Memphis Urban Area Metropolitan Planning Organization (MPO)
Transportation Policy Board Meeting
Thursday, February 22, 2018 1:30 PM
UT Health Science Center – Student Alumni Building
800 Madison Avenue - Memphis, Tennessee

Note: Please fill out a comment card and turn into a MPO staff member to be given the opportunity to speak on any of the agenda items. Comment cards must be submitted before the agenda item is brought to the floor. You will be given up to two minutes to provide your comments.

1) Call to Order

2) Approval of November 16, 2017 Minutes ⇐ ACTION

3) Transportation Policy Board Election ⇐ ACTION
   a) Chairman
   b) Vice Chairman

4) Election of Transportation Policy Board Representative for Freight Committee ⇐ ACTION

5) Memphis MPO Administrator’s Report
   a) 2017 State of MPO Report (includes the Annual Outreach Report)
   b) 2017 Bicycle and Pedestrian Report
   c) CMAQ Performance Measures
   d) Next Quarterly TPB Meeting Date Changed to April 19th 1:30 pm

6) 2050 RTP Update ⇐ PRESENTATION
   a) Goals and Objectives ⇐ ACTION
   b) Reaffirming Socio Demographic Projections ⇐ ACTION

7) TDOT Poplar Bridge Replacement Project ⇐ PRESENTATION

8) Other Business
   i. Next Scheduled TPB Meeting: April 19, 2018 1:30 pm, Location: UT Health Science Center

9) Adjourn
SUMMARY OF MINUTES

Mayor Mark H. Luttrell, Jr. called the meeting to order at 1:31 PM. In addition to Mayor Luttrell the following voting members were present at the meeting:

Calvin Abram  Rep. Governor of TN  Dennis Moultrie  TDOT
Jessica Dilley  MDOT  Austin Cardosi  DeSoto County
Keith Briley  Hernando  Jason Gambone  Olive Branch
Whitney Choat-Cooke  Southaven  Mayor Rhea Taylor  Fayette County
Christopher Pate  Oakland  Harvey Matheny  Piperton
Mayor Judy Watters  Rossville  Randall Jansen  FHWA-MS Division
Steve Hill  Arlington  Rick McClanahan  Bartlett
Frank McPhail  Collierville  Tim Gwaltney  Germantown
Emily Harrell  Lakeland  Manny Belen  Memphis
Jason Dixon  Millington  Gary Rosenfeld  MATA
James Hay  MSC Airport Authority  Tom Needham  Port Commission

The following Ex-officio members were present:
Bobby Williams  W. Memphis MPO

The following Interested Individuals were present:
Antoine Hawkins  TDOT  Mohamed Osman  TDOT
Matt Meservy  AECOM  Chris Triplett  BWSC
Wain Gaskins  Cannon & Cannon Inc.  James Collins  Kimley-Horn
John Lancaster  MATA  Tom Word  MLGW
Sonja Owens  SCHD  Ian Engstrom  SSR
Damariye Smith  U of M  John Haas  Tenn Traxx
Cynthia Mott  Citizen

The following MPO Staff members were present:
Mavrick Fitzgerald  Kate Horton  Sajid Hossain  Alvan-Bidal Sanchez
Jordan Smith  Pragati Srivastava  Betty Turner  Nick Warren
Zylavian Watley

A quorum was present.
1) Call to Order @ 1:31 PM

2) Approval of August 17, 2017 Minutes

Mayor Rhea Taylor moved to approve the minutes as presented; Mr. Keith Briley seconded the motion and the motion carried out without dissent

NO DISCUSSION/QUESTIONS

3) Memphis MPO Administrator’s Report

Ms. Pragati Srivastava gave a brief overview of the following items.

a) FY 2017 Annual Listing of Obligated Projects
b) FY 2017-20 TIP Project Status Updates/FY 2017 Obligation Reporting
c) 2050 Livability Regional Transportation Plan (RTP) Update
d) TDOT 3-Year Project List (FY 2019-21)
e) New Employee Introduction: Nick Warren

Mr. James Hay moved to approve the TDOT 3-Year Project List (FY 2019-21) as presented; Mayor Rhea Taylor seconded the motion and the motion carried out without dissent

NO DISCUSSION/QUESTIONS

Ms. Pragati Srivastava thanked the member’s for their attendance and emphasized the importance of a quorum so that items needing approval can be presented the board for approval. Ms. Srivastava also asked the members in their absence to send an alternate that can represent their organization which in turn helps the MPO staff in preparation for the meeting.

4) Regional Freight Plan Adoption

Ms. Pragati Srivastava gave an overview of the Regional Freight Plan Adoption. Ms. Srivastava also mentioned the freight plan will help with the RTP update.

Mayor Rhea Taylor moved to approve the adoption of the Regional Freight Plan as presented; Mr. Tim Gwaltney seconded the motion and the motion carried out without dissent

NO. DISCUSSION/QUESTIONS
5) **2018 Memphis MPO Calendar**

Ms. Pragati Srivastava gave an overview of the 2018 Memphis MPO Calendar

Mr. Rick McClanahan moved to approve the 2018 Memphis MPO Calendar as presented; Mr. James Hay seconded the motion and the motion carried out without dissent

**NO DISCUSSION/QUESTIONS**

6) **Safety Performance Measures Targets**

Ms. Pragati Srivastava gave an overview of the Safety Performance Measures Targets, proposing to support the individual State targets for TDOT & MDOT.

Mr. Christopher Pate moved to approve the support of the individual State targets for the Safety Performance Measures Targets as presented; Mr. Rick McClanahan seconded the motion and the motion carried out without dissent

**NO DISCUSSION/QUESTIONS**

7) **FY 2018 Transportation Alternatives (TA) Projects – TN/MS**

Ms. Pragati Srivastava gave an overview of the following items

The following nine (9) projects for Tennessee and one (1) project for Mississippi have been selected as the recipients for the Memphis MPO FY 2018 Transportation Alternatives (TA) grant funding. The projects for TN & MS will be included in the Transportation Alternatives Groupings, TAP-2014-01 and MS-TAP-2014-01 respectively, in the FY 2017-20 Transportation Improvement Program (TIP).

**TAP-2014-01 Transportation Alternatives Grouping - Tennessee**

i. **Fletcher Creek Greenway Phase III – Bartlett** (Federal Funds: $80,000)
ii. **ADA Transition Plan – Collierville** (Federal Funds: $150,000)
iii. **ADA Transition Plan – Germantown** (Federal Funds: $140,000)
iv. **Transit Stop Enhancements (4 locations) – MATA** (Federal Funds: $40,000)
v. **North Parkway & Watkins St. Off-Street Connection – Memphis** (Federal Funds: $80,000)
vi. **Great Streets Downtown Corridor Planning & Design – Memphis** (Federal Funds: $139,316)
vii. **Mullins Station Road Pedestrian Improvements – Memphis** (Federal Funds: $40,000)
viii. **ADA Transition Plan – Millington** (Federal Funds: $100,000)
ix. **ADA Transition Plan – Shelby County** (Federal Funds: $300,000)

**MS-TAP-2014-01 Transportation Alternatives Grouping - Mississippi**

i. **Lewisburg School/Craft Road Intersection Improvements and Sidewalks – DeSoto County** (Federal Funds: $198,400)
Mr. Austin Cardosi moved to approve the FY 2018 Transportation Alternatives (TA) Projects – TN/MS as presented; Mr. Manny Belen seconded the motion and the motion carried out without dissent

NO DISCUSSION/QUESTIONS

8) Livability 2040 Regional Transportation Plan (RTP) Amendment

Ms. Pragati Srivastava gave an overview of the Livability 2040 Regional Transportation Plan (RTP) amendment.

   i. RTP Amendment: Livability RTP ID #54 - Macon Road Widening

      Shelby County is requesting to amend the Livability 2040 Regional Transportation Plan (RTP) by changing the description of the Macon Road Widening project to include the addition of a continuous left turn lane.

Mr. Tom Needham moved to approve the Livability 2040 Regional Transportation Plan (RTP) Amendment as presented; Mr. Steve Hill seconded the motion and the motion carried out without dissent.

DISCUSSION/QUESTIONS

Mr. Gary Rosenfeld inquired if there were transit routes as part of the project. Mr. Tom Needham responded that the project will include bicycle lanes, but transit was not included on this route.

9) FY 2017-20 Transportation Improvement Program (TIP) Amendments

Ms. Pragati Srivastava gave an overview of the FY 2017-20 Transportation Improvement Program (TIP) amendments

   Tennessee Local Road Amendments

   i. TIP Amendment STP-M-2014-06: Macon Road Widening

      Shelby County is requesting to amend the FY 2017-20 TIP by adding the Macon Road Widening project. The project was previously included in the FY 2014-17 TIP and is being amended into the FY 2017-20 TIP to show $1,125,000 in STBG federal funds and $375,000 in local funds to FY 2018 for the PE-D phase of the project. The amendment will also modify the project description to include the addition of a continuous left turn lane.

   ii. TIP Amendment STP-M-2014-07: Germantown Road at Wolf River Boulevard Intersection Improvements

      The City of Germantown is requesting to amend the FY 2017-20 TIP by adding additional ROW funds to the Germantown Road at Wolf River Boulevard Intersection Improvements project. The amendment will add $1,401,280 in STBG federal funds and $350,320 in state funds to FY 2018 for the ROW phase of the project.
iii. **TIP Amendment STP-M-2014-10: SR-205 (Airline Road) North Widening**

The Town of Arlington is requesting to amend the FY 2017-20 TIP by applying the construction funding to the SR-205 (Airline Road) North Widening project from the Fiscally Constrained Construction Set-Aside Project List, Appendix A of the FY 2017-20 TIP. The amendment will add $3,049,600 in STBG federal funds and $762,400 in local funds to FY 2018 for the construction phase of the project.

iv. **TIP Amendment TAP-2014-01: Transportation Alternatives Grouping (TN)**

The Memphis MPO is requesting to amend the FY 2017-20 TIP by adding $1,069,316 in TA federal funds and $267,329 in local funds to the Tennessee Transportation Alternatives Grouping for FY 2018. Additionally, the City of Lakeland and the Tennessee Department of Transportation (TDOT) are requesting to amend the Tennessee Transportation Alternatives Grouping to add $1,000,000 in TA-S federal funds and $250,000 in local funds for Lakeland's Canada Road Pedestrian and Bike Trail Project, which was awarded a Transportation Alternatives grant through TDOT.

**Congestion Mitigation and Air Quality (CMAQ) Amendment**

v. **TIP Amendment CMAQ-2012-01: 50 Mile Bike/Ped Project**

The City of Memphis is requesting to amend the FY 2017-20 TIP by adding the Congestion Mitigation and Air Quality (CMAQ) 50 Mile Bike/Ped Project into the TIP. The project was previously included in the FY 2014-17 TIP and is being amended into the FY 2017-20 TIP to show $1,400,000 in CMAQ-M federal funds and $350,000 in local funds to FY 2018 for the construction phase of the project.

Mr. Steve Hill moved to approve the FY 2017-20 Transportation Improvement Program (TIP) amendments as presented; Mr. Rick McClanahan seconded the motion and the motion carried out without dissent.

**NO DISCUSSION/QUESTIONS**

10) **Other Business**

Next Scheduled TPB Meeting: February 22, 2018 1:30 PM, Location: UT Health Science Center

Mr. Gary Rosenfeld provided an update regarding the Transit Vision project, which is led by Innovate Memphis, City of Memphis and MATA and is part of the Memphis 3.0 project. Currently there is a survey out which is available online. Please go online to Memphis 3.0 website and take the survey.

11) **Adjourn @ 1:53 PM**

Mr. James Hay moved to Adjourn; Mr. Frank McPhail seconded the motion. The meeting was adjourned at 1:53 P.M.

*Note: The meeting minutes are a summary of the meeting. If you would like to review the tape recording of the entire meeting you may do so by scheduling an appointment with Kate Horton, Transportation Planner at (901) 636-7218.*
This document is available in accessible formats (such as foreign language versions or large-print and gray-scale versions for those with impaired vision, among others) when requested ten (10) calendar days in advance.

