 6****2050 LONG RANGE TRANSPORTATION PLAN UPDATE**

Mr. Gatz discussed chapters 4, 5, 7, 8, and 12 of the 2050 Long Range Transportation Plan.

**ITEM 7****POST 2020 UNITED STATES ADJUSTED CENSUS URBAN BOUNDARY UPDATE**

Mr. Franklin provided an update on the Adjusted Census Urban Boundary process.

**ITEM 8****OTHER BUSINESS**

There was no other business.

**ITEM 9****PUBLIC COMMENT**

There was no public comment.

**ITEM 10****ADJOURNMENT**

There being no further business, Chair Shotwell adjourned the meeting at 8:35 a.m.

Staff  
Region 2 Planning Commission

**TO:** JACTS Technical Advisory and Policy Committees  
**DATE:** July 7, 2023  
**FROM:** Jon H. Dowling, P.E.  
**SUBJECT:** TIP Project Status

---

**2022**

West Avenue Signals at Franklin, Washington and Morrell with Ganson and Elm Signal -  
Reconstruct Signals on West Ave at Franklin and Morrell with Signal at Ganson and Elm.  
Contractor is Wright Electric Co. **Contractor cannot finish until AT&T is done moving their wires.**

Greenwood Ave: Fourth St to Morrell St with Greenwood/Fourth & Fourth/Prospect Signals -  
Mill and HMA Resurface on Greenwood with signal replacements at the intersections.  
Contractor is Michigan Paving and Materials Co. **Contractor cannot finish until AT&T is done at Fourth and Greenwood.**

Greenwood at High Signal: Signal replacement with new mast arm signal – HRC is the consultant on the project. J Ranck Electric is the contractor. **Fabrication of the poles is scheduled for Mid-August.**

**2023**

Brown Street: Morrell to Michigan – Mill and repave, relocate curb and construct non-motorized trail on east side. Spaulding DeDecker is the consultant on this project. **Paving is scheduled for the week of July 10<sup>th</sup>. Stripping and casting adjustments are scheduled for the week of July 17<sup>th</sup>. The remaining pathway will be finished when Comcast and AT&T have moved their wires and removed their poles.**

Wildwood Avenue: West Ave to Steward – Mill and HMA Resurface. Spaulding DeDecker is the consultant on this project. Bailey Excavating is the contractor on this project. **Contractor is scheduled to start work on July 12<sup>th</sup> and finish by August 11<sup>th</sup>.**

Wisner Street: Wildwood to Ganson – Mill and HMA Resurface. Spaulding DeDecker is the consultant on this project. Bailey Excavating is the contractor on this project. **Contractor is scheduled to start work on July 12<sup>th</sup> and finish by August 11<sup>th</sup>.**

Crosswalk Enhancements at 5 Locations (HSIP) – Sidewalk ramps, LED bordered signs, along non-motorized paths. HRC is the consultant on this project. J Ranck Electric is the contractor. **The contractor is scheduled to start work on July 17<sup>th</sup>.**

North Street: Wisner to West Ave – Pavement Replacement. Spaulding DeDecker is the consultant on the project. **Michigan Paving and Materials is the as-submitted low bidder at 6.17% over the engineer estimate.**



2350 East High Street  
Jackson, Michigan 49203-3490  
517.787.8363

---

## **PROJECT REPORT** **2023-2026 TIP**

*July 2023*

### **1. Vehicle Procurements**

- a. We've taken delivery of 3 new Gillig buses. #531 is in service with #532 and #533 soon to follow after completing inspections.

### **2. Facility Upgrades**

- a. Cook Foundation & Flatwork was awarded the bid to replace the parking lot and sidewalks at our Downtown Transfer Center. Work is tentatively scheduled to begin August 7<sup>th</sup>.
- b. Our RFP - Request for Proposal – to replace all of the bus lifts in our maintenance facility received 2 bids and oral presentations are scheduled for 7/11 & 7/12.



# Jackson County Department of Transportation

Angela N. Kline, PE, CPM  
Managing Director / Director of Engineering & Technical Services

*Keeping Our Community Safely in Motion...*



---

## Memorandum

---

**Date:** July 6, 2023

**To:** Ms. Jill Liogghio  
Region 2 Planning Commission

**From:** Angela N. Kline, PE, CPM  
Managing Director/Director of Engineering

**RE:** July JACTS Update

---

We would like to provide the following update regarding our projects that are on the Transportation Improvement Program (TIP) for FY 2022, 2023, and 2024.

---

## Fiscal Year 2022

---

### STUL (Urban) Federal Aid Projects

#### **JN 207169 South Street Preventive Maintenance**

Project will be constructed during June by Michigan Paving & Materials.

#### **JN 216632 Urban Pavement Markings**

Project will be completed by PK Contracting during the summer.

### STP Local (Rural) Federal Aid Projects

#### **JN 215587 – Holibaugh Road**

Lakeland Asphalt Corporation has an August start date for construction.

### U.S. Economic Development Administration (EDA) Grant Project

#### **County Farm/Springport Corridor Improvements and Jackson Technology Park North Construction**

- Work to widen County Farm Road continues at the intersection of Ayrshire.
- New signal bases at Ayrshire are being constructed.
- Drainage work is continuing along the project to prepare for the widening work.

Weekly progress meetings are scheduled for every Monday at noon during the project.

## **HRRR & HSIP Funding – MDOT Safety Grant Projects**

### **JN 211855 Compact Roundabout at Springport Road and Rives Junction Road**

Asphalt base course, curb and gutter, and drainage work is complete at the Springport Road and Rives Junction Road roundabout. Completion anticipated in mid-July.



***Springport and Rives Junction Roundabout***





***Springport and Rives Junction Roundabout***



**JN 210343 Compact Roundabout at South Dearing Road and McCain Road**

Working on grading aggregate base, concrete curbs and islands. The tentative completion date is in mid-August.



***McCain and Dearing “Peanut” Roundabout***

**JN 211779 Countywide Horizontal Curve Signing (West and Northeast) – CONSTRUCTION**

**JN 211851 Countywide LED Stop Signs**

Work to begin in mid-July.

**JN 211823 N. Concord Road Tree Removal**

**JN 211852 Moscow Road Tree Removal**

**JN 211853 Rives Junction Road Tree Removal**

Sign replacement and guardrail upgrades are complete. Pavement markings will be placed in mid-July.

**JN 213736 Edgeline Pavement Markings**

Construction will take place in late summer 2023.

**JN 213875 N. Stony Lake Road, Seymour Road, and Race Road Tree Removal**

Sign replacement, guardrail upgrades, and pavement markings will be placed later this summer.

**JN 214462 Countywide Horizontal Curve Signing (Southeast)**

**JN 214463 Countywide LED Stop Signs**

**JN 214464 Countywide High Friction Surface Treatment and LED Stop Signs**

Work to begin in late July.

---

**Fiscal Year 2023**

---

**HRRR & HSIP Funding – MDOT Safety Grant Projects**

**JN 213879 Dearing Road and Jefferson Tree Removal**

Final documents have been submitted. Project will be let during the fall.

**JN 213984 Springport Road and Minard Road Compact Roundabout**

JCDOT is completing design for summer 2024 construction.

**JN 214664 Airport Road at Wayland Drive/Meijer Drive Signal Modernization**

Final documents being prepared for submission.

**JN 214064 Horton Road (Ferguson Road to Weatherwax Drive) Road Safety Audit**

**JN 214065 Moscow Road Intersections Road Safety Audit**

These RSAs will be completed during the fall when school is back in session.

**MDOT Local Bridge Program**

**JN 209883 S. Jackson Bridge Replacement**

Project is in the July bid letting. Project completion is in November 2024.

**STUL (Urban) Federal Aid Projects**

**JN 207167 Badgley Road**

Lakeland Asphalt Corporation was awarded the contract. Project has a November 15<sup>th</sup> completion date.

**JN 216635 Signal Modernization Project at Multiple Intersections**

*Intersections Include:*

*Lansing Avenue and Parnall Road*

*Badgley Road and Horton Road*

*McCain Road and Robinson Road*

Final documents being prepared for submission.



## **STL (Rural) Federal Aid Project**

### **2023 PM Project – Sharon Valley Road from Austin Road to Washtenaw County Line**

Michigan Paving and Materials was awarded the contract. Project has a November 15<sup>th</sup> completion date.

## **Fiscal Year 2024**

---

### **HRRR & HSIP Funding – MDOT Safety Grant Projects**

#### **JN 211703 Compact Roundabout at Horton Road and Springbrook Road**

The Michigan State Historic Office found that the project would have an adverse effect on the archeological sites that were found. JCDOT is currently working with the Michigan SHPO and MDOT to mitigate the adverse effects of the site so that the project can be constructed.

### **Transportation Alternatives Program (TAP) Grant – Shared-use Pathway Project**

#### **JN 210635 Mike Levine Lakelands Trail Extension**

Alternate trail routes are currently being reevaluated to avoid property acquisition from private property owners.



GRETCHEN WHITMER  
GOVERNOR

STATE OF MICHIGAN  
**DEPARTMENT OF TRANSPORTATION**  
JACKSON TRANSPORTATION SERVICE CENTER

BRADLEY C. WIEFERICH, P.E.  
DIRECTOR

July 7, 2023

**Construction:**

**I-94 at Elm Road, Lansing Ave. and West Ave (US-127) also includes resurfacing on US-127 (I-94 to Parnall)** – All the concrete paving on I-94 is complete and traffic is shifted back to new pavement. Median barrier and lighting work is occurring from Cooper St. to Dettman Road. Shoulder widening and resurfacing remains on NB US-127 from Springport to Parnall. Work remains on the sidewalk along the west side of West Ave. Seymour Road is open to traffic. Clean up, signing, turf establishment, pavement markings and other various items of work also remain.

**I-94 from M-60 to Calhoun County line – Reconstruction from M-60 to Michigan Ave, major rehabilitation from Michigan Ave to Calhoun County line – (2022-2025 construction).** Traffic is shifted into a split merge configuration to rebuild westbound I-94 from M-60 to Michigan Ave. The westbound ramps at Parma Road are closed Monday through Friday morning. The westbound exit ramp to Michigan Ave opened June 30th. The westbound ramps to Dearing Road are closed for approximately 30 days. Resurfacing work will continue from Michigan Ave to the Calhoun County line at night.

**US-127 bridges over M-50/Railroad (just north of McDevitt)** – Deck replacement and superstructure repairs. US-127 is down to one lane in each direction. Traffic is expected to be switched back to the SB 127 bridge near July 8<sup>th</sup>. Removal of the temporary pavement and clean up will be occurring for a few weeks. Final bridge repairs will require intermittent closures of the NB 127 bridge in August or September.

**Railroad bridges over Jackson Street and Mechanic Street in downtown Jackson** – Bridge replacements. The Blackstone Street crossing is opened and Jackson St. is now closed under the RR. The track shutdown and bridge deck installation is scheduled August 9<sup>th</sup> thru August 14<sup>th</sup>. Mechanic St., Detroit St. and Van Buren St. remain closed.

**Signing upgrade on M-106 (Cooper St) M-50, I-94 BL (E. Michigan Ave), M-124** – Work is underway and will continue through 2023.

**I-94 Westbound from Mt. Hope Road to Washtenaw County line** – Capital preventative maintenance resurfacing. Work is underway and being done at night.

**M-50 from Valley Farm Road to Lincoln Road** – Shoulder paving. Shoulder closures and daytime lane closures are occurring for pavement removal and paving.

**Miscellaneous trunkline routes in Jackson County (M-50, M-99, I-94BL, M-106)** – Crack sealing. Daytime lane closures using flag control. Work begins near July 10<sup>th</sup>.

**Traffic signal modernization on Cooper Street and MLK (Washington, Glick, Ganson, Leroy, Parnall, South, Morrell, & High. MLK at Ganson.)** – (Late 2023 construction).

**Cooper (M-50/US-127BR) over abandoned RR, north of High and south of Morrell** – Preventative maintenance bridge repairs. 2024 construction.



GRETCHEN WHITMER  
GOVERNOR

STATE OF MICHIGAN  
**DEPARTMENT OF TRANSPORTATION**  
JACKSON TRANSPORTATION SERVICE CENTER

BRADLEY C. WIEFERICH, P.E.  
DIRECTOR

**Design:**

**Cooper Street (M-106) bridge replacement in downtown Jackson south of train station and Louis Glick (I-94BL) deck replacement near Mechanic Street – (2024/2025 Construction).**

**US-127 Freeway Signing Upgrade (I-94 to Ingham County Line and M-50 to I-94) – (2024 Construction).**

**I-94 BL/E. Michigan Ave (Dwight to US-127) – Reconstruction (future construction).**

**US-127 (Henry to near Ingham Co Line) – Maintenance resurfacing (future construction).**

|                |   |
|----------------|---|
| <b>To:</b>     | Jill Liogghio   |
| <b>From:</b>   | Patrick O'Dowd, Government and Community Relations Manager, Jackson Area Transportation Authority |
| <b>Date:</b>   | 7/6/23  |
| <b>Subject</b> | Request for Amendment to JN213005 on the 2023-2026 Transportation Improvement Program (TIP)       |

1. The Jackson Area Transportation Authority (JATA) is requesting the Region 2 Planning Commission approve an amendment to JN 213005 on the 2023-2026 TIP. JATA is requesting the federal amount to be \$110,675 and the state funding for this project to be \$27,669 for a total of \$138,344. The table below shows the specific project information JATA would like amended in the TIP.

| <b>Fiscal Year</b> | <b>Project Name</b> | <b>Limits</b> | <b>Primary Work Type</b>        | <b>Project Description</b>         | <b>Federal Cost</b> | <b>Federal Funding Source</b> | <b>State Cost</b> | <b>Total Project Cost</b> |
|--------------------|---------------------|---------------|---------------------------------|------------------------------------|---------------------|-------------------------------|-------------------|---------------------------|
| 2023               | Transit Capital     | Area Wide     | SP 1203 – Facility Improvements | FY – 5339 CTF Bus & Bus Facilities | \$110,675           | 5339                          | \$27,669          | \$138,344                 |

|                |   |
|----------------|---|
| <b>To:</b>     | Jill Liogghio   |
| <b>From:</b>   | Patrick O'Dowd, Government and Community Relations Manager, Jackson Area Transportation Authority |
| <b>Date:</b>   | 7/6/23  |
| <b>Subject</b> | Request for Amendment to JN216554 on the 2023-2026 Transportation Improvement Program (TIP)       |

1. The Jackson Area Transportation Authority (JATA) is requesting the Region 2 Planning Commission approve an amendment to JN 216554 on the 2023-2026 TIP. JATA is requesting the federal amount to be \$1,708,569 and the state funding for this project to be \$1,590,096 for a total of \$3,298,665. The table below shows the specific project information JATA would like amended in the TIP.

| <b>Fiscal Year</b> | <b>Project Name</b> | <b>Limits</b> | <b>Primary Work Type</b>  | <b>Project Description</b> | <b>Federal Cost</b> | <b>Federal Funding Source</b> | <b>State Cost</b> | <b>Total Project Cost</b> |
|--------------------|---------------------|---------------|---------------------------|----------------------------|---------------------|-------------------------------|-------------------|---------------------------|
| 2023               | E. High St.         | Area Wide     | 3000 Operating Assistance | FY – 2023 Operating        | \$1,708,569         | 5307                          | \$1,590,096       | \$3,298,665               |

|                |   |
|----------------|---|
| <b>To:</b>     | Jill Liogghio   |
| <b>From:</b>   | Patrick O'Dowd, Government and Community Relations Manager, Jackson Area Transportation Authority |
| <b>Date:</b>   | 7/6/23  |
| <b>Subject</b> | Request for Amendment to JN216555 on the 2023-2026 Transportation Improvement Program (TIP)       |

1. The Jackson Area Transportation Authority (JATA) is requesting the Region 2 Planning Commission approve an amendment to JN 216555 on the 2023-2026 TIP. JATA is requesting the federal amount to be \$17,258 and the state funding for this project to be \$4,315 for a total of \$21,573. The table below shows the specific project information JATA would like amended in the TIP.

| <b>Fiscal Year</b> | <b>Project Name</b> | <b>Limits</b> | <b>Primary Work Type</b> | <b>Project Description</b> | <b>Federal Cost</b> | <b>Federal Funding Source</b> | <b>State Cost</b> | <b>Total Project Cost</b> |
|--------------------|---------------------|---------------|--------------------------|----------------------------|---------------------|-------------------------------|-------------------|---------------------------|
| 2023               | E. High St.         | Area Wide     | SP 1809 - safety         | FY – 2023 Safety           | \$17,258            | 5307                          | \$4,315           | \$21,573                  |

# Region 2 PLANNING COMMISSION

Serving Hillsdale, Jackson & Lenawee Counties

**To:** JACTS Technical Committee, JACTS Policy Committee, Region 2 Planning Commission, and Other Interested Parties

**From:** Brett Gatz, Planner

**Date:** July 5, 2023

**Subject:** **2050 Long Range Transportation Plan Update -- Chapters 2, 6, 9, 10, and 11 Available for Review**

Staff from the Region 2 Planning Commission (R2PC) has completed the following chapter drafts for review and discussion:

Chapter 2: Vision, Goals, & Objectives

Chapter 6: Performance Measures

Chapter 9: Roadway Congestion, Congested Links, & Recommended Projects

Chapter 10: Operational & Management Strategies

Chapter 11: Financial Analysis

Some portions of the chapters are still in the process of being updated as we are pending input from other agencies.

Please take an opportunity to review these chapters. Contact Brett Gatz with comments, edits and/or questions at [bgatz@mijackson.org](mailto:bgatz@mijackson.org) or at 517.768.6706.

## **Chapter 2**

# **Vision, Goals, & Objectives**

---

The vision, goals, and objectives are meant to guide the long range transportation planning process over the life of the plan. The development of these elements is a critical part of the planning process. They are used as a benchmark to determine if future projects align with the vision for the Jackson MPO, and are a means of measuring the success of implementing the plan. They also reflect the values and principles of the community, measuring the expectations for the quality of life.

