**Decatur Area Metropolitan Planning Organization (MPO)**

# Draft

# 2045 Long-Range Transportation Plan (LRTP) For the Decatur Metropolitan Planning Area


**Prepared by the Staff of the**
**Decatur Area Metropolitan Planning Organization**

**February 2021**

**Decatur Area Metropolitan Planning Organization (MPO)**

# 2045 Long-Range Transportation Plan (LRTP)

## Draft

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Date Adopted: February 23, 2021
Date Amended:

This document was prepared as a cooperative effort of the U.S. Department of Transportation (USDOT), the Federal Highway Administration (FHWA), the Federal Transit Administration (FTA), the Alabama Department of Transportation (ALDOT), and local governments, in fulfillment of requirements set forth in 23 USC 134 and 135, amended by the FAST Act, Sections 1201 and 1202, December 2015. The contents of this document do not necessarily reflect the official views or polices of the U.S. Department of Transportation.

**Decatur Area Metropolitan Planning Organization (MPO)**

# MPO Policy Board and Advisory Committee Members

**Fiscal Year 2020**

## Decatur Area Metropolitan Planning Organization (MPO) Policy Board

Voting Members

| | |
|---|---|
| Randy Garrison, Vice-Chairperson | Mayor, City of Hartselle |
| Ray Long | Chairman, Morgan County Commission |
| Tab Bowling | Mayor, City of Decatur |
| Sam Heflin | Mayor, Town of Priceville |
| Vaughn Goodwin | Mayor, Town of Trinity |
| Colin Daly | Chairman, Limestone County Commission |
| Curtis Vincent | ALDOT, North Region Engineer |
| Jacob Ladner | Councilmember, City of Decatur |
| Carlton McMasters | Councilmember, City of Decatur |
| Hunter Pepper | Councilmember, City of Decatur |
| Kyle Dukes Pike | Councilmember, City of Decatur |

Non-Voting Members

| | |
|---|---|
| Mark Bartlett | FHWA, Alabama Division Administrator |
| Brad Lindsey | ALDOT, Local Transportation Bureau Chief |
| Roxanne Ledesma | FTA, Region 4 Transportation Program Specialist |
| Bobby Burch | Lawrence County Commission |

## Decatur Area Technical Coordinating Committee (TCC)

Voting Members

| | |
|---|---|
| Jeff Johnson, Chairperson | City of Hartselle |
| Greg Bodley, Vice-Chairperson | Morgan County |
| Carl Prewitt | City of Decatur |
| Chris Jones | City of Decatur |
| Wayne Delgado | City of Decatur |
| Jeremy Griffith | City of Hartselle |
| Gary Borden | Decatur Utilities |
| Jeremy Nails | Morgan County Economic Development |
| Bethany Shockney | Limestone County Economic Development |
| Sonny Wright | Town of Priceville and Town of Trinity |

| | |
|---|---|
| John Seymour | Decatur Morgan County Chamber |
| Butch Roberts | Huntsville International Airport |
| Robby Cantrell | NARCOG Transit |
| Ricky Ingram | U.S. Fish and Wildlife |
| Rodney Ellis | ALDOT |

Non-Voting Members

| | |
|---|---|
| Aaron Dawson | FHWA |
| Wiley Brooks | ALDOT |
| Sonya Baker | ALDOT |
| Cornell Tatum | ALDOT |
| Allen Teague | ALDOT |

**Decatur Area Citizens Advisory Committee (CAC) Officers**

Blake McAnally, Co-Chairperson
John Seymour, Co-Chairperson

**Decatur Area MPO Staff**

Dewayne Hellums, Director of Transportation Planning
Lee Terry, Transportation Planner

# RESOLUTION 21 - 13

Decatur Area Metropolitan Planning Organization (MPO)
Adopting the 2045 Draft Long-Range Transportation Plan (LRTP)
For the Decatur Metropolitan Planning Area (MPA)

**WHEREAS,** the Decatur Area Metropolitan Planning Organization (MPO) has been designated by the Governor of Alabama as the agency authorized, together with the State of Alabama, to conduct the continuing, cooperative, and comprehensive planning process for the Decatur Urban Area in accordance with applicable provisions of amended 23 USC 134 and 135 (MAP-21, Sections 1201 and 1202, July 2012); 42 USC 2000d, 7401 et seq; 23 CFR 450 et al; CFR parts 51 and 93; and

**WHEREAS,** pursuant to 23 CFR 450.322, the metropolitan transportation planning process requires the development of a metropolitan transportation plan with a minimum 20-year horizon, includes long and short-range strategies for an integrated transportation network, requires review every five years (four years in air quality non-attainment or maintenance areas), requires approval of the MPO Policy Board, and the effective date of approval by the Alabama Department of Transportation, the Federal Highway Administration, and the Federal Transit Administration; and

**WHEREAS,** the MPO has participated in the Interagency Consultation and Public Participation Process for Draft 2045 Long-Range Transportation Plan as required under 23 CFR 450.322(g) and (i); and

**WHEREAS,** the Decatur Area Metropolitan Planning Organization (MPO) staff has prepared the Draft 2045 Long-Range Transportation Plan with the above provisions and in cooperation with the Local Transportation Bureau of the Alabama Department of Transportation; now

**THEREFORE, BE IT RESOLVED,** that the Decatur Area MPO herby adopts the Draft 2045 Long-Range Transportation Plan for the Decatur Metropolitan Planning Area.

Adopted this the 23rd Day of February, 2021

_____
Chairperson,
Decatur Area Metropolitan Planning Organization

ATTEST:

_____
Director of Transportation Planning,
Decatur Area Metropolitan Planning Organization

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# Executive Summary

This Long-Range Transportation Plan (LRTP) is intended to serve as a vision of current and future transportation needs within the Decatur Metropolitan Planning Area (MPA). Every five (5) years, the Decatur Area Metropolitan Planning Organization (MPO), in accordance with the Code of Federal Regulations (CFR) Title 23, Section 134 and Title 49, Section 5303 and the Fixing America's Surface Transportation Act (FAST Act) (Pub L. 114-94, Dec. 4, 2015), is tasked with updating the Long-Range Plan for a twenty-five (25) year planning horizon. This Long-Range Plan updates the previous LRTP from a horizon year of 2040 to a horizon year of 2045. The goals of this, and every update of the LRTP, is to: 1) identify current transportation needs, 2) forecast future transportation needs, and 3) establish strategies and projects that address these needs.

The staff of the Decatur Area MPO, in cooperation with the Alabama Department of Transportation (ALDOT), Federal Highway Administration (FHWA), and the Federal Transit Administration (FTA), has developed and analyzed a Travel Demand Model (TDM) that mimics current traffic volumes and patterns and projects what these volumes and patterns will be twenty-five (25) years in the future. In cooperation with ALDOT Local Transportation Bureau staff, the MPO Policy Board, MPO advisory committees, and the general public, the Decatur Area MPO staff has identified projects, both funded and visionary, that are intended to address the current and future transportation needs within the Decatur MPA. The projects identified will serve as a guide for the future transportation planning efforts of the Decatur Area MPO.

This update of the LRTP also includes a listing of bicycle and pedestrian projects, transit projects, freight projects, safety projects, and regionally significant projects located in the Planning Area. These projects were identified as a part the 3C Planning Process for the Metropolitan Planning Area. The inclusion of these projects in this plan indicates the commitment of the Decatur Area MPO for a truly multi-modal and safe transportation system for all users.

The following pages will describe, in detail, the steps taken by the Decatur Area MPO in order to complete this update of the LRTP, as well as listings of projects intended to keep the Decatur MPA's roadway network healthy and congestion free, now and into the future. This is by no means a static document and will be updated if, and when, new projects are identified or new sources of funding become available.

The Decatur Area MPO and its advisory committees will continue to carry out the transportation planning process for the Decatur MPA and will continually evaluate the performance of this document in order to serve the general public in the best way possible.

# 1.0 Introduction

## 1.1 Overview and Purpose

The Long-Range Transportation Plan (LRTP) is a document and guide used to plan transportation improvements that will be needed over the next twenty-five (25) years to enhance the movement of people, goods, and services throughout the Metropolitan Planning Area (MPA), as well as the North Alabama Region.

The LRTP is developed through a public participation process that includes all modes of transportation and a broad array of stakeholders and citizens concerned with the future transportation system and the effects it has on congestion, safety, economic development, the environment, and the quality of life for the people living in the planning area.

The Decatur Area Metropolitan Planning Organization (MPO) updates and maintains the Long-Range Transportation Plan (LRTP) for the Decatur Metropolitan Planning Area (MPA). Major updates of the LRTP have occurred approximately every five (5) years since 1984. The MPO staff develops and evaluates data and information from public participation meetings, stakeholder groups, and the development of a computer based travel demand model to evaluate the future comprehensive transportation needs of the MPA.

## 1.2 Federal Guidance (Laws and Regulations)

In 1981, the United States Department of Commerce designated the City of Decatur and the adjacent areas of Hartselle, Trinity, Priceville, and Flint City (now incorporated into the City of Decatur) as the Decatur Urbanized Area. Federal Law (Section 134, Title 23) of the United States Code, as amended, requires that all urbanized areas must conduct a comprehensive, cooperative, and continuing transportation planning process. This planning process is often referred to as the 3C process.

The Long-Range Transportation Plan is a document required by the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) according to the Code of Federal Regulations (CFR) Title 23, Section 134, and Title 49, Section 5303. The basis for this requirement arises from the passage of the Fixing America's Surface Transportation Act (FAST Act) (Pub L. 114-94, Dec. 4, 2015). The Long-Range Transportation Plan (LRTP) addresses a twenty-five (25) year planning horizon through the year 2045. However, according to federal regulations, this plan must be updated every five (5) years. The LRTP addresses the multi-modal aspects of the transportation system in the planning area to effectively enhance the movement of people, goods, and services. This Long-Range Transportation Plan (LRTP) is comprehensive in its coverage and coordinates the efforts of all member governments in their transportation planning strategies while paying special attention to requirements and factors specified in FAST Act legislation. The LRTP is consistent with other comprehensive plans and land use documents developed in the planning area, as well as statewide plans concerning transportation related issues.

### 1.2.1 Scope of the Planning Process

The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) listed eight (8) planning factors that must be considered as part of the planning process for all metropolitan areas. Under MAP-21 and the FAST Act, these planning factors remain unchanged. The MPO must consider these planning factors in the development of the Long-Range Transportation Plan (LRTP) and the Transportation Improvement Program (TIP). These planning factors are listed below:

1) Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency;
2) Increase the safety of the transportation system for motorized and non-motorized users;
3) Increase the security of the transportation system for motorized and non-motorized users;
4) Increase the accessibility and mobility of people and for freight;
5) Protect and enhance the environment, promote energy conservation, improve quality of life, and promote consistency between transportation improvements and state and local planned growth and economic development patterns;
6) Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight;
7) Promote efficient system management and operation; and
8) Emphasize the preservation of the existing transportation system.

### 1.2.2 Transportation Performance Measures and Targets

In compliance with the Joint Planning Rule from FHWA (23 CFR 450 and 771) and FTA (49 CFR 613), under MAP-21 and the FAST Act, State Departments of Transportation (DOTs) and Metropolitan Planning Organizations (MPOs) are to implement a performance-based approach to planning and programming activities. This includes setting data-driven performance targets for transportation performance measures. This approach supports the national goals for the federal-aid highway and public transportation programs. The seven goals are as follows: 1) Improving Safety, 2) Maintaining an Infrastructure Asset System in a State of Good Repair, 3) Reducing Traffic Congestion, 4) Improving the Efficiency of the Surface System, 5) Freight Movement and Economic Vitality, 6) Protecting the Environment, and 7) Reducing Project Delivery Delays.

Under 23 CFR 490, the DOTs and MPOs are required to establish targets for applicable national performance measures. The Safety Performance Measures (PM1), Bridge/Pavement Measures (PM2), the System Performance Measures (PM3), and the FTA's Transit Asset Management (TAM) Targets have been adopted by ALDOT and the MPOs. Some targets are required to be set on an annual basis while others are set on two (2)-year and four (4)-year cycles.

ALDOT and the MPOs, along with the Transit Providers, have a cooperative agreement in place to coordinate the development of the targets, the sharing of information related to the transportation performance measures, selection of targets, and reporting requirements. ALDOT has set performance measures and targets and the Decatur Area MPO has adopted ALDOT's performance measures and targets. The Performance Measures Agreement between ALDOT, the Decatur Area MPO, and NARCOG Transit can be found in Section 9.3 on Page 84 of this document.

**TIP Linkage to Performance-Based Planning Documents and Targets:**

The FHWA/FTA Joint Planning Rule required that two years after the rules become effective that STIP/TIP amendments or updates must meet the Performance-Based Program and Planning (PBPP) requirements (23 CFR 450. 226 and 450.340). These "phased -in" requirements became effective in 2018 and 2019. The STIP/TIPs aid in programming investments toward achieving the targets as well as align with the PBPP plans *to the maximum extent practicable*.

This LRTP contains both Highway and Transit Projects. Typical highway projects, such as highway capacity, system preservation, bridge, and safety projects, support the established targets. The same is true for the transit projects that are capital purchases. The STIP project selection criteria considers ALDOT's goals and objectives to preserve the existing system, improve system reliability, promote safety, reduce congestion, and improve the movement of goods and people. The Decatur Area MPO will continue to coordinate with ALDOT on updates and/or amendments to the STIP/TIPs and support the selected performance targets (*to the maximum extent practicable).*

**ALDOT Performance Measures & Targets**

| **FHWA Safety Performance Measures (PM1) (Annual Targets)** | **Calendar Year 2021 Targets** |
|---|---|
| Number of Fatalities | 961 |
| Rate of Fatalities (per 100 million Vehicle Miles Traveled) | 1.364 |
| Number of Serious Injuries | 6,595 |
| Rate of Serious Injuries (per 100 million Vehicle Miles Traveled) | 9.355 |
| Number of Non-motorized fatalities and serious injuries | 366 |
| **FHWA Bridge/Pavement Performance Measures (PM2)** | **4-Year Target 2022** |
| % of Pavements of the Interstate System in Good Condition | > 50.0% |
| % of Pavements of the Interstate System in Poor Condition | < 5.0% |
| % of Pavements of the Non-Interstate NHS in Good Condition | > 40.0% |
| % of Pavements of the Non-Interstate NHS in Poor Condition | < 5.0% |
| % of NHS bridges in Good condition by deck area | ≥ 27.0% |
| % of NHS bridges in Poor condition by deck area | ≤ 3.0% |

Table Continued on Next Page

| **FHWA**<br>**System Performance Measures (PM3)** | **4-Year Target**<br>**2022** |
|---|---|
| % of Person-Miles Traveled on the Interstate that are Reliable | 92.0% |
| % of Person-Miles Traveled on the Non-Interstate NHS that are Reliable | 90.0% |
| Truck Travel Time Reliability (TTTR) Index on the Interstate | 1.30 |
| **FTA**<br>**State of Good Repair Performance Measures** | **2020** |
| % of Rolling Stock (Revenue vehicles) meet or exceed Useful Life Benchmark (ULB) | Reduce inventory by 5% |
| % of Equipment (over $50K) meet or exceed Useful Life Benchmark (ULB) | Reduce by 10% |
| % of FTA-funded Facilities with condition rating below 3.0 (average) of FTA Average TERM Scale | No more than 20% of facilities rate less than average |

**Performance-Based Plans Descriptions:**

Listed below are brief descriptions of ALDOT's PBPP Plans. All of the plans align with their respective performance measures and targets and this LRTP.

Strategic Highway Safety Plan (SHSP) and Highway Safety Improvement Program (HSIP) Report (HSIP) (PM1)

The SHSP is a data-driven, multiyear comprehensive plan that establishes ALDOT's traffic safety goals, objectives, priorities and areas of focus, and facilitates engagement with safety stakeholders and partners. The SHSP provides a comprehensive framework for reducing fatalities and serious injuries on all public roads, with the ultimate vision of eradicating the State's roadway deaths. The strategies detailed in the plan integrate the efforts of partners and safety stakeholders from the 4 Es of safety (Engineering, Education, Enforcement, and Emergency Medical Services).

The Alabama SHSP 3rd Edition was completed in July 2017 and the current focus of Alabama's SHSP is the National Goal of "Toward Zero Deaths" initiative which is to reduce fatalities by 50% by 2035.

Transportation Asset Management Plan (TAMP) (PM2)

The TAMP is a focal point for information about the bridge and pavement assets, their management strategies, long-term expenditure forecasts, and business management processes. The development of ALDOT's TAMP is consistent with ALDOT's desire to make data-driven spending decisions related to its assets. In short, ALDOT puts into practice, both on a regular basis and more specifically in the TAMP, better decision making based upon quality information and well-defined objectives. The TAMP will be a central resource for multiple ALDOT Bureaus for asset information, management strategies around those assets, financial sources and forecasting, and business management processes.

System Performance Measures (PM3)

System Performance Measures (PM3) assess the performance of the Interstate and Non-Interstate National Highway System (NHS) for the purpose of carrying out the National Highway Performance Program (NHPP); to evaluate freight movement on the Interstate System; and to analyze traffic congestion and on-road mobile source emissions for the purpose of carrying out the Congestion Mitigation and Air Quality Improvement (CMAQ) Program.

The Alabama Statewide Long-Range Plan provides a high-level description of existing and projected travel and maintenance conditions of Alabama's infrastructure. This Plan places emphasis on the roadway system because it is the primary mode of transportation for the movement of people and goods. The targets support system reliability along Alabama's infrastructure system.

The Alabama Statewide Freight Plan (FP) provides an overview of existing and projected commodity flow by mode (truck, rail, waterway, air, and pipeline) along existing and projected network characteristics through data analysis. In general, the FP provides an overall profile of Alabama's multimodal freight network, existing and projected freight flows by truck, and congested areas of concern throughout the state. The targets support the movement of freight which affects economic vitality.

The targets were set utilizing the FHWA's dataset source for travel time called National Performance Management Research Data Set (NPMRDS), Regional Planning Commission of Greater Birmingham's Air Quality Conformity Data, and other resources.

Transit Asset Management (TAM)

Transit Asset Management (TAM) is a business model that uses the condition of assets to guide the optimal prioritization of funding at transit properties to keep transit networks in a State of Good Repair (SGR). The benefits of the plan are: improved transparency and accountability, optimal capital investment and maintenance decisions, more data-driven decisions, and has potential safety benefits. This plan aligns with the transit targets under Transit Asset Management.

### 1.2.3 Consistency with Other Agencies and Plans

The development of the LRTP included involvement and coordination between several different agencies and organizations. Significant contributions were made toward this plan by the Federal Highway Administration (FHWA); the Federal Transit Administration (FTA); the Alabama Department of Transportation (ALDOT); the municipalities of Decatur, Hartselle, Priceville, and Trinity; the Counties of Morgan, Limestone, and Lawrence; the Decatur/Morgan County Chamber of Commerce; the Hartselle Chamber of Commerce; the Morgan County Economic Development Association (MCEDA); the Limestone County Economic Development Association (LCEDA); the Morgan County Commission; and several employers and civic groups located in the planning area.

The LRTP is consistent with and supportive of land use plans, growth management plans, safety studies, environmental studies, and other plans and studies developed by other agencies and municipalities concerning transportation related issues in the planning area. This includes the Transportation Improvement Program (TIP), the State Transportation Improvement Program (STIP), and the Decatur Comprehensive Plan.

### 1.2.4 Amendment Process

The LRTP will be amended as needed to adjust funding, time frames, or other factors relevant to the projects. New projects will be added if appropriate and if funding is available. Other projects may be moved into the Transportation Improvement Program (TIP) if funding is available, or deleted if funding is not available.

If Morgan County is designated nonattainment, based on the current National Ambient Air Quality Standards (NAAQS), the LRTP would have to be amended. An air quality conformity determination report would have to be added to the LRTP. In addition the LRTP project list might have to be adjusted in order to demonstrate conformity. After the LRTP has met the conformity requirement, any future LRTP amendments would have to prove conformity before adoption.

## 1.3 The Transportation Planning Process

The 3C transportation planning process is a cooperative, continuous, and comprehensive planning process that allows involvement of all users of the transportation system. This planning process follows a formal public involvement process that includes input from the business community, civic groups, environmental groups, freight operators, transit operators, and the general public for inclusion into plans and programs conducted by the Decatur Area Metropolitan Planning Organization (MPO) and the Alabama Department of Transportation (ALDOT).

### 1.3.1 MPO Structure

The overall decision-making responsibility for the 3C transportation planning process within the Decatur Metropolitan Planning Area (MPA) falls under the auspices of the Decatur Area Metropolitan Planning Organization (MPO) Policy Board. The Decatur Area Metropolitan Planning Organization was created in 1982 upon execution of an agreement between the municipalities of Decatur, Hartselle, Priceville, Trinity, and Flint City (now part of the City of Decatur); the North Central Alabama Regional Council of Governments (NARCOG); the Top of Alabama Regional Council of Governments (TARCOG); and the State of Alabama Highway Department (now the Alabama Department of Transportation). The Decatur Area MPO was moved in 2012 and is now housed as a department in the City of Decatur, while remaining under the auspices of the MPO Policy Board.

### 1.3.2 MPO Organization and Management

MPO Policy Board

The organization which is responsible for the overall efforts of the transportation planning process is the Decatur Area Metropolitan Planning Organization (MPO). The central unit of the MPO is the Policy Board, which consists of elected officials from the cities, towns, and counties within the designated planning area, as well as designated officials of pertinent state and federal agencies who interface with the transportation planning staff at the MPO.

The Decatur Area MPO Policy Board includes the following eleven (11) voting members:

- The Mayor and four council members from the City of Decatur
- The Mayor of the City of Hartselle
- The Mayor of the Town of Priceville
- The Mayor of the Town of Trinity
- The Chairman of the Morgan County Commission
- The Chairman of the Limestone County Commission
- North Region Engineer from the Alabama Department of Transportation

The Policy Board also includes the following three (3) non-voting members:

- A representative of the Local Transportation Bureau of the State of Alabama Department of Transportation
- A representative of the Federal Highway Administration (Alabama Division)
- A representative of the Lawrence County Commission

Executive Board

The Executive Board, subject to the will of the Policy Board, is charged with the general management of the affairs and business of the MPO including, without limitation, all matters relating to the employees of the City of Decatur whose duties are dedicated to the business of the MPO and whose compensation is paid by the City of Decatur with funds provided by the MPO. The Executive Board develops job descriptions for the employees, exercises control over their duties, and otherwise manages said employees, subject to the terms of the employment agreement with the City of Decatur. The Executive Board also exercises authority over employee disciplinary matters and, in the event of hiring new or replacement employees, is charged with recruiting and screening of applicants, from whom the Executive Board recommends job candidates for employment to the Policy Board. The Executive Board serves as the administrative arm of the MPO and administers the policies of the MPO as set by the Policy Board, as well as conducts and administers the general business of the MPO, subject to the ultimate authority of the Policy Board.