This document was prepared and published by the Memphis Urban Area Metropolitan Planning Organization (MPO) and is prepared in cooperation with and financial assistance from the following public entities: the Federal Transit Administration (FTA), the Federal Highway Administration (FHWA), the Tennessee Department of Transportation (TDOT), the Mississippi Department of Transportation (MDOT), as well as the City of Memphis, Shelby County, Tennessee and DeSoto County, Mississippi. This financial assistance notwithstanding, the contents of this document do not necessarily reflect the official view or policies of the funding agencies.

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Note: The photographs used in this document are for illustrative purposes only. Photographs used were submitted to the Memphis MPO by the public.
Our Mission

"To encourage and promote the development of a balanced, efficient, and affordable regional transportation system to meet the needs of people and goods moving within and through the region, while minimizing the effects of transportation-related air pollution."
Welcome to the Memphis Urban Area MPO!

The Memphis Urban Area MPO experienced many successes and achievements in 2017, including being recognized as a national case study for public engagement and presenting a record 13 times at regional and national events.

The Memphis MPO was the recipient of two national honors in 2017. The outreach efforts for the Livability 2040: Regional Transportation Plan were recognized by the Federal Highway Administration (FHWA) as a Case Study, praising the use of transit ads and a video series to promote awareness and engagement of the plan. Additionally, the Memphis MPO was one of ten winners of the 2017 Transportation Planning Excellence Award (TPEA) Program for the Coordinated Public Transit – Human Services Transportation Plan.

2017 also saw the completion of the Bus Stop Design & Accessibility Guidelines and the Greater Memphis Regional Freight Plan. The Guidelines will facilitate proper siting, design, installation, and maintenance of bus stops, ensuring the highest comfort and accessibility for bus riders. And the Regional Freight Plan identifies ways to take advantage of the region’s unique transportation attributes as a regional distribution center.

Transportation plays an important role in the daily lives of Mid-South residents and businesses. Stay connected with us as 2018 will hold new opportunities to get engaged in the MPO’s multi-modal planning process!

Best,

Pragati Srivastava
# Table of Contents

1.0 Introduction

- Who We Are ............................................................... 7
- Our Role in the Transportation System .......................... 7
- Purpose of the ‘State of the MPO’ Report ....................... 7

2.0 Highlights

- A Glance at 2017 .......................................................... 9
- Outreach ......................................................................... 10
- Staff Participation .......................................................... 10
- Conference & Featured Speakers .................................... 11
- Reach of MPO Activities ............................................... 12
- Website Performance .................................................... 13
- Bus Stop Design & Accessibility Guidelines .................... 14
- Bicycle & Pedestrian Counter Program ......................... 14
- Greater Memphis Regional Freight Plan ....................... 14
- Local Highlights .......................................................... 15
- Honors & Awards .......................................................... 16
- Annual Listing of Obligated Projects ............................. 17

3.0 Moving Forward

- 2018 Meeting Calendar .................................................. 19
- Upcoming Projects ......................................................... 20
- Performance Measures .................................................. 22

4.0 More Information

- MPO Board & Committees ............................................ 24
- MPO Contact Information .............................................. 25
- Connect With Us .......................................................... 26
INTRODUCTION
Who We Are

The Memphis Urban Area Metropolitan Planning Organization (Memphis MPO), created in 1977, is a regional, multi-jurisdictional agency that is responsible for the planning and programming of Long-Range Transportation facilities in the Metropolitan Planning Area.

The MPO’s voting body, the Transportation Policy Board (TPB), is comprised of officials representing the local jurisdictions, States and transportation agencies within the region. Our planning boundary covers 18 municipalities and all, or parts, of 4 counties in 2 states.

The MPO carries out a comprehensive, continuing, and cooperative planning process within the Metropolitan Planning Area that is defined by the MPO Boundary.

Our Role in the Transportation System

The transportation system plays a vital role in the everyday life of the region’s residents, whether in creating access to jobs and growing our economy, ensuring safe routes to school, or allowing more sustainable transportation choices. Through the Memphis MPO planning process, we set the priorities for the future of transportation in our region, linking dollars invested with the goals and values of the community.

Purpose of the ‘State of the MPO’ Report

Following the adoption of the 2014 Public Participation Plan, the Memphis MPO began tracking outreach efforts and developed the Annual Outreach Report. The State of the MPO Report provides a broader look at the activities performed by the Memphis MPO for the previous calendar year. Activities included in the Report include significant milestones, as well as future projects in the next calendar year.

Going forward, the State of the MPO Report will replace the Annual Outreach Report; providing summaries of outreach, project milestones, and year-over-year comparisons. Copies of this and previous reports can be found on the Memphis MPO’s Public Participation Plan Webpage.
A Glance at 2017

- **JAN**
  - ETC Meeting

- **FEB**
  - TPB Meeting
  - FAC Meeting
  - PLAC Meeting

- **MAR**
  - Staff presented at the AL Transportation Planners Association Conference
  - Memphis MPO recognized as a “Case Study” for Public Involvement Efforts for the Livability 2040 RTP

- **APR**
  - ATAC Meeting
  - Bus Stop Design & Accessibility Guidelines completed
  - Staff presented at the AR MPO Conference

- **MAY**
  - ETC Meeting
  - TPB Meeting
  - Memphis MPO named a winner of the 2017 FHWA Transportation Planning Excellence Awards for the CPT-HSTP
  - Staff presented at the TN Bike Summit
  - Staff presented at the Marine Highway 55 Workshop

- **JUNE**
  - FAC Meeting
  - PLAC Meeting
  - ETC Meeting
  - Staff presented at the TDOT MPO Conference
  - Staff presented at the American Railway Development Association Conference

- **JULY**
  - TPB Meeting
  - Staff presented at the MDOT MPO Meeting

- **AUG**
  - ETC Meeting
  - TPB Meeting

- **SEPT**
  - ATAC Meeting
  - Staff presented at the AMPO Conference

- **OCT**
  - ETC Meeting
  - TPB Meeting
  - Staff presented in the 2017 TPEA Winners Webinar
  - Memphis MPO TPB adopted the Greater Memphis Regional Freight Plan
  - Memphis MPO TPB awarded FY 2018 TA Projects

- **NOV**
  - Staff presented in AMPO Public Involvement Working Group Webinar

- **DEC**
  - Staff presented at the AMPO Conference
Outreach

The Memphis MPO’s public outreach efforts are laid out in the 2014 Public Participation Plan. Strategies promote, educate, and engage the public on a variety of planning projects.

In 2017 the Memphis MPO held over 20+ public meetings, with over 200 attendees. Over 120 days were provided for public comment on ongoing planning efforts by MPO Staff. Documents are made available on the web, through social media, and distributed to libraries across the region.

2000+ contacts received our quarterly newsletter, *Travel Times*, and our web presence continued to increase. Major planning activities in 2017 included the completion of the Bus Stop Design & Accessibility Guidelines and the Greater Memphis Regional Freight Plan.

MPO Staff Participation

The Memphis MPO Staff are engaged in multiple working groups at a local and national level to encourage a safe and efficient built environment:

- Memphis 3.0 Transit Working Group
- Memphis 3.0 Next Generation Working Group
- Memphis 3.0 Freight Working Group
- City of Memphis’s Pedestrian Advocacy Council
- City of Memphis’s Bicycle Advocacy Council
- City of Germantown’s Bike/Ped Working Group
- AMPO Public Involvement Working Group
- AMPO Autonomous Vehicles Working Group
- FHWA & European Commission Urban Freight Twinning Initiative
Conference Attendance and Featured Speaker Slots

Staff of the Memphis MPO regularly attends conferences and meetings to build staff capacity and share the progress of MPO products and processes. 2017 was a busy year for MPO staff as they attended conferences, meetings, and webinars for state and national organizations. MPO staff presented at the 2017 Association of Metropolitan Planning Organizations (AMPO) Annual Conference and both state conferences put on by the Tennessee Department of Transportation (TDOT) and Mississippi Department of Transportation (MDOT). Below are other conferences and meetings MPO staff have attended and presented at.

**AMPO Annual Conference**
- October 17-20
- Active Transportation
- Regional Freight Plan
- Public Involvement

**TDOT MPO Conference**
- June 7-9
- Bicycle & Pedestrian Counter Program
- Regional Freight Plan
- Bus Stop Design & Accessibility Guidelines
- Public Involvement

**MDOT MPO Statewide Meeting**
- September 14-15
- Coordinated Public Transit-Human Services Transportation Plan (CPT-HSTP)

**American Railway Development Association Conference**
- June 20
- Regional Freight Plan

**ATSSA Chapter Meeting**
- April 20
- Bicycle Safety

**2017 TPEA Winner Webinar**
- November 14
- CPT-HSTP

**FHWA & European Commission Urban Freight Roundtable**
- January
- Regional Freight Plan

**TN Bike Summit**
- May 18-19
- Bicycle & Pedestrian Counter Program

**Arkansas Transportation Planning Conference**
- April 18-19
- Bus Stop Design & Accessibility Guidelines

**Marine Highway 55 Workshop**
- May
- Regional Freight Plan

**Alabama Transportation Planners Association Conference**
- March 23
- Regional Freight Plan

**AMPO Public Involvement Webinar**
- December 11
- Public Involvement

**Marine Highway 55 Workshop**
- May
- Regional Freight Plan

**Flint Hills Development**
- March 23
- Regional Freight Plan

**FHWA & European Commission Urban Freight Roundtable**
- January
- Regional Freight Plan
Reach of MPO Activities

In accordance with the 2014 Public Participation Plan, the Memphis MPO engages in monthly tracking of multiple metrics to evaluate the reach and effectiveness of MPO outreach efforts. Below is a snapshot into the most meaningful information gathered over the last 4 years of tracking. MPO activity has been consistent since the 2014 PPP, activities highlighted below illustrate the reach of MPO Staff and efforts.

**MPO Website**

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<th>Visitors</th>
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<td>2017</td>
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</tbody>
</table>

The number of visitors to the Memphis MPO’s website have increased steadily since tracking began in 2014.

**MPO Social Media Presence**


Facebook “Likes” and Twitter Followers has increased at a steady pace since tracking began in 2014. YouTube Channel Views are now documented as of April 2017, adding another informative metric to evaluate in the future.

**MPO Media Appearances**


A wide range of metrics are evaluated in terms of the reach of MPO outreach and engagement efforts. 2017 was a busy year for the MPO, with an increase in ‘Newspaper Mentions’ and ‘Speaker Slots’, while ‘Press Releases,’ and ‘Television Mentions’ have stayed consistent.
The percentage of traffic to the Memphis MPO’s website from Mobile devices increased by 2.3% over the previous year, to 12%. Visits by desktop (86%) remain the predominant way visitors access the site.

Most web traffic occurs Monday through Friday, from 8am - 4pm. The time periods the website is most visited match the standard work week and the times the Memphis MPO Offices are open.

In 2017, the performance of the Memphis MPO's website improved in terms of the number of users, the number of sessions, and the duration of the session. There were noticeable increases in web traffic in June and September-December compared to similar times last year. One of the most visited pages in 2017 was the MPO’s Interactive Webmap, a consistent trend its unveiling.
The Memphis MPO, in partnership with the Memphis Area Transit Authority (MATA), has completed the **Bus Stop Design & Accessibility Guidelines**. The Guidelines include:

- Classification of 4,463 MATA bus stops by trip volume, land use, route type, roadway, and transfer activity
- Results from multiple public outreach efforts (stakeholder meetings, public survey, engagement activity)
- Recommendations for the location and improvements of bus stops, based on best practices, ADA requirements, and rider priorities

In 2015, the Memphis MPO was selected as one of ten MPOs nationally to participate in the Federal Highway Administration's (FHWA) Bicycle and Pedestrian Count Technology Pilot Program. As part of that program, the Memphis MPO purchased three bicycle and three pedestrian counters. In order to test the equipment and counting process, the counters were placed in three locations.