The vision, goals, and objectives for the plan are listed in the section below. They were developed through meaningful public input to ensure that the Jackson MPO 2050 Long Range Transportation Plan correctly captured what the community envisions for the future ideal Jackson transportation system. The guidance from the new federal transportation legislation, the Infrastructure Investment and Jobs Act (IIJA), that was signed into law by President Biden on November 15, 2021, also influenced these planning elements. The ten planning factors that come from the federal transportation bill provided a strong blueprint for the plan's goal. The goals align with the needs of the Jackson MPO and the local communities within the planning area, while also meeting state and federal requirements. The objectives are developed to ensure that the future needs of the local transportation system are considered.

The Jackson MPO also supports the state's mission to improve traffic safety by fostering effective communication, coordination and collaboration among public and private entities in support of the "Toward Zero Deaths" initiative on all federal, state, and locally maintained roads.

## **2050 Long Range Transportation Plan Vision**

Create a transportation system that promotes safety and provides strong, multimodal connections to and within communities that is sustainably funded and well-maintained.

### **Goals & Objectives**

#### **Goal 1. Safety & Security**

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

##### **Objectives**

- 1.1 Reduce vehicular crashes and eliminate hazardous locations.
- 1.2 Minimize crashes and conflicts among transportation modes and users.
- 1.3 Use best practices to increase safety.

#### **Goal 2. Accessibility & Mobility**

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

---



## **Objectives**

- 2.1 Minimize transportation barriers for all people, especially the physically challenged, senior citizens, young people, and persons who do not have automobiles available, have limited economic means, or choose not to travel by automobile.
- 2.2 Provide appropriate transportation connections, especially for non-motorized modes, to major land uses and activity centers within Jackson County, including residence, employment, recreation, community facilities, and commercial centers.
- 2.3 Improve or increase facilities for pedestrians and bicyclists.
- 2.4 Design the transportation system to operate efficiently.
- 2.5 Provide enhanced, improved capacity accessibility to the transportation system to move freight and enhance the range of freight service options available.

## **Goal 3. Preservation**

Emphasize the preservation of the existing transportation system.

### **Objectives**

- 3.1 Based on the goals, policies and plans of local communities, preserve and maintain the existing transportation network.
- 3.2 Support transportation system maintenance.
- 3.3 Emphasize system rehabilitation rather than expansion, except for the provisions of the I-94 Modernization Study.
- 3.4 Incorporate new technologies in well-researched, purposeful ways.

## **Goal 4. Community Impact & Environment**

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.

### **Objectives**

- 4.1 Minimize disruptions made by the transportation system to neighborhoods, especially to ensure that they do not disproportionately affect low-income and minority populations.
- 4.2 Preserve historic sites and districts, and ensure minimal impact if necessary.
- 4.3 Conserve prime agricultural and natural resource areas and open spaces.
- 4.4 Minimize disruptions to natural resources, environmentally sensitive areas, wetlands, and other critical areas and habitats.
- 4.5 Support projects that reduce vehicle emissions and noise, including greenhouse gases and air pollutant concentrations.
- 4.6 Encourage policies, plans and projects that minimize energy resources consumed for transportation.

## **Goal 5. Integration & Connectivity**

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

### **Objectives**

- 5.1 Develop transportation services consistent with area land use, housing, water quality management, economic development, and recreation/open space plans.
- 5.2 Encourage land use policies and practices, access management, and right-of-way preservation to meet the future needs of the transportation system.
- 5.3 Ensure that the transportation system is multi-modal and intermodal in character.
- 5.4 Improve intermodal connectivity for people and freight.
- 5.5 Support the development of information technology networks that integrate freight and people.

## **Goal 6. Economic Vitality**

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

### **Objectives**

- 6.1 Develop an efficient transportation system that encourages tourism and job employment retention and attraction.
- 6.2 Support projects and policies that enable transportation modes to be simultaneously considered as economic development and tourism investments.
- 6.3 Improve and enhance the movement of workers.
- 6.4 Improve economic productivity and competitiveness throughout the system.
- 6.5 Encourage transportation system investments from the private sector.

## **Goal 7. Operations & Maintenance**

Promote efficient system management and operation.

### **Objectives**

- 7.1 Promote transportation project and technologies that reduce distance and time spent traveling.
- 7.2 Improve on-road operating efficiency through the use of transportation management techniques where possible, including Intelligent Transportation Systems (ITS).
- 7.3 Coordinate the movement of goods and persons for maximum efficiency.
- 7.4 Encourage the multiple use of transportation rights-of-way by different modes, including pedestrian and bicyclists.
- 7.5 Minimize capital and operating costs for all modes.

7.6 Ensure the scale and character of transportation improvements is consistent with the ability to finance such improvements.

### **Goal 8. Public Involvement**

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

#### **Objectives**

8.1 Provide opportunities for the involvement of all segments of the community in the development of JACTS plans and programs through multiple outlets.

8.2 Allow for timely public review and comment at key decision points in the planning and project development process.

8.3 Look for ways to include traditionally under-represented communities, especially minority and low-income populations.

### **Goal 9. Resiliency & Reliability**

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

#### **Objectives**

9.1 Maximize quality and minimize quantity of storm water run-off.

9.2 Support the development, integration, and use of local, regional, and state storm water mitigation plans and policies.

9.3 Consider the impact to the Upper Grand River watershed for any transportation project.

9.4 Consider the impact to local floodplains and wetlands for any transportation project.

9.5 Consider the impacts of extreme weather events to storm water mitigation on the transportation system.

### **Goal 10. Travel & Tourism**

Enhance travel and tourism.

#### **Objectives**

10.1 Consider the impact on tourism when making investment decisions.

10.2 Provide and maintain economical non-motorized facilities in rural, suburban and urban areas that may transform the region into a non-motorized travel destination.

10.3 Integrate water trails into the transportation framework to promote travel and tourism in the region.

10.4 Emphasize context-sensitive designs that preserve historic character.

# Chapter 6

## Performance Measures

---

Transportation legislation developed by Congress provides a vision and direction for all transportation agencies. In July 2012, President Obama signed MAP-21 that established transportation systems move toward a performance- and outcome-based program. The objective of the performance and outcome-based program is for the investment of resources in projects that collectively make progress toward the achievement of nationally set goals. The emphasis continued in the Fixing America's Surface Transportation (FAST) Act and the Bipartisan Infrastructure Law (BIL), signed into law in 2015 and 2021, respectively. As part of MAP-21, national performance goals were created for roads, highways, and public transportation.

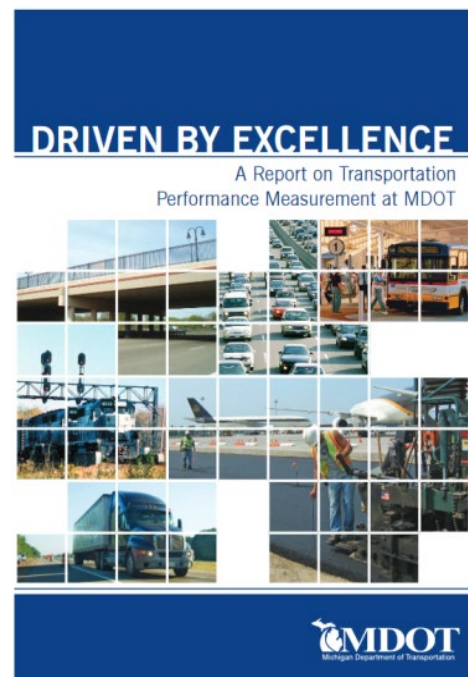
### Program Overview

#### Roads & Highways National Performance Goals

The performance measures were created around monitoring the federal aid highway program. They are designed to be national goals to help monitor the success of the transportation system and help drive investment. Below is a brief summary of the seven national goals included in MAP-21.

- 1) **Safety** - To achieve a significant reduction in traffic fatalities and serious injuries on all public roads
- 2) **Infrastructure Condition** - To maintain the highway infrastructure asset system in a state of good repair
- 3) **Congestion Reduction** - To achieve a significant reduction in congestion on the National Highway System
- 4) **System Reliability** - To improve the efficiency of the surface transportation system
- 5) **Freight Movement** - To improve the national freight network, strengthen the ability of rural communities to access national and international trade markets, and support regional economic development
- 6) **Environmental Sustainability** - To enhance the performance of the transportation system while protecting and enhancing the natural environment

**Figure 6-1**  
**A Report on**  
**Transportation Performance**  
**Measures at MDOT**



- 7) **Reduced project delivery delay** - To reduce project costs, promote jobs and the economy, and expedite the movement of people and goods by accelerating project completion through eliminating delays in the project development and delivery process, including reducing regulatory burdens and improving agencies/work practices.

## Public Transportation National Performance Goals

MAP-21 also mandated the Federal Transit Administration (FTA) to develop a rule establishing a strategic and systematic process of operating, maintaining, and improving public capital assets effectively through their entire life cycle. The Transit Asset Management Final Rule became effective October 1, 2016 and established four performance measures. The performance management requirements are a minimum standard for transit operators. Providers with more data and sophisticated analysis expertise are allowed to add performance measures. Below are the asset categories that are the focus of the transit asset management performance measures:

- 1) Rolling Stock - means a revenue vehicle used in providing public transportation, including vehicles used for carrying passengers on fare-free services.
- 2) Equipment - means an article of nonexpendable, tangible property has a useful life of at least one year.
- 3) Facilities - means a building or structure that is used in providing public transportation
- 4) Infrastructure - means the underlying framework or structures that support a public transportation system.

In addition to transit asset management goals and performance measures, FTA also published the Public Transportation Agency Safety Plan (PTASP) Final Rule, which requires certain operators of public transit systems that receive federal funds under FTA's Urbanized Area Formula Grants to develop safety plans that include the processes and procedures to implement Safety Management Systems (SMS). The plan must include safety performance targets. Transit operators also must certify they have a safety plan in place, originally meeting the requirements of the rule by July 20, 2020. The deadlines for the PTASP were extended due to the COVID-19 pandemic. The plan must be updated and certified by the transit agency annually.

## National Goals Implementation Schedule

The timeline for implementation of the national performance measures is determined when a final rule establishing the date for the rule is effective. Table 6-1 outlines the effective date of the final rule and when States and MPOs must take action.

**Figure 6-2**  
**JATA Bus**



**Table 6-1: National Goals & Implementation Schedule**

| Final Rule   | Effective Date  | States Targets Dates  | MPOs Targets Dates  | MTP and TIP Inclusion                          |
|--|-----------------|---|---|--|
| Safety Performance Measures                          | April 14, 2016  | August 21, 2022   | Up to 180 days after the states set targets, but not later than Feb. 27, 2023   | Updates or amendments on or after May 28, 2018 |
| Pavement/Bridge Performance Measures                 | May 20, 2017    | October 1, 2022 – November 1, 2022  | No later than 180 days after the state(s) sets target; March 30, 2023 – April 30, 2023  | Updates or amendments on or after May 20, 2019 |
| Reliability & Freight Performance Measures           | May 20, 2017    | October 1, 2022 – November 1, 2022  | No later than 180 days after the state(s) sets target; March 30, 2023 – April 30, 2023  | Updates or amendments on or after May 20, 2019 |
| Statewide non-metropolitan and metropolitan planning | May 27, 2016    | There are no measures associated with the planning rule.  |   |  |
| Asset Management Plan                                | October 2, 2017 | By April 30, 2018 State DOTs submit initial plans describing asset management plan processes. By June 30, 2019 State DOTs submit fully compliant asset management plan. |   |  |
| Transit Asset Management Plan                        | October 1, 2016 | January 1, 2017   | Optional reporting year for 2017 and mandatory for 2018. State will set targets for rural transit providers and urban providers will set own targets. |  |
| Public Transit Agency Safety Plan                    | July 19, 2018   | Rule effective July 19, 2019 – by July 20, 2020 transit providers to have Public Transportation Agency Safety Plan in place with a requirement for an annual update     |   |  |

## Target Overview

Within one year of the USDOT final rule on performance measures, states are required to set performance targets in support of those measures. To ensure consistency, each state must to the maximum extent practicable:

- Coordinate with an MPO when setting performance targets for the area represented by that MPO



- Coordinate with public transportation providers when setting performance targets in an urbanized area not represented by an MPO
- After the state (MDOT) establishes targets for the respective performance measures, the MPOs have 180 days within which to support the state targets or establish their own.

### **Target Coordination with MDOT**

Performance target coordination between MPOs and MDOT began in January 2017. As Michigan MPOs, MDOT, and FHWA staff met monthly as part of the Michigan Transportation Planning Association (MTPA), it was convenient to follow scheduled MTPA meetings with a Target Coordination Meeting led by MDOT. The Target Coordination Meetings give MDOT and FHWA the opportunity to provide updates on performance measures and target setting to the MPOs. The meetings also give the MPOs an opportunity to ask questions and provide feedback on the methods used to set performance targets. MTPA members have been meeting with various MDOT agencies in the development of language and timelines to implement the targets. This MDOT Transportation Performance Measures Metro Planning Team has met monthly to ensure the timely delivery of these targets for MPOs to incorporate into their local planning documents. MPOs have also been coordinating with MDOT to develop a process for reporting MPO performance targets and the recommended action to be taken by MPO Policy Committees on setting performance targets.

### **Performance Reporting Requirements**

MDOT is required to report to FHWA on the establishment of state performance targets and the progress made in attaining the state targets on a biennial basis. The reports are due October 1 of each even numbered year.

Federal regulations require the use of four-year performance periods over which progress toward attaining targets is tracked and reported. The first performance period runs from **January through December 2022** for all performances measures. The exception to the four-year performance period is for the safety performance measures, which are required to be established and reported by MDOT to FHWA through the Highway Safety Improvement Program Annual Report by August 31 of each year.

MPOs are not required to provide annual reports other than MPO decisions on targets. MPOs are required to report MPO performance targets to MDOT in accordance with the documented procedures for MPO reporting targets. This will result in MPOs reporting MPO safety targets annually to MDOT, and other performance targets as they are established.

## Road & Highway Future Targets

There are additional performance measures that do not have published targets as of the adoption of this plan. The dates of inclusion can be found below. As the targets are set and published by MDOT, the MPOs will take action either through adoption of the state targets or development of MPO specific targets. The following are the performance measures that do not currently have set targets to date.

### 1) Interstate & National Highway System Pavements

Current coordination efforts include evaluation of the pavement condition on the interstate and non-interstate National Highway System (NHS). The evaluation of the pavement will be evaluated by four metrics:

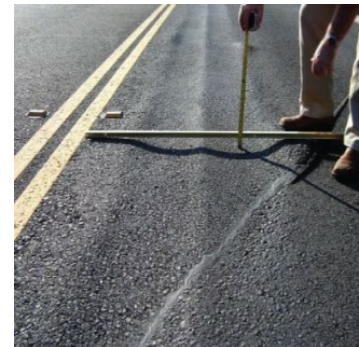
- International Roughness Index (IRI)
- Cracking
- Rutting (Asphalt)
- Faulting (Joined Concrete)

The rule designates that MDOT is required to establish two and four year targets for pavement condition on the NHS. There are two sets of targets, one for the Interstate System, and the other for the Non-Interstate NHS. The first performance period takes place from **January 1, 2018 to December 31, 2022**, with MDOT targets due on **May 20, 2018**. MDOT is required to submit biennial progress reports to FHWA. There are four performance measures for assessing pavement condition based on composite analysis of the metrics. MDOT has provided the following information on performance measure baselines and targets:

**Table 6-2: NHS Pavement Condition Performance Measures**

| NHS Pavement Condition                             | 2022-25 Baseline | 2-Year Target | 4-Year Target |
|--|------------------|---------------|---------------|
| % of Interstate pavement in Good Condition         | 70.4%            | 59.2%         | 56.7%         |
| % of Interstate pavement in Poor Condition         | 1.8%             | 5%            | 5%            |
| % of Non-Interstate NHS pavement in Good Condition | 41.6%            | 33.1%         | 33.1%         |
| % of Non-Interstate NHS pavement in Poor Condition | 8.9%             | 10%           | 10%           |

**Figure 6-3  
Pavement Rutting**





## 2) NHS Bridges

Current coordination efforts include evaluation of the condition of the substructure, superstructure, deck, and culverts for bridges on the NHS system. The evaluation of the bridges will use the National Bridge Inspection Standards (NBIS). Each substructure, superstructure, deck, and culvert are rated on a 0-9 scale and recorded in the National Bridge Inventory (NBI) database. The NBI Condition ratings are broken up into three categories below:

- Good Condition: Rating of 7-9
- Fair Condition: Rating of 5-6
- Poor Condition: Rating of 0-4
  - Serious or Critical Condition: Rating of 2-3
  - Imminent Failure/Failed Condition: Rating of 0-1

The rule designates that MDOT is required to establish two and four year targets for bridge condition on the NHS. MDOT targets were due on **May 20, 2018**. MDOT is required to submit three performance reports to FHWA within the four year performance period. There are two performance measures for assessing bridge condition:

- % of NHS bridges in Good Condition
- % of NHS bridges in Poor Condition

The minimum penalty threshold requires that no more than 10% of NHS bridges measured by deck area be classified as structurally deficient.

**Table 6-3: NHS Bridge Condition Performance Measures**

| NHS Bridge Condition               | 2022-25<br>Baseline | 2-Year<br>Target | 4-Year<br>Target |
|------------------------------------|---------------------|------------------|------------------|
| % of NHS bridges in Good Condition | 22.1%               | 15.2%            | 12.8%            |
| % of NHS bridges in Poor Condition | 7%                  | 6.8%             | 5.8%             |

As of the adoption of this plan, MDOT was still working on the development of this target.

## 3) Interstate & NHS Reliability

In 2015, MDOT formed the Statewide Congestion Management Group (SCMG) to coordinate efforts between the Department and MPO's that address federal system performance measures. Since that time, this group has produced a congestion analysis white paper, reviewed and commented on draft performance measures, provided comment on a RFP for vehicle probe data, and discussed best practices and issues with measuring congestion.