The Decatur Area MPO Executive Board includes the following members:

- The Mayor of the City of Decatur
- The Mayor of the City of Hartselle

- The Mayor of the Town of Priceville
- The Mayor of the Town of Trinity
- The Chairman of the Morgan County Commission

Technical Coordinating Committee (TCC)

Serving the Policy Board, in an advisory capacity, is the Technical Coordinating Committee (TCC). This committee includes planners, engineers, and other designated representatives who have a direct relationship to the transportation planning process within a specific jurisdiction on the federal, state, or local level.

The actions of the TCC are that of advising, reviewing, and supporting the Policy Board through analysis and evaluation of transportation projects, plans, and studies. This includes review and recommendations concerning the Unified Planning Work Program (UPWP), the Transportation Improvement Program (TIP), and the Long-Range Transportation Plan (LRTP). The everyday working knowledge and input of the people on this committee is invaluable to the transportation planning process for the planning area.

The Decatur Area MPO Technical Coordinating Committee (TCC) includes the following members:

Voting Members

- Planner, City of Decatur
- Engineer, City of Decatur
- Engineer, Town of Priceville
- Engineer, Town of Trinity
- Planner, City of Hartselle
- Department of Development Director, City of Hartselle
- Engineer, Morgan County
- Executive Director, NARCOG (Transit)
- President, Decatur/Morgan County Chamber of Commerce
- President, Morgan County Economic Development Association
- President, Limestone County Economic Development Association
- A representative of the U.S. Fish and Wildlife Service
- A representative of the Port of Huntsville
- A representative of Decatur Utilities
- A representative of the City of Decatur Police Department
- Director of Transportation, Decatur Area MPO

Non-Voting Members

- A representative of the Local Transportation Bureau of the State of Alabama Department of Transportation
- A representative of the North Region of the State of Alabama Department of Transportation

Citizens Advisory Committee (CAC)

Also serving in a participatory/advisory role is the Citizens Advisory Committee (CAC). The CAC is comprised of members from the transportation committee of the Decatur/Morgan County Chamber of Commerce, as well as members from the general public. The committee meets on a regular basis and is very much involved in the transportation planning process as a grass roots type organization that is capable and willing to explore new possibilities and options relative to all modes of transportation.

The CAC serves in a 'general interest' capacity. Its major function is that of representing the interest of the public and staying abreast of what is occurring in the transportation arena, while offering its opinion and suggestions on these issues. Other involvement includes:

- Reviewing and commenting on transportation plans prepared for the planning area
- Expressing transportation needs and concerns as perceived by local residents
- Responding to social, economic, and environmental impacts of transportation projects planned for the planning area
- Assisting the transportation staff in the development of specific solutions to area-wide transportation needs

Additional Committees

The Policy Board may seek input from additional committees at its discretion. Committee members may be comprised of persons with technical knowledge of projects, studies, and plans, as well as citizens from neighborhoods and communities throughout the planning area, to provide advice and recommendations to the Policy Board, TCC, and CAC. Examples of the committees include a Bicycle and Pedestrian Committee, and a Freight Committee.

All MPO Policy Board and Advisory Committee Meetings are subject to the Alabama Open Meetings Act, Alabama Code §36-25A. For additional information, please contact the Decatur Area MPO staff.

MPO Staff

The MPO staff is responsible for the day-to-day activities of the Decatur Area MPO. The staff works closely with the MPO membership concerning the transportation planning process. The MPO staff provides expertise and guidance on all transportation related activities concerning federal, state, and local transportation projects.

The MPO staff is housed within the City of Decatur as a stand-alone department. The MPO staff is under the day-to-day guidance of the Mayor of Decatur, and follows the personnel procedures laid out by the Personnel Board of the City of Decatur, though general management is carried out by the Decatur Area MPO Executive Board, as mentioned above.

## 1.4 MPO Area Boundaries

The Decatur Area MPO Metropolitan Planning Area (MPA) includes the municipalities of Decatur, Hartselle, Priceville, and Trinity, as well as the adjacent urban area located in Morgan County, eastern Lawrence County, and southern Limestone County in North Central Alabama. There are three (3) boundaries that are defined in the planning area (Figure 1).

Urbanized Area (UA)

According to the Bureau of the Census, and published in the Federal Register on March 27, 2012 (77 FR 18652), urbanized areas are delineated based on residential population density at the tract and block levels. The criteria for this delineation for the 2010 Census were published in the Federal Register on August 24, 2011 (76 FR 53030). An urbanized area is considered to be a densely populated area of more than 50,000 people. The Decatur, AL Urbanized Area (UA) boundary was defined in 2010 by the United States Census Bureau with a population of 70,436. The Urban Area covers 59.78 square miles.

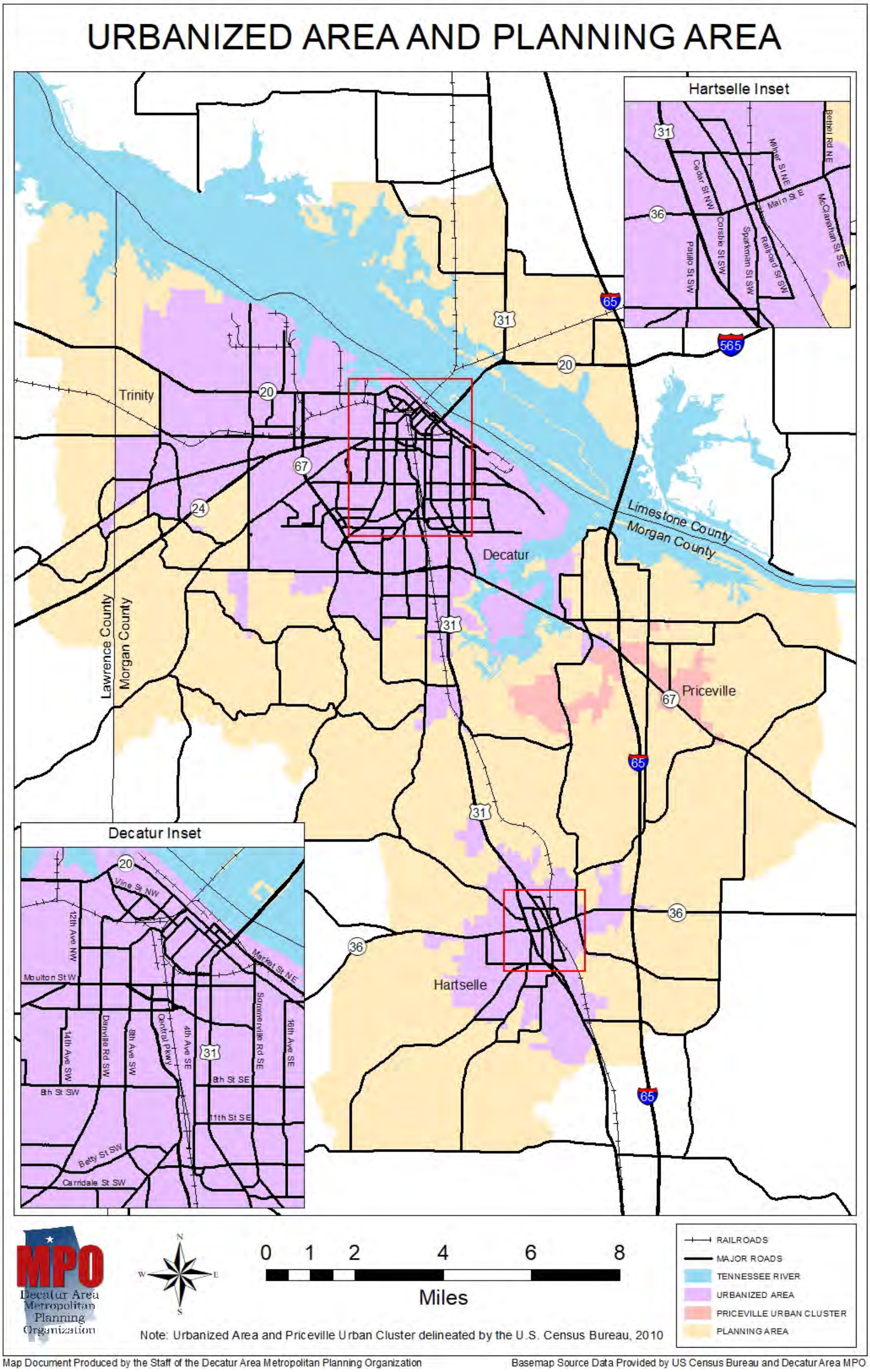
Urban Cluster (UC)

Urban clusters are similarly defined by the Census Bureau in the above mentioned entries into the Federal Register (76 FR 53030 and 77 FR 18652). Unlike urbanized areas (UAs), urban clusters are densely populated areas of between 2,500 and 50,000 people. The Priceville, AL Urban Cluster (UC) was defined in 2010 by the United States Census Bureau with a population of 3,006. The Priceville, AL Urban Cluster (UC) is adjacent to the defined Urbanized Area and covers 3.75 square miles.

Metropolitan Planning Area (MPA)

The Metropolitan Planning Area (MPA) boundary is defined by the Metropolitan Planning Organization (MPO) in cooperation with the Alabama Department of Transportation (ALDOT), and had a 2010 population of 91,009. The Planning Area is defined as the Urban Area boundary plus the area that is projected to become urbanized in the next twenty years. The Metropolitan Planning Area covers 249.18 square miles and is located along the Tennessee River in North Central Alabama

**Figure 1 Decatur Area MPO Urbanized and Metropolitan Planning Areas**



## 1.5 Public Participation

The process of preparing the LRTP included several opportunities for the input of comments by local elected officials, stakeholders, and the general public. The planning process included input by these groups early in the development of the plan. Public meetings and presentations were made to various groups and organizations concerning the development of the plan. In addition to the public meetings, the general public was allowed to provide comments virtually through social media and the MPO website. A detailed Public Participation Process for the development of the LRTP is included in Section 9.9 of this document.

Additional information on the public participation procedures employed by the Decatur Area MPO may be obtained by viewing the Public Participation Plan (PPP) found on the MPO website at: https://www.cityofdecatural.com/departments/metropolitan-planning-organization/

## 1.6 Documentation Process

This plan is an update of the current Long-Range Transportation Plan (LRTP) for the Decatur Metropolitan Planning Area (MPA). The Decatur Area MPO Policy Board adopted the current 2040 Long-Range Transportation Plan (LRTP) in October 2015. The base year of the current LRTP was 2010, with a horizon year of 2040. This update moves the base year forward to 2015, with a horizon year of 2045. The MPO Policy Board is responsible for the Transportation Planning Process for the MPA, to be carried out by the Director of Transportation Planning of the MPO.

## 1.7 Title VI in the Preparation of the LRTP

The Decatur Area Metropolitan Planning Organization (MPO) is committed to ensuring public participation in the development of all transportation plans and programs. It is the overall goal of the MPO that the transportation planning process be open, accessible, transparent, inclusive, and responsive. As a continuing effort by the MPO to provide public access and the means by which to engage in the planning process, the MPO has established the following public participation goals for all documents and programs:

1) An Open Process – To have an open process that encourages early and continued public participation. All MPO Policy Board and committee meetings are open to the public.
2) Easy Information Access – To provide complete and timely information regarding plans, programs, procedures, policies, and technical data produced or used during the planning process to the general public and the media. All MPO meeting announcements, documents, maps, and plans can be viewed at: https://www.cityofdecatural.com/departments/metropolitan-planning-organization/
3) Notice of Activities – To provide timely and adequate public notice of hearings, meetings, reviews, and availability of documents.
4) Public Input and Organizational Response – To demonstrate consideration and recognition of public input and comments, and to provide appropriate responses to public input.

5) An Inclusive Process – To encourage participation in the planning process by traditionally under represented segments of the community; low-income groups, minorities, persons with disabilities, and the elderly; and to consider the needs of these groups when developing programs, projects, or plans.

Additionally, the Decatur Area MPO will be compliant with the Rehabilitation Act of 1973 (Section 504) and the Americans with Disabilities Act of 1990 in July 2016. The MPO is, and will be, compliant with the following Title VI programs, processes, and procedures:

- Civil Rights Act of 1964, 42 USC 2000d, et seq. which prohibits exclusion from participation in any federal program on the basis of race, color, or national origin.
- 23 USC 324 which prohibits discrimination on the basis of sexual orientation, adding to the landmark significance of 2000d. This requirement is found in 23 CFR 450.334(1).
- Rehabilitation Act of 1973, 29 USC 701 Section 504, which prohibits discrimination on the basis of a disability, and in terms of access to the transportation planning process.
- Americans with Disabilities Act of 1990 which prohibits discrimination based solely on disability. ADA encourages the participation of people with disabilities in the development of transportation and para-transit plans and services. In accordance with ADA guidelines, all meetings conducted by the MPO will take place in locations which are accessible by persons with mobility limitations or other impairments.
- Executive Order 12898, or referred to as *Environmental Justice*, which requires that federal programs, policies, and activities affecting human health or the environment will identify and avoid disproportionately high and adverse effects on minority or low-income populations. The intent was to ensure that no racial, ethnic, or socioeconomic group bears a disproportionate share of negative environmental consequences resulting from government programs and policies.
- Limited English Proficiency (LEP) Plan which is required by Title VI of the Civil Rights Act of 1964, Executive Order 13166, and FTA Circular C 4702.1B, October 2012. The Decatur Area MPO has completed a Four Factor Analysis of the Decatur Area Metropolitan Planning Area (MPA) to determine requirements for compliance with the Limited English Proficiency (LEP) provisions. Based on the analysis, the MPO has identified a population within the MPA that may require MPO assistance in participating in the planning process. A Limited English Proficiency (LEP) Plan has been adopted and can be found at: https://www.cityofdecatural.com/departments/metropolitan-planning-organization/

In order to further support the public participation goals of the Decatur Area MPO, the public is encouraged to participate in the development of the LRTP. The 2045 LRTP process will include two public involvement meetings designed to obtain input from the public concerning the LRTP process in the Decatur Area Metropolitan Planning Area (MPA). In addition, once the draft LRTP is approved, it will be subject to a 30-day public comment period before adoption of the final document. A summary of the public outreach activities and results are included in the Appendices. All Decatur Area MPO meetings are open to the public. At these meetings, the MPO committees review and approve the draft and final LRTP documents. Interested individuals may also review and comment upon these documents in tandem with the MPO committees. Individuals may address

their concerns to the MPO committees directly at any meetings they attend. The transportation planning staff at the Decatur Area MPO should be contacted to coordinate an address to the MPO committees and to obtain draft and final documents.

Additional information on the public participation procedures employed by the Decatur Area MPO may be obtained by viewing the Public Participation Plan (PPP) found on the MPO website at: https://www.cityofdecatural.com/departments/metropolitan-planning-organization/

## 1.8 Environmental Justice (EJ)

In 1994, Executive Order 12898: *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations* was signed by the President. This Executive Order requires that programs, policies, and activities that affect human health or the environment should identify and avoid disproportionately high and adverse effects on minority and low-income populations. Environmental Justice aims to ensure that no racial, ethnic, or socioeconomic group bears a disproportionate share of negative environmental consequences resulting from government programs and policies. The Decatur MPO makes a point to seek out and consider the needs of those traditionally underserved by existing transportation systems, such as low-income and minority households, who may face challenges accessing employment or services. This is of primary concern when considering adverse community impacts at the project level. All projects are reviewed by the Decatur Area MPO Policy Board, advisory committees, and staff for possible community impacts prior to inclusion into the LRTP.

## 1.9 Americans with Disabilities Act (ADA)

The Americans with Disabilities Act of 1990 encourages the participation of people with disabilities in the development of transportation and para-transit plans and services. In accordance with ADA guidelines, all meetings conducted by the MPO will take place in locations which are accessible by persons with mobility limitations or other impairments. Further, all states and local governments are required to be compliant with Section 504 of the Rehabilitation Act of 1973 and the 1990 Act.

## 1.10 Limited English Proficiency (LEP) and Language Assistance Plan

In accordance with Title VI of the Civil Rights Act of 1964, 42 USC 2000d, et seq., and Executive Order 13166, titled *Improving Access to Services for Persons with Limited English Proficiency*, the Decatur Area MPO developed a Limited English Proficiency (LEP) Plan. Title VI states that, "no person in the United States shall, on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance." Executive Order 13166 expands Title VI by indicating that differing treatment based upon a person's inability to speak, read, write, or understand English is a type of national origin discrimination. All federal agencies publish guidelines for its funding recipients to clarify their obligations to ensure that this discrimination does not take place. As a recipient of federal funds through the United States Department of Transportation (USDOT), the Decatur Area Metropolitan Planning Organization (MPO) must comply with these guidelines.

Additional information on the LEP procedures employed by the Decatur Area MPO may be obtained by viewing the Limited English Proficiency Plan found on the Decatur MPO website at: https://www.cityofdecatural.com/departments/metropolitan-planning-organization/

## 1.11 Environmental Mitigation

The current federal legislation contains a requirement that the Long-Range Transportation Plan (LRTP) includes "a discussion of types of potential environmental mitigation activities and potential areas to carry out these activities, including activities that may have the greatest potential to restore and maintain the environmental functions affected by the metropolitan transportation plan." -23USC §134(i)(2)(D)(i).

"This discussion shall be developed in consultation with Federal, State, and Tribal land management, wildlife, and regulatory agencies." -23USC §134(i)(2)(D)(ii).

A three-step process was used to help address this FAST Act requirement:

1) Define and inventory the environmentally sensitive species and resources
2) Identify and assess likely impacts on these species and areas from transportation projects
3) Address possible mitigation at the system-wide level through consultation with other agencies

## 1.12 Climate Change

"According to the FHWA report *Integrating Climate Change into the Transportation Planning Process*, there is general scientific consensus that the earth is experiencing a long-term warming trend and that human-induced increases in atmospheric greenhouse gases (GHGs) may be the predominant cause. The combustion of fossil fuels is by far the biggest source of GHG emissions. In the United States, transportation is the largest source of GHG emissions, after electricity generation. Within the transportation sector, cars and trucks account for a majority of emissions. Opportunities to reduce GHG emissions from transportation include switching to alternative fuels, using more fuel efficient vehicles, and reducing the total number of miles driven. Each of these options requires a mixture of public and private sector involvement. Transportation planning activities, which influence how transportation systems are built and operated, can contribute to these strategies. In addition to contributing to climate change, transportation will likely also be affected by climate change. Transportation infrastructure is vulnerable to predicted changes in sea level and increases in severe weather and extreme high temperatures. Long-term transportation planning will need to respond to these threats."

*Introduction to Integrating Climate Change into the Transportation Planning Process* - Federal Highway Administration, Final Report, July 2008

## 1.13 Air Quality Planning

The Clean Air Act (CAA) was originally adopted in 1963 and most recently amended in 1990. The purpose of the Clean Air Act (CAA) is to improve air quality and to protect human health. The Clean Air Act requires the Environmental Protection Agency (EPA) to establish tolerance limits on ground level and atmospheric pollutant concentrations through enactment of the National Ambient Air Quality Standards (NAAQS). In 2008, the Environmental Protection Agency (EPA) lowered the National Ambient Air Quality Standards (NAAQS) for ground level ozone from 84 to 75 parts per billion (ppb). In 2015, the EPA lowered the NAAQS Standards for ground level ozone again to 70 parts per billion (ppb). This lower standard had the potential to affect the Decatur Metropolitan Planning Area (MPA).

As of the adoption of this document, the Environmental Protection Agency (EPA) has not determined Morgan and Limestone counties to be designated as non-attainment for ground level ozone.

## 1.14 Safety

The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) required every state to develop a Strategic Highway Safety Plan (SHSP) in order to improve highway safety. This requirement was continued in MAP-21 and the FAST Act. In 2006, Alabama adopted a SHSP (currently updated to the third edition in 2017) that was based on an analysis of fatal automobile crashes in the state. The SHSP includes four (4) emphasis areas: high-risk behavior, at-risk road users, infrastructure and operations, and decision and performance improvement. The SHSP provides direction for ALDOT to allocate resources as it is implemented. ALDOT and its safety partners use the SHSP to guide investment decisions for safety programs. The current ALDOT safety program priorities are roadway departure, intersection improvements, and wrong-way driving improvements, along with impaired driving and occupant protection which have historically been priority programs for the department.

## 1.15 Livability Principles and Indicators

Increasingly, federal and state agencies are using Performance Measures as a way of ensuring greater accountability for the expenditure of public funds in an ever-growing number of programs and activities across a variety of disciplines. Within the transportation sector, and the planning processes associated with transportation infrastructure development, ALDOT has adopted the Livability Principles and Indicators as a sustainability measurement against future actions.

All planning tasks must be measured against these **Livability Principles:**

1) Provide more transportation choices
2) Promote equitable affordable housing
3) Enhanced economic competitiveness
4) Support existing communities
5) Coordinate policies and leverage investment
6) Value communities and neighborhoods

As a measure of sustainability of these principles, the MPO will provide the following **Livability Indicators** (Livability Indicators numbering relates to corresponding Livability Principles):

1) Percent of transit ridership of workers
1) Percent of workers using other means of transportation to work (transit, walk, bicycle, etc.)
2) Percent of household income spent on housing and transportation
3) Percent of housing units located within one (1) mile of the Central Business District (CBD)
4) Number of projects contained in the current Transportation Improvement Program that enhances or supports existing communities (non-roadway projects)
5) Number of projects contained in the current Transportation Improvement Program that includes Public and Private Collaboration and funding
6) Number of housing units within ½ mile of a Regional Trail System

The Indicators can be found in Section 9.4 on page 90 of this document.

## 1.16 Plan Adoption

Adoption of the 2045 Decatur Area Long-Range Transportation Plan (LRTP) is subject to the review and approval of the Policy Board of the Metropolitan Planning Organization (MPO). The review process includes public involvement meetings and a comment period to allow the public input into the development of the LRTP. At the conclusion of the public meetings and comment period, the MPO staff reviews and summarizes all submitted comments and presents the findings to the Policy Board for consideration of input into the LRTP. Once approved, the Decatur Area MPO submits the Final 2045 LRTP to the Alabama Department of Transportation (ALDOT), the Federal Highway Administration (FHWA), and the Federal Transit Administration (FTA). These agencies then review the plan to ensure compliance with federal and state regulations.

## 1.17 Plan Implementation

Implementation of the LRTP occurs through a series of short and long-range plans and programs. The Unified Planning Work Program (UPWP) identifies annual work tasks and work products that guide the planning activities for the transportation planning process. The Transportation Improvement Program (TIP) is a short range program that prioritizes a list of transportation projects scheduled for project design and engineering, right-of-way acquisition, utility relocation, or construction for the next four (4) years. The projects included in the TIP are taken from the LRTP.