The MPO will be working with member agencies to collect data that will be beneficial for region-wide bicycle and pedestrian planning purposes.

The Memphis MPO has completed the **Greater Memphis Regional Freight Plan**. As “America’s Distribution Center,” the region plays a critical role in the global supply chain. The Regional Freight Plan:

- Provides an overview of the region’s freight transportation system and goods movement
- Identifies key issues and challenges to the region’s overall freight system, as well as strategic freight corridors
- Assesses all modes of freight transportation, such as: Truck, Rail, Pipeline, Waterways, and Air
- Analyzes future threats to economic competitiveness of freight in the region
Local Highlights

**Wolf River Greenway**
The Wolf River Greenway is a paved pathway for non-motorized transportation. Built in phases, this 10-foot and 12-foot wide pathway will eventually extend a total of 36 miles to connect neighborhoods from Downtown Memphis to Collierville. One of the newest segment, Confluence Park, opened October 2017.

**I-269 Construction**
The second of three segments of the I-269 loop officially opened to traffic December 2017. The 14-mile segment connects north of Lewisburg then heads east and north into Marshall County to the current segment available north of state Highway 302 east of Barton. The completion of the entire roadway is expected in the Fall of 2018.

**Memphis 3.0 Transit Vision**
The Memphis 3.0 team is kicking off the 3.0 Transit Vision. This new vision for transit will be developed with extensive input from the public, stakeholders and elected officials. A draft Transit Vision is scheduled to be developed Spring 2018 for public review and comment.

**Port of Memphis Master Plan**
The Economic Development Growth Engine (EDGE) of Memphis and Shelby County approved a contract for a comprehensive study for the Port of Memphis. The plan will offer recommendations for a wide array of topics, including facility expansions, property redevelopment, economic impact, environmental analysis, and target tenant identification.

**IMPROVE Act**
The Improving Manufacturing, Public Roads, and Opportunities for a Vibrant Economy (IMPROVE) Act delivers 962 road and bridge projects across all 95 counties in Tennessee. After full implementation, Shelby and Fayette counties and their cities will receive an estimated $13 million a year in additional revenue from the higher fuel taxes.

**Midtown Area Connector**
The City of Memphis is applying to support the city’s first rapid transit project, the Midtown Area Connector (MAC) through the Transportation Investment Generating Economic Recovery (TIGER) Grant Program. The MAC will serve as an east-west trunk line that will connect low income and central city neighborhoods to employment and education centers.

**US-78/Lamar Avenue Project**
The Memphis MPO along with the Tennessee Department of Transportation (TDOT) have jointly submitted an application for the US-78/Lamar Avenue Project under the Infrastructure for Rebuilding America (INFRA) Grants Program. A key freight corridor in the region, Lamar Avenue plays a critical role in the overall economy.
Honors and Awards

FHWA 2017 Transportation Planning Excellence Awards Winner!

The Memphis MPO is one of ten winners of the 2017 FHWA Transportation Planning Excellence Award. The Coordinated Public Transit - Human Services Transportation Plan (CPT-HSTP) has been recognized as one of the ten best transportation planning studies, plans, initiatives, or projects in the nation. The award announcement states the plan “demonstrates a cooperative and comprehensive effort to establish a process that addresses the transportation needs of disadvantaged populations.” Find more information on the MPO’s 2017 TPEA Webpage.

USDOT Transportation Planning Capacity Building Case Study Recognition

The Memphis MPO’s public involvement efforts for the Livability 2040: Regional Transportation Plan have been named a “notable practice” by the U.S. Department of Transportation. USDOT praised the placement of advertisements both inside and on the back of MATA buses in order to reach a diverse audience. Other public involvement efforts included a Livability YouTube Video Series, postcard mailings, and the use of online and application tools for geo-located and real-time survey engagement.
Fiscal Year (FY) 2017 Annual Listing of Obligated Projects

Fund obligations are a measure of the progress being made on a project. As such, the Annual List of Obligated Projects is prepared at the end of the federal fiscal year (October - September) to identify which projects got funding obligated during the fiscal year. The total obligation for FY 2017 was $174,234,780.73, below is a summary of 2017 federally obligated projects, to see the full document visit the [Annual List of Obligated Project’s Webpage](#) on the Memphis MPO’s website.

**FY 2017 Funding Obligations by Project Type**

Tennessee Bridge Projects (32.2%) and Mississippi Road Projects (29.6%) had the highest percentages of federal funds obligated in FY 2017, totaling $107,654,477.50 or 61.8%. Transit Projects had the third highest percentage of federal funds obligated with $25,110,438.00 or 14.4% followed by Tennessee Road Projects with $21,899,984.64 or 12.6%. Tennessee and Mississippi Intelligent Transportation Systems (ITS), signalization, and other safety projects totaled $12,928,995.97 or 7.4%, followed by Mississippi Bridge Projects with $4,937,135.00 or 2.8%, and Tennessee and Mississippi Bicycle and Pedestrian projects totaling $1,703,749.65 or approximately 1.0%.

**FY 2017 Funding Obligations by Funding Type**

National Highway Performance Program (NHPP) funds received the largest allotment of $76,545,518.35 or 43.9% of the obligated funds. The second largest funding source was Surface Transportation Block Grant Program (STBG) funds, formerly Surface Transportation Program funds (STP), totaling $43,917,692.13 or 25.2% of the obligated funds for the area. The following five (5) funding sources represent more than 1% of the total obligations, National Highway (NH), $20,629,426.00 or 11.8%, 5307 FTA Urbanized Area Formula Program funds $6,173,771.00 or 3.5%, and the Bridge Replacement and Rehabilitation Program (BRR) $5,007,008.00 or 2.9%.
Note: Meeting dates and locations are subject to cancellation or modification, please visit the Memphis MPO’s Calendar Webpage for scheduled meeting dates and locations.
Upcoming Projects

**Livability 2050: Regional Transportation Plan (RTP)**

The RTP assesses the current and future demand on the region’s transportation system and provides a fiscally-constrained action plan to guide the development of transportation projects for the next 25 years. This current transportation plan for the region, known as Livability 2040: Regional Transportation Plan, was adopted by the Memphis MPO’s Transportation Policy Board (TPB) on January 28, 2016.

Long term planning for transportation infrastructure is critical for the growth and development of a region in a way that is consistent with the goals and objectives of the community. As conditions change, these long range plans must be updated periodically. The current plan is now being updated with a new horizon year of 2050, Livability 2050: RTP.

Public engagement is at heart of the planning process, to stay up-to-date, check out the Memphis MPO’s Livability 2050: RTP Webpage, Facebook Page, Twitter Account, and YouTube Channel.

**Fiscal Year (FY) 2020-23 Transportation Improvement Program (TIP)**

The TIP is a four-year, fiscally constrained, short-range program, which provides a prioritized list of multimodal transportation projects within the Metropolitan Planning Area. It provides an overview of how transportation revenues will be invested over a four-year period by state and local agencies that have legal responsibility to build, operate, and maintain that states’ highway, street and public transit systems.

The current Fiscal Year (FY) 2017-20 TIP was adopted by the Memphis MPO’s Transportation Policy Board (TPB) on August 25, 2016 and approved by the Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) on January 6, 2017.

The TIP is cooperatively developed at least every 4 years, compatibly with the Statewide Transportation Improvement Program (STIP) and approved by the MPO and the Governors of Tennessee and Mississippi.

Find more information on the current TIP by visiting the Memphis MPO’s FY 2017-20 TIP Webpage.
Upcoming Projects

2017 Bicycle and Pedestrian Report

The Regional Bicycle and Pedestrian Plan relies on four main goals to identify methods and strategies for improving bicycle and pedestrian infrastructure. It was adopted by the Memphis MPO’s Transportation Policy Board (TPB) on November 20, 2014.

The Memphis MPO is publishing the 2017 Bicycle and Pedestrian Report to provide an update on the progress made since the adoption of the 2014 Regional Bicycle and Pedestrian Plan. Included in the report are:

- Jurisdiction Updates
- Regional Safety Statistics
- Existing and Planned Facilities

To see the report in its entirety and find more information visit the Memphis MPO’s Regional Bicycle and Pedestrian Plan Webpage.


The Congestion Management Process is a systemic and regionally accepted approach for addressing congestion and mobility. The current CMP was adopted by the Memphis MPO’s Transportation Policy Board (TPB) in August 2015.

As part of maintaining the CMP, the Memphis MPO publishes a CMP Report every two years to provide a snapshot of the region’s congestion and mobility issues. The report examines congestion in the Memphis Metropolitan Planning Area by reviewing the following:

- Congestion Level
- Memphis Area Transit Authority Monthly Ridership
- Daily Vehicle Miles Traveled (VMT)
- Travel Time Index (TTI)
- Memphis Area Rideshare Program
- Buffer Index

To see the most recent report and find more information & resources visit the Memphis MPO’s Congestion Management Process Webpage.
Performance Measures

Beginning with the Moving Ahead for Progress in the 21st Century (MAP 21) Act signed under President Barack Obama, and continuing with the Fixing America’s Surface Transportation (FAST) Act, Transportation Performance Management (TPM) will be a process used by State DOTs and MPOs to make appropriate investment decisions across transportation modes and assets. Currently, under the FAST Act, State DOT’s and MPO’s are required to establish performance targets and report on the progress made toward achieving each of these performance targets. Find more information on the Memphis MPO’s [Performance Measures Webpage](#).

**Safety - Completed November 2017**

*MPO Target Deadline: Feb. 27, 2018*

- Number of Serious Injuries
- Rate of Serious Injuries
- Number of Fatalities
- Rate of Fatalities
- Number of Non-Motorized Fatalities and Serious Injuries

**National Highway Performance Program - Upcoming**

*MPO Target Deadline: November 16, 2018*

- Percentage of Pavement in Good Condition
- Percentage of Pavement in Poor Condition
- Percentage of Bridges in Good Condition
- Percentage of Bridges in Poor Condition
- Percentage of Person Miles Travelled (PMTs) that are Reliable

**Freight Movement - Upcoming**

*MPO Target Deadline: November 16, 2018*

- Truck Travel Time Reliability Index (TTTR)

**Congestion Mitigation and Air Quality - Upcoming**

*MPO Target Deadline: November 16, 2018*

- Annual Hours of Peak Hour Excessive Delay Per Capital
- Percentage of Non-Solo Occupied Vehicle
- Total Emission Reductions

**Transit Asset Management - Upcoming**

*MPO Target Deadline: June 30, 2017*

- Percentage of Revenue Vehicles that exceed the Useful Life Benchmark (ULB)
- Percentage of Non-Revenue Service Vehicles that exceed the ULB
- Percentage of Facilities that are rated Rated < 3.0 on the TERM Scale
- Percentage of Track Segments that have Performance Restrictions
Transportation Policy Board (TPB)

UT Health Science Center - Student Alumni Building
800 Madison Avenue, Memphis TN 38103

The TPB is composed of the principal elected officials of the governmental jurisdictions participating in the Memphis Urban Area Transportation Planning Process, along with the chairpersons of the major providers of local and regional transportation facilities.

Engineering and Technical Committee (ETC)

UT Health Science Center - Student Alumni Building
800 Madison Avenue, Memphis TN 38103

The ETC membership includes local jurisdiction engineers, planners or other designated persons who are responsible for planning or implementation of transportation projects within each jurisdiction.

Active Transportation Advisory Committee (ATAC)

Benjamin L. Hooks Central Library, Conference Room A
3030 Poplar Avenue, Memphis TN 38111

The ATAC provides guidance and strategy on the planning and implementation of transportation projects as related to bicycle and pedestrian travel, transit and public transportation, accessibility, safety, and community outreach.

Freight Advisory Committee (FAC)

3175 Lenox Park Blvd., Suite 201
Memphis, TN 38115

The FAC provides a forum for regional freight stakeholders to discuss strategies to aid in the efficient movement of freight and increase collaboration between the public and private sectors regarding freight matters while maintaining a good quality of life.

