2017 BICYCLE & PEDESTRIAN REPORT

Memphis MPO
METROPOLITAN PLANNING ORGANIZATION
Strengthening Regional Transportation
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# INTRODUCTION

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# PROGRESS IN THE GREATER MEMPHIS REGION

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# SAFETY ACROSS THE GREATER MEMPHIS REGION

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# BEST PRACTICES
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.
TENNESSEE DEPARTMENT OF TRANSPORTATION

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**
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)
JURISDICTIONAL UPDATES

DESO TO 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).*
SAFETY

MEMPHIS MPO BICYCLE AND PEDESTRIAN CRASH DATA

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.

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.

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.

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

<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>8.23%</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>60.93%</td>
<td>815</td>
<td>54.96%</td>
<td>1052</td>
<td>56.20%</td>
</tr>
<tr>
<td>Possible Injuries</td>
<td>45</td>
<td>11.57%</td>
<td>169</td>
<td>11.40%</td>
<td>214</td>
<td>11.43%</td>
</tr>
<tr>
<td>No Injury</td>
<td>64</td>
<td>16.45%</td>
<td>105</td>
<td>7.08%</td>
<td>169</td>
<td>9.33%</td>
</tr>
<tr>
<td>Unknown</td>
<td>4</td>
<td>1.03%</td>
<td>18</td>
<td>1.09%</td>
<td>26</td>
<td>1.07%</td>
</tr>
<tr>
<td>Total</td>
<td>369</td>
<td>-</td>
<td>1483</td>
<td>-</td>
<td>1672</td>
<td>-</td>
</tr>
</tbody>
</table>

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

Figure V: Pedestrian Crashes by Time of Day
(Sources: MDOT and TDOT)

**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 PROGRAM

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 known 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 II

#### FY 2017-20 Transportation Improvement Program (TIP) Bicycle and Pedestrian Projects - Tennessee

<table>
<thead>
<tr>
<th>Project Name</th>
<th>Agency</th>
<th>Funding Source</th>
<th>Federal Funds</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Shared-Use Path Projects</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<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 (State)</td>
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</tr>
<tr>
<td>Canada Road Pedestrian and Bike Trail</td>
<td>Lakeland</td>
<td>TA (State)</td>
<td>$1,000,000</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>
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<td>South Memphis Greenline</td>
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<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>
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<td>Wolf River Greenway - Phase V</td>
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<td>Memphis-Arlington Road Bike/Ped Project</td>
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<td>Shelby Farms Greenline: Cordova Station to Lenow</td>
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<th>Sidewalk/Crosswalk Projects</th>
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<td>Riverdale School - Safe Routes to Schools</td>
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<td>North Parkway &amp; Watkins Street Off-Street Connect</td>
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# FY 2017-20 TIP PROJECTS

## Bicycle and Pedestrian Projects - Tennessee (continued)

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<th>Funding Source</th>
<th>Federal Funds</th>
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<tr>
<td>Corridor/Streetscape Projects</td>
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<td>Collierville Center Connect - Phase I &amp; II</td>
<td>Collierville</td>
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<td>Walker Avenue Streetscape - Phase 2</td>
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<td>Biomedical Planning District - Streetscape/Sidewalks</td>
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<td>Jefferson Ave Cycle Track</td>
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<td>Bike Routes - 25 Miles</td>
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<td>Great Streets Downtown Corridor Planning &amp; Design</td>
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## Access to Transit Projects

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<tbody>
<tr>
<td>Bus Bike Rack Replacement</td>
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<tr>
<td>Crosstown Corridor Superstop Enhancements</td>
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<td>TA</td>
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<td>Bicycle Access to Transit Project</td>
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<td>TA</td>
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<td>Transit Stop Enhancements (4 locations)</td>
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## ADA Transition Plans

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<tr>
<td>ADA Transition Plan</td>
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<td>ADA Transition Plan</td>
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<td>TA</td>
<td>$150,000</td>
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<td>ADA Transition Plan</td>
<td>Germantown</td>
<td>TA</td>
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<td>ADA Transition Plan</td>
<td>Millington</td>
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<td>ADA Transition Plan</td>
<td>Oakland</td>
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<td>ADA Transition Plan</td>
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## Bicycle and Pedestrian Projects - Mississippi

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<tr>
<td>Shared-Use Path Projects</td>
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<td>Johnson Creek Greenway - Phase II</td>
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<td>Trail and Overlook Project</td>
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<td>Linear Park Bike/Ped Path</td>
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<td>TE</td>
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<td>Snowden Pedestrian Path and Bicycle Project</td>
<td>Southaven</td>
<td>STBG</td>
<td>$615,600</td>
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<td>Pedestrian and Bike Trail</td>
<td>Southaven</td>
<td>TE</td>
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<td><strong>TOTAL</strong></td>
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## Sidewalk/Crosswalk Projects

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<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>Lewisburg School/Craft Road Sidewalks</td>
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<td>Hernando Square Pedestrian Improvements</td>
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<td>Nesbit Sidewalk Project</td>
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<td>$456,282</td>
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<td>Stateline Road Pedestrian Project</td>
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<td><strong>TOTAL</strong></td>
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<td>$1,634,050</td>
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**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>Previous Transportation Improvement Program (TIP)</th>
<th>Bicycle and Pedestrian Projects - Completed/Under Construction (since 2014)</th>
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</thead>
<tbody>
<tr>
<td>Project Name</td>
<td>Agency</td>
</tr>
<tr>
<td>Bike and Pedestrian Connector</td>
<td>Arlington</td>
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<tr>
<td>Fletcher Creek Greenway - Phase I</td>
<td>Bartlett</td>
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<tr>
<td>Greenway Extension: Kimbrough to Cameron Brown</td>
<td>Germantown</td>
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<tr>
<td>Mainstreet to Mainstreet Project: Big River Crossing</td>
<td>Memphis</td>
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<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>
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<tr>
<td>Shelby Farms Bicycle, Pedestrian, and Equine Trails</td>
<td>Shelby County</td>
</tr>
<tr>
<td>University of Memphis Railroad Pedestrian Project</td>
<td>Memphis</td>
</tr>
<tr>
<td>Rozelle Elementary School Safety</td>
<td>Memphis</td>
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<tr>
<td>Frayser Elementary School Safety</td>
<td>Memphis</td>
</tr>
<tr>
<td>Walker Avenue Streetscape - Phase I</td>
<td>Memphis</td>
</tr>
</tbody>
</table>
Figure XVII: Existing and Programmed Bicycle and Pedestrian Facilities

LEGEND
- Existing
- - Programmed
Population: 652,717

**Project Scope:**
After ranking second in Smart Growth America’s highest pedestrian danger index in 2008 and 2012, the City of St. Petersburg’s, Florida wanted to make changes. The 4th Street N - Complete Streets Project proposed a variety of improvements to a corridor that had long served as a major north and south thoroughfare for the area, providing access to major employment and retail centers. The project intended to reduce pedestrian safety concerns along the corridor by implementing safety improvements such as flashing lights at crosswalks and painted lane markings for bicyclists.

St. Petersburg is seeing results; in 2017, the city found that the safety improvements increased the number of drivers yielding from 18 to 81%.

**GREAT STREETS PILOT PROJECT: MEMPHIS, TENNESSEE**

Population: 3,030,000

**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 memphismpo.org