# 2.0 Vision Statement, Goals, and Objectives

## 2.1 Vision Statement

The vision of the Decatur Area Metropolitan Planning Organization (MPO) is to promote, enhance, and maintain a safe, efficient, and environmentally friendly transportation system that enhances the quality of life and economic prosperity throughout the planning area.

## 2.2 Goals

The following goals were developed to help define the vision statement and to help guide the MPO in the project selection process for the 2045 Long-Range Transportation Plan (LRTP):

- Provide a safe and efficient transportation system
- Improve the accessibility, connectivity, and mobility of the transportation system for the movement of people, goods, and services for all modes in and throughout the planning area
- Provide a transportation system that will preserve, protect, and enhance the natural and human environment
- Maintain quality performance of the transportation system through efficient congestion management and operations
- Provide meaningful opportunities for public involvement in the transportation planning process

## 2.3 Objectives

Contrary to goals, objectives are more precise intentions that are measurable. The Decatur Area MPO developed the following objectives for the each mode of the transportation system:

<u>Highway and Streets (collector and above)</u>

- Development of highways and streets that are consistent with local land use and development plans
- Increase the connectivity of the existing network, locally and regionally
- Development of highways and streets that relieve traffic congestion and travel times
- Development of highways and streets that reduce accident potential and severity
- Include sidewalks and bicycle facilities in the design of highways and streets to accommodate and encourage pedestrian and bicycle travel
- Develop visually attractive highways and streets

<u>Public Transit</u>

- Establish programs and services that encourage transit ridership
- Serve the elderly, low income, and populations at a disadvantage to reasonable access of needed services

- Maximize transit's coverage area to the extent feasible
- Facilitate the integration and coordination of transit services by all transit service providers
- Operate safe and efficient transit services that minimize costs, travel times, and travel distances
- Implement land use strategies that promote transit participation and coverage

Bicycle and Pedestrian

- Improve the transportation system to accommodate pedestrian and bicycle access along roadways through design and facility standards
- Increase pedestrian and bicycle safety through public education programs
- Provide access for pedestrians and bicycles between neighborhoods, schools, employment centers, retail areas, central business districts, churches, and cultural centers
- Promote the use of pedestrian and bicycle facilities to relieve traffic congestion

Intermodal System including Rail Transportation, Air Transportation, and Freight Movements

- Develop a transportation system that reduces travel times and congestion on the transportation network
- Improve the transportation system to increase accessibility and provide compatibility with multiple modes of transportation
- Identify opportunities to expand intermodal facilities in the planning area
- Designate truck routes that minimize exposure to neighborhoods, historic, and cultural resources
- Work with officials from all modes of transportation to enhance, promote, and safely move people, goods, and services in and through the planning area

Environment

- Develop transportation systems that maintain or improve air quality
- Develop transportation systems that preserve and complement the area's natural features
- Plan, design, and develop transportation systems that protect cultural and historic resources
- Develop and educate public officials and the general public on environmental policies involving transportation projects in the planning area

Financial

- Minimize implementation and operation costs of transportation projects
- Develop transportation projects that enhance state, local, and regional economies
- Actively explore new sources of revenue

# 3.0 Existing Transportation System

## 3.1 Geographic Area

The Decatur Area MPO is located in the North Central section of North Alabama (Figure 1 on page 12). The MPO Area is comprised of the municipalities of Decatur, Hartselle, Trinity, and Priceville and portions of Morgan, Limestone, and Lawrence Counties. The Decatur MPO Area is included in the Decatur Metropolitan Statistical Area (MSA) with a 2010 estimated population of 153,829.

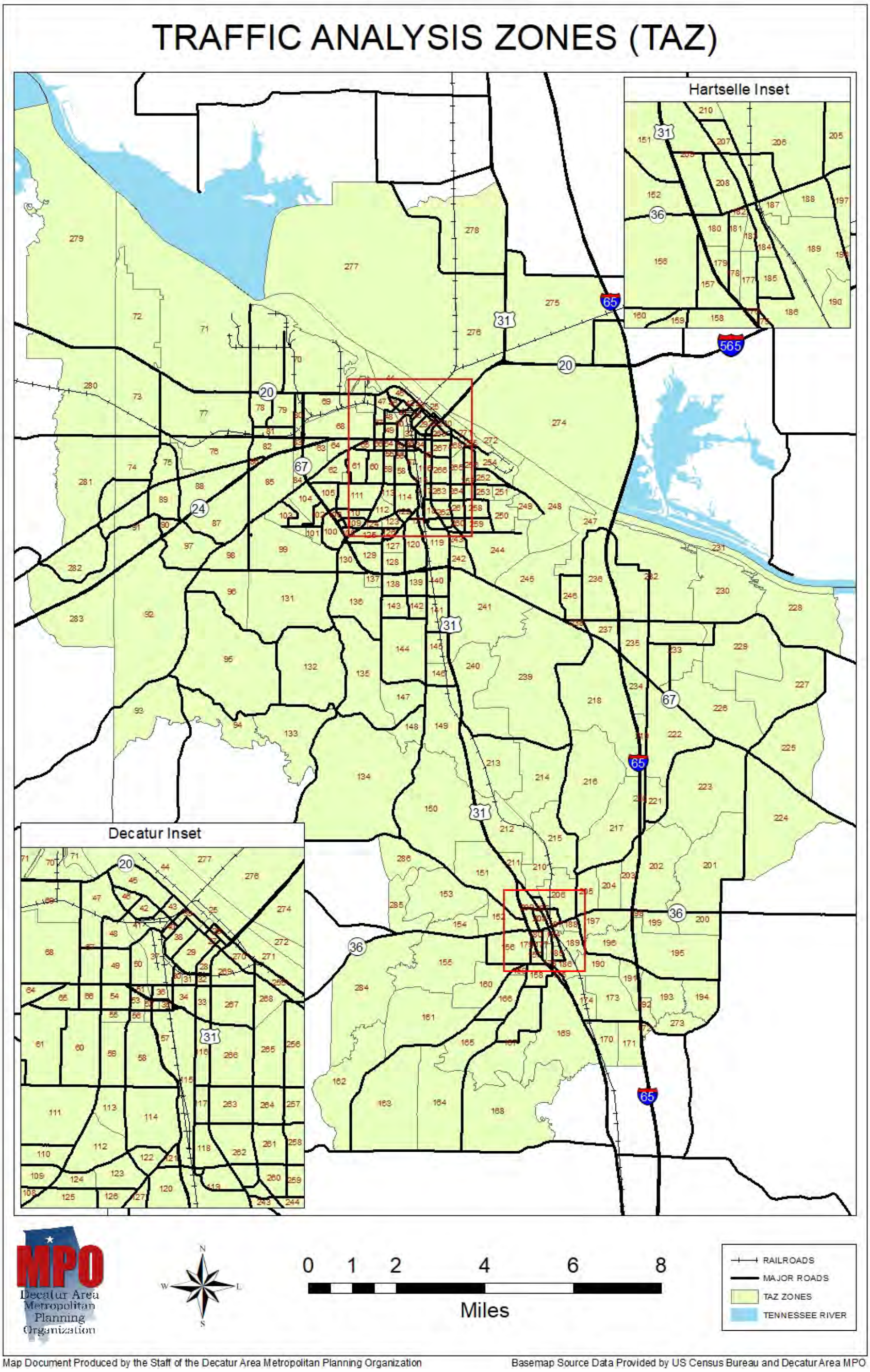
## 3.2 Urban and Planning Area Boundaries

The Decatur Metropolitan Planning Organization (MPO) is defined by two boundaries. The Urban Area (UA) boundary was defined by the U.S. Census Bureau in 2010. This Urban Boundary is updated during each decennial census, and had a population of 70,436 in 2010. The Metropolitan Planning Area (MPA) boundary is defined as the Urban Area Boundary plus the area that is projected to become urbanized over the next twenty (20) years. The Metropolitan Planning Area (MPA) had a 2010 population of approximately 91,009. The Urban Area and Planning Area Boundaries are shown in Figure 1 on page 12.

## 3.3 Traffic Analysis Zones

The Metropolitan Planning Area (MPA) is divided into smaller areas called Traffic Analysis Zones (TAZ). A traffic analysis zone is defined as a subdivision of the planning area consisting of homogeneous land use within a distinct border for the compilation of land use and traffic generation data. The TAZ system was developed from 2010 census data including tract, block group, and block level geography. A total of 286 TAZ zones are included within the Metropolitan Planning Area (MPA) boundary, as shown in Figure 2.

**Figure 2 Traffic Analysis Zones (TAZ)**



## 3.4 Land Use

The interrelationship between land use and the transportation system is used to identify the demand for travel on the highway network. Each land use (residential, retail, non-retail, etc.) generates and attracts traffic dependent on the nature of the development and the amount of land developed. In order to identify this demand for travel, inventories of existing land uses must be accomplished. This information is used in conjunction with physical location, constraints of the roadway network, and other related factors to develop the interrelationship between land use and the transportation system.

Each traffic analysis zone (TAZ) within the planning area was inventoried to determine the existing primary land use within its boundary. Factors used to characterize land use within each TAZ are listed below:

- Occupied Housing Units
- Median Household Income
- Retail Employment
- Non-Retail Employment
- School Enrollment
- Dorm Rooms

Each primary land use noted above and its corresponding total quantity within the planning area is listed in Table 1 below.

**Table 1 2015 Socio-Economic Data Totals**

| Land Use | Total 2015 |
|---|---|
| Occupied Housing Units | 39,800 |
| Median Household Income | $45,255 |
| Retail Employment | 8,607 |
| Non-Retail Employment | 46,195 |
| School Enrollment | 19,300 |
| Dorm Rooms | 0 |

The land use data was collected by using the following data sources:

- 2010 U.S. Census Data
- Census Transportation Planning Package (CTPP)
- American Community Survey (ACS)
- InfoGroup (employment data)
- Morgan County Aerial Photography
- Local Building Permits
- Decatur Morgan County Chamber of Commence
- Morgan County Economic Development Association (MCEDA)
- Local Boards of Education
- Hartselle Chamber of Commerce
- Yellow Pages

It should be noted that the household and median income data is collected at the home end of a trip, the employment data is collected at the work site, and school enrollment is collected at the school site.

## 3.5 Existing Transportation System

The existing conditions analysis of the transportation system for the LRTP was developed based on factors such as roadway classifications and physical descriptions, regional access routes, roadway traffic volumes, link analysis, bicycle and pedestrian facilities, and an analysis of the public transit system. These factors were used to analyze the Decatur Metropolitan Planning Area (MPA) transportation network in order to determine deficiencies in the existing system.

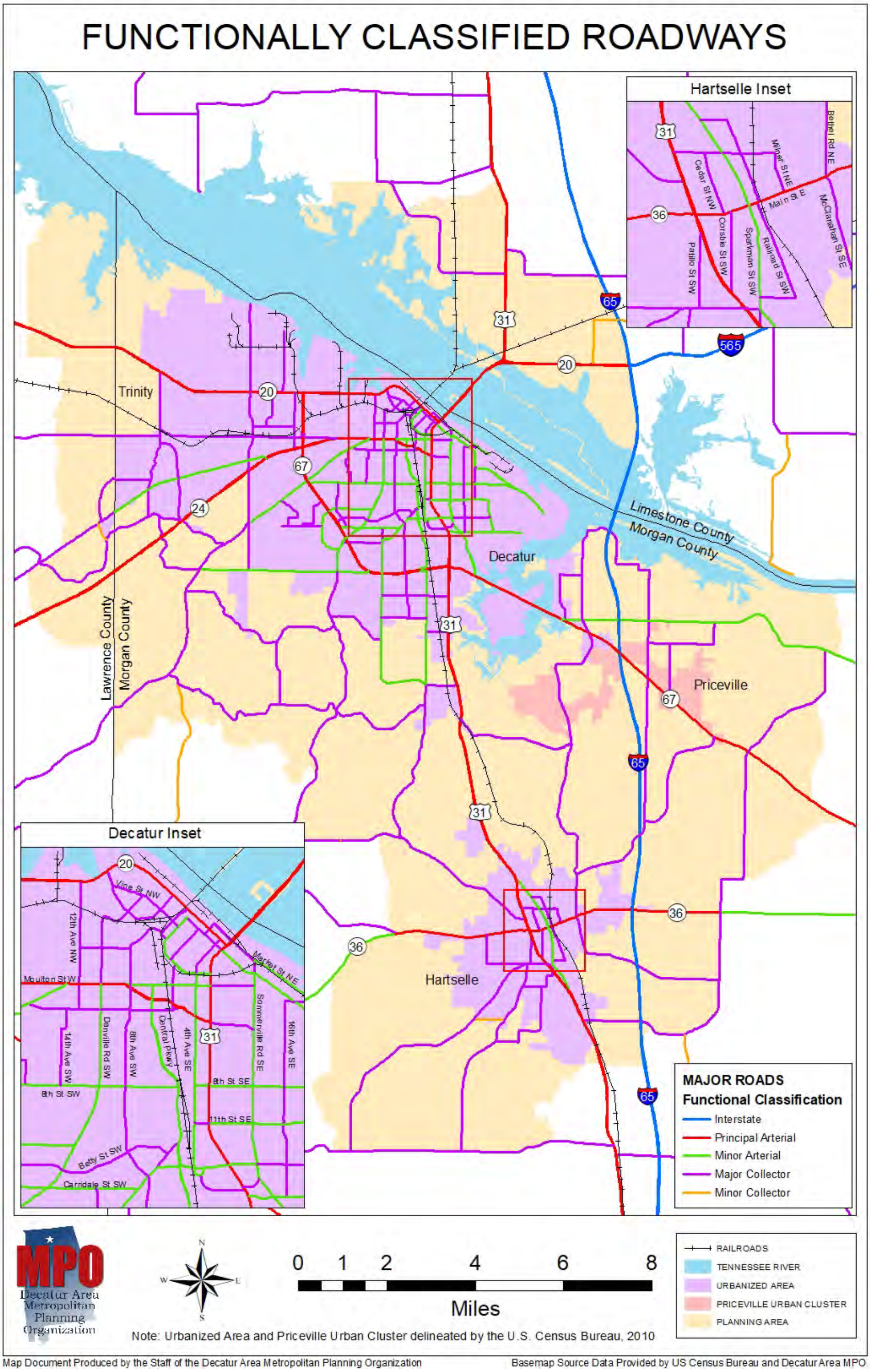
## 3.6 Roadway Classification and Descriptions

All transportation networks have some form of functional classification (Figure 3) to categorize the hierarchy of the traffic movement in the system. The functional classification for the planning area is defined by following four types of roadways, interstate, principal arterials, minor arterials, and collectors. An inventory of the functionally classified road system including un-classified local roads is listed in Table 2 below.

**Table 2 Roadway Classification and Inventory**

| **Functional Classification** | **Miles of Roadway** |
|---|---|
| Interstate | 18.65 miles |
| Freeway and Expressway | 0 miles |
| Principal Arterial | 70.32 miles |
| Minor Arterial | 61.76 miles |
| Major Collector | 187.31 miles |
| Minor Collector | 4.29 miles |
| Un-Classified Local Roadways | 734.40 miles |
| Total | 1,076.73 miles |

**Figure 3 Functionally Classified Roadways**



## 3.7 Public Transit System

Public transit service is available to all of the planning area. This service is managed and operated by the NARCOG Regional Transit Agency (RTA), under the auspices of the North Central Alabama Regional Council of Governments. NARCOG RTA operates two (2) major programs of public transit, the 5307 urban program and the 5311 rural program.

The 5307 urban transit service is a demand-response passenger pick-up service and has Americans with Disabilities Act (ADA) equipped vehicles available. The urban transit service is available Monday through Friday from 7:00 am to 5:00 pm, with reservations made one (1) day in advance. NARCOG RTA provides subscription service to the Morgan County Commission on Aging and the North Central Alabama Community Action Agency's Foster Grandparent and Senior Companion Program.

The 5311 rural program is also a demand-response passenger pick-up service and has ADA-equipped vehicles available. The service is also operated Monday through Friday from 7:00 am to 5:00 pm. NARCOG RTA offers rural program subscription services to human resource clients into non-urban areas, as well as from the non-urban area to the urban area.

The cost to ride NARCOG RTA is $2.00 each way inside the urban area. Each rural area trip is $2.00 for every 5 miles, with no one-way trip costing over $10.00. Trips outside the NARCOG RTA service area are $1.00 per mile.

The 5307 and 5311 services are provided by forty-three (43) vehicles, including thirty-seven (37) cutaways and six (6) minivans.

The combined ridership on the urban and rural systems in fiscal year 2019 was 141,928 passenger trips traveling approximately 612,917 miles.

The current Transportation Improvement Program (TIP) indicates that the 5307 urban program funding level for FY 2019 is $1,180,000 in operational expenses and administrative costs. Federal funds account for $651,500 of the total funds and the remaining $391,000 are provided by local funding. The 5311 rural program for FY 2019 has $252,500 in administrative costs and operational expenses, with $241,884 in federal funds and $138,500 of local matching funds. Federal sources fund eighty (80) percent of the capital funding with the remaining twenty (20) percent coming from local matching funds. The operational expenses are split fifty (50) percent federal and fifty (50) percent local matching funds after the fare box revenues are subtracted.

At the present time, there is no fixed route system running in the planning area.

Current short- and long-term goals of the area transit system include:

- Improved Safety
- Increased Bicycle Accommodation
- Downtown Fixed Route Feasibility
- College Campus Shuttle Service (Calhoun Main Campus to Downtown Arts Center)

## 3.8 Bicycle and Pedestrian Facilities

The MPO bicycle and pedestrian transportation system is comprised of a combination of on-road facilities (bicycle lanes, paved shoulders, shared lanes, and crosswalks) and off-road facilities (multi-use trails, side-paths, and sidewalks). In certain cases in the planning area both on- and off-road facilities come together to form bikeways that connect important recreational facilities. Maps of the existing bicycle and pedestrian facilities within each city inside the Metropolitan Planning Area (MPA) can be found in Section 9.5. A detailed listing of the on- and off-road facilities found within the MPA is provided below.

### 3.8.1 On-Road Facilities

Bicycle Lanes

Designated bicycle lanes can be found on a limited number of streets within the City of Decatur. They have been included as a part of the Decatur bikeway system and where it was deemed appropriate to provide pavement markings dedicating lanes for exclusive use by bicycles. Typically bicycle lanes are located to the outside of travel lanes and are marked with a bicycle symbol or written communication denoting use for bicycles only. Examples of this can be found on Modaus Road, between Danville Road and SR-67, and on 10th Avenue NE, between Market Street and Church Street. Pavement markings for designated bicycle lanes conform to guidelines from the Manual on Uniform Traffic Control Devices (MUTCD), as well as in publications by the American Association of State Highway and Transportation Officials (AASHTO). Dedicated bicycle lanes are shown on the existing bicycle and pedestrian facilities maps in Section 9.5.

Paved Shoulders

Some roads in the planning area have wide shoulders that meet bicycle lane criteria, but are not specifically designated as bicycle lanes. These lanes are not striped or marked in any way to designate a bicycle facility and do not continue through intersections. In these cases, bicycles are expected to merge through the travel lanes shared with motor vehicle traffic. An example of a road with paved shoulders capable of accommodating bicycles is Beltline Road whose widening project included wide paved shoulders. The roads with these paved shoulders can be found on the existing bicycle and pedestrian facilities maps in Section 9.5.

Shared Lanes

While bicycles are permitted on all roadways within the planning area, most streets do not have separate on-road facilities designated specifically for bicycles. In these cases bicycles and motor vehicle traffic share the travel lanes. On most low-speed local streets this arrangement works well and provides few conflicts. Where these shared lanes are significant as a part of the Decatur bikeway system, they are shown on the existing bicycle and pedestrian facilities maps in Section 9.5. Some shared lanes in the planning area are wide enough for motorists to pass bicycle traffic without crossing the center line. This arrangement is known as a wide shared lane. AASHTO specifies a minimum of 14 foot lane width for wide shared lane designation.

Crosswalks

Crosswalks are provided across the planning area as a means for safe pedestrian travel across motor vehicle travel lanes. There are over 200 individual crosswalks in the planning area serving a wide range of pedestrian travel purposes. The largest concentration of pedestrian crosswalks can be found in the downtown areas of the cities of Decatur and Hartselle. These facilities provide safe access to the commercial opportunities within the downtown areas such as restaurants and shopping. Crosswalks can also be found near the area schools to provide an alternative means of travel to and from school. These crosswalks conform to Safe Routes to Schools (SRTS) standards and guidelines.

### 3.8.2 Off-Road Facilities

Multi-Use Trails

Multi-use trails are similar in function to the on-road facilities in the planning area, in that they provide for alternative transportation choices and recreational usage. Multi-use trails are open to both bicycle and pedestrian access while prohibiting motorized vehicle access. They provide for safe travel with limited crossings of major roads. Most multi-use trails within the planning area are ADA compliant with the only exceptions being those seasonal multi-use trails maintained by the US Fish and Wildlife Service located on the Wheeler National Wildlife Refuge. These trails are unpaved so as to impact the wildlife habitats as little as possible, but still provide access to refuge staff and the general public. Most of these trails are open year round for bicycle and pedestrian access with the exception of those surrounding the visitor center, which close during peak waterfowl seasons. The multi-use trails can be found on the existing bicycle and pedestrian facilities maps in Section 9.5.

Side-paths

Side-paths are similar to multi-use trails. They share the same characteristics, except that side-paths follow alongside of roadways. They are made to accommodate both bicycle and pedestrian travel. Side-paths serve as a good pedestrian facility but are marginal as a bicycle facility. AASHTO points out that there are operational difficulties presented to bicycles on side-paths. These difficulties mainly arise in association with driveway crossings and at intersections. For these reasons AASHTO discourages the use of side-paths as a rational to forgo on-road bicycle facilities. The side-paths in the planning area are shown on the existing bicycle and pedestrian facilities maps in Section 9.5.

Sidewalks

Sidewalks are an integral part of the pedestrian transportation system within the MPO. They are the primary means of pedestrian travel within the planning area. The largest concentration of sidewalks can be found within the downtown areas of the cities of Hartselle and Decatur and, thanks to new subdivision regulations, they are increasingly being implemented within the newly built subdivisions across the area. Sidewalks in the MPA are intended primarily for pedestrian foot traffic with bicyclists being encouraged to use the roadways. The sidewalk network can be seen represented on the existing bicycle and pedestrian facilities maps in Section 9.5.