Planning & Land Use Advisory Committee (PLAC)

3175 Lenox Park Blvd., Suite 201
Memphis, TN 38115

The PLAC is comprised on the planning director, principal planner, or other housing and economic development official for each government entity or major transportation provider in the Memphis MPO region.

Interagency Consultation Committee (IAC)

Quarterly Conference Call

The IAC provides recommendations on measures, projects, and funding sources designed to reduce emissions from motor vehicles. The group also advises the MPO on the conformity of plans and projects with national and statewide air quality standards.
The Memphis MPO Offices are accessible by MATA Routes 2, 4, 5, 7, 12, 13, 34, 39, 46, 50, 56, 340, 400, and the Main Street Trolley. Bicycle racks are available on a first-come, first-serve basis. Metered street parking and paid parking at the Mud Island Garage are available nearby.

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TPB Item #5b

2017 BICYCLE & PEDESTRIAN REPORT

Memphis MPO
METROPOLITAN PLANNING ORGANIZATION

Strengthening Regional Transportation
This document is available in accessible formats (such as foreign language versions or large-print and gray-scale versions for those with impaired vision, among others) when requested ten (10) calendar days in advance.

This document was prepared and published by the Memphis Urban Area Metropolitan Planning Organization (MPO) and is prepared in cooperation with and financial assistance from the following public entities: the Federal Transit Administration (FTA), the Federal Highway Administration (FHWA), the Tennessee Department of Transportation (TDOT), the Mississippi Department of Transportation (MDOT), as well as the City of Memphis, Shelby County, Tennessee and DeSoto County, Mississippi. This financial assistance notwithstanding, the contents of this document do not necessarily reflect the official view or policies of the funding agencies.

It is the policy of the Memphis Urban Area Metropolitan Planning Organization (MPO) not to discriminate on the basis of age, race, color, national origin or disability in its hiring or employment practices, or in its admission to or operations of its program, services, or activities. All inquiries for Title VI and/or the Americans with Disabilities Act, contact Alvan-Bidal Sanchez, at 901-636-7156 or Alvan.Sanchez@memphistn.gov.

Note: The photographs used in this document are for illustrative purposes only. Photographs used were obtained from member agency websites and social media accounts, or submitted to the Memphis MPO by partner agencies.
BACKGROUND
In 2014, the Regional Bicycle and Pedestrian Plan was adopted by the Memphis Urban Area Metropolitan Planning Organization (MPO), with the intent of identifying opportunities for encouraging and enhancing bicycle and pedestrian travel within the Memphis MPO region. The plan serves as the bicycle and pedestrian component of the Memphis MPO’s Regional Transportation Plan (RTP), which is the planning document that guides the current and projected future demand for all modes of transportation over the next 25 years. The current RTP was developed with a focus on the concept of livability and the Memphis MPO has committed itself to planning and supporting livable communities. This emphasis on livability links transportation investments to opportunities and improve the quality of life for residents by improving access to jobs, affordable housing, quality schools, and safer streets.

Since the adoption of the 2014 Regional Bicycle and Pedestrian Plan, member agencies of the Memphis MPO have made great strides to implement the plan’s recommendations by encouraging and promoting a comprehensive bicycle and pedestrian transportation system that focuses on safety, connectivity, accessibility, and mode shift. The 2017 Bicycle and Pedestrian Report highlights the progress that has been made within the Memphis MPO’s Planning Area (Figure I) to promote bicycle and pedestrian awareness through educational campaigns and encouragement efforts, as well as planning and construction of bicycle and pedestrian facilities and amenities. Additionally, a focus on safety remains a priority area and the Memphis MPO works with the Tennessee and Mississippi Department of Transportation to analyze bicycle and pedestrian crash data for the region. This report summarizes the data for the most recent four consecutive years (2014-2017).

The Memphis MPO is also in the process of updating the Livability 2050 Regional Transportation Plan and the FY 2020-23 Transportation Improvement Program (TIP), both documents will continue to focus on the concept of livability and will place an emphasis on improving active transportation for the region.
The Tennessee Department of Transportation (TDOT) Multimodal Transportation Resources Division includes the Bicycle and Pedestrian Program, which serves as a liaison between TDOT and bicycle and pedestrian stakeholders across the state. The Multimodal Transportation Resources Division adopted the Multimodal Access Planning Policy in 2015, which superseded the previously adopted 2010 policy, with the purpose of encouraging safe access and mobility through the planning, design, and construction of transportation facilities for all users, including bicyclists and pedestrians. With facilitation from Smart Growth America, TDOT held workshops on the process for implementation of the Department’s Multimodal Access Planning Policy in 2017. TDOT is currently in the process of updating and/or planning for the following:

- State Interactive Bike Map
- TDOT’s Bicycle and Pedestrian Plan Update
- TN State Bike Route Designation Guidelines

TDOT has made bicycle and pedestrian initiatives across the state, including designating $3 million in Highway Safety Improvement Program (HSIP) funds for pedestrian safety improvements at high crash locations. Additionally, the TN Highway Safety Office is awarding grant funds for pedestrian safety campaigns over the next four years in Nashville, Chattanooga, Memphis, Knoxville, and Kingsport. For more information, please visit TDOT’s website:

- TDOT Bicycle and Pedestrian Program
AGENCY UPDATES

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

The Mississippi Department of Transportation (MDOT) MDOT’s goal is to provide a safe intermodal transportation network for all users, including bicyclists and pedestrians through the Bicycle and Pedestrian Program. MDOT has received multiple distinctions for improving the bicycle culture throughout the state and they have expressed the importance for all modes of transportation to coexist including bicyclists and pedestrians.

MDOT’s current 2040 Long Range Transportation Plan addresses Bicycle and Pedestrian Safety and will continue to expand on this with the Long Range Transportation Plan update. Information is available on MDOT’s website related to bicycle safety education, bicycle laws, and greenway trails. For more information, please visit MDOT’s following websites:

- Bicycle and Pedestrian Program - GoMDOT.com/BikeandPed
- Driver Safety Education - MDOT.ms.gov/safetyeducation/

MEMPHIS AREA TRANSIT AUTHORITY

The Memphis Area Transit Authority (MATA) is the public transportation provider for the Memphis area, servicing the City of Memphis, parts of Shelby County, and the City of West Memphis, Arkansas. MATA covers 319 square miles of service area and transports approximately eight million riders annually.

MATA offers a Bike ‘N Ride service, allowing riders greater travel flexibility with self-service bike racks mounted on the front of MATA’s buses (Image 1) and the installation of bike racks at transit centers. MATA has developed a Bike Rack Policy and produced several videos on the Bike ‘N Ride program.

Through the Memphis MPO, MATA has received Transportation Alternative (TA) awards to help fund the installation of bus bike racks in addition to the following access to transit projects:

- Crosstown Corridor Superstop Enhancements - Shelters, amenities, ADA improvements
- Bicycle Access to Transit - Storage facilities along transit routes
- Transit Stop Enhancement Improvements (4 locations) - Shelters, amenities, ADA improvements
SHELBY COUNTY - TENNESSEE

Shelby County, one of Tennessee’s largest counties in terms of population and geographic area, had a 2016 population estimate of 934,603 and a total area of 785 square miles.

Since the adoption of the Memphis MPO’s Regional Bicycle and Pedestrian Plan, Shelby County has completed construction on the following bicycle and pedestrian projects:

- Shelby Farms Park - Pedestrian Facilities around the Lake Expansion - Completed Fall 2016
- Connection to the Greenline from Perkins - Completed June 2017
- Shelby Farms Greenline East Extension and Germantown Road Crossing - Completed June 2016
- ADA Compliant Curb Ramps and Audible Calls - Multiple Locations

To increase public awareness and safety, Shelby County released an animated video to assist the public’s understanding of the Shelby Farms Greenline Crossing at Germantown Road. Shelby County continues to make strides to improve walking and biking in their community with the future phase of the Shelby Farms Greenline Extension from Cordova Station to Lenow which has an estimated completion date of 2019. Additionally, Shelby County was recently awarded a Transportation Alternatives (TA) grant for development of an ADA Transition Plan.

ARLINGTON - TENNESSEE

The Town of Arlington, located in Shelby County, Tennessee, had a 2016 population estimate of 11,599 and a total area of 23 square miles.

Since the adoption of the Memphis MPO’s Regional Bicycle and Pedestrian Plan, Arlington has completed construction on the Memphis Arlington Road Bicycle and Pedestrian Connector project from Milton Wilson Road to Jetway Avenue (Image II). Arlington is planning the continuation of the Bicycle and Pedestrian trail along Memphis-Arlington Road, extending west from Milton Wilson Road to Gerber Road.

Additionally, Arlington has completed the following bicycle and pedestrian plans and projects:

- Adoption of the Loosahatchie Greenway Trail Master Plan
- Adoption of an ADA Transition Plan
- Evaluation of Pedestrian Crosswalks and School Zones
BARTLETT - TENNESSEE

The City of Bartlett, located in Shelby County, Tennessee, had a 2016 population estimate of 58,622 and a total area of 32 square miles.

Since the adoption of the Memphis MPO’s Regional Bicycle and Pedestrian Plan, Bartlett has adopted a document to help guide bicycle and pedestrian planning in their community and completed construction on the following bicycle and pedestrian projects:

- **ADA Compliant Curb Ramp Updates** – Annually, as part of the Repaving Program
- **Fletcher Creek Greenway Phase 1** – Completed Spring 2017
- **Kirby Whitten (South City Limits to Yale)** – Signed Bicycle Lane – Completed October 2015

Additionally, Bartlett is in the process of planning the following bicycle and pedestrian plans and projects:

- **ADA Handicap Ramp Updates** - Annually, as part of the Repaving Program
- **ADA Transition Plan**
- **Fletcher Creek Greenway Phase 2**
- **Fletcher Creek Greenway Phase 3**

COLLIERVILLE - TENNESSEE

The Town of Collierville, located in Shelby County, Tennessee, had a 2016 population estimate of 49,178 and a total area of 36 square miles.

The Collierville Greenbelt system connects neighborhoods, parks, schools, and commercial areas and offers an alternative transportation option with 18.3 miles of trails and connectors.

Since the adoption of the Memphis MPO’s Regional Bicycle and Pedestrian Plan, Collierville has completed construction on a new section of paved and gravel trail at W.C. Johnson Park (**Image III**).

Additionally, Collierville is in the process of planning or construction the following bicycle and pedestrian plans and projects:

- **Collierville Center Connect Phase I & II** – Center Street Pedestrian Improvements
- **ADA Transition Plan**

**Image III: W.C. Johnson Park Trail**
(Image Credit: Town of Collierville)
GERMANTOWN - TENNESSEE

The City of Germantown, located in Shelby County, Tennessee, had a 2016 population estimate of 39,056 and a total area of 20 square miles.

Since the adoption of the Memphis MPO's Regional Bicycle and Pedestrian Plan, Germantown has completed construction on the following bicycle and pedestrian projects:

- Germantown Greenway (Kimbrough Road to Cameron Brown Park) - Completed 2015
- Trailhead with Parking (Wolf River Boulevard at Kimbrough Road) (Image IV) - Completed 2016
- Additional Bicycle Lanes (Multiple Locations)
- Installation of Bicycle Racks (Multiple Locations)

Additionally, Germantown held regular meetings with its Bicycle/Pedestrian Walkability Taskforce in 2017 and is in the process of planning the following bicycle and pedestrian projects:

- Germantown Greenway Connectors (2 locations)
- Additional Bicycle Lanes and Sidewalks (Multiple locations)
- Riverdale Elementary Safe Routes to School
- ADA Transition Plan

LAKELAND - TENNESSEE

The City of Lakeland, located in Shelby County, Tennessee, had a 2016 population estimate of 12,494 and a total area of 18 square miles.