By **May 2018**, MDOT will submit statewide targets for the federal system performance measures. MPO's will have six months to either support the statewide targets or develop their own. MDOT is working with the MPO's to discuss the process and methods for

**Figure 6-4  
Cooper Street Bridge on I-94**



setting the targets, and the RITIS and INRIX platforms that can help agencies set their own targets if they desire. The performance measures for assessing interstate and NHS reliability is as follows. MDOT has provided the following information on performance measure baselines and targets:

**Table 6-4: NHS System Reliability Performance Measures**

| <b>NHS System Reliability</b>                             | <b>2022-25 Baseline</b> | <b>2-Year Target</b> | <b>4-Year Target</b> |
|---|-------------------------|----------------------|----------------------|
| % of Reliable Person-Miles traveled on Interstate         | 97.1%                   | 80%                  | 80%                  |
| % of Reliable Person-Miles traveled on Non-Interstate NHS | 94.4%                   | 75%                  | 75%                  |

As of the adoption of this plan, MDOT was still working on the development of this target.

#### **4) Freight Movement on the Interstate**

Freight movement will be assessed by a Truck Travel Time Reliability (TTTR) Index by analyzing freight travel over several time periods. The measure comes from the recognition that the industry's use of the transportation system during all times of day. MDOT and the Jackson MPO will have the choice of using FHWA's National Performance Management Research Data Set or an equivalent data set. MDOT has provided the following information on performance measure baselines and targets:

**Table 6-5: Freight Movement Performance Measures**

| <b>NHS Freight Reliability</b>                   | <b>2022-25 Baseline</b> | <b>2-Year Target</b> | <b>4-Year Target</b> |
|--|-------------------------|----------------------|----------------------|
| Truck Travel Time Reliability Index - Interstate | 1.31                    | 1.60                 | 1.60                 |

MDOT must establish 2 and 4 year targets by **May 20, 2018**. The targets will be reported in the State's baseline performance period report due by **October 1, 2018**. MDOT will have the option to adjust the 4-year target in their mid-performance period progress report, due **October 1, 2020**. As of the adoption of this plan, MDOT was still working on the development of this target.

#### **Infrastructure Alignment**

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. At the time of the plan's adoption, there remain several performance measures that have yet to be finalized by MDOT. The only performance measures that MPOs have been required to address are the transit asset management measures and the five highway-related safety measures. MPOs will be working through the remaining performance measures throughout the rest of this year.

MDOT is working with the Jackson MPO to better understand the expectations of the federally-required measures. For planning agencies to maximize the benefits of performance-based planning, good data is needed on the current and desired transportation system. The data is important to set strategic directions, analyze how funds

are invested and programmed, and evaluate program outcomes. For many performance measures there is not a lot of good information to base decisions on. The lack of data makes it difficult to determine how projects or a program of projects will impact future performance.

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 list of the FY 2023-2026 TIP projects and the performance areas that they align with is found in Appendix B. Information in the project description, primary work type and other narrative associated with the project in the TIP were used to determine if a project aligns with the performance areas. The Region 2 Planning Commission staff assessed the local (City of Jackson and Jackson County) projects, MDOT assessed their own projects, and JATA assessed the transit agency projects.

A major project initiative currently underway by MDOT is the I-94 modernization project. This long-term project will significantly impact the Jackson MPO performance-based planning measures. The currently programmed work found in the FY 2023–2026 TIP includes: ~~reconstructing 1.4 miles of freeway between Lansing Avenue and Elm Road, resurfacing 3.5 miles of freeway between Lansing Avenue and M-60, redesigning and rebuilding of the I-94/Cooper St interchange, including the addition of new roundabouts and reconstructing the Cooper St bridge and ramps, and replacing the bridge over the Grand River.~~

The I-94 project work has and will continue to positively impact several of the national targets, including Safety, Pavement/Bridge, and System Performance Measures. Completed work along the nine-mile corridor includes the addition of weave lanes, a widened median and shoulders, and reconstructed interchange ramps and bridges adhering to modernized standards. These improvements serve to increase the safety of the corridor for both passenger vehicles as well as freight traffic. These improvements have positively contributed towards improving the Safety Performance Targets. The nearly five miles of newly reconstructed or resurfaced pavement will contribute to both the Jackson MPO and Statewide Interstate and National Highway System Pavement Targets. The replacement of the Cooper St and Grand River bridges, as well as planned future bridge replacements will also contribute NHS Bridges Target. Lastly, the weave lanes, widened median and shoulders, and reconstructed interchange ramps and bridges should also positively impact the Interstate and NHS Reliability and Freight Movement Performance Measures.

**Figure 6-5**  
**I-94/Cooper Street Interchange Improvements**

## Chapter 9





# Roadway Congestion, Congested Links, & Recommended Projects

The Travel Demand Forecast Model (TDFM or “model”), as described in Chapter 8, was used to identify roadway capacity constraints and congestion within the Jackson MPO. These results were provided for two different year scenarios:

- 1) Base year 2018
- 2) Horizon year 2050 with committed projects, as listed in the FY 2023-2026 TIP, and 2050 Socio-Economic and employment data forecast.

The TDFM produces current or future anticipated roadway volumes over a 24-hour period. Those volumes are compared to the capacity of the roadway through a "Volume over Capacity (VOC)" ratio. Once calculated, the VOCs are assigned to a “Level of Service (LOS)” categorical system, using a letter grade (A-F). A description and visual representation of the LOS grades used for the Jackson MPA are provided in Figure 9-1 below:

**Figure 9-1: Level of Service Grades for Vehicular Traffic on Roads**

| Volume to Capacity Ratio (VOC) | Level of Service (LOS) | Congestion Description   | Example   |
|--------------------------------|------------------------|--|---|
| 0.00 to 0.60                   | A and B                | Traffic at free & stable flow; high speeds; few interactions                       |  |
| 0.60 - 0.70                    | C                      | Moderately high traffic volumes and interactions; stable flow                      |  |
| 0.70 - 0.80                    | D                      | High density of traffic & less maneuverability; speed declines; stable flow        |  |
| 0.80 and above                 | E and F                | Traffic near or at capacity; slowdowns occur; alternate routes used; unstable flow |  |

The Jackson MPO, and the JACTS technical and policy committees were provided opportunities to review the model results. Since there were limited roadways within the Jackson MPO area that exhibited high VOC levels on a daily level, the results presented to the MPO and the various committees for comment included any roadways with

moderate VOC (0.60 to 0.70) or higher. By showing roadways with moderate VOC levels, members of the various R2PC committees were able to identify potential traffic congestion problem areas that may need attention in future construction programs.

These locations may also illustrate operational-type issues on a roadway segment, especially during peak travel periods. However, other locations not detected by the model results as higher VOCs areas may also present congestion issues once factors not captured by the travel demand model as traffic interruptions (traffic signals, stop signs, merging, etc.), freedom to maneuver, and safety may affect the LOS.

Due to the limited number of congested corridors over a daily period in the area, no capacity projects were tested or selected outside of those already listed in the most current Transportation Improvement Plan (TIP) and already considered in the horizon year scenario.

### **Base Year 2018 Results**

The Base Year 2018 scenario analysis looked at the existing conditions of the area-wide transportation system as it was in 2018. The 2018 year was chosen because of the availability of demographic and employment data and traffic counts for the development and calibration of the model in accordance with the timeline for the 2050 Long Range Transportation Plan. Roadway projects and socio-economic data changes happening after 2018 are not included in this scenario.

The base year model results do not show any roadways with daily traffic volumes that result in a Level of Service E or F ( $VOC > 0.80$ ). Therefore, this document presents the few daily traffic volumes that result in Level of Service C ( $0.60 < VOC < 0.70$ ) and Level of Service D ( $0.70 < VOC < 0.80$ ) for the area. These thresholds result in the ten roadways listed below:

- 1) SB M-106 (Cooper St) between Porter St & Leroy St
- 2) NW & SE M-50 (Brooklyn Rd) between Napoleon Rd & Austin Rd
- 3) SB West Ave between the I-94 West entrance ramp & Commonwealth Ave
- 4) EB & WB Ganson St between Lansing Ave & Cooper St
- 5) NB & SB US-127 between Floyd Ave & Hart Rd
- 6) NB & SB Francis St between Franklin St & Washington Ave
- 7) NB & SB West Ave between Wildwood Ave & North St
- 8) EB & WB Michigan Ave between Laurence Ave & Main St
- 9) NB M-106 (Cooper St) between Leroy St & Porter St
- 10) NW & SE Lansing Ave between Steward Ave & Ganson St

A detailed table of the highest VOC roadway corridors, including AM Peak and PM peak VOCs for the Base Year 2018 can be found in Table 9-1. Figures 9-2 to 9-7 show the daily, AM, and PM peak maps base year scenario for Jackson County and the City of Jackson.

**Table 9-1: Base Year 2018 Scenario Capacity Limitations**

| <b>Jackson Area Comprehensive Transportation Study (JACTS)<br/>Base Year 2018 Scenario Congestion</b> |                            |           |                         |                  |                              |                         |                |                     |                     |                   |
|---|----------------------------|-----------|-------------------------|------------------|------------------------------|-------------------------|----------------|---------------------|---------------------|-------------------|
| Rank  | Road Name                  | Direction | From                    | To               | Jurisdiction                 | Maintaining Road Agency | Length (Miles) | Average AM Peak VOC | Average PM Peak VOC | Average Daily VOC |
| 1   | M-106 (Cooper St)          | SB        | Porter St.              | Leroy St         | City of Jackson              | MDOT                    | 0.81           | <b>0.84</b>         | <b>0.82</b>         | <b>0.77</b>       |
| 2   | M-50 (Brooklyn Rd)         | NW-SE     | Napoleon Rd             | Austin Rd        | Napoleon Twp                 | MDOT                    | 0.88           | <b>0.82</b>         | <b>0.79</b>         | <b>0.71</b>       |
| 3   | M-50/BUS US-127 (West Ave) | SB        | I-94 West Entrance Ramp | Commonwealth Ave | Blackman Twp/City of Jackson | MDOT                    | 0.30           | <b>0.86</b>         | <b>0.79</b>         | <b>0.70</b>       |
| 4   | Ganson St                  | E-W       | Lansing Ave             | Cooper St        | City of Jackson              | City of Jackson         | 0.58           | <b>0.72</b>         | <b>0.70</b>         | <b>0.66</b>       |
| 5   | US-127                     | N-S       | Floyd Ave               | Hart Rd          | Summit Twp                   | MDOT                    | 0.80           | <b>0.76</b>         | <b>0.79</b>         | <b>0.64</b>       |
| 6   | Francis St                 | N-S       | Franklin St             | Washington Ave   | City of Jackson              | City of Jackson         | 0.13           | <b>0.69</b>         | <b>0.67</b>         | <b>0.64</b>       |
| 7   | West Ave                   | N-S       | Wildwood Ave            | North St         | City of Jackson              | MDOT                    | 0.60           | <b>0.72</b>         | <b>0.70</b>         | <b>0.63</b>       |
| 8   | Michigan Ave               | E-W       | Laurence Ave            | Main St          | Blackman Twp                 | MDOT                    | 0.41           | <b>0.71</b>         | <b>0.68</b>         | <b>0.61</b>       |
| 9   | M-106 (Cooper St)          | NB        | Leroy St                | Porter St        | City of Jackson              | MDOT                    | 0.81           | <b>0.70</b>         | <b>0.69</b>         | <b>0.61</b>       |
| 10  | Lansing Ave                | NW-SE     | Steward Ave             | Ganson St        | City of Jackson              | City of Jackson         | 0.32           | <b>0.66</b>         | <b>0.65</b>         | <b>0.60</b>       |