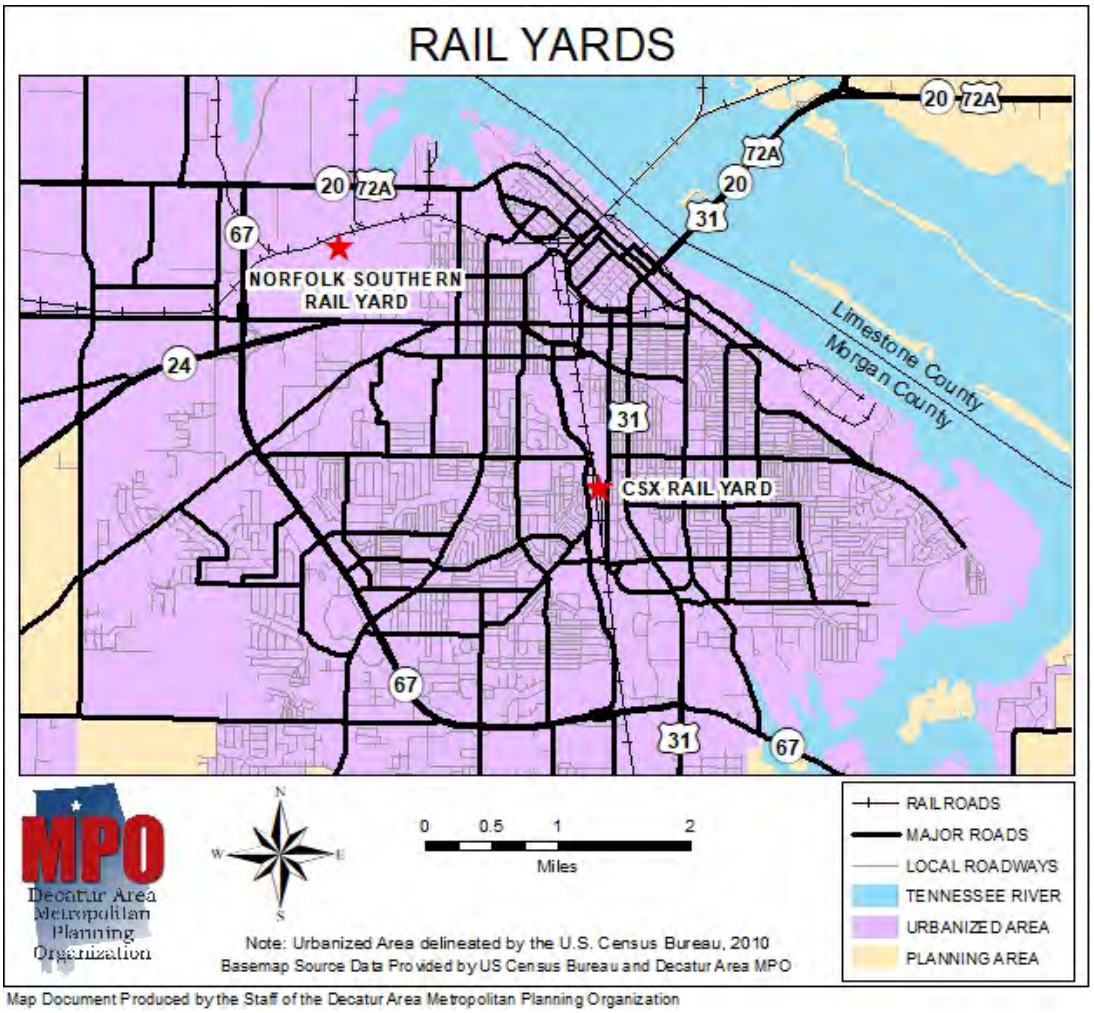
## 3.9 Freight Planning

The efficient movement of goods is vital to our communities' quality of life, their economy, and to local industries that rely significantly on freight, including manufacturers, distributors, retailers, and agriculture. Therefore, planning for the efficient transport of goods is a key component of this Long-Range Transportation Plan.

### 3.9.1 Rail Service

Included in the existing transportation system are two (2) Class I railroads. CSX Corporation and Norfolk-Southern Corporation both have rail yard facilities (Figure 4) in the Metropolitan Planning Area. The CSX rail yard facility is located near downtown Decatur. The CSX rail line is one of the primary north-south lines in the Nashville Division. The line originates near Panama City, Florida and passes into the Chicago Division just north of Nashville, Tennessee. The Norfolk-Southern rail yard is located near downtown Decatur as well. The Norfolk-Southern line is a major east-west line that connects to Memphis, Tennessee and Chattanooga, Tennessee. It should be noted that there is currently no passenger rail service in the planning area.

**Figure 4 Rail Yards Located within the Metropolitan Planning Area**



## 3.9.2 Air Service

The Metropolitan Planning Area (MPA) is served by three (3) airports (Figure 5). Two (2) of the airports, Pryor Field in Limestone County and Hartselle-Morgan County Regional Airport in Hartselle, are general aviation airports. The planning area is also served by the Huntsville International Airport (HSV) located on Interstate 565 near Madison, Alabama. Below is a description of each airport:

Pryor Field Regional Airport (DCU) – Pryor Field is a general aviation airport located three (3) miles northeast of downtown Decatur and adjacent to Calhoun Community College in Limestone County. The airport has one (1) paved runway that is 6,107 x 100 ft. with pilot controlled lights. There were 110 aircraft based at the airport as of August 2020.

Hartselle-Morgan County Regional Airport (5M0) – Hartselle Regional is a general aviation airport located in southwest Hartselle approximately one mile from U.S. Highway 31. The airport has one paved runway that is 3599 x 75 ft. There were 21 aircraft based at the airport as of August 2020. Average air traffic per day is estimated to be around 42 flights.

Huntsville International Airport (HSV) – The Huntsville International Airport serves as a general aviation, commercial passenger air service, and cargo operations airport for north Alabama and southern Tennessee. In 2019, the Federal Aviation Administration reported that approximately 1,270,000 passengers were served at the airport. The airport has two paved runways that are 12,600 x 150 ft. and 10,001 x 150 ft. There were 86 aircraft based at the airport as of August 2020. Average air traffic per day is estimated to be 194 flights. Table 3 below lists airlines that provide passenger service at the airport and also the non-stop destinations served as of August 2020.

**Table 3 Airlines and Destinations served by the Huntsville International Airport**

| Airline | Non-Stop Destinations |
|---|---|
| American Airlines | Dallas/Ft. Worth |
| | Chicago (O'Hare) |
| | Charlotte |
| | Washington D.C. (National) |
| Delta | Atlanta |
| | Detroit |
| United | Denver |
| | Washington D.C. (Dulles) |
| | Chicago (O'Hare) |
| | Houston |
| Frontier Airlines | Orlando |
| | Denver |
| Silver Airways | Orlando |

Source: Huntsville International Airport

### 3.9.3 Intermodal Connectors

Air

The Huntsville International Airport is noted for its major intermodal cargo facility called the International Intermodal Center (IIC). The Intermodal Center is an inland port which provides a single hub location for freight movements. The Intermodal Center offers a broad range of services which includes receiving, transferring, storing, and distributing cargo by air, rail, and highway. The Intermodal Center is a global air cargo hub with over 1 million square feet of cargo ramp space and has service to multiple cities in Europe and Mexico, as well as Brazil and Hong Kong. The Intermodal Center is also served by a spur off of the Norfolk-Southern main rail line. The intermodal rail yard is approximately forty-five acres has six miles of tracks and parking for 1,700 wheeled units. The International Intermodal Center is located approximately twelve miles from downtown Decatur along Interstate 565 (Figure 5). The International Intermodal Center is designated as a U.S. Customs Port of Entry which is home to 24 hour U.S. Customs, U.S. Department of Agriculture inspectors, and is part of Foreign Trade Zone 83. The Intermodal Center is used by industries, freight providers, etc. in the Metropolitan Planning Area (MPA). Approximately sixteen (16) percent of intermodal rail service originates in Morgan County.

Ports

The planning area is also served by a navigable waterway, the Tennessee River. There are three (3) port terminals located along the Tennessee River in Decatur (Figure 5). Mallard-Fox Creek, the Morgan County Port Authority State Docks, and the Port of Decatur provide a year-round nine (9) foot navigable channel. The ports serve as an intermodal connector, with services including barge to truck, barge to rail, rail to barge, and truck to barge. The ports also provide crushing, screen, and packing services. The ports link the area with the Tennessee-Tombigbee Waterway and the Ohio River system which gives the region access to thirteen (13) states and the Gulf of Mexico. The terminal at Mallard-Fox Creek is designated a Foreign Trade Zone and a U.S. Customs Port of Entry.

### 3.9.4 Motor Carrier (Truck) Freight

The planning area has a significant amount of motor carrier (truck) freight movements. There are approximately twenty-one (21) trucking terminals (Figure 5) located in the planning area. The planning area serves as an origin and destination for flatbed trailers, tanker trailers, van trailers (dry and refrigerated), dry bulk trailers, and dump trailers due to the diversity of the local industries and retailers. The largest majority of motor carrier freight movements are along Interstate 65, State Route 20, State Route 67, State Route 36, and U.S. Highway 31.

### 3.9.5 Pipelines

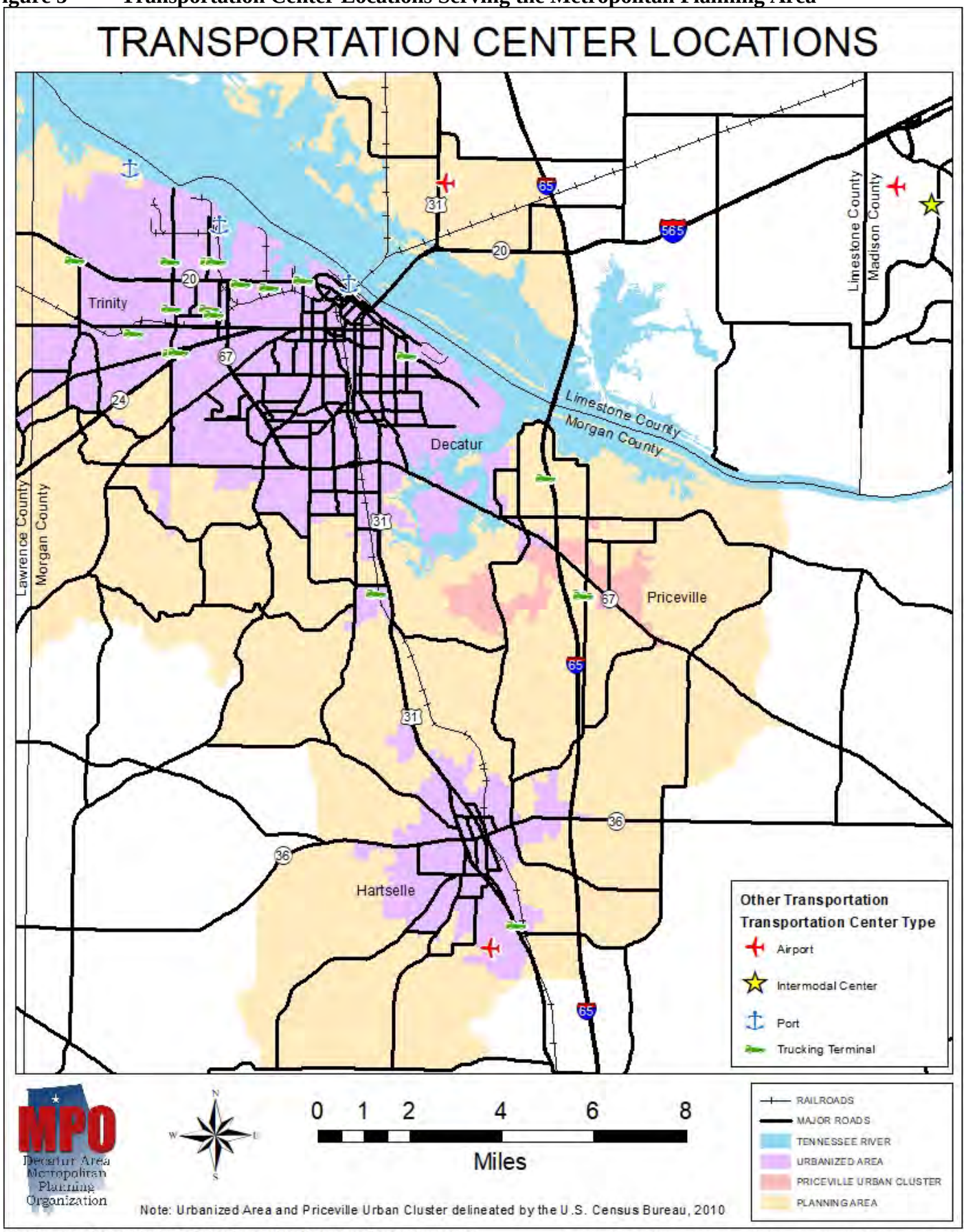
There are four (4) pipelines located within the Decatur MPA. They are generally located in a North/South direction. According to the National Pipeline Mapping System (NPMS), there are two (2) major natural gas transmission pipelines operated by Southern Natural Gas Co. of Birmingham, AL, and American Midstream (ALATENN), LLC of Houston, TX. There is also a hydrogen

pipeline operated by Linde Gas North America, LLC of Houston, TX, as well as a major xylene pipeline operated by BP Pipeline (North America Inc.) of Tulsa, OK. Both natural gas pipelines, as well as the xylene pipeline, have crossings at three (3) separate locations along the Tennessee River between Morgan and Limestone Counties.

### 3.9.6 Other Modes of Transportation (Taxi and Intercity Bus)

The planning area is also served by one (1) taxi service located in the City of Decatur, as well as Uber and Lyft service. The area was served by intercity bus service (Greyhound) until the service was discontinued in 2005. There are no current plans to restore intercity bus service to the Decatur MPA.

**Figure 5 Transportation Center Locations Serving the Metropolitan Planning Area**



## 3.10 Base Year 2015 Socio-Economic Description and Conditions

The Decatur MPO collected and projected a variety of land use datasets for the Long-Range Transportation Plan (LRTP) base year of 2015. By collecting and analyzing socio-economic data, the MPO planning staff identifies where residents live, work, shop, travel, and go to school. This socio-economic data is used for inclusion into a travel demand traffic model, which is used to simulate traffic conditions in 2015.

### 3.10.1 Base Year 2015 Data Collection and Sources

Table 4 shows the listing of base year 2015 land use datasets collected for use in the Long-Range Transportation Plan along with the source or sources from which the datasets were collected and aggregated.

**Table 4 Base Year Datasets and Sources**

| Land Use Dataset | Source |
|---|---|
| Occupied Housing Units | 2010 Census Summary File 3; 2010 Census Transportation Planning Package (CTPP); City of Decatur Building Department; City of Hartselle Building Department; Town of Priceville Building Department; Town of Trinity Building Department |
| Retail Employment | Alabama Department of Industrial Relations; Decatur/Morgan County Chamber of Commerce; Hartselle Area Chamber of Commerce; InfoUSA Business Database; AT&T Yellow Pages |
| Non-Retail Employment | Alabama Department of Industrial Relations; Decatur/Morgan County Chamber of Commerce; Hartselle Area Chamber of Commerce; InfoUSA Business Database; Morgan County Economic Development Association; AT&T Yellow Pages |
| School Enrollment | Decatur City Schools; Hartselle City Schools; Morgan County Schools; Calhoun Community College; the municipalities of Decatur, Hartselle, Priceville, and Trinity |
| Dorm Rooms | Currently there are no dorm rooms located in the planning area |
| Median Household Income | U.S. Department of Labor; 2010 CTPP Data; 2010 Census Summary File 3 |

The totals for each of these land use datasets are shown below in Table 5.

**Table 5 2015 Base Year Socio-Economic Data Totals**

| Land Use | Total |
|---|---|
| Occupied Housing Units | 39,800 |
| Retail Employment | 8,607 |
| Non-Retail Employment | 46,195 |
| Total Employment | 54,802 |
| School Enrollment | 19,300 |
| Dorm Rooms | 0 |
| Median Household Income | $45,255 |

Data Aggregation – Once the data was collected and checked for accuracy, it was then aggregated to individual traffic analysis zones (Section 9.7). Using a Geographic Information System (GIS) and a process called address geocoding, each housing unit, retail business, non-retail business, or school was located by address. Once these land uses were located, they were added to the traffic analysis zone database for use in the base year travel demand model.

## 3.11 Existing Traffic Analysis

As part of the development of the Long-Range Transportation Plan (LRTP), the staff of the Metropolitan Planning Organization (MPO) updated the existing validated 2010 Travel Demand Model (TDM) to replicate traffic conditions for the base year of 2015. The 2015 base year model was refined, validated, and used to evaluate existing traffic conditions for the base year in the planning area. The transportation modeling process is summarized below.

### 3.11.1 Highway Network Development

The highway network file is an abstract, computerized representation of the actual highway system in the planning area. The highway network file is created using a Geographic Information System (GIS) that creates a database of the current highway network for use in the travel demand model. The highway network database includes all highways that are classified as a collector or above (Figure 3). At each intersection, node numbers are assigned to defined individual links in the highway network. The classification type, capacity (Table 6), length, and posted speed limits of each highway link are coded as part of the highway network description. The 286 traffic analysis zones (TAZ) in the planning area are connected to the highway network by imaginary lines called centroid connectors, through which trips, produced or attracted in each TAZ (from the socio-economic data), may gain access to the highway system. The entire abstract description of the actual highway network is coded, entered into the travel demand model, and becomes the highway network database for the planning area.

**Table 6 Functional Classification and Capacity Table**

| Classification | Number of Lanes | Link Code | 1-Way Hourly Capacity | 2-Way Hourly Capacity | 1-Way Daily Capacity | 2-Way Daily Capacity |
|---|---|---|---|---|---|---|
| Freeways (Interstate) | 4 | 11 | 3,400 | 6,800 | 34,000 | 68,000 |
| | 6 | 12 | 5,100 | 10,200 | 51,000 | 102,000 |
| | 8 | 12 | 6,800 | 13,600 | 68,000 | 136,000 |
| | 10 | 14 | 8,500 | 17,000 | 85,000 | 170,000 |
| Expressway | 4 | 21 | 2,500 | 5,000 | 25,000 | 50,000 |
| | 6 | 22 | 3,750 | 7,500 | 37,500 | 75,000 |
| | 8 | 23 | 5,000 | 10,000 | 50,000 | 100,000 |
| Divided Principal Arterials | 2 | 31 | 1,100 | 2,200 | 11,000 | 22,000 |
| | 4 | 32 | 1,695 | 3,390 | 16,950 | 33,900 |
| | 6 | 33 | 2,500 | 5,000 | 25,000 | 50,000 |
| | 8 | 34 | 3,680 | 7,360 | 36,800 | 73,600 |
| Undivided Principal Arterials | 2 | 35 | 890 | 1,780 | 8,900 | 17,800 |
| | 4 | 36 | 1,550 | 3,100 | 15,500 | 31,000 |
| | 6 | 37 | 2,290 | 4,580 | 22,900 | 45,800 |
| | 8 | 38 | 3,155 | 6,310 | 31,550 | 63,100 |
| Divided Minor Arterials | 2 | 41 | 1,050 | 2,100 | 10,500 | 21,000 |
| | 4 | 42 | 1,595 | 3,190 | 15,950 | 31,900 |
| | 6 | 43 | 2,280 | 4,560 | 22,800 | 45,600 |
| Undivided Minor Artertials | 2 | 45 | 890 | 1,780 | 8,900 | 17,800 |
| | 4 | 46 | 1,370 | 2,740 | 13,700 | 27,400 |
| Divided Collectors | 2 | 51 | 1,040 | 2,080 | 10,400 | 20,800 |
| | 4 | 52 | 1,425 | 2,850 | 14,250 | 28,500 |
| | 6 | 53 | 2,100 | 4,200 | 21,000 | 42,000 |
| Undivided Collectors | 2 | 54 | 830 | 1,660 | 8,300 | 16,600 |
| | 4 | 55 | 1,310 | 2,620 | 13,100 | 26,200 |
| | 6 | 56 | 1,935 | 3,870 | 19,350 | 38,700 |
| 1-Way Principal Arterials | 2 | 61 | 855 | 1,710 | 8,550 | 17,100 |
| | 3 | 62 | 1,280 | 2,560 | 12,800 | 25,600 |
| 1-Way Minor Arterials | 2 | 71 | 705 | 1,410 | 7,050 | 14,100 |
| | 3 | 72 | 975 | 1,950 | 9,750 | 19,500 |
| | 4 | 73 | 1,300 | 2,600 | 13,000 | 26,000 |
| 1-Way Collectors | 2 | 81 | 565 | 1,130 | 5,650 | 11,300 |
| | 3 | 82 | 780 | 1,560 | 7,800 | 15,600 |
| | 4 | 83 | 1,040 | 2,080 | 10,400 | 20,800 |
| 1-Way Ramps | 1 | 91 | 450 | 900 | 4,500 | 9,000 |
| | 2 | 92 | 900 | 1,800 | 9,000 | 18,000 |
| | 3 | 93 | 1,350 | 2,700 | 13,500 | 27,000 |
| Centroid Connectors | 2 | 99 | 700 | 1,400 | 7,000 | 14,000 |

### 3.11.2 Transportation Modeling Process

There are several basic components of the transportation system that form the basis for the transportation modeling process in the Metropolitan Planning Area (Figure 6). The MPA travel demand model incorporates these components into a four step modeling process which includes trip generation, trip distribution, mode choice, and traffic assignment. The interrelationship between these steps within the overall transportation modeling process is summarized below and illustrated in Figure 7. It should be noted that the planning area does not have a large fixed route transit service. Without this transit service the mode choice step of the modeling process is ignored.