Lakeland is in the process of planning the Canada Road Pedestrian and Bicycle Trail project and has received Transportation Alternatives (TA) grant funding through the Memphis MPO and TDOT for this project. The project will extend the existing pedestrian and bicycle pathway on Canada Road to the north and will add new facilities on New Monroe Road (Image V).
MEMPHIS - TENNESSEE

The City of Memphis, located in Shelby County, Tennessee, had a 2016 population estimate of 652,717 and a total area of 325 square miles.

Since the adoption of the Memphis MPO’s Regional Bicycle and Pedestrian Plan, Memphis has completed construction on the following bicycle and pedestrian projects:

- Wolf River Greenway (North End Mud Island) Phase I (Image VI)
- Mainstreet to Mainstreet Project: Big River Crossing (Image VII)
- Walker Avenue Streetscape Phase I
- University of Memphis Railroad Pedestrian Project
- Rozelle and Frayser Elementary School Safety Projects
- Installation of Bicycle Lanes (Multiple Locations)
- Installation of Bicycle and Pedestrian Amenities (Multiple Locations)

Memphis is in the process of planning or constructing the following bicycle and pedestrian plans and projects. Additional projects can be found on (Table II), FY 2017-20 Transportation Improvement Projects page.

- Hampline Project (Shelby Farms Greenline Extension to Overton Park)
- Wolf River Greenway Connections
- Chelsea Avenue Greenline
- Walker Avenue Streetscape Phase II
- Central Library Pedestrian Access Project
- Mullins Station Road & Macon Road Pedestrian Improvements
- Hanley and Dunbar Elementary School Safety Projects
- Great Streets Downtown Corridor (Pilot Project Implemented)
MILLINGTON - TENNESSEE

The City of Millington, located in Shelby County, Tennessee had a 2016 population estimate of 10,974 and a total area of 15.6 square miles.

The City of Millington adopted the Millington Greenway Plan in 2014, which is helping to guide bicycle and pedestrian planning in their community. Since the adoption of the Memphis MPO’s Regional Bicycle and Pedestrian Plan, Millington has been in the process of planning or constructing the following bicycle and pedestrian projects:

- Millington Discovery Park - Construction Fall 2018
- Big Creek Project Bicycle and Pedestrian Trails (Highway 51 to east of Singleton Parkway)
- Navy Road Streetscape Phase II
- ADA Transition Plan

Image VIII: Navy Road Streetscape - Phase I
(Image Credit: City of Millington)

FAYETTE COUNTY - TENNESSEE

Fayette County, the third largest county in Tennessee by land area, had a 2016 population estimate of 38,413 and a total area of 706 square miles.

The Memphis MPO planning boundary encompasses a portion of western Fayette County, and includes the cities/towns of Braden, Gallaway, Oakland, Piperton, and Rossville. Since the adoption of the Memphis MPO’s Regional Bicycle and Pedestrian Plan, Rossville completed construction on a pedestrian bridge in June 2015 (Image IX) connecting walking trails within the town.

Additionally, Rossville and Oakland are in the process of planning the following bicycle and pedestrian plans and projects:

- Walking Trails (Rossville)
- Surface Transportation Land Use Master Plan (Oakland) - Multi-Modal Planning Document
- ADA Transition Plan (Oakland)

Image IX: Rossville Pedestrian Bridge
(Image Credit: Town of Rossville)
DESOTO COUNTY & MARSHALL COUNTY - MISSISSIPPI

DeSoto County and Marshall County are located in the northwest corner of Mississippi and make up one of the fastest growing regions in the state. DeSoto County had a 2016 population estimate of 175,611 and a total land area of 497 square miles. Marshall County had a 2016 population estimate of 36,196 and a total land area of 710 square miles.

The Memphis MPO planning boundary includes Hernando, Horn Lake, Olive Branch, Southaven, and Walls in DeSoto County and Byhalia in Marshall County. Since the adoption of the Memphis MPO's Regional Bicycle and Pedestrian Plan, the following bicycle and pedestrian projects have been completed or are currently under construction:

- **Johnson Creek Greenway Bike/Ped Project** (DeSoto County) - Under Construction
- **Nesbit/Delta View Trail & Park Project** (DeSoto County) - Completed

Additionally, the following bicycle and pedestrian projects are being planned/developed:

**DeSoto County**
- Johnson Creek Greenway Phase II
- Lewisburg School/Craft Road Sidewalk Improvements

**Hernando**
- Hernando Square Improvements (Image X)
- Nesbit Sidewalk Project
- Linear Park Bicycle/Pedestrian Path

**Southaven**
- Stateline Road Pedestrian Project
- Pedestrian and Bicycle Trail Project

*Note: All population and land area estimates are based on information obtained from the United Census Bureau: 2016 American Community Survey (ACS).*
In an effort to guide future investment(s) for pedestrian and bicyclist safety improvements, it is important to analyze data associated with pedestrian and bicyclist crashes. The data included in this section was provided by TDOT and MDOT and provides insight into the location, severity, time of day, day of week, the month, and the season associated with pedestrian and bicyclist crashes within the Memphis MPO Planning Area from 2014 to 2017. It is important to note that the data included in this section consists of only reported crashes and incidents, and it is possible that there were crash(es) or incident(s) that occurred between 2014 and 2017 that were not reported. It is also important to note that the data made available by TDOT and MDOT was reported and organized by crashes, and there are instances in which crashes resulted in multiple fatalities or persons injured.

**CRASH EVENTS BY YEAR (2014-2017)**

**Bicycle:**
There were a total of 389 reported bicycle crashes within the Memphis MPO Planning Area from 2014-2017. As Figure II indicates, there was a consistent decline in the number of reported bicycle crashes and injuries from 2014-2016, however there was an increase in the number of bicycle crashes, injuries, and fatalities from 2016-2017.

**Pedestrian:**
There were a total of 1,483 reported crashes involving pedestrians within the Memphis MPO Planning Area from 2014-2017. As Figure III indicates, 2015 witnessed the highest number of reported crashes involving pedestrians, whereas 2016 experienced the lowest number. There was an increase in the number of crashes, injuries, and fatalities, involving pedestrians, from 2016-2017.
CRASH EVENTS BY SEVERITY (2014-2017)

Bicycle:

As Table I indicates, there were a total of 389 reported bicycle crashes in the Memphis MPO Planning Area from 2014-2017. Of these, 7 crash events resulted in one or more fatalities, 32 resulted in one or more serious injuries and 237 resulted in one or more minor injuries. 64 of the reported bicycle crashes during the 4-year period resulted in no injury.

<table>
<thead>
<tr>
<th>Crash Category</th>
<th>Bicycle Crash Events</th>
<th>% of All Bicycle Crash Events</th>
<th>Pedestrian Crash Events</th>
<th>% of All Pedestrian Crash Events</th>
<th>Combined Bicycle and Pedestrian Crash Events</th>
<th>% of All Combined Bicycle and Pedestrian Crash Events</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fatal</td>
<td>7</td>
<td>1.80%</td>
<td>131</td>
<td>8.83%</td>
<td>138</td>
<td>7.37%</td>
</tr>
<tr>
<td>Suspected Serious Injuries</td>
<td>32</td>
<td>8.53%</td>
<td>247</td>
<td>16.66%</td>
<td>279</td>
<td>14.90%</td>
</tr>
<tr>
<td>Suspected Minor Injuries</td>
<td>237</td>
<td>60.33%</td>
<td>815</td>
<td>54.96%</td>
<td>1052</td>
<td>56.20%</td>
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<tr>
<td>Possible Injuries</td>
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<td>11.42%</td>
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<td>9.33%</td>
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<td>18</td>
<td>1.03%</td>
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</tr>
<tr>
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<td>369</td>
<td>-</td>
<td>1483</td>
<td>-</td>
<td>1872</td>
<td>-</td>
</tr>
</tbody>
</table>

Table I: Bicycle and Pedestrian Crashes by Severity
(Sources: MDOT and TDOT)

Pedestrian:

As Table I indicates, there were a total of 1483 reported pedestrian crashes in the Memphis MPO Planning Area from 2014-2017. Of these 131 crash events resulted in one or more fatalities, 247 resulted in one or more serious injuries, and 815 resulted in one or more minor injuries. 105 of the reported pedestrian crashes during the 4-year period resulted in no injury. Overall, more than half of bicycle and pedestrian crashes (above 56.20%) were suspected minor injuries.

CRASH EVENTS BY TIME OF DAY (2014-2017)

Bicycle: As exhibited in Figure IV, afternoon hours produced the highest number of reported crashes involving bicyclists, accounting for 35% of reported bicycle crashes within the Memphis MPO Planning Area. Night hours produced the fewest number of reported bicycle crashes over the 4-year period, accounting for 11% of reported bicycle crashes. Evening and afternoon hours combined to produce 66% of reported bicycle crashes from 2014-2017.

![Figure IV: Bicycle Crashes by Time of Day](Sources: MDOT and TDOT)

Pedestrian: As exhibited in Figure V, evening hours produced the highest number of reported crashes involving pedestrians, accounting for 30% of reported crashes involving pedestrians within the Memphis MPO Planning Area. Morning hours produced the fewest number of reported crashes involving pedestrians from 2014-2017, accounting for 21% of reported crashes. Evening and afternoon hours combined to produce 57% of reported crashes involving pedestrians within the Memphis MPO Planning Area. Overall, pedestrian crashes were evenly distributed between the four time periods.

![Figure V: Pedestrian Crashes by Time of Day](Sources: MDOT and TDOT)
SAFETY


**Bicycle:** Thursdays generated the highest number of reported bicycle crashes within the Memphis MPO Planning Area, accounting for 17% of the reported bicycle crashes over the 4-year period, (Figure VI). On average, Sundays generated the fewest number of reported bicycle crashes, accounting for 12% of the reported bicycle crashes.

**Pedestrian:** Fridays produced the highest number of reported crashes involving pedestrians from within the Memphis MPO Planning Area, accounting for 17% of the reported crashes involving pedestrians over the 4-year period, (Figure VII). On average, Sundays produced the fewest number of reported crashes involving pedestrians, accounting for 11% of the reported crashes involving pedestrians.

CRASH EVENTS BY SEASON (2014-2017)

**Bicycle:** As exhibited in Figure VIII, summer months generated the highest number of reported bicycle crashes within the Memphis MPO Planning Area, accounting for 31% of reported bicycle crashes. On average, winter produced the fewest number of crashes over the 4-year period, accounting for 15% of reported bicycle crashes.

**Pedestrian:** As exhibited in Figure IX, on average, fall months produced the highest number of reported crashes involving pedestrians, accounting for 28% and summer months generated the fewest number of reported crashes involving pedestrians, accounting for 22%. Overall, pedestrian crashes were evenly distributed between the four time periods.

*Seasons:*
Spring: March-May
Summer: June-August
Fall: September-November
Winter: December-February
CRASH EVENTS BY MONTH (2014-2017)

**Bicycle:** As exhibited in Figure X, August accounted for the highest number of reported bicycle crashes, accounting for 12%. Although May and September produced slightly fewer crashes than the month of August, each of the three months produced approximately 12% of the reported bicycle crashes from 2014-2017. February generated the fewest number of reported bicycle crashes, accounting for 3% of reported bicycle crashes within the Memphis MPO Planning Area.

**Pedestrian:** As exhibited in Figure XI, October produced the highest number of reported pedestrian crashes, accounting for 10% of the reported crashes involving pedestrians within the Memphis MPO Planning Area. June generated the fewest number of reported crashes involving pedestrians from 2014-2017, accounting for 6% of reported crashes involving pedestrians within the Memphis MPO Planning Area.
The data provided by TDOT and MDOT would suggest that the highest density of bicycle and pedestrian crashes from 2014-2017 occurred within I-240, with approximately 37% of reported bicycle and pedestrian crashes occurring within the confines of the I-240 loop.