Figure 9-2: Base Year Daily Congestion - Jackson County

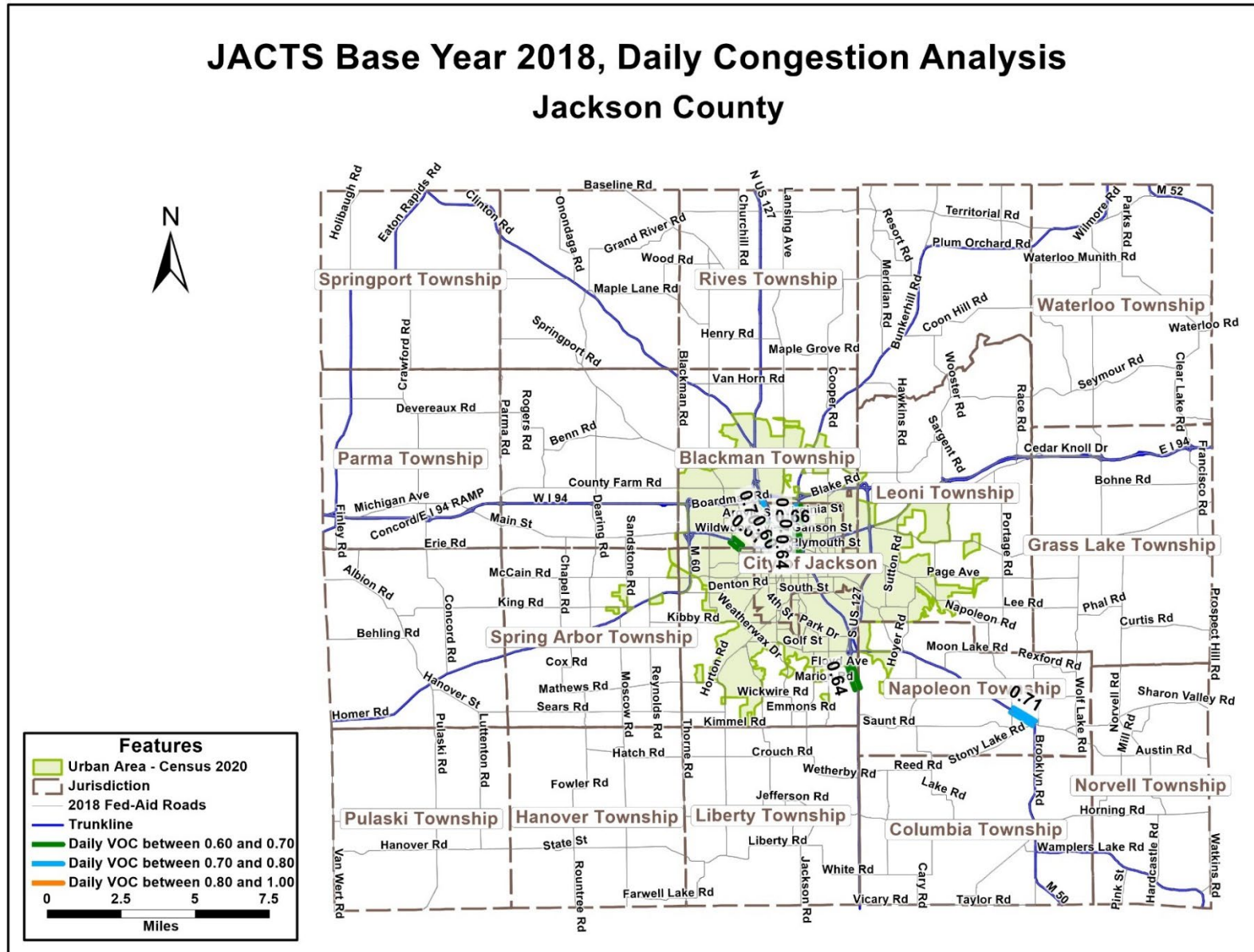


Figure 9-3: Base Year Daily Congestion – City of Jackson

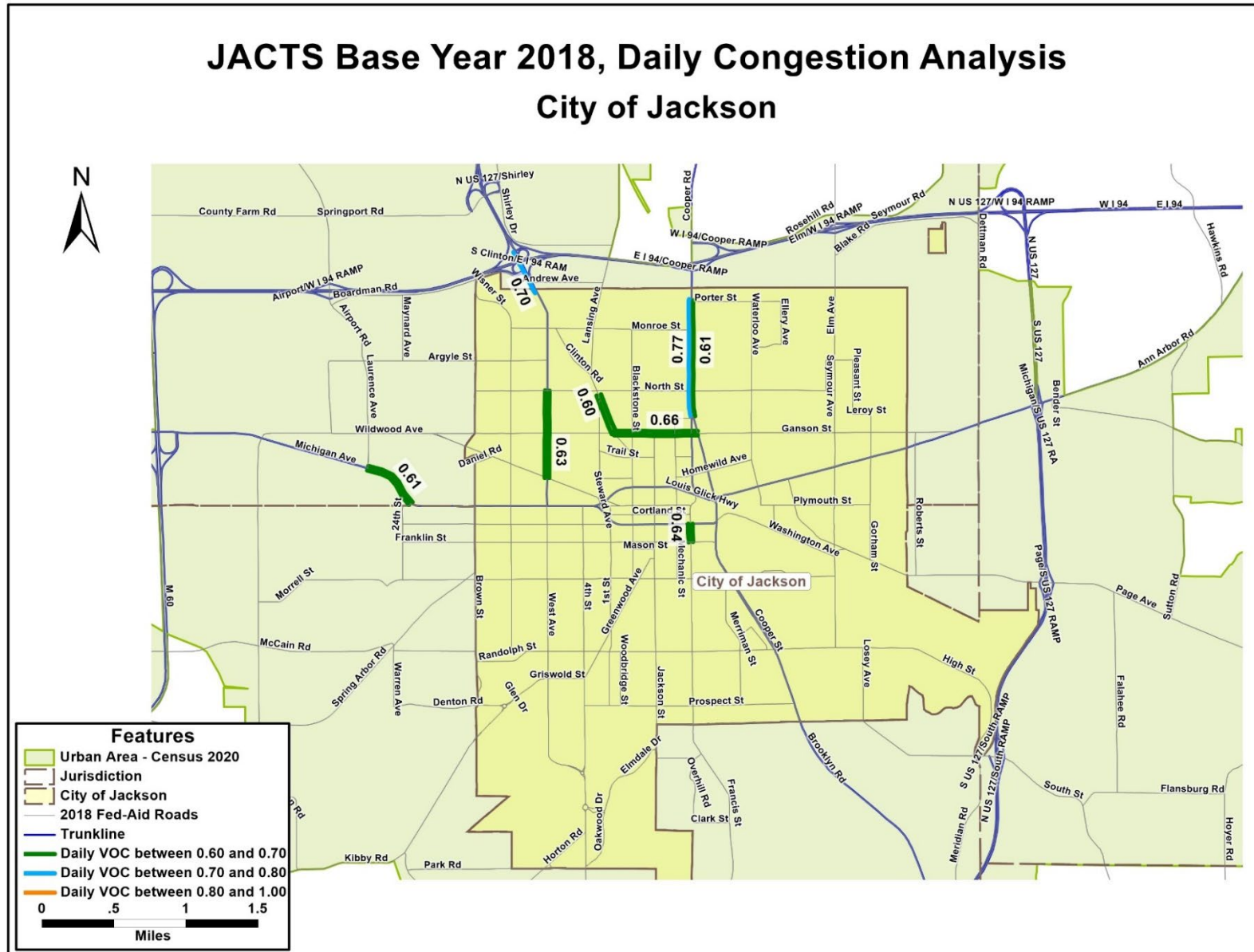
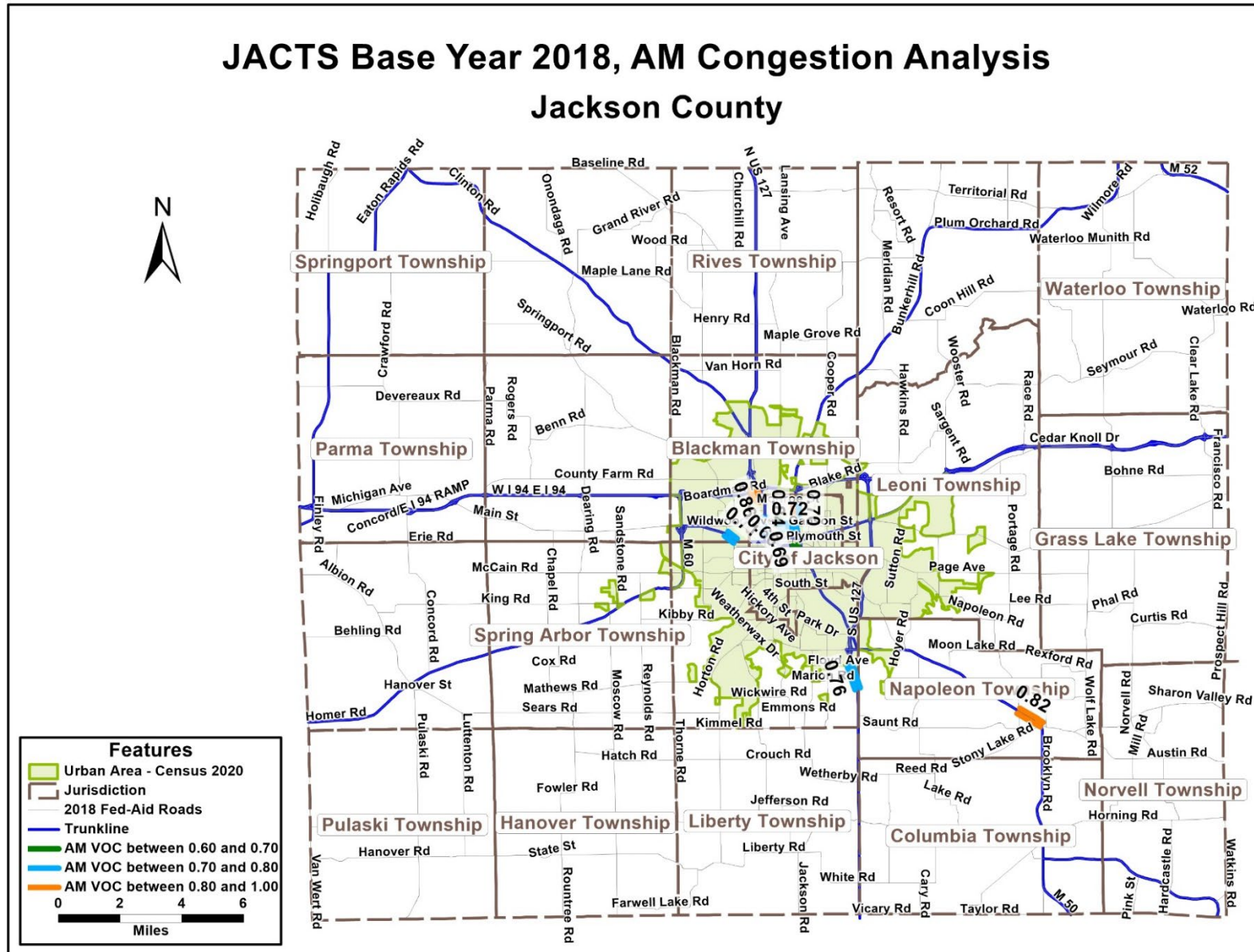




Figure 9-4: Base Year AM Peak Congestion - Jackson County



# JACTS Base Year 2018, AM Congestion Analysis

## City of Jackson

**Features**

- Urban Area - Census 2020
- Jurisdiction
- City of Jackson
- 2018 Fed-Aid Roads
- Trunkline
- AM VOC between 0.60 and 0.70
- AM VOC between 0.70 and 0.80
- AM VOC between 0.80 and 1.00

0 .5 1 1.5  
Miles

Figure 9-6: Base Year PM Peak Congestion - Jackson County

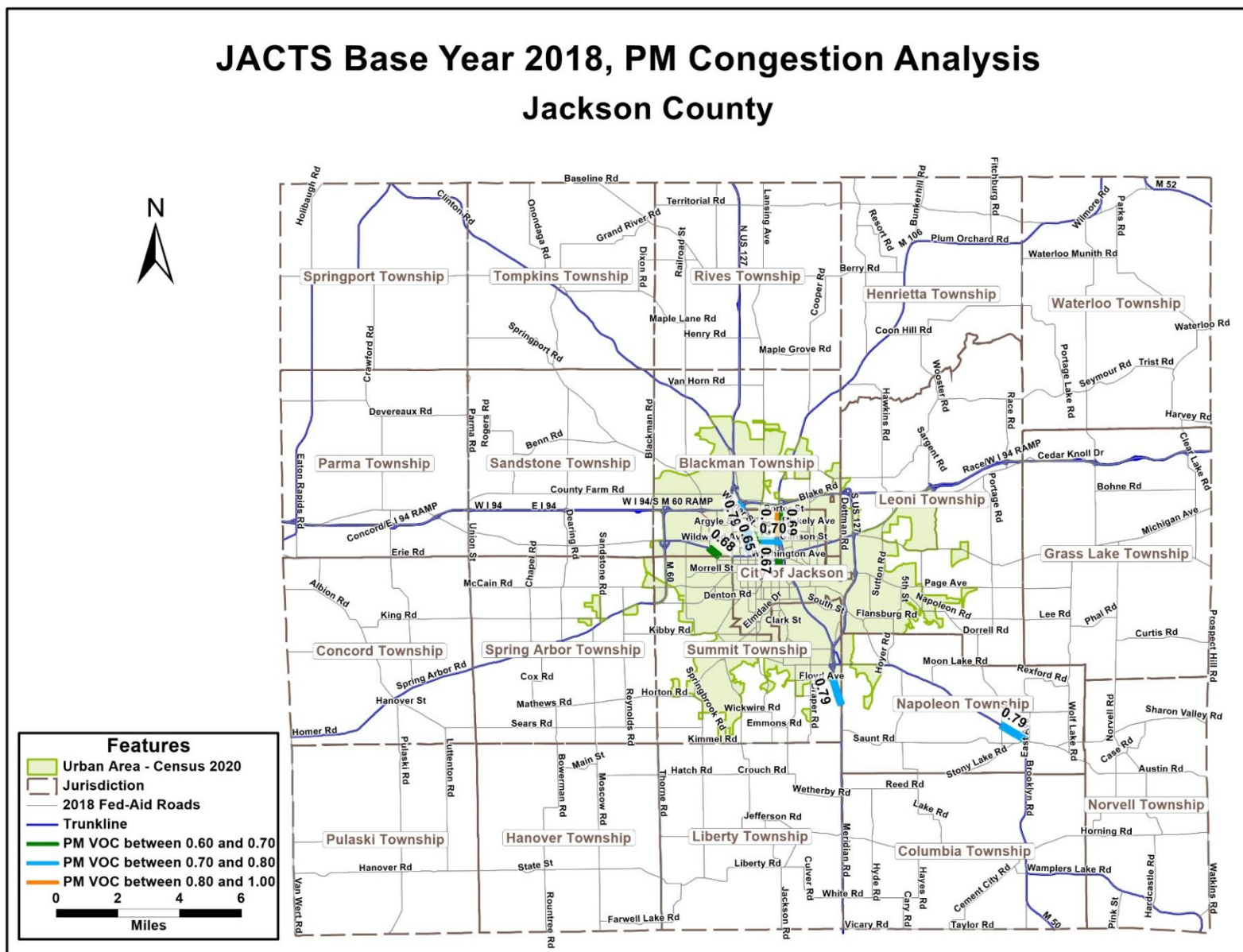
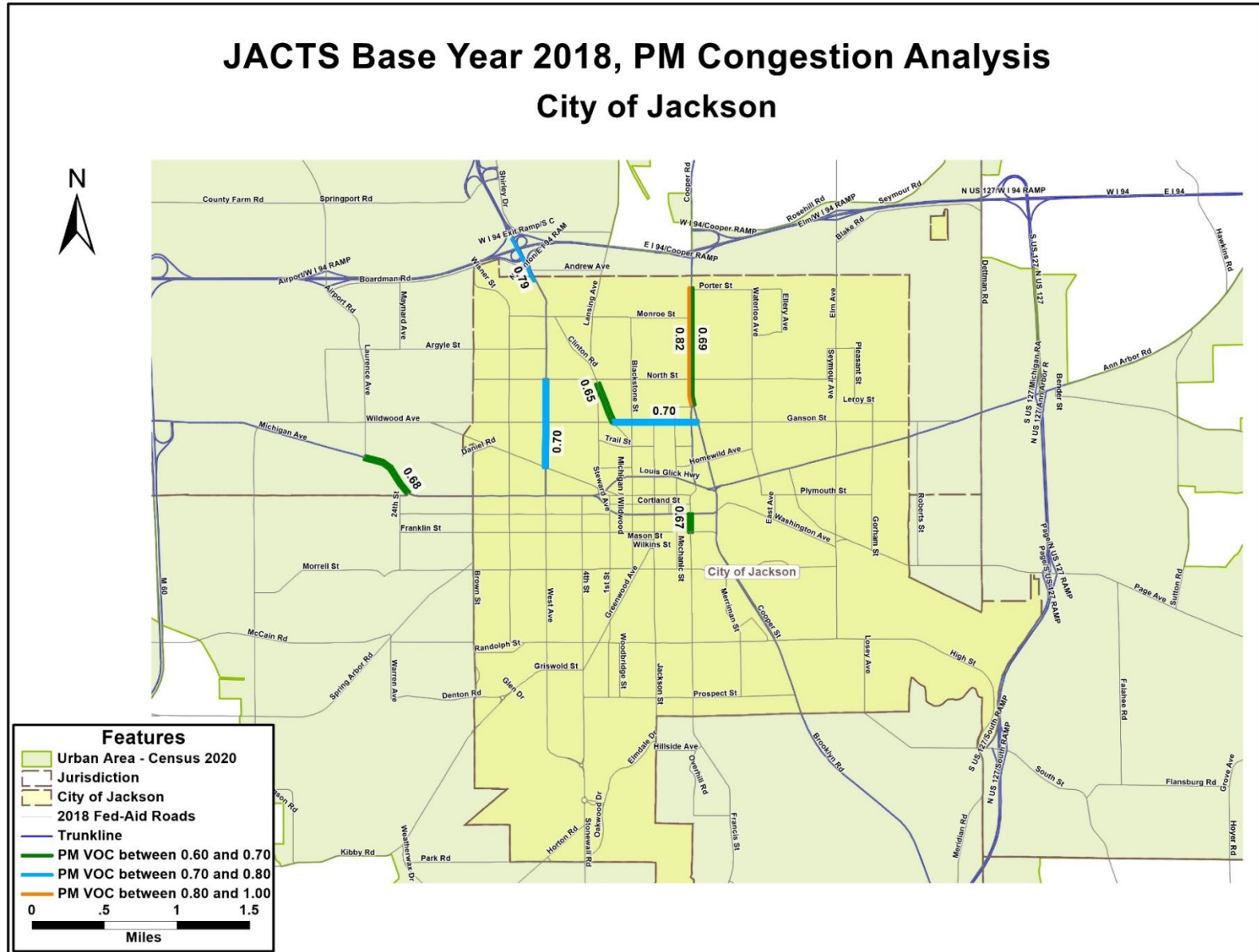




Figure 9-7: Base Year PM Peak Congestion – City of Jackson



## Horizon Year 2050 with Committed Projects Results

The Horizon Year 2050 includes all the capacity-related committed projects listed in the FY 2020-2023 TIP and FY 2023-2026 TIP as well as the projects listed on the FY 2017-2020 TIP that were not concluded before 2018 along with the projected changes in socio-economic data through 2050 approved by the JACTS Technical and Policy Committees. Traffic volume results were also compared to the expected capacities for the road system in 2050. The 2050 model shows SB Cooper St. between Porter St. and Leroy St. as the only corridor with daily traffic volumes that result in a Level of Service E or F ( $VOC > 0.80$ ). However, to be consistent with the thresholds adopted for the base year, this document also presents the daily traffic volumes that result in Level of Service C ( $0.60 < VOC < 0.70$ ) and Level of Service D ( $0.70 < VOC < 0.80$ ) for the area. These thresholds for the horizon year 2050 result in the fourteen roadways listed below.

- 1) SB M-106 (Cooper St) between Porter St & Leroy St
- 2) SB West Ave between I-94 West entrance ramp & Commonwealth Ave
- 3) NW & SE M-50 (Brooklyn Rd) between Napoleon Rd & Austin Rd
- 4) NB & SB West Ave between Wildwood Ave & North St
- 5) EB & WB Ganson St between Lansing Ave & Cooper St
- 6) EB & WB Michigan Ave between Laurence Ave & Main St
- 7) NB & SB Francis St between Franklin St & Washington Ave
- 8) NB & SB US-127 between Floyd Ave & Hart Rd
- 9) NB M-106 (Cooper St) between Leroy St & Porter St
- 10) NW & SE Lansing Ave between Steward Ave & Ganson St
- 11) WB I-94 between Airport Rd and Parma Rd
- 12) EB I-94 between Parma Rd and Airport Rd
- 13) EB I-94 between US-127 South and Race Rd

Comparing the results of corridors with  $VOC > 0.60$  in the base and horizon model scenarios it is noticeable that many of the same corridors appear in both lists. However, EB/WB I-94 between Parma Rd and Airport Rd and EB I-94 between US-127 South and Race Rd that did not have a moderate VOC in the base year are expected to have  $VOC > 0.60$  in the horizon year of 2050 with the projected conditions.

A detailed table of the highest VOC roadway corridors, including the AM and PM Peak periods VOCs, along with maps, for the Horizon Year 2050 with Committed Projects results can be found in Table 9-2 and Figures 9-8 to 9-13.