**Figure 6 Components of the Transportation Model**

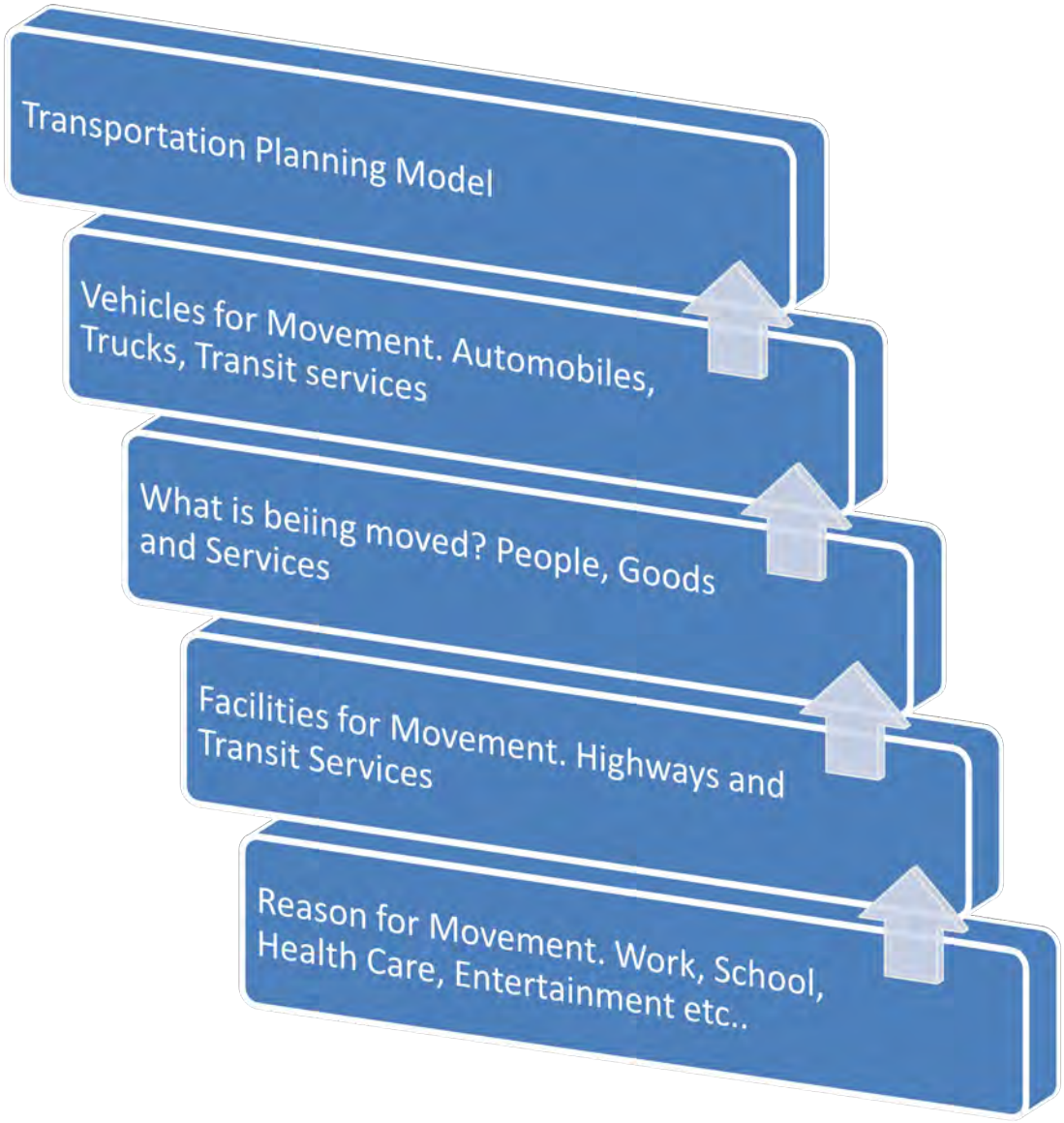
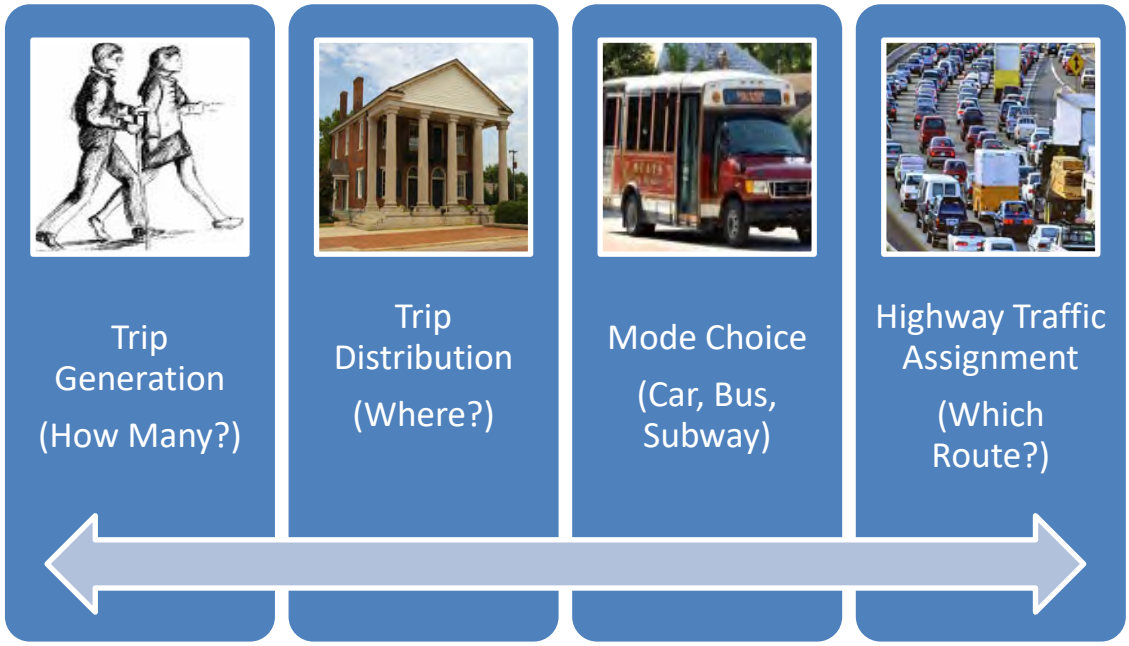


**Figure 7 Four Step Travel Demand Modeling Process**




Trip Generation (Step 1)

Trip generation is the procedure utilized in developing an estimate of the total number of trips that will travel to and from a particular area. Trip generation only addresses the total magnitude of trips in the planning area and not the route they will take. The planning analysis area, generally referred to as a traffic analysis zone (TAZ), could be as small as a census block or as large as several thousand acres. Actual procedures used in making trip generation estimates vary widely, but in all cases the estimate of total number of trips is related to the socio-economic data or land characteristics of the traffic analysis zone, i.e., occupied housing units, retail and non-retail employment, school enrollment, median household income, and dorm rooms.

The MPO planning staff used a trip generation software program developed by the Alabama Department of Transportation (ALDOT) to produce a trip generation file for use in the 2015 travel demand model. The following data files were imported into the ALDOT trip generation software to produce a production and attraction file for each traffic analysis zone in the planning area:

1) Automobile Ownership File
2) Household Trip Generation Curve
3) Production Factor Curve
4) Attraction Factor Curve
5) Road Type File
6) Income Range File
7) External Traffic Count File
8) Socio-Economic File

The trip generation program produces production and attraction data files for six (6) trip purposes. The six (6) trip purposes are:

| | |
|---|---|
| Trip Purpose 1 | Home Based Work (HBW) |
| Trip Purpose 2 | Home Based Other (HBO) |
| Trip Purpose 3 | Non-Home Based (NHB) |
| Trip Purpose 4 | Truck – Taxi (T-T) |
| Trip Purpose 5 | Internal – External (I-E) |
| Trip Purpose 6 | External – External (E-E) |

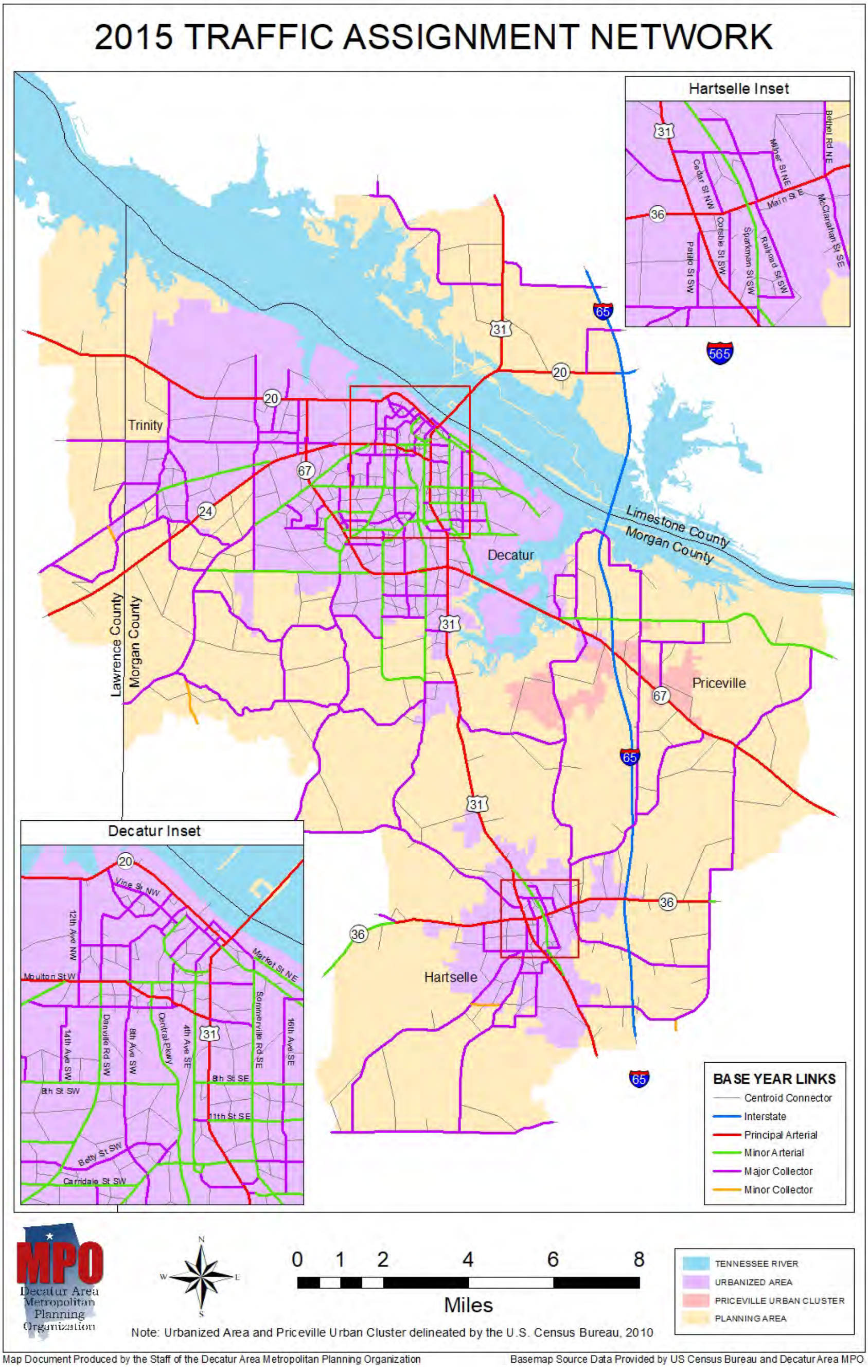
Trip Distribution (Step 2)

Trip distribution addresses the question of the location of the origin and destination of each trip. This procedure does not address the issue of the individual route the trip will use traveling from the origin or destination. The most widely used procedure for estimating the distribution of trips is the Gravity Model. This model assumes that the trips produced in a traffic analysis zone are attracted to other traffic analysis zones in direct proportion to the attractions in the other traffic analysis zones and inversely proportional to the distance between the traffic analysis zones. Trip distribution establishes the overall travel patterns in the planning area. The output from trip distribution is a set of tables called trip tables that show travel flow between each pair of zones.

Traffic Assignment (Step 3)

The traffic assignment process determines the actual route each trip will travel between its origin and destination. This process assumes that the trip will be made along the route that will minimize the time required to travel between the origin and destination traffic analysis zones. The traffic assignment process recognizes that as traffic volume increases on a particular route; delays occur which increase the travel time along that particular route. Consequently as congestion on a route increases, alternate routes are selected. The 2015 highway network represented in the Decatur MPA traffic assignment network is shown in Figure 8.

**Figure 8 2015 Traffic Assignment Network**



Travel Demand Model Validation

The objective of the travel demand model validation is to determine if the Trip Generation Model, the Trip Distribution Model, and the Traffic Assignment Model, when applied, accurately reflects the 2015 base year traffic conditions. The model would then provide reliable estimates for traffic conditions associated with changes in the network system, and/or future development. The following validation reports were prepared for the 2015 base year travel demand model.

**Table 7 2015 Trip Generation Totals by Purpose**

| Trip Purpose | Total Productions | % of Total Trip Production |
|---|---|---|
| Home Based Work (HBW) | 48,471 | 12.06% |
| Home Based Other (HBO) | 116,781 | 29.06% |
| Non – Home Based (NHB) | 55,077 | 13.71% |
| Truck – Taxi (T-T) | 33,933 | 8.44% |
| Internal – External (I – E) | 84,526 | 21.03% |
| External – External (E –E) | 63,066 | 15.69% |
| Total | 401,854 | 100% |

**Table 8 Model Performance by Traffic Volume Groups**

| Volume Group | 2015 Average Annual Daily Count (AADT) | 2015 Travel Demand Model Count | % Difference | FHWA Target* |
|---|---|---|---|---|
| 25,000 to 50,000 | 946,500 | 900,890 | 5.06% | 22% |
| 10,000 to 25,000 | 876,740 | 834,551 | 5.06% | 25% |
| 5,000 to 10,000 | 351,000 | 276,975 | 26.73% | 29% |
| 2,500 to 5,000 | 236,860 | 205,560 | 15.23% | 26% |
| 1,000 to 2,500 | 118,460 | 113,150 | 4.69% | 47% |
| 0 to 2,500 | 11,560 | 11,578 | 0.16% | 60% |
| Total | | | | |

*Source: NCHRP Report 255, FHWA

**Table 9 Model Performance by Functional Classification**

| Functional Classification | 2015 Average Annual Daily Count (AADT) | 2015 Travel Demand Model Count | % Difference | FHWA Target* |
|---|---|---|---|---|
| Interstate | 143,380 | 139,770 | 2.58% | 7% |
| Principal Arterial | 636,350 | 599,249 | 5.83% | 10% |
| Minor Arterial | 298,700 | 273,309 | 8.50% | 15% |
| Collector | 194,630 | 160,242 | 17.67% | 25% |
| Total | 1,273,060 | 1,172,570 | 7.89% | |

* Source FHWA, Calibration and Adjustment of System Planning Models 1990

Root Mean Squared Error (RMSE) is an important validation measure that indicates how closely the assigned travel demand model volumes are to the 2015 actual ground counts. The Federal Highway Administration (FHWA) guidelines state an RMSE error of less than thirty (30) percent is acceptable and, as seen in the Table 10, the 2015 travel demand model has a total RMSE percentage error of 15.15 percent by facility type. With this RMSE percentage error rate, the travel demand model is performing very well.

$$\%RMSE = \frac{((Model - Count) / (Number\ of\ Counts - 1)) * 100}{(Count / Number\ of\ Counts)}$$

**Table 10 Root Mean Squared % Error by Facility Type**

| Facility Type | % RMSE | Target |
|---|---|---|
| Interstate | 6.91 | 15% or below |
| Principal Arterial | 19.03 | 30% or below |
| Minor Arterial | 23.17 | 45% or below |
| Collector | 40.74 | 100% or below |
| Total | 15.15 | 30% or below |

**Table 11 Vehicle Miles Traveled and Vehicle Hours Traveled by Functional Classification**

| Functional Classification | VMT | VHT |
|---|---|---|
| Interstate | 673,212 | 9,756 |
| Principal Arterial | 1,295,012 | 27,243 |
| Minor Arterial | 326,289 | 8,243 |
| Collector | 348,725 | 8,920 |
| Total | 2,643,238 | 54,162 |

The coefficient of determination, or $R^2$ value, is a statistic that shows how well a regression line represents the assignment model data. The desirable $R^2$ data is 0.88 or higher. The value of 0.9438 achieved for the 2015 travel demand model illustrates the travel demand model counts have a significant correlation with the actual ground counts for the 2015 base year.

Validation Summary

Based on the validation process summarized in the previous pages, the 2015 base year network was determined to be validated well within recommended standards. The Alabama Department of Transportation (ALDOT) Metropolitan Planning Section reviewed the validation process for accuracy and gave the notice to proceed to the 2045 future year model in October 2020.

Existing Network Traffic Analysis

The 2015 validated travel demand model is a tool used to analyze and evaluate the existing base year highway network system. The 2015 Average Daily Traffic Counts (AADT) provided by the Alabama Department of Transportation were used in the validation process, as discussed in previous sections. Upon completion of the validation process, the travel demand model was used to determine the general level of service (LOS) conditions for each link included in the highway network (Figure 10). Roadways determined to be level of service E and F are operating at unacceptable levels of service, and level of service D should be monitored on a regular basis to determine when they would begin approaching unacceptable levels. The roadways currently operating at unacceptable levels of service are shown on Figure 10 and listed in Table 12

**Figure 9 Level of Service (LOS) Descriptions**

Level of Service (LOS) is a qualitative assessment of a road's operating conditions. For the MPO planning purposes, level of service is an indicator of the extent or degree of service provided by, or proposed to be provided by, a facility based on and related to the operational characteristics of the facility. This term refers to a standard measurement used by transportation officials which reflects the relative ease of traffic flow on a scale of A to F, with free-flow being rated LOS-A and congested conditions rated as LOS-F

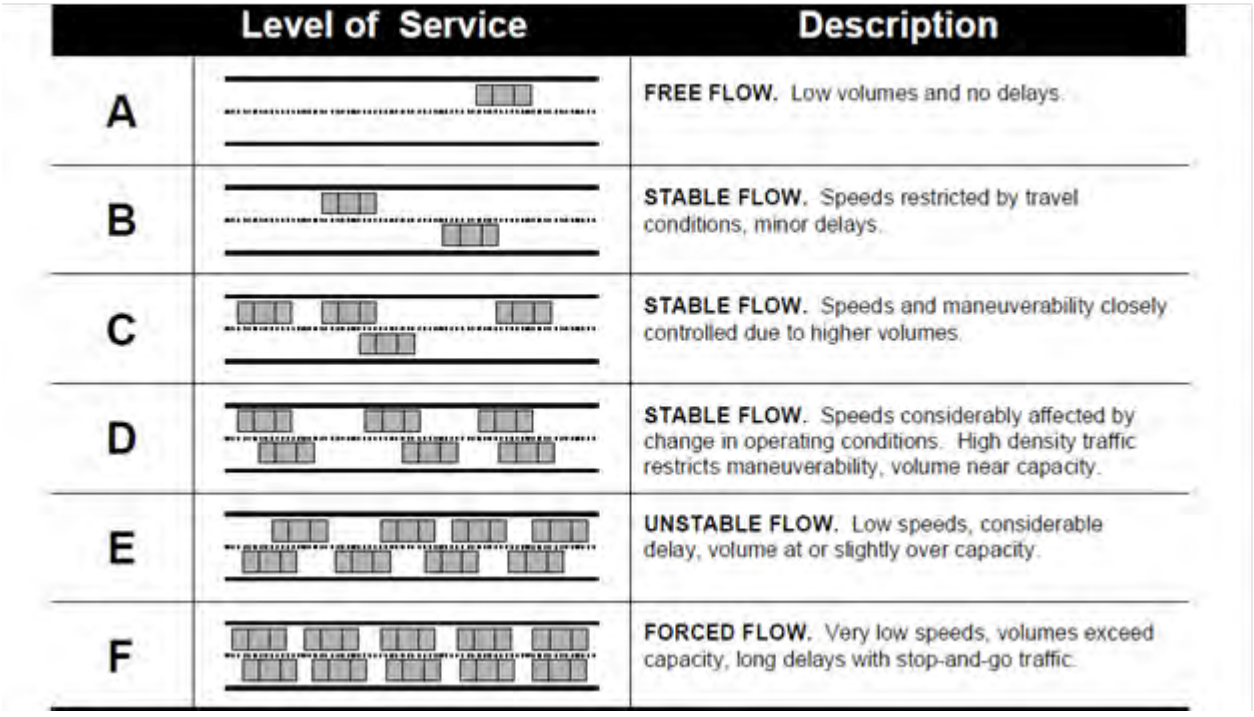
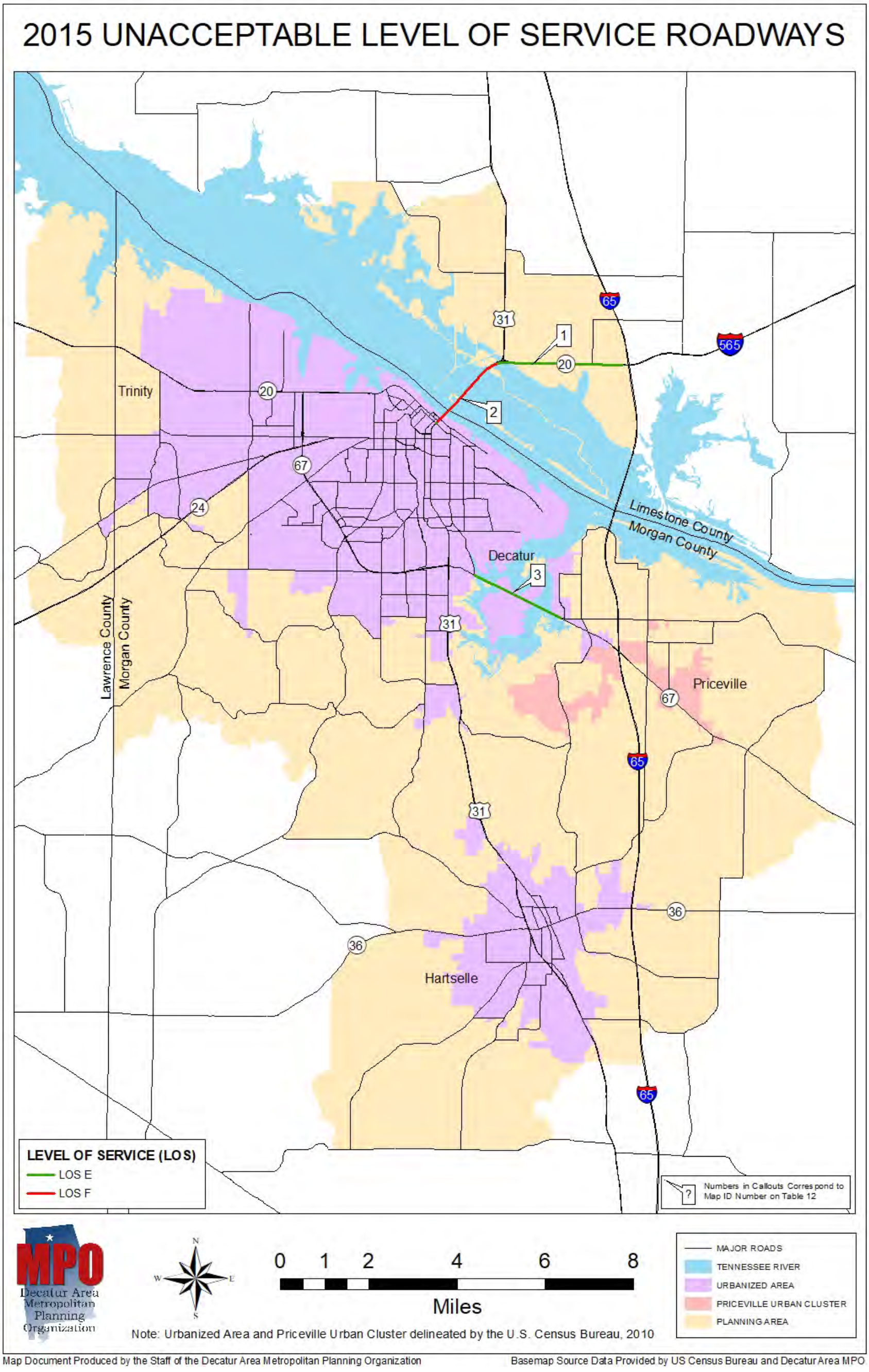


**Figure 10 Unacceptable Level of Service Roadways**



## Table 12 Unacceptable Level of Service Roadways Table

| Roadway | Roadway Segment Location | MAP ID (Figure 10) | Level of Service (LOS) |
|---|---|---|---|
| U.S. Alt 72 / State Route 20 | U.S. ALT Hwy 72 / State Route 20 from U.S. Hwy 31 to Interstate 65 in Limestone County | 1 | E |
| U.S. ALT 72 / U.S. Hwy 31 / State Route 20 | Church Street to State Route 20 in Limestone County | 2 | F |
| State Route 67 | Country Club Road SE to Upper River Road | 3 | E |

# 4.0 Future Transportation System

23 CFR 450 requires a Metropolitan Planning Organization (MPO) to include a minimum twenty (20) year planning horizon for the Long-Range Transportation Plan (LRTP). This LRTP includes projections and traffic conditions for a thirty (30) year time frame to 2045. The same procedures for analyzing the 2015 existing traffic conditions were employed to evaluate and analyze future traffic conditions to the year of 2045. In order to evaluate and analyze the future traffic conditions, the travel demand model must be updated to reflect the 2045 socio-economic projections, future land use development, and transportation network system assumptions for the planning area. The following sections discusses future planning efforts and provides socio-economic data projections used to estimate future travel demand through proposed changes to land use.