In addition, as Figure XII demonstrates, there are high crash densities located south of I-240, south of S.R. 385 and along U.S. 51.
PROJECT BACKGROUND

In 2015, the Memphis MPO was selected as one of ten MPOs across the country to participate in the Federal Highway Administration’s (FHWA) Bicycle and Pedestrian Automated Count Pilot Program (Figure XIII). As part of the program, the Memphis MPO was awarded a $20,000 grant, which was used to purchase three passive infrared counters and three bicycle pneumatic counters (Image XIV) to count bicyclist and pedestrians. The Memphis MPO desired to participate in the FHWA pilot project in order to launch an ongoing count program and to build upon its initial manual counting experience in 2014.

COUNTER TEST PERIOD

In order to test the equipment and counting process, three locations were selected for a test period from the previous manual counts that were done in 2014. The counters were placed in the field at the same time of year as when the previous counts were conducted to give the Memphis MPO a baseline for comparing the accuracy of the new equipment. The Memphis MPO considered the facility type, volume, location, and adjacent land uses before selecting the following three locations: Main Street/Adams Avenue, (Image XI) Dunlap Street/Jefferson Avenue, and Humphreys Boulevard/Shady Grove Road.

Through this testing period, the Memphis MPO learned the importance of scheduling to allow for sufficient time for count validation, safety during counter placement and mid-period checks, organization and documentation to ensure accuracy, and partnerships with local jurisdictions and agencies to conduct counts across the region.
COUNTER CHECK-OUT PROGRAM

After the completion of the testing period, the Memphis MPO established a counter check-out program, which allows public entities or agencies that are members of the MPO the opportunity to check-out the equipment for use in their area. The Memphis MPO created a Bicycle and Pedestrian Counting Program Installation Guide (Figure XVI) with visuals to provide information on how to use the equipment and step-by-step instructions for installation.

Several jurisdictions and agencies have checked out the equipment or expressed interest in using the counters in their area. Once the count period has ended, the Memphis MPO will upload the data and provide it in accessible formats for relevant users. In addition, the Memphis MPO will compile information from participating agencies in an effort to continue to grow a count program in the region. The Memphis MPO hopes that the momentum of the count program continues to grow. If you have any questions about the count program or are interested in checking out the equipment for your area, please contact the Memphis MPO for additional information.

Figure XVI: Counter Installation Guide
OVERVIEW

The Transportation Improvement Program (TIP) is a four-year fiscally constrained list of multi-modal transportation projects in the Memphis MPO Planning Area. Preparation of the TIP is required by federal legislation know as Fixing America’s Surface Transportation Act (FAST Act) and by the Metropolitan Planning Regulations of the United States Department of Transportation (DOT). The Memphis MPO’s current TIP was adopted on August 25, 2016 and covers the period from October 1, 2016 to September 30, 2020. The TIP was developed in coordination with TDOT, MDOT, local governments, MATA, transportation agencies, and the public.

FUNDING SOURCES

Most funding sources for projects in the TIP come from federal funds allocated to Tennessee and Mississippi under the FAST Act, administered through the US Department of Transportation’s Federal Highway Administration (FHWA) and Federal Transit Administration (FTA), and are funded using an 80/20 split, with 80 percent of project costs receiving federal funding and the remaining 20 percent requiring local matching funds. Of the different funding sources included in the TIP, the Memphis MPO is responsible for selecting and programming projects under the Surface Transportation Block Grant Program-Metropolitan (STBG) and the Transportation Alternatives Program (TA). Investments in the FY 2017-20 TIP include a diverse range of projects that reflect regional priorities and an increased emphasis on active transportation in recent years. Since 2010, funding has been set-aside in a funding group intended for Bicycle and Pedestrian projects. The current FY 2017-20 TIP sets aside approximately $20 million of the MPO’s managed Surface Transportation Block Grant Program federal funds for bicycle and pedestrian projects. Additionally, the Memphis MPO receives approximately $1 million in Transportation Alternatives (TA) federal funds for TN and $200,000 for MS annually. The Transportation Alternatives program was established in 2012 and provides funding for programs and projects defined as transportation alternatives, including pedestrian and bicycle facilities, infrastructure projects for improving non-driver access to public transportation, recreational trail projects, and ADA transition plans.

PROJECTS

A list of the bicycle and pedestrian projects included in the FY 2017-20 TIP are shown in Table II. In addition to STBG and TA, funding sources include Congestion Mitigation and Air Quality Program (CMAQ), Demonstration Set-Aside (DEMO), Enhancement Grant (ENH), and Transportation Enhancements (TE). ENH/TE are carry-over funds from programs under previous federal legislation. The projects shown in Table II are included in the Bicycle and Pedestrian Grouping, Transportation Alternatives Grouping, and as stand-alone projects in the FY 2017-20 TIP. Additional bicycle and pedestrian improvements may be included within the scope of other road, bridge, and resurfacing projects in the FY 2017-20 TIP, but are not shown as separate projects in Table II.
<table>
<thead>
<tr>
<th>Project Name</th>
<th>Agency</th>
<th>Funding Source</th>
<th>Federal Funds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fletcher Creek Greenway - Phase II</td>
<td>Bartlett</td>
<td>STBG</td>
<td>$1,085,000</td>
</tr>
<tr>
<td>Fletcher Creek Greenway - Phase III</td>
<td>Bartlett</td>
<td>TA</td>
<td>$80,000</td>
</tr>
<tr>
<td>Germantown Greenway</td>
<td>Germantown</td>
<td>STBG</td>
<td>$1,355,003</td>
</tr>
<tr>
<td>Canada Road Pedestrian and Bike Trail</td>
<td>Lakeland</td>
<td>TA</td>
<td>$380,920</td>
</tr>
<tr>
<td>Hampline Project</td>
<td>Memphis</td>
<td>CMAQ</td>
<td>$1,400,000</td>
</tr>
<tr>
<td>Wolf River Greenway - Phase IV</td>
<td>Memphis</td>
<td>ENH</td>
<td>$666,523</td>
</tr>
<tr>
<td>Wolf River Greenway - Phase XV</td>
<td>Memphis</td>
<td>STBG</td>
<td>$1,384,800</td>
</tr>
<tr>
<td>South Memphis Greenline</td>
<td>Memphis</td>
<td>STBG</td>
<td>$2,820,000</td>
</tr>
<tr>
<td>Chelsea Ave Greenline</td>
<td>Memphis</td>
<td>STBG</td>
<td>$4,080,000</td>
</tr>
<tr>
<td>Shelby Farms Greenline Bridge</td>
<td>Memphis</td>
<td>STBG</td>
<td>$3,960,000</td>
</tr>
<tr>
<td>Wolf River Greenway - Phase V</td>
<td>Memphis</td>
<td>TA</td>
<td>$271,305</td>
</tr>
<tr>
<td>Shelby Farms Greenline Crossing Enhancements</td>
<td>Memphis</td>
<td>TA</td>
<td>$340,200</td>
</tr>
<tr>
<td>Memphis-Arlington Road Bike/Ped Project</td>
<td>Arlington</td>
<td>STBG (Local)</td>
<td>$493,360</td>
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<tr>
<td>Shelby Farms Greenline: Cordova Station to Lenow</td>
<td>Shelby County</td>
<td>CMAQ</td>
<td>$2,040,000</td>
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<td><strong>TOTAL</strong></td>
<td></td>
<td></td>
<td><strong>$21,944,972</strong></td>
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<table>
<thead>
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<th>Project Name</th>
<th>Agency</th>
<th>Funding Source</th>
<th>Federal Funds</th>
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<tbody>
<tr>
<td>Riverdale School - Safe Routes to Schools</td>
<td>Germantown</td>
<td>SRTS</td>
<td>$215,795</td>
</tr>
<tr>
<td>Cobbstone Landing Railroad Pedestrian Improvements</td>
<td>Memphis</td>
<td>DEMO</td>
<td>$50,000</td>
</tr>
<tr>
<td>Sidewalk Program</td>
<td>Memphis</td>
<td>STBG</td>
<td>$120,000</td>
</tr>
<tr>
<td>North Parkway Sidewalks</td>
<td>Memphis</td>
<td>STBG</td>
<td>$337,600</td>
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<tr>
<td>Overton Park Cooper Street Entrance</td>
<td>Memphis</td>
<td>STBG</td>
<td>$315,600</td>
</tr>
<tr>
<td>Ball Road Sidewalks</td>
<td>Memphis</td>
<td>TA/STBG</td>
<td>$250,000</td>
</tr>
<tr>
<td>Dunbar Elementary School Safety</td>
<td>Memphis</td>
<td>TA/STBG</td>
<td>$100,000</td>
</tr>
<tr>
<td>Macon Road Sidewalk Improvements</td>
<td>Memphis</td>
<td>TA/STBG</td>
<td>$640,000</td>
</tr>
<tr>
<td>MS Blvd. Signalized Pedestrian Crossing</td>
<td>Memphis</td>
<td>TA</td>
<td>$130,000</td>
</tr>
<tr>
<td>Hanley Elementary School Safety</td>
<td>Memphis</td>
<td>TA</td>
<td>$120,000</td>
</tr>
<tr>
<td>Central Library Pedestrian Access</td>
<td>Memphis</td>
<td>TA</td>
<td>$75,000</td>
</tr>
<tr>
<td>Range Line Road Sidewalks</td>
<td>Memphis</td>
<td>TA</td>
<td>$179,000</td>
</tr>
<tr>
<td>Westmont Street Sidewalk Improvements</td>
<td>Memphis</td>
<td>TA</td>
<td>$268,000</td>
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<tr>
<td>Chiswood Street Pedestrian Safety</td>
<td>Memphis</td>
<td>TA</td>
<td>$266,992</td>
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<tr>
<td>CBU Pedestrian Access Improvements</td>
<td>Memphis</td>
<td>TA</td>
<td>$600,000</td>
</tr>
<tr>
<td>Kirby Parkway and Timber Trail Crossing Update</td>
<td>Memphis</td>
<td>TA</td>
<td>$176,000</td>
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<td>Mullins Station Road Pedestrian Improvements</td>
<td>Memphis</td>
<td>TA</td>
<td>$125,280</td>
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<tr>
<td>North Parkway &amp; Watkins Street Off-Street Connection</td>
<td>Memphis</td>
<td>TA</td>
<td>$80,000</td>
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<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td></td>
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### TABLE II (Continued)

#### Bicycle and Pedestrian Projects - Tennessee (continued)

<table>
<thead>
<tr>
<th>Project Name</th>
<th>Agency</th>
<th>Funding Source</th>
<th>Federal Funds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collierville Center Connect - Phase I &amp; II</td>
<td>Collierville</td>
<td>TA</td>
<td>$880,000</td>
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<tr>
<td>Walker Avenue Streetscape - Phase 2</td>
<td>Memphis</td>
<td>ENH</td>
<td>$756,846</td>
</tr>
<tr>
<td>Biomedical Planning District - Streetscape/Sidewalks</td>
<td>Memphis</td>
<td>ENH</td>
<td>$458,830</td>
</tr>
<tr>
<td>Jefferson Ave Cycle Track</td>
<td>Memphis</td>
<td>STBG</td>
<td>$3,428,000</td>
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<tr>
<td>Bike Routes - 25 Miles</td>
<td>Memphis</td>
<td>STBG</td>
<td>$342,927</td>
</tr>
<tr>
<td>Great Streets Downtown Corridor Planning &amp; Design</td>
<td>Memphis</td>
<td>TA</td>
<td>$139,316</td>
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<td><strong>TOTAL</strong></td>
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<td><strong>$9,617,555</strong></td>
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#### Access to Transit Projects

<table>
<thead>
<tr>
<th>Project Name</th>
<th>Agency</th>
<th>Funding Source</th>
<th>Federal Funds</th>
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</thead>
<tbody>
<tr>
<td>Bus Bike Rack Replacement</td>
<td>MATA</td>
<td>TA</td>
<td>$19,845</td>
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<tr>
<td>Crosstown Corridor Superstop Enhancements</td>
<td>MATA</td>
<td>TA</td>
<td>$400,000</td>
</tr>
<tr>
<td>Bicycle Access to Transit Project</td>
<td>MATA</td>
<td>TA</td>
<td>$120,000</td>
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<tr>
<td>Transit Stop Enhancements (4 locations)</td>
<td>MATA</td>
<td>TA</td>
<td>$40,000</td>
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<tr>
<td><strong>TOTAL</strong></td>
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<td><strong>$579,845</strong></td>
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#### ADA Transition Plans