**Table 9-2 Horizon Year 2050 Scenario Capacity Limitations**

| <b>Jackson Area Comprehensive Transportation Study (JACTS)<br/>Horizon Year 2050 Scenario Congestion</b> |                            |                  |                         |                          |                              |                                |                       |                            |                            |                          |
|--|----------------------------|------------------|-------------------------|--------------------------|------------------------------|--------------------------------|-----------------------|----------------------------|----------------------------|--------------------------|
| <b>Rank</b>  | <b>Road Name</b>           | <b>Direction</b> | <b>From</b>             | <b>To</b>                | <b>Jurisdiction</b>          | <b>Maintaining Road Agency</b> | <b>Length (Miles)</b> | <b>Average AM Peak VOC</b> | <b>Average PM Peak VOC</b> | <b>Average Daily VOC</b> |
| 1  | M-106 (Cooper St)          | SB               | Porter St               | Leroy St                 | City of Jackson              | MDOT                           | 0.81                  | <b>0.89</b>                | <b>0.86</b>                | <b>0.82</b>              |
| 2  | M-50/BUS US-127 (West Ave) | SB               | I-94 West Entrance Ramp | Commonwealth Ave         | Blackman Twp/City of Jackson | MDOT                           | 0.30                  | <b>0.90</b>                | <b>0.84</b>                | <b>0.74</b>              |
| 3  | M-50 (Brooklyn Rd)         | NW/SE            | Napoleon Rd             | Austin Rd                | Napoleon Twp                 | MDOT                           | 0.88                  | <b>0.81</b>                | <b>0.80</b>                | <b>0.70</b>              |
| 4  | West Ave                   | SB/NB            | Wildwood Ave            | North St                 | City of Jackson              | MDOT                           | 0.60                  | <b>0.75</b>                | <b>0.74</b>                | <b>0.68</b>              |
| 5  | Ganson St                  | E-W              | Lansing Ave             | Lansing Ave to Cooper St | City of Jackson              | City of Jackson                | 0.58                  | <b>0.72</b>                | <b>0.70</b>                | <b>0.66</b>              |
| 6  | Michigan Ave               | E-W              | Laurence Ave            | W Main St                | Blackman Twp                 | MDOT                           | 0.41                  | <b>0.75</b>                | <b>0.72</b>                | <b>0.65</b>              |
| 7  | Francis St                 | N-S              | Franklin St             | Washington Ave           | City of Jackson              | City of Jackson                | 0.13                  | <b>0.70</b>                | <b>0.69</b>                | <b>0.65</b>              |
| 8  | US-127                     | N-S              | Floyd Ave               | Hart Rd                  | Summit Twp                   | MDOT                           | 0.80                  | <b>0.76</b>                | <b>0.79</b>                | <b>0.64</b>              |
| 9  | M-106 (Cooper St)          | NB               | Leroy St                | Porter St                | City of Jackson              | MDOT                           | 0.81                  | <b>0.71</b>                | <b>0.73</b>                | <b>0.64</b>              |
| 10   | Lansing Ave                | N-S              | Ganson St               | North St                 | City of Jackson              | City of Jackson                | 0.32                  | <b>0.70</b>                | <b>0.67</b>                | <b>0.62</b>              |
| 11   | M-50/BUS US-127 (West Ave) | NB               | Commonwealth Ave        | I-94 West Entrance Ramp  | Blackman Twp/City of Jackson | MDOT                           | 0.30                  | <b>0.68</b>                | <b>0.71</b>                | <b>0.60</b>              |
| 12   | I-94 West                  | WB               | Airport Rd              | Parma Rd                 | Blackman Twp/Sandstone Twp   | MDOT                           | 7.22                  | <b>0.63</b>                | <b>0.70</b>                | <b>0.60</b>              |
| 13   | I-94 East                  | EB               | Parma Rd                | Airport Rd               | Sandstone Twp/Blackman Twp   | MDOT                           | 7.20                  | <b>0.64</b>                | <b>0.69</b>                | <b>0.60</b>              |
| 14   | I-94 East                  | EB               | US-127 South            | Race Rd                  | Leoni Twp                    | MDOT                           | 4.92                  | <b>0.63</b>                | <b>0.72</b>                | <b>0.60</b>              |



Figure 9-8: Horizon Year Daily Congestion – Jackson County

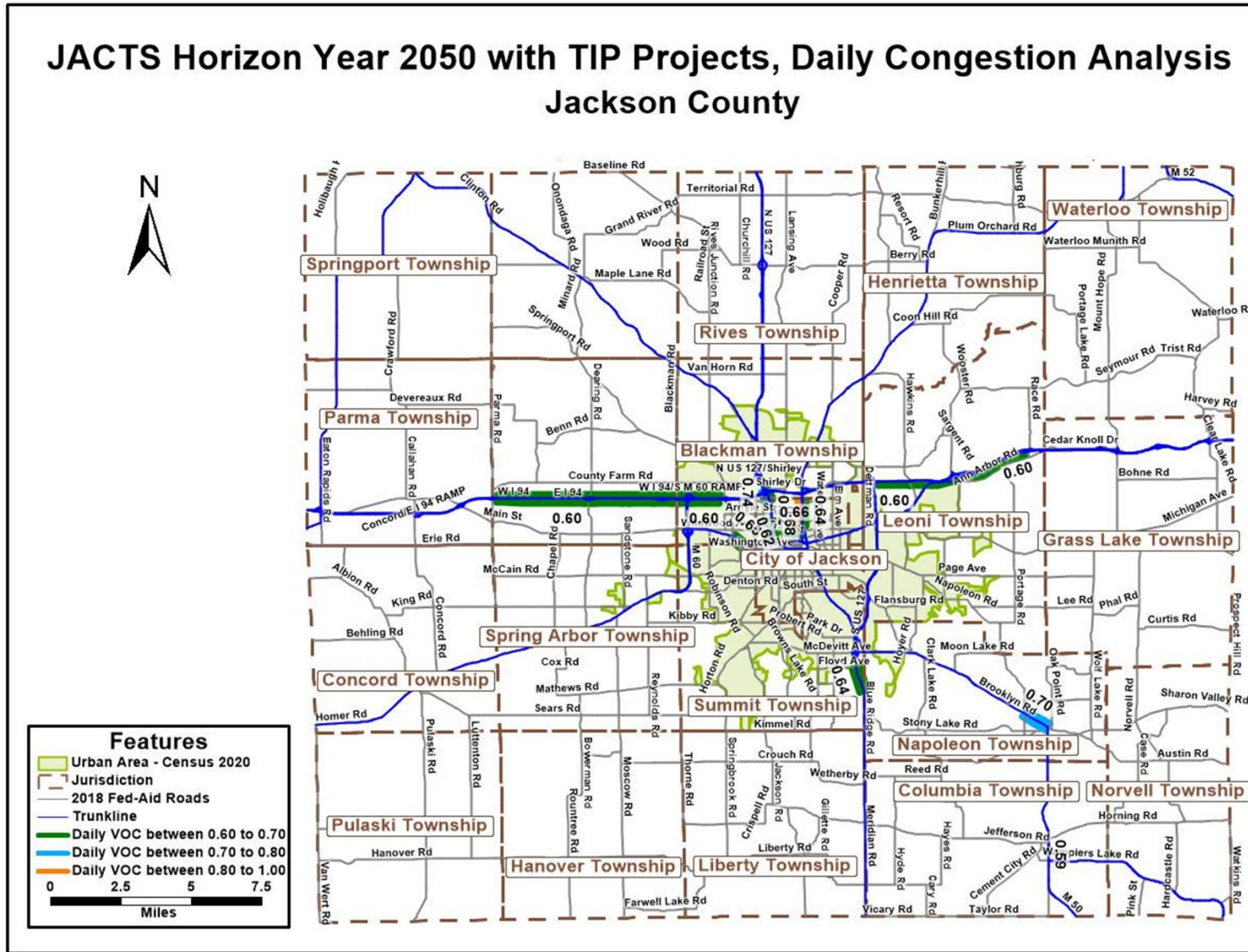


Figure 9-9: Horizon Year Daily Congestion – City of Jackson

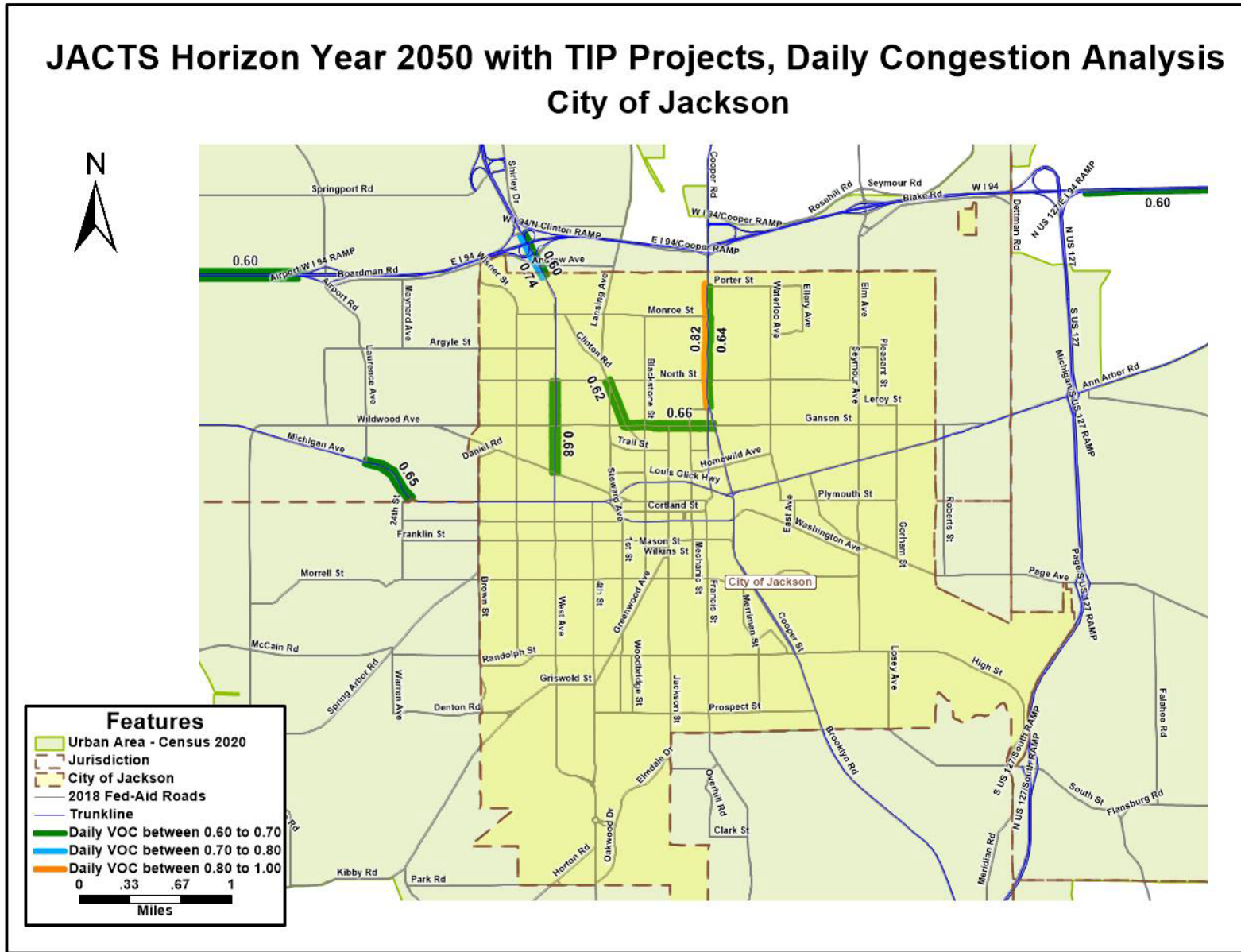
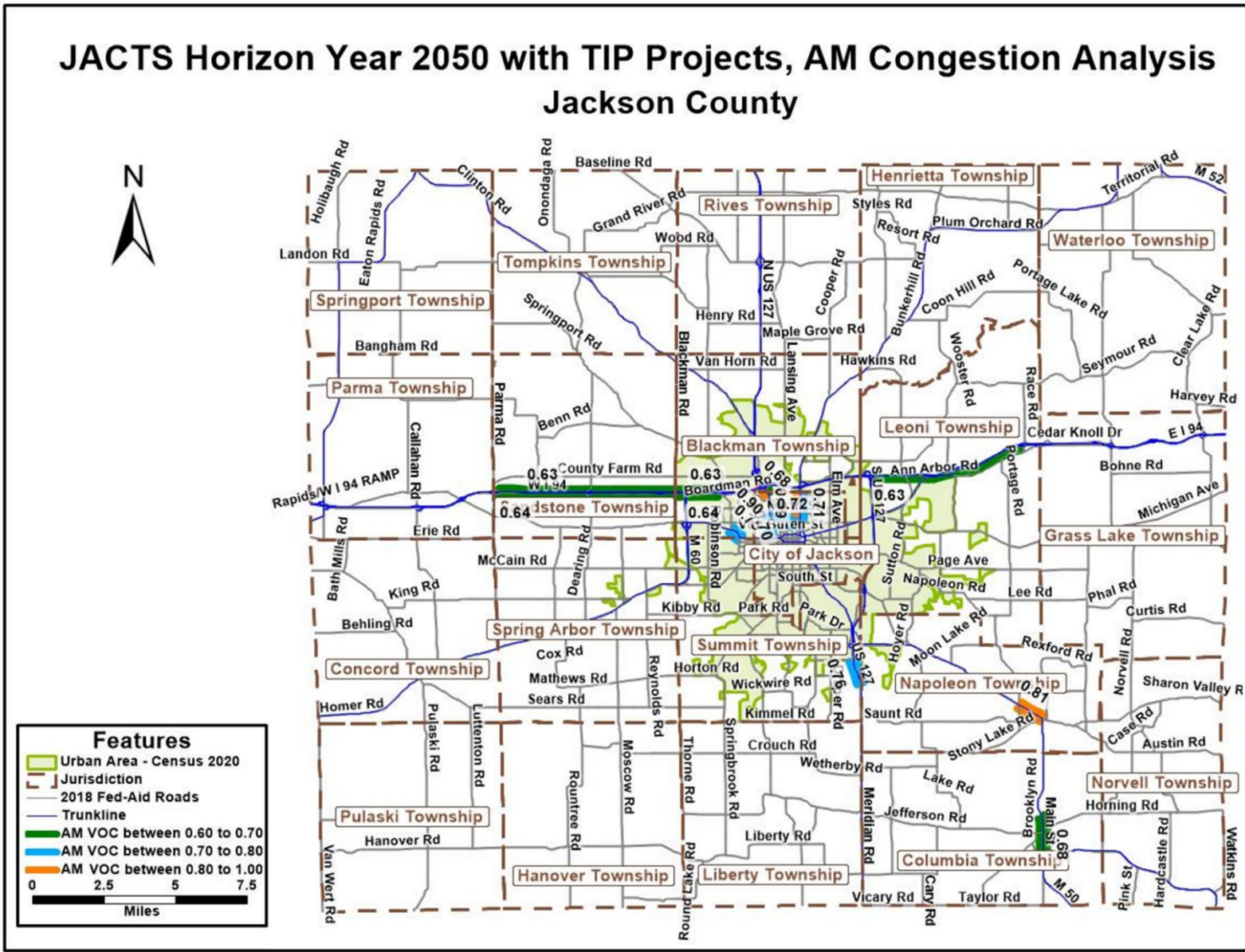
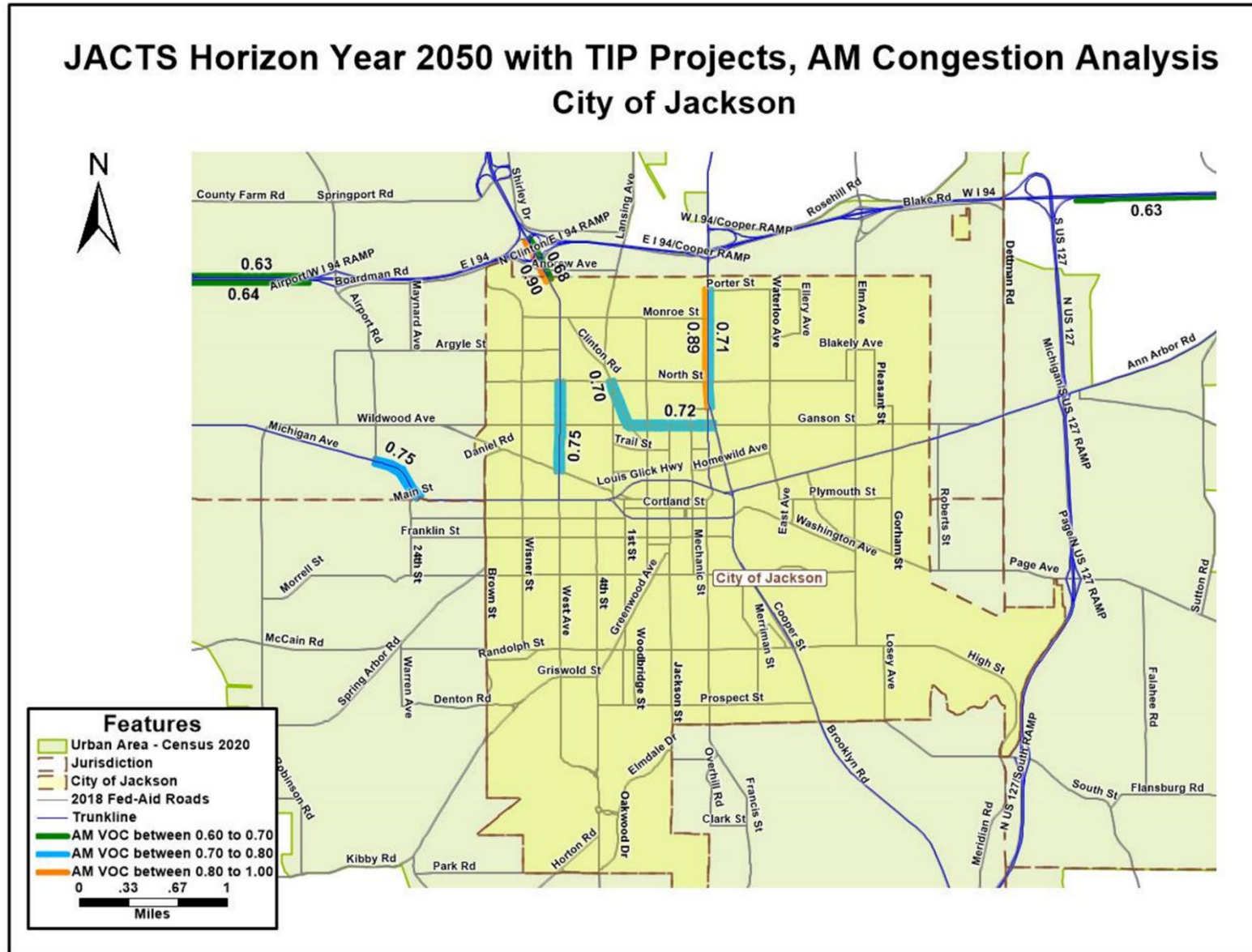