## 4.1 Metropolitan Planning Area Review

The Decatur Area Metropolitan Planning Organization (MPO) reviewed its Metropolitan Planning Area (MPA) Boundary in the initial stages of development of the LRTP. The MPA Boundary is defined by the Policy Board of the MPO along with the Alabama Department of Transportation (ALDOT), and includes areas that are expected to become urban in the next twenty (20) years. During this process the MPO staff analyzed future land use documents, infrastructure improvements (water and sewer), and planned and proposed transportation improvements for potential inclusion into the planning area.

## 4.2 Land Use

The MPO planning staff worked closely with cities, towns, and counties within the planning area and other state and federal agencies to identify existing and future land use in the planning area. This evaluation included the base 2015 data (see Section 3.4), local comprehensive plans, zoning ordinances, growth management plans, building permit data, throughway plans, downtown re-development plans, streetscape plans, economic development plans and studies, utility infrastructure plans, annexation plans and studies, environmental studies, other transportation plans and studies, and base realignment and closure plans and studies (BRAC). These plans and studies were used to predict where growth is likely to take place over the next thirty (30) years in the planning area. These plans and studies were also used to help identify which traffic analysis zones would gain or lose occupied housing, retail and non-retail employment, or school enrollment in 2045.

## 4.3 Socio – Economic Data Projections

The Metropolitan Planning Organization (MPO) collects and uses projected socio-economic data for the development of the future travel demand in the planning area. By collecting, analyzing, and making future projections with socio-economic data, the MPO staff can estimate where people will live, work, shop, and go to school. This socio-economic data is the basis for the 2045 travel demand model. The travel demand model uses the socio-economic data to simulate future travel patterns and movements which helps to identify future transportation system needs.

The staff of the Metropolitan Planning Organization (MPO) prepared the Socio-Economic Data Projections using the land use characteristics described in Section 4.2 above. These projections were aggregated to the traffic analysis zones (TAZ) using considerations such as density of development, the suitability of vacant land, and growth experienced in past plans and studies. The following factors were projected for the 2045 future year:

- Occupied Housing Units
- Median Household Income
- Retail Employment
- Non – Retail Employment
- School Enrollment
- Dorm Rooms

Each primary land use noted above and its corresponding quantity within each TAZ in the planning area for 2045 is listed in Table 13 below:

**Table 13 2045 Socio – Economic Data Projections**

| Primary Land Use | Total 2045 |
|---|---|
| Occupied Housing Units | 50,248 |
| Median Household Income | $45,255 |
| Retail Employment | 13,838 |
| Non-Retail Employment | 55,350 |
| School Enrollment | 24,496 |
| Dorm Rooms | 50 |

It should be noted that the median household income was assumed to remain constant over the thirty (30) year period of this plan. It is fully recognized that there will be a significant increase in the income in most, if not all, of the planning area through the forecasted year of 2045. However, most of this increase in income will be the result of inflation and not significantly increased buying power. It can be assumed that income growth due to inflation does not yield a corresponding change in the number of trips generated by a household. The trip generation rates used in this planning area are based on 2010 income data. Therefore in order to discount the effects of inflation and eliminate the need for adjustments to the trip generation rates, it was decided to hold the median household income constant for the thirty (30) year period of this plan.

## 4.4 Future Traffic Analysis

The 2015 validated base year travel demand model was used to forecast and analyze travel patterns, and identify roadway deficiencies in the planning area in 2045. In order to analyze travel patterns and identify roadway deficiencies, the 2015 validated base year model was updated to include projected socio-economic data that reflects land use and travel assumptions for the planning area in 2045. The 2045 land use and travel assumptions were used to develop three (3) travel demand models:

- Existing Plus Committed (E+C) Network (Section 4.4.1)
- 2045 Future Network (Section 7.3)
- 2045 Visionary Network (Section 7.4.1)

### 4.4.1 Existing Plus Committed Network (E+C)

The Existing Plus Committed (E+C) Network includes the 2015 base year network plus any completed capacity transportation projects from 2010 to 2015, or any committed capacity projects in the design phase that are included in the Transportation Improvement Program (TIP) through Fiscal Year 2015. Two (2) transportation projects were added to the 2015 base year network to form the E+C network. These projects are listed in Table 14 below:

**Table 14 Existing Plus Committed Network Transportation Projects**

| Project Description | Project Year |
|---|---|
| Additional Lanes on Spring Avenue | 2015 - 2016 |
| Additional Lanes on Hudson Memorial Bridge (North Bound Bridge Only) | 2015 |

The Existing Plus Committed (E+C) Transportation Network was used to evaluate and determine traffic conditions in 2045. The E+C network identifies future transportation needs based on control measurements such as level of service (LOS) and travel times. A comparison of the existing and future roadway conditions indicates that roadways with existing deficiencies (level of service E and F) will get progressively worse in the future. Figure 9 on page 43 gives a description and definition of level of service. Table 15 gives a detailed description of the congested roadways for the 2045 E+C transportation network. Also, Figure 11 shows the location of congested roadways based on the volume/capacity ratio.

**Figure 11 2045 Existing Plus Committed Transportation Network Level of Service**

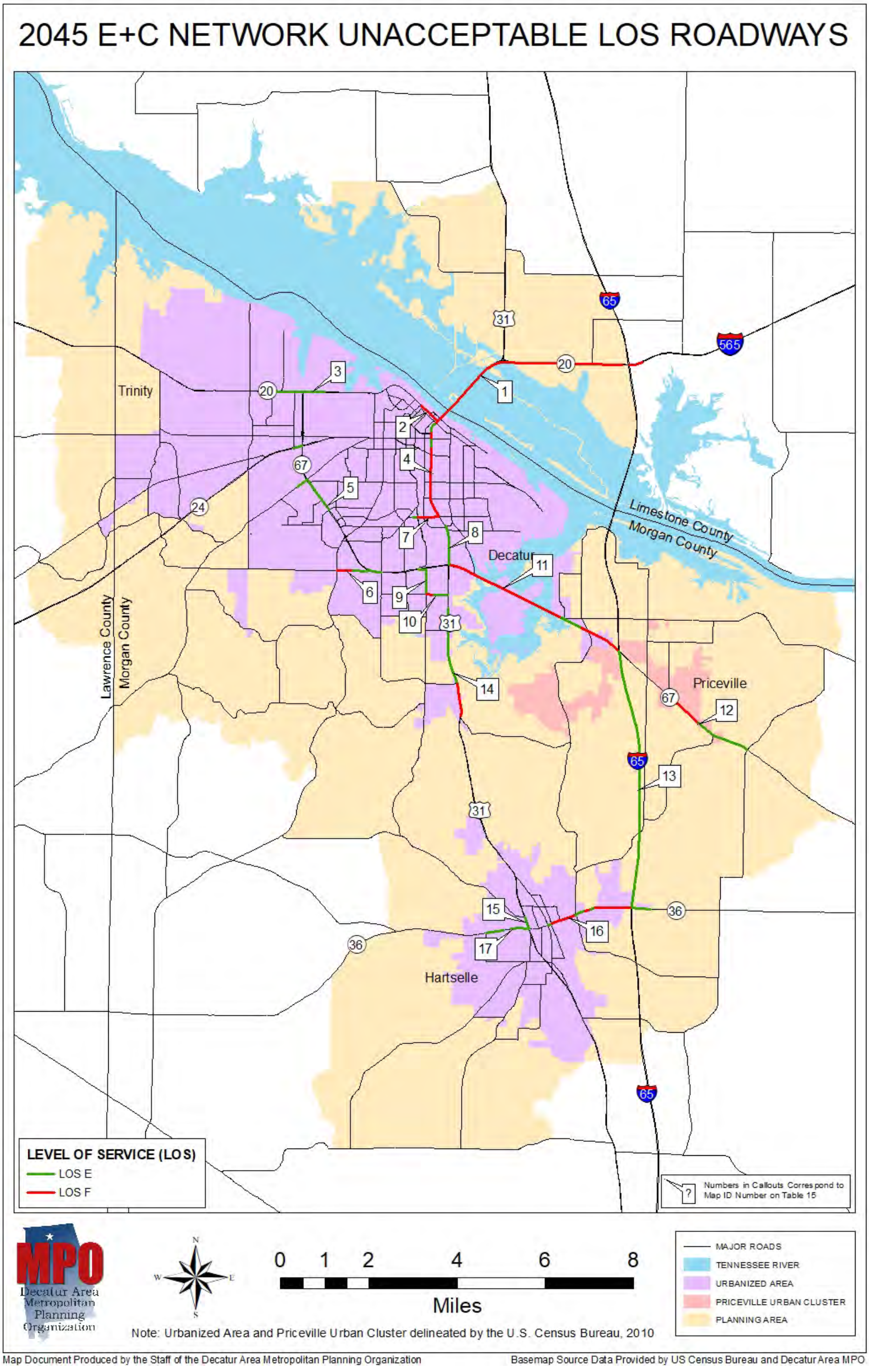


**Table 15 2045 Existing Plus Committed Transportation Network Level of Service**

| Roadway | Roadway Segment Location | MAP ID (Figure 11) | Level of Service (LOS) |
|---|---|---|---|
| U.S. ALT 72 / State Route 20 | Interstate 65 to Wilson Street | 1 | F |
| Wilson Street | Oak Street to U.S. Highway 31 / 6th Avenue | 2 | F |
| U.S. ALT 72 / State Route 20 | Plugs Drive to Construction Road | 3 | E |
| U.S. Highway 31 / 6th Avenue | Wilson Street to 14th Street | 4 | E, F |
| State Route 67 / Beltline Road | Old Moulton Road to Westmead Drive | 5 | E |
| Modaus Road | Danville Road to State Route 67 / Beltline Road | 6 | E, F |
| 14th Street | Austinville Road to U.S. Highway 31 / 6th Avenue | 7 | E, F |
| U.S. Highway 31 / 6th Avenue | Flint Road to State Route 67 / Beltline Road | 8 | E |
| Central Parkway | State Route 67 / Beltline Road to Cedar Lake Road | 9 | E |
| Cedar Lake Road | Central Parkway to U.S. Highway 31 / 6th Avenue | 10 | E, F |
| State Route 67 | U.S. Highway 31 to Interstate 65 | 11 | E, F |
| State Route 67 | Derby Drive to Friendship Road | 12 | E |
| Interstate 65 | State Route 67 to State Route 36 | 13 | E |
| U.S. Highway 31 | Sexton Road to Red Bank Road | 14 | E, F |
| U.S. Highway 31 | Vaughn Bridge Road to State Route 36 | 15 | E |
| State Highway 36 | Sparkman Street to Peachtree Road | 16 | E, F |
| State Highway 36 | Pucket Road to U.S. Highway 31 | 17 | E |

# 5.0 Descriptions, Needs, and Strategies for each Transportation Mode

## 5.1 Air

Description – The Planning Area is served by three (3) airports. Two (2) of the airports, Pryor Field in Limestone County and Hartselle/Morgan County Regional Airport, are general aviation airports. The planning area is also served by an international airport. The Huntsville International Airport, located fourteen (14) miles from downtown Decatur, serves general aviation needs, commercial passenger service, and cargo operations for North Alabama and Southern Tennessee.

Needs

- Enhancement of roadways, transit services, and pedestrian/bicycle facilities to and from all airports in the planning area
- Collaboration with local planning agencies and the airport authorities

Strategies to address needs

- Continue to plan, enhance, and repair roadways that provide access to all airports as funding becomes available
- Continue to plan, enhance transit services, and pedestrian/bicycle access to all airports as funding becomes available
- Continue to collaborate with the general public, local planning agencies, and airport authorities on enhancing and improving access to all airports

## 5.2 Bicycle

Description - The Metropolitan Planning Organization (MPO) is working with local committees and organizations to enhance and improve bicycle facilities throughout the planning area. In the past, transportation enhancement grants have been used to construct bicycle facilities in the planning area. The planning area is geographically compact enough to allow people to utilize the bicycle as an alternative mode of transportation.

Needs

- Bicycle educational efforts
- Roadway suitability analysis
- Additional and improved bicycle facilities
- Bicycle ridership promotion
- Bicycle facility accessibility (including trails and facilities that are linked to each other)

Strategies to address needs

- Continue to plan, enhance, build, and repair bicycle facilities as funding becomes available
- Continue to work with federal, state, and local officials concerning bicycle related solutions and issues in the planning area
- Encourage local governments and schools to promote bicycle usage in the planning area
- Encourage bicycle facilities inclusion, when feasible, in all new transportation projects
- Continue to work with local officials and the general public to implement the 2015 Bicycle and Pedestrian Plan (BPP)
- Continue to seek funding through federal, state, and local sources
- Encourage and educate the general public concerning bicycle safety

## 5.3 Pedestrian

Description – Sidewalks are available in various locations throughout the planning area, with the highest concentration in the downtown central business district (CBD) and historic neighborhoods of Decatur and Hartselle. Many of the new developments in the planning area are requiring sidewalks as part of their overall plan. Several of the schools in the planning area are also pedestrian accessible.

Needs

- Promote pedestrian facilities that link different types of land uses
- Promote and educate the general public on pedestrian safety
- Add more pedestrian facilities such as sidewalks, bridges, and walking trails
- New developments that are pedestrian friendly

Strategies to address needs

- Continue to plan, enhance, build, and repair pedestrian facilities
- Continue to work with federal, state, and local officials on the promotion of pedestrian facilities
- Continue to seek funding opportunities for pedestrian facilities
- Continue to work with federal, state, and local officials on education and safety involving pedestrian movements in the planning area
- Continue to work with local and the general public on the implementation of the 2015 Bicycle and Pedestrian Plan (BPP)

## 5.4 Railroads

Description – The Planning Area is served by two (2) major rail lines. CSX Transportation Corporation has the primary north-south line and Norfolk-Southern Corporation has the primary east-west line running through the planning area. Both corporations have major rail yard facilities located in the City of Decatur. The CSX Railroad Bridge located in the planning area is a major crossing for the Tennessee River and on average forty (40) trains a day travel through the planning area. An Intermodal Rail Center is located adjacent to the Huntsville International Airport and is used by local industries to ship both raw materials and finished products throughout the world. A Railroad Quiet Zone is located in the Bank Street area in the City of Decatur. This railroad noise mitigation measure provides local businesses and adjoining neighborhoods a safe corridor by which to cross the rail line.

Needs

- Railroad crossing enhancements and safety measures
- Railroad noise identification and mitigation
- Improve data on rail operations in the planning area
- Improve Intermodal access and facilities in the region
- Improved access for vehicles, bicycles, and pedestrians across rail facilities in the planning area

Strategies to address needs

- Continue to support and enhance Railroad Crossing Safety Programs
- Continue to encourage and support Railroad Noise Identification and Mitigation programs in the planning area
- Continue to plan, enhance, and build transportation projects that aid rail operations in the planning area
- Continue to work with federal, state, and local officials on rail issues in the planning area

## 5.5 Freight

Description - The planning area is served by approximately twenty-one (21) trucking terminals and numerous industries, distribution centers, and shipping providers. The planning area serves as a regional hub for freight operations in North Alabama. The planning area is served by numerous federal, state, and local highways, which are used for freight movement throughout the region, as well as a navigable waterway, the Tennessee River.

Needs

- Safe and efficient transportation network system including roadways and ports
- Freight movement and management study

- Enhanced intermodal transportation network including rail, air, trucks, and water

Strategies to address needs

- Continue to enhance, build, and maintain transportation projects for the safe and efficient movement of freight in and through the planning area
- Development and maintenance of a Freight Movement Study
- Evaluate the existing transportation network system to identify roadway deficiencies
- Continue to work with federal, state, local officials, and industries on freight issues and solutions

## 5.6 Public Transit

Description – The Public Transit service in the planning area is operated and managed by the NARCOG Regional Transit Agency (RTA), under the auspices of the North Central Alabama Regional Council of Governments. NARGOG RTA operates two (2) major programs of public transit services, which are the 5307 urban program and the 5311 rural program.

Needs

- More urban and rural transit routes
- Extended hours of operation (nights/weekends)
- Increase funding (federal, state, local, fares)
- Employment based needs (home to work)
- Van Pools
- Transit services to and from other regions
- Downtown Circulars
- Park and Ride lots

Strategies to address needs

- Promote new and existing transit routes
- Continue to work with federal, state, and local officials on new funding opportunities
- Maintain and update the comprehensive transit plan
- Promote transit related services such as park and ride, van pools, and work related transit operations
- Enhance transit facilities
- Maintain and update transit fleet and equipment
- Promote downtown circulars
- Work with other services providers on transit related operations

## 5.7 Highways

Description – The transportation network in the planning area includes 339.56 miles of functionally classified roadways. The Federal Functional Classification is divided into groups that provide vehicle capacity and access to adjacent land uses. Interstates have the greatest vehicle capacity; Principal Arterials have the next highest vehicle capacity while collectors have the greatest access to adjacent land uses. In order to be eligible for federal funding and to be included in this Long-Range Transportation Plan, a roadway must be designated a major collector or above.

Needs

- Capacity and congestion needs
- Reduce traffic accidents
- Intelligent Transportation System (ITS) for the Tennessee River bridges
- Access Management Plan and Procedures
- Highway safety promotion and education
- Reduce air emissions
- Maintenance of the existing highway system

Strategies to address needs

- Continue to plan, maintain, and build new highway projects when funding is available
- Continue to work with federal, state, local officials, and the general public on capacity and congestion needs in the planning area
- Continue to work with federal, state, local officials, and the general public on the promotion and education of highway traffic safety
- Develop and maintain access management plans and procedures
- Continue to work with local and state law enforcement agencies to reduce traffic accidents in the planning area
- Continue to work with federal, state, and local officials on funding opportunities for transportation projects in the planning area
- Continue to work with federal, state, and local officials on reducing air emissions in the planning area
- Develop an Intelligent Transportation System (ITS) to improve safety in the planning area

# 6.0 Financial Plan

The FAST Act legislation requires MPOs to include a financial plan as part of the Long-Range Transportation Plan (LRTP). The MPO is expected to provide reasonable project cost estimates to ensure the MPO and local stakeholders have the financial capacity to implement the planned transportation improvements contained in Section 7.0 of this plan.

## 6.1 Revenue Forecasts

The Alabama Department of Transportation (ALDOT) developed the projected revenue forecasts for the 2045 Long-Range Transportation Plan (LRTP). The revenue forecasts were based on historical funding averages or allotments of funding for roadway projects in the planning area.

These averages or allotments are further divided into either Capacity projects or Highway Operation and Maintenance projects based on the percentage of these types of projects over the historical averages. The Alabama Department of Transportation (ALDOT) defines a capacity project as any project that adds a new general purpose lane on existing roadways or adds new roadways to the network system to increase capacity. Highway maintenance and operation projects are defined as projects that add turn lanes on existing roadways, realign existing roadways, add or upgrade traffic signals, add or replace bridges, or resurface/widen secondary roadways in order to improve safety and maintain the existing roadway network system.

Based upon the uncertainty of future funding amounts through the Highway Trust Fund (HTF), and a large maintenance effort proposed by the state, the Alabama Department of Transportation (ALDOT) has made a decision to spend more dollars on operations and maintenance projects over the next twenty-five (25) years. Because of this, the Alabama Department of Transportation (ALDOT) will be limiting its spending for capacity projects, while dedicating the remaining funds to maintenance and operations projects. The Decatur MPO will use its own dedicated Surface Transportation Program funds for both capacity and maintenance and operations projects.

The Alabama Department of Transportation (ALDOT) also provides projected revenue forecasts for transit projects in the planning area for 2045. These revenue forecasts are calculated the same as the roadway revenue forecasts mentioned above. This revenue forecast includes transit operations, preventative maintenance, and capital costs.

Table 16 lists the Forecasted Federal Capacity, Maintenance/Operations, and Transit Funding allocations for 2045. This table was developed by ALDOT. Table 17 lists the federal funding amounts and the state or local match for 2045.