<table>
<thead>
<tr>
<th>Project Name</th>
<th>Agency</th>
<th>Funding Source</th>
<th>Federal Funds</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADA Transition Plan</td>
<td>Bartlett</td>
<td>TA</td>
<td>$120,000</td>
</tr>
<tr>
<td>ADA Transition Plan</td>
<td>Collierville</td>
<td>TA</td>
<td>$150,000</td>
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<tr>
<td>ADA Transition Plan</td>
<td>Germantown</td>
<td>TA</td>
<td>$140,000</td>
</tr>
<tr>
<td>ADA Transition Plan</td>
<td>Millington</td>
<td>TA</td>
<td>$100,000</td>
</tr>
<tr>
<td>ADA Transition Plan</td>
<td>Oakland</td>
<td>STBG (Local)</td>
<td>$48,000</td>
</tr>
<tr>
<td>ADA Transition Plan</td>
<td>Shelby County</td>
<td>TA</td>
<td>$300,000</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td></td>
<td><strong>$858,000</strong></td>
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</table>

#### Bicycle and Pedestrian Projects - Mississippi

<table>
<thead>
<tr>
<th>Project Name</th>
<th>Agency</th>
<th>Funding Source</th>
<th>Federal Funds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Johnson Creek Greenway - Phase II</td>
<td>DeSoto County</td>
<td>STBG</td>
<td>$413,600</td>
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<tr>
<td>Trail and Overlook Project</td>
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<td>TA</td>
<td>$216,600</td>
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<tr>
<td>Linear Park Bike/Ped Path</td>
<td>Hernando</td>
<td>TE</td>
<td>$610,000</td>
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<tr>
<td>Snowden Pedestrian Path and Bicycle Project</td>
<td>Southaven</td>
<td>STBG</td>
<td>$615,600</td>
</tr>
<tr>
<td>Pedestrian and Bike Trail</td>
<td>Southaven</td>
<td>TE</td>
<td>$900,000</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td></td>
<td><strong>$3,555,800</strong></td>
</tr>
</tbody>
</table>

#### Sidewalk/Crosswalk Projects

<table>
<thead>
<tr>
<th>Project Name</th>
<th>Agency</th>
<th>Funding Source</th>
<th>Federal Funds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lewisburg School/Craft Road Sidewalks</td>
<td>Hernando</td>
<td>TA</td>
<td>$198,400</td>
</tr>
<tr>
<td>Hernando Square Pedestrian Improvements</td>
<td>Hernando</td>
<td>TA</td>
<td>$286,000</td>
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<td>Nesbit Sidewalk Project</td>
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<td>TA</td>
<td>$456,282</td>
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<tr>
<td>Stateline Road Pedestrian Project</td>
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<td>STBG</td>
<td>$693,368</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
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<td><strong>$1,634,050</strong></td>
</tr>
</tbody>
</table>

Total FY 2017-20 TIP Bicycle and Pedestrian Projects (TN & MS) **$42,239,489**
PROJECTS

Table III shows some of the Bicycle and Pedestrian projects that were included in previous TIP cycles and have been completed or are currently under construction since the development of the 2014 Regional Bicycle and Pedestrian Plan. Similarly to Table II, the projects shown in Table III do not include bicycle lanes, sidewalk installation and repairs, and ADA upgrades that are included as a part of other road, bridge, and resurfacing projects. Additionally, the list may not include bicycle and pedestrian projects that were funded through local and/or private sources.

TABLE III

<table>
<thead>
<tr>
<th>Project Name</th>
<th>Agency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bike and Pedestrian Connector</td>
<td>Arlington</td>
</tr>
<tr>
<td>Fletcher Creek Greenway - Phase I</td>
<td>Bartlett</td>
</tr>
<tr>
<td>Greenway Extension: Kimbrough to Cameron Brown</td>
<td>Germantown</td>
</tr>
<tr>
<td>Mainstreet to Mainstreet Project: Big River Crossing</td>
<td>Memphis</td>
</tr>
<tr>
<td>Wolf River Greenway - Phase I (North End Mud Island)</td>
<td>Memphis</td>
</tr>
<tr>
<td>Shelby County Greenline (Farm Road to Old Cordova Train Station)</td>
<td>Shelby County</td>
</tr>
<tr>
<td>Shelby Farms Bicycle, Pedestrian, and Equine Trails</td>
<td>Shelby County</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Project Name</th>
<th>Agency</th>
</tr>
</thead>
<tbody>
<tr>
<td>University of Memphis Railroad Pedestrian Project</td>
<td>Memphis</td>
</tr>
<tr>
<td>Rozelle Elementary School Safety</td>
<td>Memphis</td>
</tr>
<tr>
<td>Frayser Elementary School Safety</td>
<td>Memphis</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Project Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Walker Avenue Streetscape - Phase I</td>
</tr>
</tbody>
</table>
Population: 652,717

Project Scope:

The Great Streets Pilot Project was launched in June 2017 as a short-term, low-cost method to demonstrate the transformation of several streets in downtown Memphis with the addition of bicycle lanes and public spaces.

The project was inspired by street improvement projects in New York City, Los Angeles, and Chicago and intended to protect bicyclists commuting to and from Downtown and Midtown Memphis. Key components of the project include the implementation of shared lanes, protected bike lanes, pedestrian safety improvements at intersections, narrowing of existing travel and parking lanes, two-way cycle track, a pedestrian promenade, and a turning lane throughout various sections of the project’s corridor.

With the success of the pilot, the City of Memphis has decided to pursue implementation and recently received a Transportation Alternatives Program (TA) grant through the Memphis MPO for design work on the implementation of the future project.
For more information on Bicycle and Pedestrian Initiatives of the Memphis MPO and partner agencies, visit memphismopo.org
## PERFORMANCE MEASURES TIMELINE

<table>
<thead>
<tr>
<th>Performance Measure (By Category)</th>
<th>MPO Due Date</th>
<th>Status</th>
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</thead>
<tbody>
<tr>
<td>Safety</td>
<td>February 27, 2018</td>
<td>Completed</td>
</tr>
<tr>
<td>Traffic Congestion (CMAQ)</td>
<td>May 20, 2018</td>
<td>Underway</td>
</tr>
<tr>
<td>Total Emissions Reduction (CMAQ)</td>
<td>November 16, 2018</td>
<td>Underway</td>
</tr>
<tr>
<td>Pavement Condition</td>
<td>November 16, 2018</td>
<td>Underway</td>
</tr>
<tr>
<td>Bridge Condition</td>
<td>November 16, 2018</td>
<td>Underway</td>
</tr>
<tr>
<td>Travel Time Reliability (System Performance)</td>
<td>November 16, 2018</td>
<td>Underway</td>
</tr>
<tr>
<td>Freight Reliability</td>
<td>November 16, 2018</td>
<td>Underway</td>
</tr>
</tbody>
</table>
CMAQ – TRAFFIC CONGESTION

• Targets:
  ➢ Percent of Non-SOV Travel (Tri-State)
  ➢ Peak Hour Excessive Delay (Tri-State)

• Next Steps:
  ➢ Memphis MPO - Approve Targets & Report to DOTs
    ▪ Prior to April 25th
  ➢ TN/MS/AR DOTs – Approve Targets
    ▪ April 25th – Internal Deadline

Note: May 20, 2018 - Deadline for State DOTs to Establish Targets
### Goals and Objectives for Approval

<table>
<thead>
<tr>
<th>Planning Theme</th>
<th>FAST Act National Planning Emphasis Area</th>
<th>Livability 2050 RTP Update Goals</th>
<th>Livability 2050 RTP Update Objectives</th>
</tr>
</thead>
</table>
| Connections & Choices | Increase the accessibility and mobility of people and for freight | **Goal 1:** Improve multimodal access to community and employment resources | **1.1** Improve bicycle and pedestrian access to educational, health, and recreational opportunities  
**1.2** Expand transit service to unserved regional employment markets  
**1.3** Expand rural human services transportation services into areas not currently served  
**1.4** Advance TDM strategies to support last mile connections for key employment origins and destinations |
|  | Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight | **Goal 2:** Support a fully integrated multimodal network that advances the concept of complete streets | **2.1** Support complete streets implementation  
**2.2** Support bicycle, pedestrian, and transit improvements as incidental improvements as roadway improvements occur.  
**2.3** Support integrated and expanded greenway/multiuse plans |
| Economic Vitality | Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency | **Goal 3:** Ensure the region is well positioned to remain a leader in global logistics and freight movement | **3.1** Reduce truck delay on critical freight corridors and within key freight hubs  
**3.2** Reduce intermodal conflict and delay  
**3.3** Advance an Airport/Aerotropolis TMA |
|  | Enhance travel and tourism | **Goal 4:** Enhance travel and tourism | **4.1** Include the economic development benefits associated with travel and tourism when prioritizing transportation projects. |
| Safety and Security | Increase the safety of the transportation system for motorized and nonmotorized users. | **Goal 5:** Increase the safety and security of the transportation system for all users | **5.1** Support projects that address an existing, identified safety or security need  
**5.2** Support projects, programs, and policies that advance safe and secure travel for all users over the plan horizon  
**5.3** Continue coordination with TDOT and MDOT to meet federal safety performance targets |
### Goals and Objectives for Approval

<table>
<thead>
<tr>
<th>Planning Theme</th>
<th>FAST Act National Planning Emphasis Area</th>
<th>Livability 2050 RTP Update Goals</th>
<th>Livability 2050 RTP Update Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sustainable Growth</strong></td>
<td>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</td>
<td><strong>Goal 6:</strong> Advance corridor and community redevelopment opportunities to improve economic development, public health, and quality of life</td>
<td><strong>6.1</strong> Encourage access management planning and design to maintain minimum level of service (on regional mobility corridors) <strong>6.2</strong> Encourage context sensitive solutions derived from integrated transportation/land use planning efforts</td>
</tr>
<tr>
<td></td>
<td>Improve the resiliency and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation</td>
<td><strong>Goal 7:</strong> Minimize adverse impacts of transportation investment on the (social, natural, historic) environment</td>
<td><strong>7.1</strong> Preserve and protect natural resources <strong>7.2</strong> Provide multimodal, active transportation options that reduce vehicle miles travelled and air pollution and improve public health <strong>7.3</strong> Design the transportation network in a way that protects air and water quality, manages storm water runoff and preserves green space.</td>
</tr>
<tr>
<td><strong>System Preservation</strong></td>
<td>Promote efficient system management and operation</td>
<td><strong>Goal 8:</strong> Reduce travel delay for people and goods</td>
<td><strong>8.1</strong> Address critical highway bottlenecks as a priority <strong>8.2</strong> Focus capacity investment on corridor connections to regional employment centers <strong>8.3</strong> Improve system operations through technology applications</td>
</tr>
<tr>
<td></td>
<td>Emphasize the preservation of the existing transportation system</td>
<td><strong>Goal 9:</strong> Maintain existing transportation assets and infrastructure</td>
<td><strong>9.1</strong> Maintain existing assets as a priority, before system expansion is considered <strong>9.2</strong> Prioritize strategies to better manage travel demand on existing infrastructure before adding new infrastructure <strong>9.3</strong> Promote construction/maintenance techniques, materials, and practices that minimize maintenance needs over the plan horizon</td>
</tr>
</tbody>
</table>
## Relationship Between RTP Goals & Objectives to Planning Themes, FAST Act, and Federal Performance Measures