Figure 9-10: Horizon Year AM Peak Congestion – Jackson County



**Figure 9-11: Horizon Year AM Peak Congestion – City of Jackson**





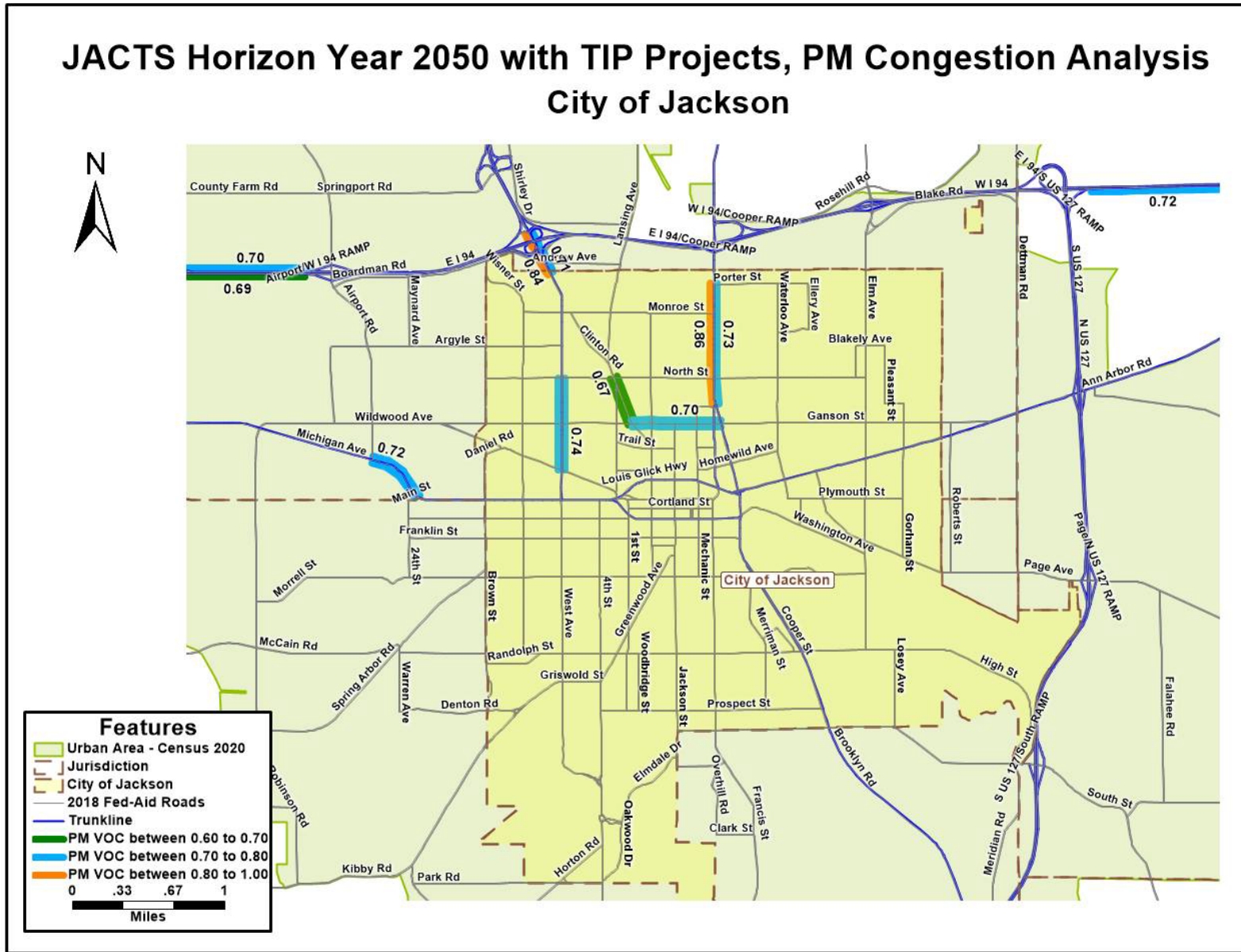
# JACTS Horizon Year 2050 with TIP Projects, PM Congestion Analysis Jackson County

**Features**

- Urban Area - Census 2020
- Jurisdiction
- 2018 Fed-Aid Roads
- Trunkline
- PM VOC between 0.60 to 0.70
- PM VOC between 0.70 to 0.80
- PM VOC between 0.80 to 1.00

0 2.5 5 7.5 Miles

Figure 9-13: Horizon Year PM Peak Congestion – City of Jackson





## Recommended Capacity Improvement Projects

After the completion of the travel demand modeling process and identification of congested or deficient corridors, it is necessary to determine what action should be taken to address the current and anticipated future traffic on the road network. With the knowledge of available federal, state, and local revenues for the 27 years span of the plan, the JACTS Technical and Policy Committees considered local community concerns and issues, which determine the improvements that should be programmed in the coming years.

The plan provides a vision of Jackson County's transportation system through the year 2050. The transportation improvement projects included in the first years (2023-2026) of the plan are considered firm commitments by the implementing jurisdictions. This means that funding has been assigned to the specific improvement which will be completed unless unforeseen circumstances prevent completion. The remaining years of the plan (2027–2050) are a vision of how the transportation system may develop based on the existing land use and zoning plans of local communities and the current forecast of available transportation revenues. The transportation improvements in the “out” years (2027-2050) of the Plan represent current priorities for the future. The transportation plan is updated every five years and the priorities listed for the later years may change as conditions warrant.

There are a limited number of congested corridors and no corridors that are currently, or are expected to be, deficient within the Jackson MPO. **R2PC's focus is to maintain the current transportation system. This means that although capacity projects are valid and important for the future of the MPO transportation system, they are viewed to be a lower priority than projects aimed at preserving the existing system.** Preservation projects generally include reconstruction and resurfacing of the road within the existing right-of-way. In most cases, the lane configuration of the road remains the same. These types of projects are not required to be identified within this plan.

Examples of capacity improvement projects may be the addition of traffic lanes, turn lanes, weave lanes, or the construction of a new road. Also, only those roads located on the federal-aid road network are eligible for inclusion in the plan's project list.

### I-94 Modernization

Many of the projects currently programmed in the FY 2023-2026 TIP consider several transportation issues outside the focus of the TDFM, in particular the modernization of the Interstate 94 corridor.

MDOT completed the Final Environmental Impact Statement and Final Section 4(f) Evaluation for the I-94 Freeway Modernization Study in November 2006. The Record of Decision (ROD) was approved by the Federal Highway Administration in March 2007. The Re-Evaluation was approved by the Federal Highway Administration in September,

2013, and again in December 2017. The project study area is a nine-mile segment of I-94 extending from the M-60 interchange to just east of the Sargent Rd interchange. The project area encompassed approximately nine miles of existing highway, eight interchanges, local frontage roads adjacent to I-94, and 18 distinct bridge structures at 14 locations. The purpose of the project is to:

- 1) Improve the deteriorating condition of existing bridges and road segments consistent with an overall corridor improvement plan
- 2) Improve travel efficiency and road capacity in the I-94 corridor by replacing existing road segments, interchanges, and bridges with modern facilities designed to accommodate projected year 2050 traffic volumes
- 3) To improve motorist safety

The original priorities were determined at the time of the I-94 Modernization Study (2007) in cooperation with an ad hoc committee consisting of local representatives and MDOT experts evaluating the phasing strategy of the elements based on:

- 1) Safety
- 2) Operations
- 3) Condition
- 4) Under-clearance
- 5) Funding Availability

With a projected cost of \$409 million (in 2005-year dollars), sufficient funding is not available for construction of the entire nine-mile corridor. Instead, MDOT will phase project implementation over the next 5 to 40 years based on conditions, traffic volume needs, congestion, funding availability, and safety needs along the corridor. The Preferred Alternative for reconstructing the I-94 corridor has been divided into three separate phases as follows:

### **Phase 1**

- Sargent Rd interchange reconstruction, including the closure of the I-94 BL interchange – Completed in 2013
- Replacement of the Hawkins Rd and Dettman Rd bridge overpasses – Complete

### **Phase 2**

- Cooper St interchange reconstruction and other road improvements as necessary – Complete
- Replacement and widening of the I-94 bridge over the Grand River to accommodate potential future widening of I-94 – Complete
- The remainder of I-94 between M-60 and Sargent Rd will receive a major rehabilitation – Mostly complete

- Replacement of the M-60 and Elm Rd interchanges and Lansing Ave and Elm Rd bridge overpasses – M-60 and Lansing Ave complete, Elm Rd under construction

### **Phase 3**

- Reconstruction of US-127/M-50-West Ave interchange to diverging diamond – Complete
- Reconstruct the northern portion of the Sargent Rd interchange
- US-127 South and Airport Rd interchanges reconstruction
- Widen I-94 between M-60 and Sargent Rd – Mostly complete

These unfunded improvements are technically not a part of the JACTS 2050 Long Range Transportation Plan, but instead are included to highlight some of the unmet needs that could be addressed with increased revenues. As future funding is identified and becomes available for implementing the findings included in the I-94 Modernization Study, the JACTS committees will continue to assist MDOT in programming the projects to address the capacity and safety improvements outlined in the study.

# Chapter 10

## Operational & Management Strategies

---

The IIJA legislation continues to emphasize the inclusion of operational and management strategies to improve the performance of existing transportation facilities in order to relieve vehicular congestion and to maximize the safety and mobility of people and goods.

The purpose of identifying and utilizing operational and management strategies is to improve the overall performance of the system and to reduce the number of costly widening (capacity) projects and the frequency of total roadway reconstruction projects on the area's roadway network. Jackson participates in and promotes a variety of transportation strategies that support reducing congestion, prolonging the life of the existing facilities, and maximizing the safety and mobility of people and goods. These strategies also support the plan goals of addressing operations, maintenance, preservation, and accessibility.

### Programs

#### Asset Management

Asset management is defined as the process of maintaining, upgrading and operating physical assets cost-effectively, based on a continuous, physical inventory and condition assessment.

The Jackson MPO is actively involved in the asset management process for federal-aid roads in Jackson County and the City of Jackson. One of the goals of the statewide asset management program, overseen by MDOT, is to maximize pavement life by applying the correct “fix” at the right time. Half of all federal-aid eligible roads are inventoried each year by a trained team of field surveyors to determine deterioration levels. The team consists of representatives from MDOT, the Region 2 Planning Commission and either the Jackson County Department of Transportation or the City of Jackson. Each of the local agencies has access to the PASER rating system and the RoadSoft software to use the results of the field data. The City of Jackson and the Jackson County Department of Transportation have chosen to survey all local roads and use this information within their own pavement management and forecasting process. Each road agency is responsible for its own pavement management system. Data for the federal-aid eligible road system has been inventoried annually since 2003.

**Figure 10-1**  
**Weathered Asphalt Road**



Jackson supports this effort with its involvement in training personnel, field surveying, equipment maintenance, assistance to the local agencies, and reporting the data to MDOT.

### **Capital Preventative Maintenance**

This strategy is one of the implementation steps that can result from the asset management activity. Jackson promotes the timely resurfacing, repaving, repainting, redecking, signal upgrading, and other preventative maintenance activities that extend the life of the existing transportation system infrastructure. Many of the projects can be small in scope, while others are not significant enough to be listed within the context of the Long Range Transportation Plan. The local road agencies conduct the activities primarily as maintenance work using state and local funding.

**Figure 10-2**  
**Filling Potholes**



The Jackson MPO supports these activities through the annual asset management program and the inclusion of MDOT Capital Preventative Maintenance funding in the TIP.

### **General Maintenance**

By maintaining existing facilities in the best possible condition, the transportation system is sustained and functions more safely for users. Activities considered to be general maintenance include minor resurfacing, crack and chip sealing applications, ice and snow removal, traffic signal maintenance, pot hole filling, sign and pavement marking replacement and upkeep, street cleaning and debris removal, and landscaping activities including mowing, tree trimming, and general roadside maintenance.

The Jackson MPO supports these activities through the funding of sign upgrade projects, enhancement projects, and through participation in the asset management program.

### **Safety Management**

Although many of the activities in the CPM and maintenance categories result in improved safety, safety is a secondary benefit. Activities that are directly related to improving the safety and operation of the transportation system include the development of projects to address high crash locations and intersections, adding specific safety features to existing roadways and bridges, improving geometrics or design, and promoting public safety programs.

Jackson County has also developed a Hazard Mitigation Plan in accordance with state and federal government guidelines. The purpose of the plan is to protect the health, safety and economic interests of residents and businesses by reducing the impacts of natural and technological hazards through hazard mitigation planning, awareness, and implementation. For more information about this plan, see Chapter 14.



## Intelligent Transportation Systems

Intelligent Transportation Systems (ITS) activities involve the addition of facilities, services, and/or technological enhancements designed to improve mobility and safety. Such activities can include computerized signal controls, automated transit fare collection systems, and transit vehicle locator systems. Future activities that could possibly occur include real-time motorist/trucker information with changeable message signs and a centralized traffic monitoring station. Neither the City nor JCDOT have plans for ITS technology.

The Jackson MPO supports ITS activities through its participation in the Regional ITS Architecture and Deployment Plan by the MDOT Southwest Region Office for Jackson County.

## Access Management

Access management involves establishing policies and implementing projects that will reduce or eliminate driveways, roadway access points, median openings, and street connections with the intention of improving safety, reducing congestion, and enhancing traffic mobility by reducing conflict points. Application of the best practices of access management has benefits for motorists, bicyclists, pedestrians, transit, government agencies, and communities by helping to maintain the capacity of the road system.

Success with access management requires that several players be involved in the process including, but not limited to, MDOT, local road agencies, property owners, developers, and local planning commissions. MDOT is involved in access management studies to preserve access along state highway corridors. This process involves bringing together all of the stakeholders to develop an access control plan, along with associated land use and zoning changes. Other access management activities include driveway consolidation and shared use, use of medians and/or turning restrictions, construction of frontage roads and the development of educational materials for the general public, planning commissions and developers.

The Jackson MPO supports access management procedures through its participation on MDOT steering committees for access management studies within the Jackson area.

## Congestion Management

The FAST Act requires that problem areas identified by the congestion management system be considered in developing metropolitan and statewide transportation plans and improvement programs. MDOT's Congestion Management System (CSM) includes the identification of alternative strategies to alleviate congestion while enhancing the mobility of persons and goods. Under the CSM regulations, general purpose road widening can only be

**Figure 10-3**  
**I-94 through Jackson**





considered after careful evaluation of the congestion reduction impacts of low-cost improvements such as traffic signal projects, local traffic engineering projects, and transit/ridesharing improvements.

A congestion management system will require continuous data collection and system monitoring. The extent of the program will be determined by MDOT in consultation with MPO's, local officials, transit operators, and other transportation officials.

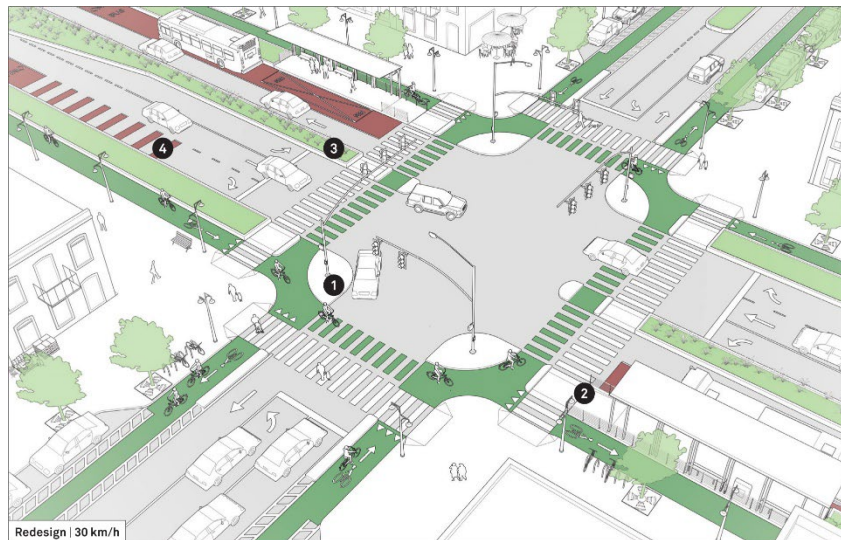
The Jackson MPO will continue to support the development of a congestion management system strategy with uniform performance measures across modes and jurisdictions for the use and analysis of traffic volume and congestion data among local road agencies and MDOT.

## Complete Streets

Complete Streets are streets designed and operated to enable safe use and support mobility for all users. This includes people of all ages and abilities, regardless of whether they are traveling as drivers, pedestrians, bicyclists, or public transportation riders. The Region 2 Planning Commission, Jackson County DOT, and the City of Jackson passed Complete Streets resolutions in 2006. The Michigan Legislature passed Complete Streets legislation in 2010.

Figure 10-4 provides an example of Complete Streets. In this example, the streets support the use of vehicles, pedestrians, bicycles, and public transit. While the streets support cars with turn lanes and traffic signals as they normally would, cars are not their only priority. Pedestrians are given wide, complete sidewalks along with crosswalks and signals at the intersection. Bike lanes (highlighted dark green) are built so

**Figure 10-4**  
**Example of Complete Streets**



that they have physical separation from cars and pedestrians, and the intersection is designed to protect cyclists from turning cars while they are waiting or turning right. Buses are supported through bus lanes (highlighted red) which allow them to not get stuck in traffic with other cars, and to also not hold up cars while they are stopped. People using the bus are provided a covered shelter that is easily accessible by walking or cycling. The streets are also given grassy center medians to separate both directions of traffic and the speed limit is reduced to 30 km/h (about 20 mph) to provide more safety to pedestrians and cyclists.

## **Non-Motorized Management**

Effective accommodation of pedestrians and users of the non-motorized transportation devices available today is important for the safe and efficient operation of the entire transportation system. In the Jackson MPO study area, this includes active involvement in the Walkable Communities Coalition, an advisory committee to the Jackson City Council and the Jackson County Planning Commission.

The local agencies are actively involved in the planning, designing, and implementation of non-motorized projects. MDOT produced a non-motorized map for the University Region's eleven-county planning area that was completed in 2017.

In May of 2020, R2PC completed the Jackson City + County Non-Motorized Plan. This plan lays out an interconnected network of trails that could be developed across the county, with nine priority routes highlighted. This plan also outlines other bicycle infrastructure that can be developed, such as bike parking, a uniform sign system, and bike sharing stations. The costs of developing this trail network and the possible funding sources are all outlined in the plan. The Jackson MPO will look to implement the recommendations of this plan as opportunities arise and funding becomes available.

The Jackson MPO supports the activities through participation in the Walkable Communities Coalition, and by providing assistance and coordination with area communities in the development of non-motorized and recreational trail plans and projects. The Jackson MPO will also continue to offer assistance to area jurisdictions in funding non-motorized transportation projects.

## **Public Transit Management**

JATA currently uses MDOT's Public Transit Management System to maintain current capital equipment and operational data and to determine future needs. The Jackson MPO will continue to provide assistance to JATA in maintaining and updating its databases as required. The Jackson MPO will continue to advocate and encourage connectivity between transit and other modes of transportation, and continue to promote public transit through its funding of capital equipment including buses, vans, and shelters.