**Table 16 2045 Forecasted Federal Capacity, Maintenance/Operations, Transit Funding, and State Allocations**

| 2045 Long Range Transportation Plan Forecasted Federal, State and Local Funding | | | | |
|---|---|---|---|---|
| **Funding Categories** | Federal Funds | State Funds | Local Funds | Total |
| | | | | |
| MPO Surface Transportation Attributable | $44,303,619 | | $11,075,905 | $55,379,523.75 |
| | | | | |
| Capacity Projects (All other Surface Transportation Programs) | $38,129,095 | $9,532,274 | | $47,661,369 |
| | | | | |
| Operations and Maintenance Projects (All other Surface Transportation Programs) | $79,455,569 | $19,863,892 | | $99,319,461 |
| | | | | |
| Transit Projects | $23,319,419 | | $5,829,855 | $29,149,274 |
| | | | | |
| State Projects (State Funding Only) | | $1,648,190 | | $1,648,190 |
| | | | | |
| Grand Total | $185,207,702 | $31,044,356 | $16,905,760 | $233,157,817.50 |

**Table 17 Description of Funding Categories**

| | | Matching Requirements | |
|---|---|---|---|
| **Funding Category** | **Eligibility Requirements** | **Federal** | **State or Local** |
| Interstate Maintenance | Facitilities located on the Interstate Highway System | 90% | 10% |
| National Highway System | Facilities that are designated that are importatnt to the nation's economy, defense and mobility | 80% | 20% |
| Surface Transportation (Any Area) | Roads Classified as a Major Collector or Above | 80% | 20% |
| Surface Transportation (Other Area) | Roads Classified as a Major Collector or Above | 80% | 20% |
| Appalachian | Must meet ARC requirements and eligiblity for classified routes | 80% | 20% |
| Bridge | Structurally Deficient or Functionally Obsolete Bridge on any Public Roadway | 80% | 20% |
| Safety | Any Public Roadway | 90% | 10% |
| Congressional Special Projects | Roads Classified as a Major Collector or Above | 80% | 20% |
| Surface Transportation (Other Area) Dedicated | Roads Classified as a Major Collector or Above | 80% | 20% |

## 6.2 Estimated LRTP Project Costs

The estimated project costs were provided, when available, by the projected sponsor. If the estimated project costs were not provided, the MPO staff estimated the total project costs including preliminary engineering, right-of-way acquisition, utilities, and construction as follows:

- $2.0 to $2.5 million per centerline mile
- $2.5 to 3.5 million per centerline mile if elevated
- $3.5 to $5.0 million per centerline mile if the road is in an urban environment (a retrofit)

All project costs are adjusted for inflation per FAST Act requirements. The current inflation rate, according to ALDOT standards, is calculated at one (1) percent annually.

## 6.3 Financial Constrained Planning Requirement

Under the requirements of the FAST Act, the MPO must adopt a Financially Constrained Plan showing future transportation projects that can be funded with revenues that are reasonably expected to be available during the planning period.

## 6.4 Other Revenue

The Decatur Area MPO will continue to look for other forms of revenue to enhance the transportation system in the planning area. This includes public-private partnerships, toll facilities, industrial access funding, impact fees, and bonds to help with shortfalls of funding for transportation projects in the planning area.

# 7.0 Transportation Improvements

This section identifies transportation projects selected for the 2045 LRTP as a result of the transportation planning process. Included is the listing of financially constrained projects and a visionary project listing. These projects will provide solutions to address the movement of people, goods, and services throughout the planning area in 2045. The LRTP is updated every five (5) years to reflect changes in socio-economic data, traffic conditions, and transportation needs in the planning area.

## 7.1 Project Selection (Financially Constrained)

In order to select transportation projects for inclusion into the 2045 Long-Range Transportation Plan, the following project selection and prioritization criteria was used:

- Safety and Security
- Roadway Deficiencies, Level of Service (existing and future)
- Cost Effectiveness
- Funding Availability
- Environmental Issues
- Local Commitment and Support

In order to identify roadway deficiencies, two (2) travel demand models were developed to identify future roadway deficiencies in the planning area. The Existing Plus Committed (E+C) network and the 2045 network are summarized below.

The Existing Plus Committed (E+C) network represents existing and future roadway projects for which a committed funding source exists. The E+C network also includes projects that have been constructed, or are significantly complete, between the base year of 2015 and the current year of 2020. The E+C network was discussed in detail in Section 4.4.1 of this document. Figure 11 on page 49 shows the level of service (LOS) for the E+C network.

The 2045 network was created using 2045 socio-economic data and included financially constrained projects needed for future travel demand in the planning area. These projects were proposed based on the above mentioned criteria and comments from local governments, stakeholder groups, general public comments, and roadway deficiencies identified in the E+C network.

The following section (Section 7.2) details the selected financially constrained projects along with their descriptions and a balance sheet.

## 7.2 Project Descriptions and Balance Sheet

The projects for the 2045 LRTP were developed using the previous 2040 LRTP, the current transportation improvement plan, the project selection and prioritization criteria (Section 7.1), the travel demand model results and analysis, and the public participation process outlined in this plan (Section 8).

Based on the funding estimates for the thirty (30) year period of 2015 to 2045, a total of $161,888,283 (federal funds) will be available for capacity and operations/maintenance projects for the planning area. Total federal transit funding for the same time frame will be $23,319,419; this will continue funding for operating, maintenance, and capital costs at the current level of funding. The MPO has control for the selection of projects included in the Surface Transportation Program – Attributable (STPOA) funding category. This funding category has total projected revenue of $44,303,619 for capacity and operations/maintenance projects from 2015 to 2045. All projects in other funding categories are selected by ALDOT in conjunction with the MPO. Because of uncertainty of future federal funding, and an emphasis by the state, to have a large operations/maintenance effort, the Alabama Department of Transportation (ALDOT) will be limiting its spending on capacity projects.

The MPO has also placed an emphasis on operations/maintenance in the selection of projects contained in the Surface Transportation Program – Attributable (STPOA) funding category. Capacity and operation/maintenance projects that are identified in the MPO Portal from 2015 to 2025 are included in the constrained funding table (Table 17). All other capacity and operation/maintenance projects identified but not contained within the financially constrained tables will be shown in the visionary project table (Table 20).

Bicycling and walking are viable transportation alternatives throughout many communities within the North Alabama Region. In the project selection process, bicycling and pedestrian facilities will be contained within the scope of all projects unless one of the following exceptional circumstances occurs:

- If bicyclists and pedestrians are prohibited by law from using the roadway. In this instance, an effort may be necessary to accommodate bicyclists and pedestrians elsewhere within the right-of-way or within the same transportation corridor.
- If the cost of establishing bikeways or walkways would be excessively disproportionate to the need or probable use.

In January 2015, the Decatur Area MPO Policy Board adopted the 2015 Bicycle and Pedestrian Plan (BPP). The BPP contains a listing of projects that are bicycle and pedestrian specific, without regard to any specific roadway project. This listing can be found in Section 9.6 of this document, as well as in Appendix G of the 2015 Bicycle and Pedestrian Plan, which can be obtained from the MPO website:
https://www.cityofdecatural.com/departments/metropolitan-planning-organization/

Table 17 lists financially constrained capacity and maintenance and operations projects for the 2045 LRTP. This table is divided by funding category and includes the following details:

- ALDOT Project Number
- Project Type
- Project Description
- Project Sponsor
- Project Status
- Time Frame
- Scope
- Length
- Program Year
- Project Costs – Year of Expenditure (federal cost, state or local cost, and total cost)

Figure 12 contains map locations of financially constrained projects in the planning area for the 2045 LRTP.

## Table 17 2045 Long-Range Projects (Financially Constrained)

| Surface Transportation Attributable Projects (Capacity and Operations and Maintenance) | | | | | | | | | Project Costs -Year of Expenditure (YOE) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ALDOT Project Number | Project Type | Project Description | Project Sponsor | Project Status | Timeframe | Scope | Length (Miles) | Program Year | Federal | State | Local | Total |
| 100033425 | Capacity | Add Lanes on CR-43 (Spring Ave) From Day Road to Cedar Lake RD south of SR-67 and West of SR-3 | Decatur | Authorized | TIP | CN | 1.92 | 2018 | $9,438,688 | | $2,359,672 | $11,798,360 |
| 100043404 | Capacity | | Decatur | Authorized | TIP | UT | 1.92 | 2016 | $2,485,731 | | $621,433 | $3,107,164 |
| 100069660 | Capacity | Intersection Improvements on Vaughn Bridge Road at SR-3 (US-31) | Hartselle | Authorized | TIP | PE | 0.5 | 2020 | $80,000 | | $20,000 | $100,000 |
| 100069661 | Capacity | | Hartselle | Planned | TIP | RW | 0.5 | 2021 | $12,241 | | $3,061 | $15,302 |
| 100069662 | Capacity | | Hartselle | Planned | TIP | UT | 0.5 | 2021 | $29,869 | | $7,467 | $37,336 |
| 100069663 | Capacity | | Hartselle | Planned | TIP | CN | 0.5 | 2021 | $571,256 | | $142,814 | $714,070 |
| 100070845 | O& M | Replace Roadway Culvert and Approaches on West Morgan Road over Bakers Creek | Morgan County | Authorized | TIP | PE | 0.3 | 2020 | $32,000 | | $8,000 | $40,000 |
| 100070846 | O& M | | Morgan County | Planned | TIP | RW | 0.3 | 2021 | $50,096 | | $12,524 | $62,620 |
| 100070847 | O& M | | Morgan County | Planned | TIP | UT | 0.3 | 2022 | $109,080 | | $27,270 | $136,350 |
| 100070848 | O& M | | Morgan County | Planned | TIP | CN | 0.3 | 2022 | $639,936 | | $159,984 | $799,920 |
| 100059679 | O& M | Resurface and Stripe CR-606 (Old Highway 24) from the West Town Limits to CR-204 (Woodall Road) | Trinity | Completed | TIP | CN | 2.93 | 2015 | $406,897 | | $101,724 | $508,621 |
| 100062270 | O& M | Resurface South Greenway Drive from Old HWY 24 to Gordon Terry Parkway (SR-24) | Trinity | Completed | TIP | CN | 0.87 | 2016 | $245,408 | | $61,352 | $306,760 |
| 100069658 | O& M | Resurfacing on North Seneca Drive from Old HWY 24 to SR-20 (US-72A) | Trinity | Authorized | TIP | PE | 2.75 | 2020 | $12,800 | | $3,200 | $16,000 |
| 100069659 | O& M | | Trinity | Authorized | TIP | CN | 2.75 | 2020 | $392,704 | $243 | $97,933 | $490,880 |
| 100071485 | O& M | Resurfacing on CR-684 (Church Street) from Somerville Road to Riverview Avenue | Decatur | Planned | TIP | PE | 0.41 | 2021 | $101,000 | | $25,250 | $126,250 |
| 100071486 | O& M | | Decatur | Planned | TIP | CN | 0.41 | 2022 | $707,000 | | $176,750 | $883,750 |
| | Capacity | Intersection Improvements at SR-36 and Lando Cain Road | Hartselle | Planned | TIP | PE | 0.5 | 2022 | $120,000 | | $30,000 | $150,000 |
| | Capacity | | Hartselle | Planned | TIP | RW | 0.5 | 2022 | $160,000 | | $40,000 | $200,000 |
| | Capacity | | Hartselle | Planned | TIP | UT | 0.5 | 2023 | $80,000 | | $20,000 | $100,000 |
| | Capacity | | Hartselle | Planned | TIP | CN | 0.5 | 2023 | $680,000 | | $170,000 | $850,000 |
| | O& M | Resurfacing Bethel Road from Lynnwood Circle to SR-67 | Priceville | Planned | TIP | PE | | 2022 | $24,000 | | $6,000 | $30,000 |
| | O& M | | Priceville | Planned | TIP | CN | | 2023 | $760,477 | | $190,119 | $950,596 |
| | O& M | Resurfacing Cave Springs Road from Bethel Road to Sunset Acres Avenue | Priceville | Planned | TIP | PE | | 2022 | $10,000 | | $2,500 | $12,500 |
| | O& M | | Priceville | Planned | TIP | CN | | 2023 | $240,819 | | $60,204 | $301,023 |
| | O& M | Resurfacing Skidmore Road | Priceville | Planned | TIP | PE | | 2023 | $8,000 | | $2,000 | $10,000 |
| | O& M | | Priceville | Planned | TIP | CN | | 2023 | $191,104 | | $47,776 | $238,880 |
| | O& M | Intersection Improvements at US 31 and Cedar Lake Road | Decatur | Planned | LRTP | PE, RW, UT and CN | 0.25 | 2025 | $520,000 | | $130,000 | $650,000 |
| | Capacity | Intersection Improvements at SR-67 and Upper River Road | Decatur | Planned | LRTP | PE, RW, UT and CN | 0.5 | 2026 | $1,920,000 | | $480,000 | $2,400,000 |
| | Capacity | Intersection Improvements at the Intersection of Milner Street and Georgia Street | Hartselle | Planned | LRTP | PE, RW, UT and CN | 0.25 | 2027 | $480,000 | | $120,000 | $600,000 |
| | Capacity | Intersection Improvements at the Intersection of Old Hwy 24 and Woodall Road | Trinity | Planned | LRTP | PE, RW, UT and CN | 0.25 | 2028 | $480,000 | | $120,000 | $600,000 |
| | Capacity | Intersection Improvements at Memorial Drive and Moulton Street | Decatur | Planned | LRTP | PE, RW, UT and CN | 0.25 | 2029 | $1,600,000 | | $400,000 | $2,000,000 |
| | Capacity | Intersection Improvements at Skidmore and Cave Springs Road | Priceville | Planned | LRTP | PE, RW, UT and CN | 0.25 | 2030 | $400,000 | | $100,000 | $500,000 |
| | Capacity | Intersection Improvements at Old Moulton Road and McEntire Lane | Morgan County | Planned | LRTP | PE, RW, UT and CN | 0.25 | 2030 | $480,000 | | $120,000 | $600,000 |
| | Capacity | Intersection Improvements at Old Moulton Road and Shady Grove Lane | Decatur | Planned | LRTP | PE, RW, UT and CN | 0.25 | 2031 | $480,000 | | $120,000 | $600,000 |
| | Capacity | Intersection Improvements on SR-67 at Marco Drive, Robinson Street and Pleasant Acres Road | Priceville | Planned | LRTP | PE, RW, UT and CN | 0.75 | 2031 | $2,400,000 | | $600,000 | $3,000,000 |
| | O& M | Resurface Milner Street from SR-36 to Georgia Street | Hartselle | Planned | LRTP | PE, RW, UT and CN | 0.5 | 2033 | $400,000 | | $100,000 | $500,000 |

| Surface Transportation Attributable Projects (Capacity and Operations and Maintenance) Continued | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Project Costs -Year of Expenditure (YOE) | | | |
| ALDOT Project Number | Project Type | Project Description | Project Sponsor | Project Status | Timeframe | Scope | Length (Miles) | Program Year | Federal | State | Local | Total |
| | O& M | Resurface Mount Tabor Road from Thompson Road to SR-36 | Morgan County | Planned | LRTP | PE, RW, UT and CN | 2 | 2035 | $2,400,000 | | $600,000 | $3,000,000 |
| | O& M | Intersection Improvements at SR-67 and Marsha Drive | Priceville | Planned | LRTP | PE, RW, UT and CN | 0.25 | 2035 | $800,000 | | $200,000 | $1,000,000 |
| | O& M | Resurface Central Parkway SW from Gordon Drive to Beltline Road | Decatur | Planned | LRTP | PE, RW, UT and CN | | 2036 | $4,800,000 | | $1,200,000 | $6,000,000 |
| | O& M | Resurface Barkley Bridge Road from Nance Ford Road to Salem Road | Hartselle | Planned | LRTP | PE, RW, UT and CN | 0.25 | 2037 | $1,200,000 | | $300,000 | $1,500,000 |
| | O& M | Intersection Improvements at SR-67 and Deere Road | Decatur/Priceville | Planned | LRTP | PE, RW, UT and CN | 0.5 | 2038 | $2,000,000 | | $500,000 | $2,500,000 |
| | O& M | Intersection Improvements at SR-67 and Williams Lane | Decatur\Priceville | Planned | LRTP | PE, RW, UT and CN | 0.5 | 2039 | $960,000 | | $240,000 | $1,200,000 |
| | O& M | Intersection Improvements at Barkley Bridge Road and Groover Road | Hartselle | Planned | LRTP | PE, RW, UT and CN | 0.5 | 2040 | $500,000 | | $125,000 | $625,000 |
| | O& M | Resurface Cedar Lake Road SW from Spring Avenue to US Hwy 31 | Decatur | Planned | LRTP | PE, RW, UT and CN | 1.5 | 2041 | $480,000 | | $120,000 | $600,000 |
| | O& M | Resurface Mill Road SE from Old HWY 31 to U.S. 31 | Decatur | Planned | LRTP | PE, RW, UT and CN | 0.25 | 2042 | $320,000 | | $80,000 | $400,000 |
| | O& M | Resurface Gordon Drive SW/SE from West Moulton Street to 4th Avenue SE | Decatur | Planned | LRTP | PE, RW, UT and CN | 1 | 2043 | $560,000 | | $140,000 | $700,000 |
| | O& M | Intersection Improvements at Indian Hills Road and Red Bank Road | Decatur | Planned | LRTP | PE, RW, UT and CN | 0.25 | 2043 | $400,000 | | $100,000 | $500,000 |
| | O& M | Resurface Nance Ford Road from Salem Road to U.S. 31 | Hartselle | Planned | LRTP | PE, RW, UT and CN | 2.5 | 2043 | $640,000 | | $160,000 | $800,000 |
| | O& M | Resurface Mountain Home Road from North Seneca Drive to the Lawrence County Line | Trinity | Planned | LRTP | PE, RW, UT and CN | 1 | 2043 | $560,000 | | $140,000 | $700,000 |
| | Capacity | Intersection Improvements at Danville Road and Vestavia Drive | Decatur | Planned | LRTP | PE, RW, UT and CN | 0.5 | 2044 | $800,000 | | $200,000 | $1,000,000 |
| | Capacity | Intersection Improvements at Danville Road and Chapel Hill Road | Decatur | Planned | LRTP | PE, RW, UT and CN | 0.5 | 2044 | $800,000 | | $200,000 | $1,000,000 |
| | Capacity | Intersection Improvements at Garner Road and Blue Ridge Road | Hartselle | Planned | LRTP | PE, RW, UT and CN | 0.5 | 2045 | $320,000 | | $80,000 | $400,000 |
| | | | | | | | | | | | | |
| | | | | | | Project Estimated Total | | | $44,289,106 | | $11,072,033 | $55,361,382 |
| | | | | | | Forecasted 2045 Total (Federal) | | | $44,303,619 | | | |
| | | | | | | Balance | | | $14,513 | | | |

| Surface Transportation Projects (All Other Surface Transportation Programs) | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Project Costs -Year of Expenditure (YOE) | | | |
| ALDOT Project Number | Project Type | Project Description | Project Sponsor | Project Status | Timeframe | Scope | Length (Miles) | Program Year | Federal | State | Local | Total |
| Operations and Maintenance Projects | | | | | | | | | | | | |
| 100049716 | O & M | Replace Southbound Bridge Bin 000882 SR-3 (US-31) over Cedar Creek | ALDOT | Authorized | TIP | PE | 0.25 | 2015 | $314,962 | $78,740 | | $393,702 |
| 100049716 | O & M | | ALDOT | Authorized | TIP | PE | 0.25 | 2015 | $405,038 | $101,260 | | $506,298 |
| 100049717 | O & M | | ALDOT | Authorized | TIP | RW | 0.25 | 2019 | $57,724 | $14,431 | | $72,155 |
| 100049718 | O & M | | ALDOT | Authorized | TIP | UT | 0.25 | 2019 | $269,106 | $67,276 | | $336,382 |
| 100061816 | O & M | | ALDOT | Authorized | TIP | CN | 0.25 | 2017 | $668,171 | | $167,042 | $835,213 |
| 100049719 | O & M | | ALDOT | Authorized | TIP | CN | 0.25 | 2020 | $3,218,636 | $804,659 | | $4,023,295 |
| 100061284 | O & M | Curb Ramp Installations and Modifications on SR-20 SR-36 and SR-3 (US-31) in Morgan County and SR-53 | ALDOT | Authorized | TIP | CN | 0 | 2018 | $120,000 | $30,000 | | $150,000 |
| 100061284 | O & M | | ALDOT | Authorized | TIP | CN | 0 | 2018 | $156,762 | $39,190 | | $195,952 |
| 100066743 | O & M | Resurfacing on SR-36 from I-65 to SR-67 | ALDOT | Authorized | TIP | FM | 8.32 | 2019 | $172,000 | $43,000 | | $215,000 |
| 100066743 | O & M | | ALDOT | Authorized | TIP | FM | 8.32 | 2019 | $1,236,505 | $309,126 | | $1,545,631 |
| 100067272 | O & M | Paint Retrofit Bridge Rails and Replace Bearing Assemblies on I-65 Bridges over the Tennessee River BIN 01882 and 010883 | ALDOT | Authorized | TIP | PE | 1.88 | 2019 | $405,000 | $45,000 | | $450,000 |
| 100042493 | O & M | | ALDOT | Planned | TIP | CN | 1.88 | 2022 | $10,192,869 | $1,132,541 | | $11,325,410 |
| 100067287 | O & M | Bridge Replacement Bins 006153 and 001391 on SR-3 (US-31) over Norfolk Southern | ALDOT | Authorized | TIP | PE | 0.1 | 2019 | $565,600 | $141,400 | | $707,000 |
| 100071954 | O & M | | ALDOT | Planned | TIP | RW | 0.1 | 2021 | $323,200 | $80,800 | | $404,000 |
| 100071966 | O & M | | ALDOT | Planned | TIP | UT | 0.1 | 2021 | $161,600 | $40,400 | | $202,000 |
| 100037845 | O & M | | ALDOT | Planned | TIP | CN | 0.1 | 2022 | $4,994,899 | $1,248,725 | | $6,243,624 |
| 100068589 | O & M | Interchange Lighting (LED Retrofit) on I-65 at SR-36 (Exit 328) | ALDOT | Authorized | TIP | PE | 0.1 | 2019 | $12,500 | | $12,500 | $25,000 |
| 100068590 | O & M | | ALDOT | Authorized | TIP | CN | 0.1 | 2019 | $236,572 | | $236,572 | $473,144 |
| 100066519 | O & M | Resurface SR-20 from State Docks Road STA 210+00 (MP65.261) to 12th Avenue NW STA 319+35 (MP67.3260 with 3 Norfolk Southern Railroad Crossings Profile Adjustments | ALDOT | Authorized | TIP | FM | 2.07 | 2019 | $2,063,744 | $515,936 | | $2,579,680 |
| 100066778 | O & M | Resurfacing on SR-20 (US-72A) from .36 Mile East of Lawrence County Line to West of SR-67 (State Docks Road) | ALDOT | Authorized | TIP | FM | 3.6 | 2019 | $1,767,019 | $441,755 | | $2,208,774 |
| 100066932 | O & M | Resurface SR-67 from MP 24.050 just South of SR-36 to MP 35.670 just North of Indian Hills Road | ALDOT | Authorized | TIP | FM | 11.62 | 2020 | $2,113,631 | $528,408 | | $2,642,039 |
| 100066932 | O & M | | ALDOT | Authorized | TIP | FM | 11.62 | 2020 | $500,000 | $125,000 | | $625,000 |
| 100068237 | O & M | Resurfacing on SR-36 From SR-3 (US-31) (MP 21.136) to West End of the I-65 Bridge (MP 23.555) Including CXS Railroad Crossing | ALDOT | Authorized | TIP | FM | 2.42 | 2020 | $910,772 | $227,693 | | $1,138,465 |
| 100068239 | O & M | Resurface SR-3 (US-31) from SR-36 to South End of Flint Creek Bridge | ALDOT | Authorized | TIP | FM | 3.71 | 2020 | $1,652,494 | $413,123 | | $2,065,617 |
| 100068243 | O & M | Resurfacing on SR-20 (US-72A) from .33 Mile West of SR-3 (US-31) to .54 Mile West of I-65 | ALDOT | Authorized | TIP | FM | 2.71 | 2020 | $1,192,664 | $298,166 | | $1,490,830 |
| 100072056 | O & M | Resurfacing on SR-3 (US-31) from 0.10 miles South of SR-67 to the Tennessee River Bridge | ALDOT | Planned | TIP | FM | 3.55 | 2021 | $3,335,389 | $833,847 | | $4,169,236 |
| 100068263 | O & M | Resurfacing on SR-3 (US-31) from Atkeson Drive SE to 0.12 miles South of SR-67 | ALDOT | Planned | TIP | FM | 2.34 | 2021 | $1,365,281 | $341,320 | | $1,706,601 |
| 100072297 | O & M | Advanced Corridor Management TSMO on I-65 from SR-67 (MP 334) to SR-3 (US-31 / MP 354) | ALDOT | Planned | | CN | 20 | 2024 | $3,662,926 | $915,732 | | $4,578,658 |
| 100061923 | O & M | Pavement Rehabilitation on SR-20 (US-72) from MP 67.147 East of RR Spur to MP 68.600 West of Bridge over RR | ALDOT | Planned | | CN | 1.45 | 2024 | $2,624,845 | $656,211 | | $3,281,056 |
| 100059676 | O & M | Bridge Replacement BIN 7652 CR-125 (Kirby Bridge Road) over the West Fork of Flint Creek new BIN 20851 | ALDOT | Authorized | TIP | CN | 0.1 | 2017 | $2,070,633 | | $517,658 | $2,588,291 |
| 100059676 | O & M | | ALDOT | Authorized | TIP | CN | 0.1 | 2015 | $487,564 | | $121,891 | $609,455 |
| 100069578 | O & M | Install Guardrail and End Anchors at Sites 2 and 3 on CR-1296 over Cotaco Creek (BIN 010117) and Hughes Creek (BIN 011515) and Site 4 (BIN 007160) on CR-1252 over Shoal Creek | ALDOT | Authorized | TIP | CN | 0.1 | 2019 | $128,196 | | $14,244 | $142,440 |
| 100065587 | O & M | Slope Failure Repair Work for SR-67 NB at CSX RR Bridge over Central Avenue in Decatur FHWA Disaster NO. AL-2016-1. DDIR NO 30-02-52-1 | ALDOT | Authorized | TIP | PE | 0.1 | 2016 | $7,600 | $1,900 | | $9,500 |
| 100065594 | O & M | | ALDOT | Authorized | TIP | CN | 0.1 | 2016 | $818,360 | $204,590 | | $1,022,950 |
| 100059675 | O & M | Bridge Replacement and Approaches on CR-28 (Vaughn Bridge Road) Over Flint Cree BIN 6691 | ALDOT | Authorized | TIP | CN | 0.1 | 2016 | $2,095,639 | $523,910 | | $2,619,549 |