<table>
<thead>
<tr>
<th>Planning Theme</th>
<th>FAST Act National Planning Emphasis Area</th>
<th>Current Livability 2040 RTP Goals</th>
<th>Livability 2050 RTP Update Goals</th>
<th>Livability 2050 RTP Update Objectives</th>
<th>Federal Performance Measures²</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Connections &amp; Choices</strong></td>
<td>Increase the accessibility and mobility of people and for freight</td>
<td>2040 RTP Goal 6: Improve multimodal access to community and employment resources</td>
<td>Goal 1: Improve multimodal access to community and employment resources</td>
<td>1.1 Improve bicycle and pedestrian access to educational, health, and recreational opportunities 1.2 Expand transit service to unserved regional employment markets 1.3 Expand rural human services transportation services into areas not currently served 1.4 Advance TDM strategies to support last mile connections for key employment origins and destinations</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight⁴</td>
<td>2040 RTP Goal 6: Improve multimodal access to community and employment resources</td>
<td>Goal 2: Support a fully integrated multimodal network that advances the concept of complete streets</td>
<td>2.1 Support complete streets implementation 2.2 Support bicycle, pedestrian, and transit improvements as incidental improvements as roadway improvements occur. 2.3 Support integrated and expanded greenway/multiuse plans</td>
<td></td>
</tr>
</tbody>
</table>
| **Economic Vitality** | Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency | 2040 RTP Goal 5: Ensure the region is well positioned to remain a leader in global logistics and freight movement | Goal 3: Ensure the region is well positioned to remain a leader in global logistics and freight movement | 3.1 Reduce truck delay on critical freight corridors and within key freight hubs 3.2 Reduce intermodal conflict and delay 3.3 Advance an Airport/Aerotropolis TMA | Freight Reliability  
- Percentage of Interstate System mileage providing reliable truck travel time |
| | | | | |  |
| | Enhance travel and tourism¹ | No relevant goal statement | Goal 4: Enhance travel and tourism | 4.1 Include the economic development benefits associated with travel and tourism when prioritizing transportation projects. |  |
| **Safety and Security** | Increase the safety of the transportation system for motorized and nonmotorized users | 2040 RTP Goal 2: Increase the safety and security of the transportation system for all users | Goal 5: Increase the safety and security of the transportation system for all users | 5.1 Support projects that address an existing, identified safety or security need 5.2 Support projects, programs, and policies that advance safe and secure travel for all users over the plan horizon 5.3 Continue coordination with TDOT and MDOT to meet federal safety performance targets | Safety (5-Year Rolling Average)  
- Number of Fatalities  
- Fatality Rate (Per 100 million VMT)  
- Number of Serious Injuries  
- Serious Injury Rate (Per 100 million VMT)  
- Number of Non-Motorized Fatalities and Serious Injuries |
| | Increase the security of the transportation system for motorized and nonmotorized users | 2040 RTP Goal 2: Increase the safety and security of the transportation system for all users | Goal 5: Increase the safety and security of the transportation system for all users | 5.1 Support projects that address an existing, identified safety or security need 5.2 Support projects, programs, and policies that advance safe and secure travel for all users over the plan horizon 5.3 Continue coordination with TDOT and MDOT to meet federal safety performance targets | Safety (5-Year Rolling Average)  
- Number of Fatalities  
- Fatality Rate (Per 100 million VMT)  
- Number of Serious Injuries  
- Serious Injury Rate (Per 100 million VMT)  
- Number of Non-Motorized Fatalities and Serious Injuries |
| **Sustainable Growth** | 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 | 2040 RTP Goal 4: Advance corridor and community redevelopment opportunities to improve economic development and quality of life | Goal 6: Advance corridor and community redevelopment opportunities to improve economic development, public health, and quality of life | 6.1 Encourage access management planning and design to maintain minimum level of service (on regional mobility corridors) 6.2 Encourage context sensitive solutions derived from integrated transportation/land use planning efforts | Total Emissions Reduction  
- Total emissions reductions by applicable pollutants under the CMAQ program |
| | Improve the resiliency and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation | 2040 RTP Goal 3: Minimize adverse impacts of transportation investment on the (social, natural, historic) environment and public health | Goal 7: Minimize adverse impacts of transportation investment on the (social, natural, historic) environment | 7.1 Preserve and protect natural resources 7.2 Provide multimodal, active transportation options that reduce vehicle miles travelled and air pollution and improve public health 7.3 Design the transportation network in a way that protects air and water quality, manages storm water runoff and preserves green space. | Total Emissions Reduction  
- Total emissions reductions by applicable pollutants under the CMAQ program |

Page 64
### Planning Theme: System Preservation

<table>
<thead>
<tr>
<th>FAST Act National Planning Emphasis Area</th>
<th>Current Livability 2040 RTP Goals</th>
<th>Livability 2050 RTP Update Goals</th>
<th>Livability 2050 RTP Update Objectives</th>
<th>Federal Performance Measures&lt;sup&gt;2&lt;/sup&gt;</th>
</tr>
</thead>
</table>
| Promote efficient system management and operation | 2040 RTP Goal 7: Reduce travel delay for people and goods | Goal 8: Reduce travel delay for people and goods | 8.1 Address critical highway bottlenecks as a priority | NHS Travel Time Reliability  
  - Percent of the Person-Miles Traveled on the Interstate that are reliable  
  - Percent of the Person Miles Traveled on the Non-Interstate National Highway System that are reliable  
Traffic Congestion  
  - Annual hours of peak hour excessive delay per capita  
  - Percentage of Non-Single Occupancy Vehicle Travel |
| Emphasize the preservation of the existing transportation system | 2040 RTP Goal 1: Maintain existing transportation assets and infrastructure | Goal 9: Maintain existing transportation assets and infrastructure | 9.1 Maintain existing assets as a priority, before system expansion is considered  
  9.2 Prioritize strategies to better manage travel demand on existing infrastructure before adding new infrastructure  
  9.3 Promote construction/maintenance techniques, materials, and practices that minimize maintenance needs over the plan horizon | Pavement Conditions  
  - Percentage of pavements on the Interstate System in Good condition  
  - Percentage of pavements on the Interstate System in Poor condition  
  - Percentage of the non-interstate National Highway System in Good condition  
  - Percentage of the non-interstate National Highway System in Poor condition  
Bridge Condition  
  - Percentage of National Highway System bridges classified as in Good condition  
  - Percentage of National Highway System bridges classified as in Poor condition |

<sup>1</sup>The blue box indicates a new national planning emphasis area identified in the FAST Act legislation.

<sup>2</sup>Performance Measures shown are only those being considered at a federal level. The Safety Performance Targets are the only finalized metrics, and the others are estimated to be finalized at various times through 2018. You can read more at the MPOs website: [http://memphismpo.org/resources/trends/performance-measures](http://memphismpo.org/resources/trends/performance-measures)
Demographic and Employment Forecasts

The following tables show socio-demographic projections at the county-level, which were approved as part of the Livability 2040 Regional Transportation Plan (RTP). These forecasts have been vetted against various data sources and they remain valid and consistent for use in the development of the 2050 RTP.

### Population

<table>
<thead>
<tr>
<th>County</th>
<th>2016</th>
<th>2020</th>
<th>2030</th>
<th>2040</th>
<th>2050</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crittenden</td>
<td>50,923</td>
<td>50,938</td>
<td>50,974</td>
<td>51,010</td>
<td>51,046</td>
</tr>
<tr>
<td>DeSoto</td>
<td>181,763</td>
<td>196,521</td>
<td>239,558</td>
<td>292,020</td>
<td>355,971</td>
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<tr>
<td>Fayette</td>
<td>41,056</td>
<td>42,893</td>
<td>47,932</td>
<td>52,932</td>
<td>58,902</td>
</tr>
<tr>
<td>Marshall</td>
<td>38,502</td>
<td>39,427</td>
<td>41,851</td>
<td>44,423</td>
<td>47,154</td>
</tr>
<tr>
<td>Shelby</td>
<td>950,291</td>
<td>965,619</td>
<td>1,004,035</td>
<td>1,041,684</td>
<td>1,082,732</td>
</tr>
<tr>
<td>Tate</td>
<td>31,241</td>
<td>32,889</td>
<td>37,447</td>
<td>42,637</td>
<td>48,546</td>
</tr>
<tr>
<td>Tipton</td>
<td>67,048</td>
<td>71,238</td>
<td>80,886</td>
<td>89,316</td>
<td>101,358</td>
</tr>
<tr>
<td>Tunica</td>
<td>11,839</td>
<td>12,590</td>
<td>14,706</td>
<td>17,178</td>
<td>20,065</td>
</tr>
<tr>
<td>Total</td>
<td>1,372,664</td>
<td>1,412,115</td>
<td>1,517,389</td>
<td>1,631,200</td>
<td>1,765,774</td>
</tr>
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</table>

### Households

<table>
<thead>
<tr>
<th>County</th>
<th>2016</th>
<th>2020</th>
<th>2030</th>
<th>2040</th>
<th>2050</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crittenden</td>
<td>19,034</td>
<td>19,039</td>
<td>19,053</td>
<td>19,066</td>
<td>19,080</td>
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<tr>
<td>DeSoto</td>
<td>65,092</td>
<td>70,377</td>
<td>85,790</td>
<td>104,577</td>
<td>127,479</td>
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<tr>
<td>Fayette</td>
<td>15,503</td>
<td>16,197</td>
<td>18,099</td>
<td>19,988</td>
<td>22,242</td>
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<tr>
<td>Marshall</td>
<td>13,858</td>
<td>14,191</td>
<td>15,063</td>
<td>15,989</td>
<td>16,972</td>
</tr>
<tr>
<td>Shelby</td>
<td>359,542</td>
<td>365,341</td>
<td>379,875</td>
<td>394,120</td>
<td>409,650</td>
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<tr>
<td>Tate</td>
<td>10,853</td>
<td>11,426</td>
<td>13,009</td>
<td>14,812</td>
<td>16,865</td>
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<tr>
<td>Tipton</td>
<td>23,728</td>
<td>25,211</td>
<td>28,625</td>
<td>31,608</td>
<td>35,870</td>
</tr>
<tr>
<td>Tunica</td>
<td>4,314</td>
<td>4,587</td>
<td>5,358</td>
<td>6,259</td>
<td>7,311</td>
</tr>
<tr>
<td>Total</td>
<td>511,922</td>
<td>526,369</td>
<td>564,872</td>
<td>606,419</td>
<td>655,469</td>
</tr>
</tbody>
</table>

### Employment

<table>
<thead>
<tr>
<th>County</th>
<th>2016</th>
<th>2020</th>
<th>2030</th>
<th>2040</th>
<th>2050</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crittenden</td>
<td>21,444</td>
<td>22,516</td>
<td>25,877</td>
<td>29,962</td>
<td>34,336</td>
</tr>
<tr>
<td>DeSoto</td>
<td>64,081</td>
<td>70,684</td>
<td>90,571</td>
<td>113,942</td>
<td>140,262</td>
</tr>
<tr>
<td>Fayette</td>
<td>10,107</td>
<td>11,091</td>
<td>14,657</td>
<td>19,708</td>
<td>26,486</td>
</tr>
<tr>
<td>Marshall</td>
<td>8,525</td>
<td>9,103</td>
<td>10,981</td>
<td>13,365</td>
<td>16,055</td>
</tr>
<tr>
<td>Shelby</td>
<td>556,846</td>
<td>585,269</td>
<td>663,013</td>
<td>744,141</td>
<td>830,170</td>
</tr>
<tr>
<td>Tate</td>
<td>7,456</td>
<td>7,961</td>
<td>9,604</td>
<td>11,689</td>
<td>14,042</td>
</tr>
<tr>
<td>Tipton</td>
<td>12,899</td>
<td>13,396</td>
<td>14,739</td>
<td>16,223</td>
<td>17,849</td>
</tr>
<tr>
<td>Tunica</td>
<td>15,875</td>
<td>16,951</td>
<td>20,448</td>
<td>24,888</td>
<td>29,897</td>
</tr>
<tr>
<td>Total</td>
<td>697,234</td>
<td>736,971</td>
<td>849,890</td>
<td>973,918</td>
<td>1,109,097</td>
</tr>
</tbody>
</table>