**Figure 10-5**  
**JATA Bus Garage**



# Chapter 11

## Financial Analysis & Constraints

---

The fiscal year (FY) 2023-2026 Transportation Improvement Program (TIP) is a four-year scheduling document containing the projects that are planned to be obligated to implement the surface transportation policies contained in the 2050 Long Range Transportation Plan. The TIP project list is required to be *fiscally constrained*; that is, the cost of projects programmed in the FY 2023-2026 TIP cannot exceed the amount of funding *reasonably expected to be available* for surface transportation projects during the time period covered by the FY 2023-2026 TIP. This financial plan is the section of the TIP documenting the methods used to calculate funds reasonably expected to be available and compares this amount to proposed projects to demonstrate that the TIP is fiscally constrained. The financial plan also estimates the cost of operating and maintaining the transportation system in the Jackson MPO during the four-year period covered by the TIP.

### Sources of Transportation Funding

The basic sources of transportation funding in Michigan are motor fuel taxes and vehicle registration fees. Motor fuel is taxed at both the federal and state levels, the federal government at 18.4¢ per gallon on gasoline and 24.4¢ per gallon on diesel fuel, and the State of Michigan at 26.3¢ per gallon on both gasoline and diesel fuel. Michigan also charges sales tax on motor fuel, but this funding is not applied to transportation. These motor fuel taxes are levied on a per-gallon basis. The amount collected per gallon does not increase when the price of gasoline or diesel fuel increases. Over time, inflation erodes the purchasing power of any excise tax, unless the tax is adjusted to compensate for inflation.

The State of Michigan also collects annual vehicle registration fees when motorists purchase license plates or tabs. This is a crucial source of transportation funding for the state. Currently, slightly less than one-half of the transportation funding collected by the state is in the form of vehicle registration fees.

### Cooperative Revenue Estimation Process

Estimating the amount of funding available for the FY 2023-2026 TIP is a complex process. It relies on a number of factors, including economic conditions, miles travelled by vehicles nationwide and in the State of Michigan, and federal and state transportation funding received in previous years. Revenue forecasting relies on a combination of data and experience and represents a “best guess” of future trends.

The revenue forecasting process is a cooperative effort. The Michigan Transportation Planning Association (MTPA), a voluntary association of metropolitan planning organizations (MPOs) and agencies responsible for the administration of federally-funded highway and transit planning activities throughout the state, formed the Financial Work Group (FWG) to develop a statewide standard forecasting process. FWG is comprised of members from the Federal Highway Administration (FHWA), Federal Transit

Administration (FTA), the Michigan Department of Transportation (MDOT), transit agencies, and MPOs, including JACTS. It represents a cross-section of the public agencies responsible for transportation planning in our state. The revenue assumptions in this financial plan are based on the factors formulated by the FWG and approved by the MTPA. They are used for all TIP financial plans in the state.

Federal-aid surface transportation is divided into two parts: Highway funding, which is administered by the Federal Highway Administration (FHWA) and transit funding, administered by the Federal Transit Administration (FTA). The following sections discuss each separately.

## **Highway Funding**

### **Sources of Federal Highway Funding**

Receipts from federal motor fuel taxes (plus some other taxes related to trucks) are deposited in the federal Highway Trust Fund (HTF). Funding is then apportioned to the states. Apportionment is the distribution of funds through formulas in law. The current law governing these apportionments is the Infrastructure Investment and Jobs Act (IIJA), sometimes also referred to as the Bipartisan Infrastructure Law (BIL). Through this law, Michigan receives approximately \$1.4 billion in federal-aid highway funding annually. This funding is apportioned in the form of a number of programs designed to accomplish different objectives, such as road repair, bridge repair, safety, and congestion mitigation. A brief description of the major funding sources follows.

***Surface Transportation Block Grant Program (STBG):*** Funds construction, reconstruction, rehabilitation, resurfacing, restoration, preservation, and/or operational improvements to federal-aid highways and replacement, preservation, and other improvements to bridges on public roads. Michigan's STBG apportionment from the federal government is split, with slightly more than half allocated to areas of the state based on population and half that can be used throughout the state. A portion of STBG funding is reserved for rural areas. STBG can also be flexed (transferred) to transit projects.

***Highway Safety Improvement Program (HSIP):*** Funds to correct or improve a hazardous road location or feature or address other highway safety problems. Projects can include intersection improvements, shoulder widening, rumble strips, improving safety for pedestrians, bicyclists, or disabled persons, highway signs and markings, guardrails, and other activities. The State of Michigan retains all Safety funding and uses a portion on the state trunk line system, distributing the remainder to local agencies through a competitive process.

***Congestion Mitigation and Air Quality Improvement (CMAQ):*** Intended to reduce emissions from transportation-related sources. There is currently an emphasis on certain projects that reduce particulate matter (PM), but funds can also be used for traffic signal retiming, actuations, and interconnects; installing dedicated turn lanes; roundabouts; travel demand management (TDM) such as ride share and vanpools; transit; and non-motorized projects that divert non-recreational travel from single-occupant vehicles. The Jackson MPO area does not qualify for this measure because the population is less than the 200,000 threshold.



**Transportation Alternatives Program (TAP):** Funds can be used for a number of activities to improve the transportation system environment, such as non-motorized projects, preservation of historic transportation facilities, outdoor advertising control, vegetation management in rights-of-way, and the planning and construction of projects that improve the ability of students to walk or bike to school. Funds are split between the state and various urbanized areas based on population.

**Carbon Reduction Program (CRP):** New funding source established in IIJA. These funds encompass various eligible activities aimed at reducing transportation emissions defined as carbon dioxide (CO<sub>2</sub>) emissions from on-road highway sources. Funds may also be used to promote sustainable transportation practices. Funds are split between the state and various urbanized areas based on population.

### **Base and Assumptions Used in Forecast Calculations of Federal Highway Funds**

At least every two years, allocations are calculated for each of these programs, based on federal apportionments and *rescissions* (nationwide downward adjustments of highway funding from what was originally authorized) and state law. Targets can vary from year to year due to factors including actual vs. estimated receipts of the Highway Trust Fund, authorization (the annual transportation funding spending ceiling), and the appropriation (how much money is actually approved to be spent). Allocations for FY [YEAR], as released by MDOT on [DATE], are used as the baseline for this FY 2023-2026 TIP financial forecast. The Financial Work Group of the MTPA developed an assumption, for planning purposes, that the amount of federal-aid highway funds received will increase by [FACTOR]% each year during the FY 2023-2026 TIP period.

### **Sources of Highway Funding Generated at the State Level**

There are two main sources of state highway funding, the state motor fuel tax and vehicle registration fees.

The state law governing the collection and distribution of state highway revenue is Public Act 51 of 1951, commonly known simply as *Act 51*. All revenue from the motor fuel tax and vehicle registration fees is deposited into the Michigan Transportation Fund (MTF). Act 51 contains a number of complex formulas for the distribution of the funding, but essentially, once funding for certain grants and administrative costs are removed, approximately ten percent of the remainder is deposited in the Comprehensive Transportation Fund (CTF) for transit. The remaining funds are then split between the Michigan Department of Transportation (MDOT), county road commissions, and municipalities (incorporated cities and villages) in a proportion of 39.1 percent, 39.1 percent, and 21.8 percent, respectively.

Several years ago, major changes to the State of Michigan's surface transportation revenue collection were enacted. These changes included:

- 1) Increasing the motor fuel tax to 26.3¢/gallon from 19¢/gallon (gasoline) and 15¢/gallon (diesel), effective January 1, 2017
- 2) Raising vehicle registration fees by an average of 20%, effective January 1, 2017
- 3) Transferring \$150 million from the state's General Fund to highways in fiscal year (FY) 2019

- 4) Transferring \$325 million from the state's General Fund to highways in FY 2020
- 5) Transferring \$600 million from the state's General Fund to highways in FY 2021 and subsequent years
- 6) Adjusting the motor fuel tax for inflation by up to 5% each year, starting in January 2022

When these changes took full effect in the 2020-21 state fiscal year, MTF revenues were anticipated to increase to over \$4 billion annually. The financial impact of COVID-19 shutdowns resulted in less than expected collections. MDOT is yet to recognize significant gains from the enacted legislation. Cash receipts in the 2020-21 state fiscal year totaled \$3.412 billion. Cash receipts in the 2021-22 state fiscal year totaled \$3,537 billion.

MTF funds are critical to the operation of the road system in Michigan. Since federal funds cannot be used to operate or maintain the road system (items such as snow removal, mowing grass in the rights-of-way, paying the electric bill for streetlights and traffic signals, etc.), MTF funds are local community and county road agencies' main source for funding these items. Most federal transportation funding must be matched so that each project's cost is a maximum of approximately 80% federal-aid funding and a minimum of 20% non-federal matching funds. In Michigan, most match funding comes from the MTF. Finally, federal funding cannot be used on local public roads, such as subdivision streets, or other roads not designated as federal-aid eligible. Here again, MTF is the main source of revenue for maintenance and repair of these roads.

Funding from the MTF is distributed statewide to incorporated cities, incorporated villages, and county road commissions, collectively known as **Act 51 agencies**. The formula is based on population and public road mileage under each Act 51 agency's jurisdiction.

### **Base and Assumptions Used in Forecast Calculations of State-Generated Highway Funds**

State-generated funding for highways (i.e. MTF funding) only needs to be shown in the TIP if it is in a project that also contains federal-aid funding, or is non-federally funded but of regional significance. Therefore, most state-generated funding for highways that is distributed to MDOT and to the counties, cities, and villages of the state through the Act 51 formulas is not shown in the TIP. The total amount of MTF funding available each year can be projected. As long as the amount of MTF funding for highways shown in the TIP does not exceed the total projected MTF funding available, it is assumed that state-generated funding shown in the FY 2023-2026 TIP is constrained to reasonably available revenues.

### **State-Administered Programs that Use both Federal-Aid and State Funding**

Michigan has two programs that use both state funding and federal funding. These programs are Transportation Economic Development Fund (TEDF) Category C and TEDF Category D. The state money in these programs is separate from the state MTF money that is distributed to the cities, villages, and county road commissions each year. These funds are distributed to urban and rural counties as defined in Act 51. In the JACTS area, the distribution of each funding source is:



- TEDF Category C: Congestion mitigation in designated urban counties. There are no designated urban counties in the JACTS area.
- TEDF Category D: All-season road network in rural counties. In the JACTS area, this is Jackson County.

Four additional TEDF categories (A, B, E, and F) are 100% state-funded programs that are competitively awarded by the state. Projects using these funds do not have to be in the TIP unless they are being supplemented with federal-aid highway funding by the awardee, or the project is considered regionally significant.

Local Bridge is another important program with both federal and state funding components. It is funded through a portion of the state motor fuel tax. It is supplemented with Surface Transportation Block Grant Program (STBG) funding retained by the state. The Local Bridge program is competitive, with funds being awarded by Local Bridge Committees in each of the MDOT planning regions.

### **Base and Assumptions Used to Forecast Programs with Combined Federal and State Funding**

Funding targets for TEDF Category C and Category D funds (both federal and state) for fiscal years 2023 through 2026 were released by MDOT on [DATE]. TEDF Category C and Category D projects programmed in the TIP are constrained to the targets provided, plus any carryforward of the state portion of these programs (the federally-funded portion does not carry forward).

Since the Local Bridge program is competitively-awarded, only those Local Bridge projects that have already been awarded for use in fiscal years 2023 through 2026 are shown. Therefore, Local Bridge projects are fiscally self-constrained.

### **Sources of Locally-Generated Highway Funding**

Local highway funding can come from a variety of sources, including transportation millages, general fund revenues, and special assessment districts. Locally-funded transportation projects that are not of regional significance are not required to be included in the TIP. This makes it difficult to determine how much local funding is being spent for roads in the JACTS area. Additionally, special assessment districts and millages generally have finite lives, so an accurate figure for local transportation funding would require knowledge of all millages and special assessment districts in force during each year of the TIP period, which is difficult to achieve. It is therefore assumed that locally-generated funding shown in the FY 2023-2026 TIP is constrained to reasonably available revenues.

### **State Trunkline Funding**

The State of Michigan maintains an extensive network of highways across the state and within the JACTS area. Each highway with an I-, US-, or M- designation (e.g. I-94, US-127, M-50), is part of this network, which is known as the **State Trunkline System**. The portion of the State Trunkline System in the JACTS area is comprised of over [AMOUNT] lane-miles of highway, hundreds of bridges and culverts, signs, traffic signals, safety barriers, sound walls, and other capital that must be periodically repaired, replaced, reconstructed, or renovated. The agency responsible for the State Trunkline System is

the Michigan Department of Transportation (MDOT). MDOT has provided JACTS with a list of projects planned for the portion of the trunkline system within the JACTS area over the FY 2023-2026 TIP period. As a matter of standard operating procedure, it is assumed that the trunkline project list provided to JACTS (and similar lists provided to the other MPOs in the state) is constrained to reasonably available revenues.

### **Innovative Financing Strategies--Highway**

A number of innovative financing strategies have been developed over the past two decades to help stretch limited transportation dollars. Some are purely public sector; others involve partnerships between the public and private sectors. Some of the more common strategies are discussed below.

***Toll Credits:*** This strategy allows states to count funding they earn through tolled facilities (after deducting facility expenses) to be used as “soft match,” rather than using the usual cash match for federal transportation projects. States have to demonstrate *maintenance of effort* when using toll credits—in other words, each state must show that the toll money is being used for transportation purposes and that it is not reducing its efforts to maintain the existing system by using the toll credit program. Toll credits have been an important source of funding for the State of Michigan in the past because of the four highway bridge crossings and one tunnel crossing between Michigan and Ontario. Toll credits have also helped to partially mitigate highway-funding shortfalls in Michigan, since sufficient non-federal funding has frequently been not been available in past years to match all of the federal funding apportioned to the state.

***State Infrastructure Bank (SIB):*** Established in a majority of states, including Michigan. Under the SIB program, states can place a portion of their federal highway funding into a revolving loan fund for transportation improvements such as highway, transit, rail, and intermodal projects. Loans are available at 3% interest with a 25-year loan period to public entities such as regional planning commissions, state agencies, transit agencies, railroads, and economic development corporations. Private and nonprofit corporations developing publicly owned facilities may also apply.

***Transportation Infrastructure Finance and Innovation Act (TIFIA):*** This nationwide program provides lines of credit and loan guarantees to state or local governments for development, construction, reconstruction, property acquisition, and carrying costs during construction. TIFIA enables states and local governments to use the borrowing power and credit of the federal government to fund finance projects at far more favorable terms than they would otherwise be able to do on their own. Repayment of TIFIA funding can be delayed for up to five years after project completion with a repayment period of up to 35 years. Interest rates are also low.

***Bonding:*** Bonding is a form of borrowing where the borrower issues (sells) IOUs for portions of the debt it is incurring, called *bonds*, to willing purchasers of the debt. The borrower is then obligated to repay lenders (bondholders) the principal and an agreed-upon rate of interest over a specific time period. The amount of interest a bond issuer (borrower) will have to pay depends in large part upon its perceived credit risk--the greater the perceived chance of default, the higher the interest rate. In order to bond, a borrower must pledge a reliable revenue stream for repayment. For example, this can be the toll

receipts from a new transportation project. In the case of general obligation bonds, future tax receipts are pledged.

States are allowed to borrow against their federal transportation funds, within certain limitations. While bonding provides money up front for important transportation projects, it also means diminished resources in future years, as funding that could otherwise pay for future projects must instead be reserved for paying the bonds' principal and interest. Michigan's Act 51 law requires that funding for the payment of bond and other debts be taken off the top of motor fuel tax and vehicle registration receipts collected before the distribution of funds for other transportation purposes. Therefore, the advantages of completing a project more quickly need to be carefully weighed with the disadvantages of reduced resources in future years.

**Advance Construct/Advance Construct Conversion:** This strategy allows a community or agency to build a transportation project with its own funds (advance construct) and then be reimbursed with federal-aid funds for the federal share of the project in a future year (advance construct conversion). Tapered match can also be programmed, where the agency is reimbursed over a period of two or more years. Advance construct allows for the construction of highway projects before federal funding is available; however, the agency must be able to build the project using its own resources up front, and then be able to wait for federal reimbursement in a later year.

**Public-Private Partnerships (P3):** Funding available through traditional sources, such as motor fuel taxes, are not keeping pace with the growth in transportation system needs. Governments are increasingly turning to public-private partnerships (P3) to fund large transportation infrastructure projects. An example of a public-private partnership is Design/Build/Finance/Operate (DBFO). In this arrangement, the government keeps ownership of the transportation asset, but hires one or more private companies to design the facility, secure funding, construct the facility, and then operate it, usually for a set period of time. The private-sector firm is repaid most commonly through toll revenue generated by the new facility.

### **Operations and Maintenance of the Federal-Aid Highway System**

Construction, reconstruction, repair, and rehabilitation of roads and bridges are only part of the total cost of the highway system. It must also be operated and maintained. *Operations and maintenance* includes those items necessary to keep the highway infrastructure functional for vehicle travel, other than the construction, reconstruction, repair, and rehabilitation of the infrastructure. Examples include, but are not limited to, snow and ice removal, pothole patching, rubbish removal, maintaining rights-of-way, maintaining traffic signs and signals, clearing highway storm drains, paying the electrical bills for street lights and traffic signals, and other similar activities, and the personnel and direct administrative costs necessary to implement these projects. These activities are as vital to the smooth functioning of the highway system as good pavement.

Federal-aid highway funds cannot be used for operations and maintenance. Since the TIP only includes federally-funded capital highway projects (and non-federally-funded capital highway projects of regional significance), it does not include operations and maintenance expenses. While in aggregate, operations and maintenance activities are regionally significant, the individual projects do not rise to that level. However, federal

regulations require an estimate of the amount of funding that will be spent operating and maintaining the federal-aid eligible highway system over the FY 2023-2026 TIP period. This section of the Financial Plan provides an estimate of the cost of operations and maintenance in the JACTS area and details the method used in the estimation.

MDOT University Region estimates that its operations and maintenance costs were approximately \$[AMOUNT] per lane-mile in FY [YEAR]. Using the FY [YEAR] estimate as a baseline, costs were increased 4% per year over the life of the FY 2023-2026 TIP to adjust for inflation (also known as *year of expenditure* adjustment—see **Year of Expenditure (Inflation) Adjustment for Project Costs** section below) to provide a total of \$[AMOUNT] million estimated operations and maintenance costs on the state trunkline system in the JACTS area from FY 2023 through 2026.

Local Act-51 road agencies (county road commissions, incorporated cities, and incorporated villages) are responsible for operating and maintaining the roads they own, including those roads they own that are designated as part of the federal-aid system. The main source of revenue available to these agencies to operate and maintain the roads is the Michigan Transportation Fund (MTF). The estimate of available funding is based on the assumption that each lane-mile of road in the system has an approximately equal operations and maintenance cost. There are [AMOUNT] lane miles of locally-owned road on the federal-aid network in the JACTS area. Therefore, applying the per-lane-mile cost of maintenance derived from MDOT University Region's FY [YEAR] estimate to the number of lane-miles of locally-owned federal-aid eligible road in the JACTS area yields an annual maintenance cost of \$[AMOUNT] million in the base year of FY [YEAR], or a total of \$[AMOUNT] million over the life of the FY 2023-2026 TIP, adjusted for year of expenditure.

Finally, adding together the trunkline and locally-owned per-lane mile costs yields a total of \$[AMOUNT] million in the base year of FY [YEAR] for estimated operations and maintenance costs on the entire federal-aid system in the JACTS area, or a total of \$[AMOUNT] million over the life of the FY 2023-2026 TIP, adjusted for year of expenditure.

### Highway Commitments and Projected Available Revenue

The FY 2023-2026 TIP must be fiscally constrained; that is, the cost of projects programmed in the TIP cannot exceed revenues “reasonably expected to be available” during the relevant plan period. MDOT issued each MPO in the state, including JACTS, a local program allocations table covering the years of the FY 2023-2026 TIP. These allocations specify what is reasonably expected to be available to local agencies in the Surface Transportation Block Grant (STBG)—Urban and –Rural Program, National Highway Performance Program, Transportation Economic Development (TEDF) Category C Program (federal and state), and the TEDF Category D Program (federal and state). Projects using these funds are constrained to the amounts in the allocations table, plus any funding from the *state* portion of the TEDF Category C or Category D Programs (the federal portion of these programs does not carry forward). [NOTE: EACH MPO SHOULD MODIFY THE LIST OF PROGRAMS, IF NECESSARY, TO REFLECT WHICH OF THE FUNDING SOURCES THEY RECEIVE.]

Funds for projects that are competitively awarded are considered to be reasonably expected to be available only after they have been officially awarded. This includes all Safety, CMAQ, TAP, and Bridge projects. The only projects using these funds in the TIP are those that have already been awarded. Therefore, these projects are self-constrained to available revenue.

### **Year of Expenditure (Inflation) Adjustment for Project Costs**

Federal regulations require that, before being programmed in the TIP, the cost of each project is adjusted to the expected inflation rate (known as year of expenditure, or YOE) in the year in which the project is programmed, as opposed to the cost of the project in present-day dollars, as mentioned in the section entitled **Operations and Maintenance of the Federal-Aid Highway System**, above. As with the projection of available funding, the projected rate of inflation is determined in a cooperative process between MDOT and the MTPA. All local road agencies use the same 4% annual inflation rate as MDOT to determine YOE costs. As an example, if a project costs \$750,000 in the first year of the TIP, the same project is projected to cost \$843,648 in the fourth year of the TIP, at a 4% YOE rate. This is done in order to provide a more realistic estimate of a project's cost at different points in time. Because of the constant pressure of inflation on all goods and services in the economy, it is preferable to build a project as close to the present day as possible; thus the attraction of bonding as a funding strategy (see the **Innovative Financing Strategies—Highway** section above). This also demonstrates the fundamental problem facing infrastructure funding—the rate of inflation (standardized at 4% for MDOT and local agencies) is higher than the expected growth in tax revenues (standardized at 2%). Transit projects have a different inflation rate that reflects the different goods and services necessary to operate transit systems, as opposed to road networks.

### **Demonstration of Fiscal Constraint of the FY 2023-2026 TIP—Highway Projects**

This financial plan is required to show that the cost of highway projects in the FY 2023-2026 TIP does not exceed the amount reasonably expected to be available to fund those projects. This is known as *demonstration of fiscal constraint*, and is also required for transit projects (see below). Table 11-1 compares the amount of funding from each of the federal, state, and local highway funding sources programmed in TIP highway projects to the amount of each highway funding source reasonably expected to be available in each year of the FY 2023-2026 TIP period. Table 11-1 demonstrates that the FY 2023-2026 TIP is fiscally constrained for highway—the amount programmed using each highway funding source does not exceed the amount reasonably expected to be available from that highway funding source in any of the four years of the TIP.



**Table 11-1: Demonstration of Fiscal Constraint - Highway, FY 2023-2026 TIP****Amounts in millions of Dollars.**

| <b>Funding Source</b>   | <b>Funding Level</b> | <b>FY 2023</b> | <b>FY 2024</b> | <b>FY 2025</b> | <b>FY 2026</b> | <b>Total by Source</b> |
|---|----------------------|----------------|----------------|----------------|----------------|------------------------|
| Congestion Mitigation & Air Quality Improvement Program (CMAQ), Estimated Available | Federal              | \$9.90         | \$10.10        | \$10.30        | \$10.51        | \$40.80                |
| Congestion Mitigation & Air Quality Improvement Program (CMAQ), Programmed          | Federal              | \$9.90         | \$10.10        | \$10.30        | \$10.51        | \$40.80                |
| National Highway Performance Program (NHPP), Estimated Available                    | Federal              | \$3.50         | \$3.57         | \$3.64         | \$3.71         | \$14.43                |
| National Highway Performance Program (NHPP), Programmed                             | Federal              | \$3.50         | \$3.57         | \$3.64         | \$3.71         | \$14.43                |
| Surface Transportation Block Grant Program (STBG), Estimated Available              | Federal              | \$25.62        | \$26.13        | \$26.66        | \$27.19        | \$105.60               |
| Surface Transportation Block Grant Program (STBG), Programmed                       | Federal              | \$25.62        | \$26.13        | \$26.66        | \$27.19        | \$105.60               |
| Transportation Alternatives Program (TAP), Estimated Available                      | Federal              | \$1.39         | \$1.42         | \$1.45         | \$1.48         | \$5.73                 |
| Transportation Alternatives Program (TAP), Programmed                               | Federal              | \$1.39         | \$1.42         | \$1.45         | \$1.48         | \$5.73                 |
| MTF and Other State Funding, Estimated Available                                    | State                | \$6.10         | \$6.22         | \$6.35         | \$6.47         | \$25.14                |
| MTF and Other State Funding, Programmed   | State                | \$6.10         | \$6.22         | \$6.35         | \$6.47         | \$25.14                |
| Local Funding, Estimated Available  | Local                | \$5.22         | \$5.32         | \$5.43         | \$5.54         | \$21.51                |
| Local Funding, Programmed   | Local                | \$5.22         | \$5.32         | \$5.43         | \$5.54         | \$21.51                |
| <b>Total, All Sources, Estimated Available</b>                                      | N/A                  | <b>\$51.73</b> | <b>\$52.76</b> | <b>\$53.82</b> | <b>\$54.90</b> | <b>\$213.21</b>        |
| <b>Total, All Sources, Programmed</b>   | N/A                  | <b>\$51.73</b> | <b>\$52.76</b> | <b>\$53.82</b> | <b>\$54.90</b> | <b>\$213.21</b>        |

## Transit Funding

### Sources of Federally-Generated Transit Funding

Federally-generated revenue for transit comes from federal motor fuel taxes, just as it does for highway projects. Some of the federal motor fuel tax collected nationwide is deposited in the Mass Transit Account of the Highway Trust Fund (HTF). Federal-aid transit funding is similar to federal-aid highway funding in that there are several core programs where money is distributed on a formula basis and other programs that are

competitive in nature. Here are brief descriptions of some of the most common federal-aid transit programs.

**Section 5307:** This is the largest single source of transit funding that is apportioned to transit agencies in Michigan. Section 5307 funds can be used for capital projects (such as bus purchases and facility renovations), transit planning, and projects eligible under the former Job Access Reverse Commute (JARC) program (intended to link people without transportation to available jobs). Some of the funds can also be used for operating expenses, depending on the size of the transit agency. One percent of funds received are to be used by the agency to improve security at agency facilities. Distribution is based on formulas including population, population density, and operating characteristics related to transit service. Urbanized areas of 200,000 population or larger receive their own apportionment. Areas between 50,000 and 199,999 population are awarded funds by the governor from the governor's apportionment. In the JACTS area, the Jackson Area Transportation Authority receives Sec. 5307 funding from the state.

**Section 5310, Elderly and Persons with Disabilities:** Funding for projects to benefit seniors and disabled persons when service is unavailable or insufficient and transit access projects for disabled persons exceeding Americans with Disabilities Act (ADA) requirements. Section 5310 incorporates activities from the former New Freedom program. Urbanized areas in the state with populations over 200,000 receive an apportionment of Sec. 5310 funding directly from the federal government. The State of Michigan allocates funding in remaining areas of the region on a per-project basis. Since there are no urbanized areas over 200,000 population in the JACTS area, all transit agencies receiving Sec. 5310 funds do so through allocations from the State of Michigan.

**Section 5311, Non-Urbanized Area Formula Grant:** Funds for capital, operating, and rural transit planning activities in areas under 50,000 population. Activities under the former JARC program (see Section 5307 above) in rural areas are also eligible. The state must use 15 percent of its Section 5311 funding on intercity bus transportation. The State of Michigan operates this program on a competitive basis.

**Section 5337, State of Good Repair Grants:** Funding to state and local governmental authorities for capital, maintenance, and operational support projects to keep fixed guideway systems in a state of good repair. Recipients will also be required to develop and implement an asset management plan. Fifty percent of Section 5337 funding is distributed via a formula accounting for vehicle revenue miles and directional route miles; fifty percent is based on ratios of past funding received. The Detroit Transportation Corporation (People Mover) is currently the only recipient of Section 5337 funding in the State of Michigan.

**Section 5339, Bus and Bus Facilities:** Funds will be made available under this program to replace, rehabilitate, and purchase buses and related equipment, as well as construct bus-related facilities. Each state receives a fixed amount, with the remaining funding apportioned to transit agencies based on various population and service factors.

**Flex Funding.** In addition to these funding sources, transit agencies can also apply for Surface Transportation Program and Congestion Mitigation and Air Quality Improvement (CMAQ) program funds.

## **Base and Assumptions Used in Forecast Calculations of Federal Transit Funds**

Each year, the Federal Transit Administration (FTA) issues funding apportionments for states, urbanized areas, and/or individual transit agencies, depending on the regulations for the federal-aid transit funding source in question. Transit agencies use this apportionment information to estimate the amount of federal-aid funding they will receive in a given year, under the general oversight of MDOT's Office of Passenger Transportation (OPT). Current statewide procedures are to consider the federal amounts programmed into the FY 2023-2026 TIP by each transit agency to be constrained to reasonably-expected available revenues.

## **Sources of State-Generated Transit Funding**

The majority of state-level transit funding is derived from the same source as state highway funding, the state tax on motor fuels and vehicle registration fees. Act 51 stipulates that 10 percent of receipts into the MTF, after certain deductions, are to be deposited in a subaccount of the MTF called the Comprehensive Transportation Fund (CTF). This is similar to the Mass Transit Account of the federal Highway Trust Fund. Additionally, a portion of the state-level auto-related sales tax is deposited in the CTF. Distributions from the CTF are used by public transit agencies for matching federal grants and also for operating expenses.

## **Base and Assumptions Used in Forecast Calculations of State Transit Funds**

MDOT OPT provides each transit agency with estimates of how much CTF funding it will receive and specifies the purpose(s) for which it can be used. For example, some distributed funds are used for local bus operating, while others are used to match federal funding, and yet other CTF funds can be used for a variety of other purposes. In keeping with the general procedures for federal transit funds, the state-generated transit funding amounts programmed into the FY 2023-2026 TIP by each agency are considered to be constrained to reasonably-expected available revenues.

## **Sources of Locally-Generated Transit Funding**

Major sources of locally-generated funding for transit agencies include farebox revenues, general fund transfers from city governments, and transportation millages. All transit agencies in Southeast Michigan collect fares from riders. [EACH MPO PLACES A SHORT DESCRIPTION HERE OF LOCAL FUNDING RAISED BY, OR ALLOCATED TO, TRANSIT AGENCIES WITHIN THE MPO AREA.]

## **Base and Assumptions Used in Forecast Calculations of Local Transit Funds**

Locally-generated transit funding amounts programmed into the FY 2020-2023 TIP by each agency are considered to be constrained to reasonably-expected available revenues.

## **Innovative Financing Strategies--Transit**

Sources of funding for transit are not limited to the federal, state, and local sources previously discussed. As with highway funding, there are alternative sources of funding that can be utilized for transit capital and operating costs. Bonds can be issued (see discussion of bonds in the **Innovative Financing Strategies—Highway** section). The federal government also allows the use of toll credits to match federal funds. Toll credits

---

---

are earned at tolled facilities, such as the Blue Water Bridge in Port Huron. Regulations allow for the use of toll revenues (after facility operating expenses) to be used as “soft match” for transit projects. Soft match means that actual money does not have to be provided—the toll revenues are used as a “credit” against the match. This allows the actual toll funds to be used on other parts of the transportation system, thus stretching the resources available to maintain the system.

### **Transit Capital and Operations**

Transit expenditures are divided into two basic categories, capital and operations. *Capital* refers to the physical assets of the agency, such as buses and other vehicles, stations and shelters at bus stops, office equipment and furnishings, and certain spare parts for vehicles. *Operations* refers to the activities necessary to keep the system operating, such as driver wages and maintenance costs. The majority of transit agency expenses are usually operating expenses. This was true for the previous FY 2020-2023 TIP, and is also true of the FY 2023-2026 TIP, where capital expenses are approximately [PERCENT]% of total anticipated expenses during the four-year TIP period, whereas operations expenses are approximately [PERCENT]% of total anticipated expenses. As with highway operations, almost all transit operating costs do not have to be in the FY 2023-2026 TIP, so the percentages in this paragraph is not reflected in the TIP project list itself.

### **Demonstration of Fiscal Constraint of the FY 2023-2026 TIP—Transit Projects**

This financial plan is required to show that the cost of transit projects in the FY 2023-2026 TIP does not exceed the amount reasonably expected to be available to fund those projects. This is known as *demonstration of fiscal constraint*, and is also required for highway projects (see above). Table 11-2 compares the amount of funding from each of the federal, state, and local transit funding sources programmed in TIP transit projects to the amount of each transit funding source reasonably expected to be available in each year of the FY 2023-2026 TIP period. Table 11-2 demonstrates that the FY 2023-2026 TIP is fiscally constrained for transit—the amount programmed using each transit funding source does not exceed the amount reasonably expected to be available from that transit funding source in any of the four years of the TIP.

**Table 11-2: Demonstration of Fiscal Constraint - Transit, FY 2023-2026 TIP****Amounts in millions of Dollars.**

| <b>Funding Source</b>   | <b>Funding Level</b> | <b>FY 2023</b> | <b>FY 2024</b> | <b>FY 2025</b> | <b>FY 2026</b> | <b>Total by Source</b> |
|---|----------------------|----------------|----------------|----------------|----------------|------------------------|
| Section 5307 Urbanized Area Formula Program, Estimated Available                          | Federal              | \$12.60        | \$12.85        | \$13.11        | \$13.37        | \$51.93                |
| Section 5307 Urbanized Area Formula Program, Programmed                                   | Federal              | \$12.60        | \$12.85        | \$13.11        | \$13.37        | \$51.93                |
| Section 5310 Enhanced Mobility of Seniors & People with Disabilities, Estimated Available | Federal              | \$7.71         | \$7.86         | \$8.02         | \$8.18         | \$31.78                |
| Section 5310 Enhanced Mobility of Seniors & People with Disabilities, Programmed          | Federal              | \$7.71         | \$7.86         | \$8.02         | \$8.18         | \$31.78                |
| Section 5311 Formula Grants for Rural Areas, Estimated Available                          | Federal              | \$4.12         | \$4.20         | \$4.29         | \$4.37         | \$16.98                |
| Section 5311 Formula Grants for Rural Areas, Programmed                                   | Federal              | \$4.12         | \$4.20         | \$4.29         | \$4.37         | \$16.98                |
| Section 5339 Bus and Bus Facilities, Estimated Available                                  | Federal              | \$2.60         | \$2.65         | \$2.71         | \$2.76         | \$10.72                |
| Section 5339 Bus and Bus Facilities, Programmed   | Federal              | \$2.60         | \$2.65         | \$2.71         | \$2.76         | \$10.72                |
| CTF and Other State Funding, Estimated Available  | State                | \$6.10         | \$6.22         | \$6.35         | \$6.47         | \$25.14                |
| CTF and Other State Funding, Programmed   | State                | \$6.10         | \$6.22         | \$6.35         | \$6.47         | \$25.14                |
| Local Funding, Estimated Available  | Local                | \$5.22         | \$5.32         | \$5.43         | \$5.54         | \$21.51                |
| Local Funding, Programmed   | Local                | \$5.22         | \$5.32         | \$5.43         | \$5.54         | \$21.51                |
| <b>Total, All Sources, Estimated Available</b>  | N/A                  | <b>\$38.35</b> | <b>\$39.12</b> | <b>\$39.90</b> | <b>\$40.70</b> | <b>\$158.06</b>        |
| <b>Total, All Sources, Programmed</b>   | N/A                  | <b>\$38.35</b> | <b>\$39.12</b> | <b>\$39.90</b> | <b>\$40.70</b> | <b>\$158.06</b>        |