## Surface Transportation Projects (All Other Surface Transportation Programs) Continued

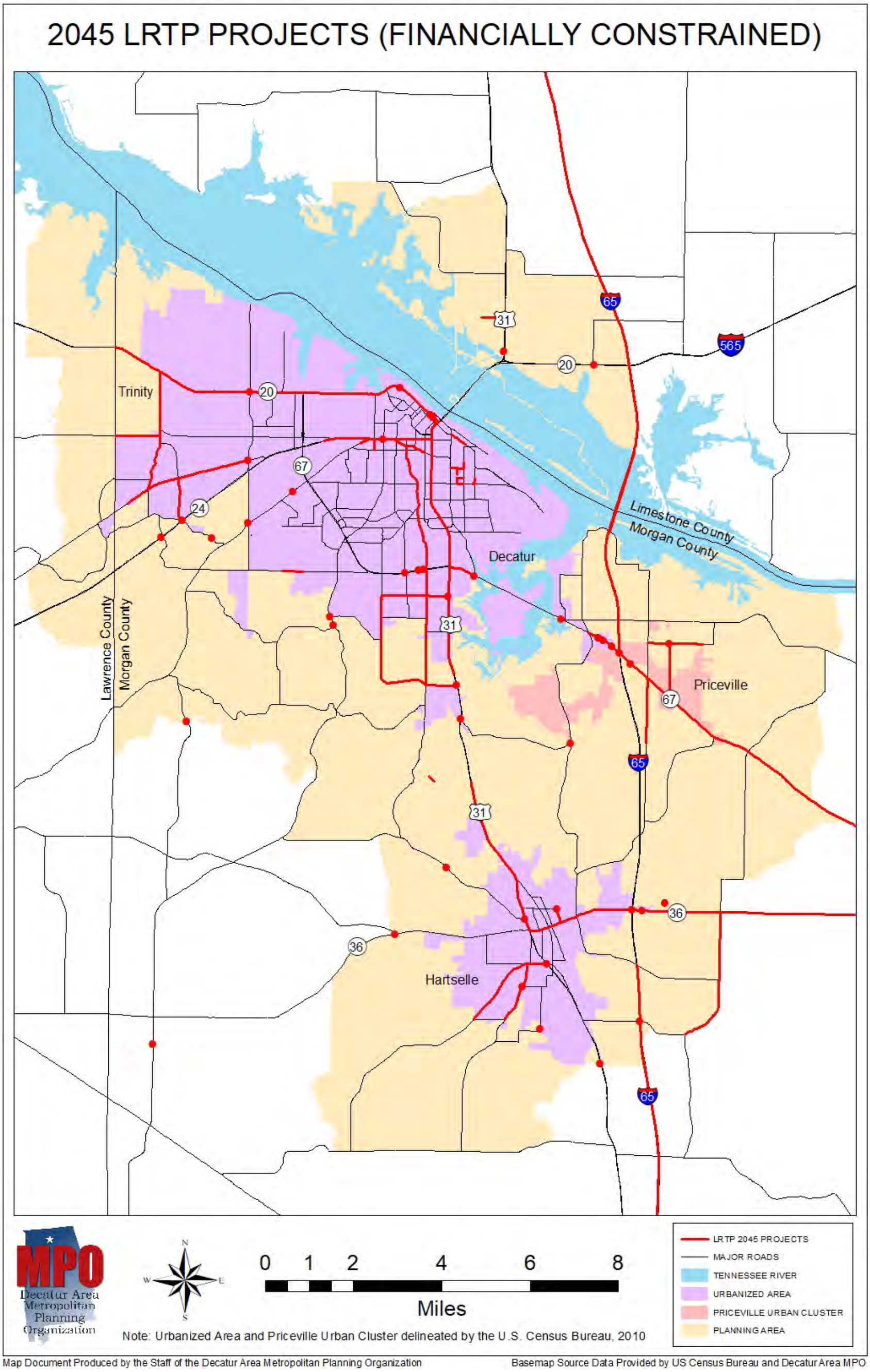
| ALDOT Project Number | Project Type | Project Description | Project Sponsor | Project Status | Timeframe | Scope | Length (Miles) | Program Year | Project Costs -Year of Expenditure (YOE) Federal | State | Local | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 100058400 | O & M | Resurface Austinville-Flint Road, Central Avenue SW and Mill Road | Decatur | Authorized | TIP | CN | 3.19 | 2016 | $1,076,861 | | $269,215 | $1,346,076 |
| 100058404 | O & M | Resurface Moulton Street CR-61 (Old Moulton Road) and 12th Avenue South West | Decatur | Authorized | TIP | CN | 2.39 | 2016 | $1,196,257 | | $299,064 | $1,495,321 |
| 100001761 | O & M | Clear Zone Safety Improvements on I-65 from MP 319.710 to MP 326.850 | ALDOT | Planned | | CN | 7.14 | 2024 | $4,555,408 | $506,156 | | $5,061,564 |
| | O & M | Access Management on SR-3 (US Hwy 31) from Gordon Terry Drive to SR-67 | ALDOT | | | CN | 3 | 2027 | $7,000,000 | $1,750,000 | | $8,750,000 |
| | O & M | Access Management on SR-67 from SR-3 (US Hwy 31) to Country Club Road | ALDOT | | | CN | 6 | 2032 | $8,000,000 | $1,750,000 | | $9,750,000 |
| | O & M | Intersection Improvements on SR-24 and South Greenway Drive | ALDOT | | | CN | 0.5 | 2033 | $1,000,000 | $250,000 | | $1,250,000 |
| | O & M | Intersection Improvements on SR-3 (US Hwy 31) at Airport Road | ALDOT | | | CN | 0.5 | 2034 | $2,500,000 | $625,000 | | $3,125,000 |
| | O & M | Intersection Improvements on SR-36 and Ironman Road | ALDOT | | | CN | 0.5 | 2036 | $1,000,000 | $250,000 | | $1,250,000 |
| | O & M | Intersection Improvements on SR-24 at Hudson Road | ALDOT | | | CN | 0.5 | 2037 | $1,700,000 | $425,000 | | $2,125,000 |
| | | | | | | | | | | | | |
| | | | | | | | | Project Estimated Total | $78,336,427 | $15,760,295 | $1,638,186 | $95,734,908 |
| | | | | | | | | Forecasted 2045 Total (Federal) | $79,455,569 | | | |
| | | | | | | | | Balance | $1,119,142 | | | |

## Surface Transportation Projects (All Other Surface Transportation Programs) Continued

| ALDOT Project Number | Project Type | Project Description | Project Sponsor | Project Status | Timeframe | Scope | Length (Miles) | Program Year | Project Costs -Year of Expenditure (YOE) Federal | State | Local | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Capacity Projects** | | | | | | | | | | | | |
| 100060267 | Capacity | SR-20 (US-72A) Intersection Improvement at SR-3 (US-31) Pavement Replacement Resurfacing and Striping from East Side of RR Bridge MP 68.605 to SR-3 MP 71.32 | ALDOT | Authorized | TIP | CN | 2.82 | 2015 | $1,629,202 | $407,983 | | $2,037,185 |
| 100060267 | Capacity | | ALDOT | Authorized | TIP | CN | 2.82 | 2015 | $6,877,716 | $1,719,429 | | $8,597,145 |
| 100071471 | Capacity | Widening and Traffic Stripe on Hulaco Road (CR-1297) from SR-67 to the Marshall County Line (Site 1) Leveling and Resurfacing on Bowles Bridge Road (CR-1193) from 0.6 miles East of Antique Lane for 849Feet (Site 2) | ALDOT | Authorized | TIP | CN | 1.23 | 2020 | $236,072 | | $36,597 | $272,669 |
| 100059677 | Capacity | Additional Lanes on West Moulton Street from Cockrell Avenue to Existing 4-lane | Decatur | Authorized | TIP | CN | 0.95 | 2017 | $1,771,024 | | $520,365 | $2,291,389 |
| | Capacity | Intersection Improvements on SR-20 at Neher Road | ALDOT | | | CN | 0.75 | 2025 | $3,000,000 | $750,000 | | $3,750,000 |
| | Capacity | Interchange Improvements at I-65 and SR-67 | ALDOT | | | CN | 0.5 | 2026 | $8,000,000 | $2,000,000 | | $10,000,000 |
| | Capacity | Interchange Improvements at I-65 and SR-36 | ALDOT | | | CN | 0.5 | 2029 | $8,000,000 | $2,000,000 | | $10,000,000 |
| | Capacity | Intersection Improvements at SR-20 and Woodall Road (Add Turn Lanes) | ALDOT | | | CN | 0.75 | 2030 | $2,000,000 | $500,000 | | $2,500,000 |
| | Capacity | Intersection Improvements on SR-67 at Country Club Road (Add Turn Lanes) | ALDOT | | | CN | 0.75 | 2032 | $2,000,000 | $500,000 | | $2,500,000 |
| | Capacity | Intersection Improvements on SR-3 (US Hwy 31) at Mill Road | ALDOT | | | CN | 0.75 | 2033 | $2,000,000 | $500,000 | | $2,500,000 |
| | Capacity | Intersection Improvements on SR-3 (US Hwy 31) at Nance Ford Road | ALDOT | | | CN | 0.75 | 2034 | $2,000,000 | $500,000 | | $2,500,000 |
| | | | | | | | | | | | | |
| | | | | | | | | Project Estimated Total | $37,514,014 | $8,877,412 | $556,962 | $46,948,388 |
| | | | | | | | | Forecasted 2045 Total (Federal) | $38,129,095 | | | |
| | | | | | | | | Balance | $615,081 | | | |

| Federal and State Funded Projects (ATRIP II, Build Grants, System Maintenance) | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Project Costs -Year of Expenditure (YOE) | | | |
| ALDOT Project Number | Project Type | Project Description | Project Sponsor | Project Status | Timeframe | Scope | Length (Miles) | Program Year | Federal | State | Local | Total |
| 100070731 | Capacity | Intersection Improvements on SR-67 (Beltline Road at Sandlin Road and Central Parkway) | Decatur | Authorized | TIP | PE | 1.82 | 2020 | | $159,119 | | $159,119 |
| 100071069 | Capacity | | Decatur | Authorized | TIP | CN | 1.82 | 2021 | | $1,648,190 | | $1,648,190 |
| 100070113 | Capacity | Plan Review and Permit Inspection for Decatur Build Grant Project at SR-20 (ALT-72) and Bibb-Garrett Road | ALDOT | Authorized | TIP | SP | 0.84 | 2019 | | $50,000 | | $50,000 |
| 100069665 | Capacity | Build Discretionary Grant (Project SMAART) Interchange Improvements over SR-20/ALT US-72 along Bibb Garrett Road | Decatur | Authorized | TIP | CN | 0.84 | 2020 | $14,222,671 | | | $14,222,671 |
| 100068442 | O & M | Bridge Painting on Thompson Road (BIN 012688) Over I-65 | Hartselle | Authorized | TIP | MC | 0.1 | 2018 | | $400,000 | | $400,000 |
| 100071050 | O & M | Resurfacing on Sandy Road 2800 Feet from Site to SR-3 (US-31) | ALDOT | Authorized | TIP | CN | 0.5 | 2020 | | $158,000 | | $158,000 |
| 100069817 | O & M | Closing of Line Street and Ferry Street at SR-20 (ALT US-72) | Decatur | Authorized | TIP | CN | 0.1 | 2019 | | $100,000 | | $100,000 |
| 100072055 | O & M | Safety Improvements on SR-3 (US-31) at Red Bank Road | Decatur | Authorized | TIP | PE | 0.7 | 2021 | | $20,000 | | $20,000 |
| 100070879 | O & M | | Decatur | Authorized | TIP | CN | 0.7 | 2021 | | $330,000 | | $330,000 |
| 100067293 | O & M | Shared Use Trail Starting East of Ashville Drive SW Moving West along Modaus Road SW and Turning North Towards the Jack Allen Recreation Complex | Decatur | Authorized | TIP | CN | 0.1 | 2018 | $333,178 | | $83,294 | $416,472 |
| 100069007 | O & M | Sidewalks on Beech Street 14th Avenue 7th Street SE 8th Street SE 19th Avenue SE and 16th Avenue | Hartselle | Authorized | TIP | CN | 0.1 | 2020 | $331,879 | | $82,969 | $414,848 |
| 100065530 | O & M | Streetscapes Beginning at the Corner of Sparkman Street SW and Proceeds to the East Side of Railroad and Hickory Street then from Hickory and Railroad ending at SR-36 | Hartselle | Authorized | TIP | CN | 0.1 | 2018 | $355,975 | | $88,993 | $444,968 |
| | | | | | | | | | | | | |
| | | | | | | Project Estimated Total | | | $15,243,703 | $2,865,309 | $255,256 | $18,364,268 |

**Figure 12 2045 Long-Range Projects (Financially Constrained)**



## 7.3 2045 Future Network

The 2045 Future Network includes the 2015 base year network and E+C network plus any financially constrained capacity transportation projects from 2015 to 2045. One (1) transportation project was added to the E+C network to form the 2045 Future Network. This project is listed in Table 18 below:

**Table 18 2045 Future Network Capacity Projects**

| Project Description | Project Year |
|---|---|
| Additional Lanes on West Moulton Street from Cockrell Avenue to Existing 4-Lane | 2017 |

The 2045 Future Transportation Network was used to evaluate and determine traffic conditions in 2045. The 2045 Future Network identifies future transportation needs based on control measurements such as level of service (LOS) and travel times. A comparison of the existing and future roadway conditions indicates that roadways with existing deficiencies (level of service E and F) will get progressively worse in the future. Figure 9 on page 43 gives a description and definition of level of service. Table 19 gives a detailed description of the congested roadways for the 2045 Future Transportation Network. In addition, Figure 13 shows the location of congested roadways based on the volume/capacity ratio.

**Figure 13 2045 Future Transportation Network Level of Service**

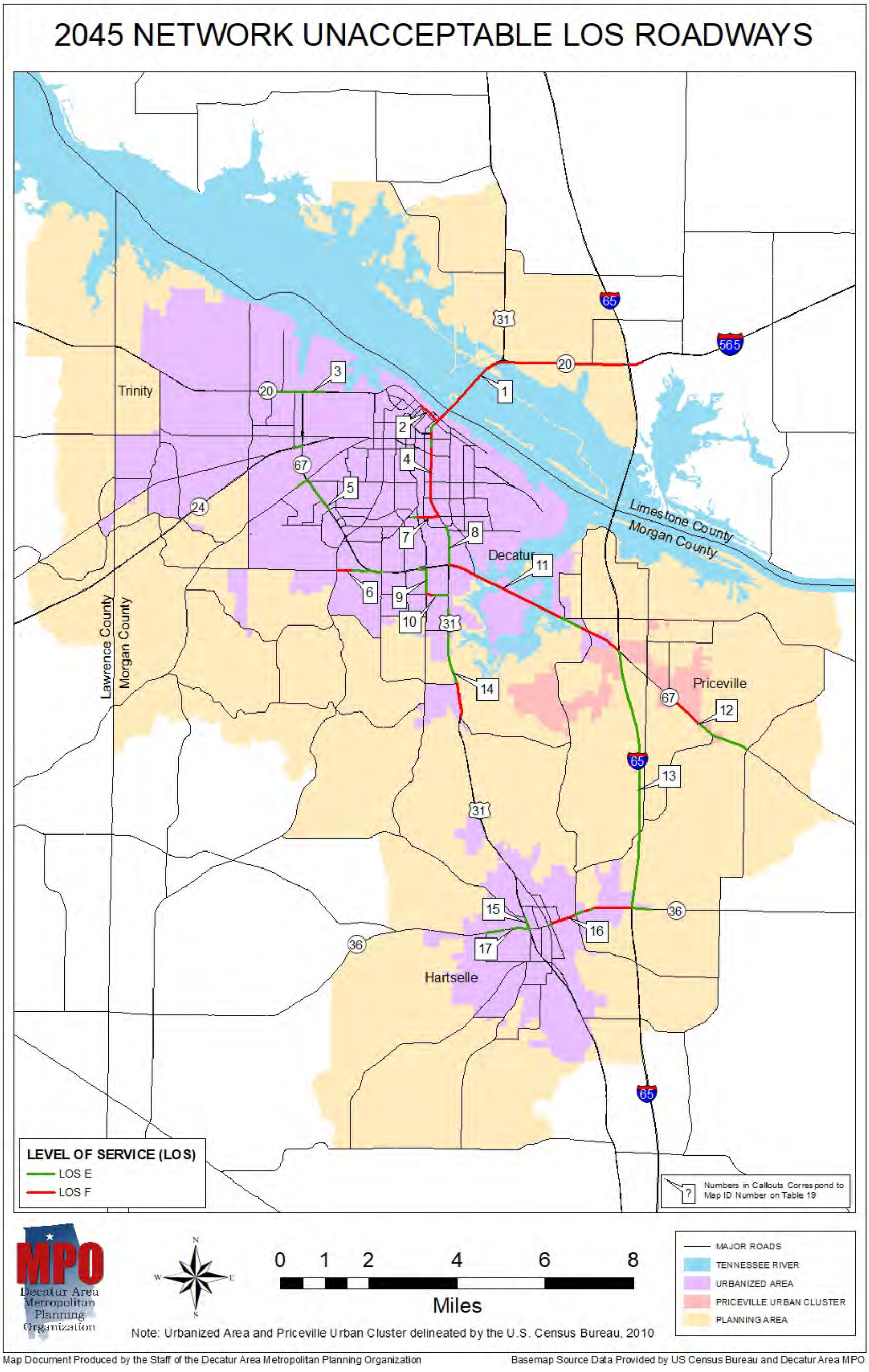


**Table 19 2045 Future Transportation Network Level of Service**

| Roadway | Roadway Segment Location | MAP ID (Figure 13) | Level of Service (LOS) |
|---|---|---|---|
| U.S. ALT 72 / State Route 20 | Interstate 65 to Wilson Street | 1 | F |
| Wilson Street | Oak Street to U.S. Highway 31 / 6th Avenue | 2 | F |
| U.S. ALT 72 / State Route 20 | Plugs Drive to Construction Road | 3 | E |
| U.S. Highway 31 / 6th Avenue | Wilson Street to 14th Street | 4 | E, F |
| State Route 67 / Beltline Road | Old Moulton Road to Westmead Drive | 5 | E |
| Modaus Road | Danville Road to State Route 67 / Beltline Road | 6 | E, F |
| 14th Street | Austinville Road to U.S. Highway 31 / 6th Avenue | 7 | E, F |
| U.S. Highway 31 / 6th Avenue | Flint Road to State Route 67 / Beltline Road | 8 | E |
| Central Parkway | State Route 67 / Beltline Road to Cedar Lake Road | 9 | E |
| Cedar Lake Road | Central Parkway to U.S. Highway 31 / 6th Avenue | 10 | E, F |
| State Route 67 | U.S. Highway 31 to Interstate 65 | 11 | E, F |
| State Route 67 | Derby Drive to Friendship Road | 12 | E |
| Interstate 65 | State Route 67 to State Route 36 | 13 | E |
| U.S. Highway 31 | Sexton Road to Red Bank Road | 14 | E, F |
| U.S. Highway 31 | Vaughn Bridge Road to State Route 36 | 15 | E |
| State Highway 36 | Sparkman Street to Peachtree Road | 16 | E, F |
| State Highway 36 | Pucket Road to U.S. Highway 31 | 17 | E |

## 7.4 2045 Visionary Plan

The 2045 Visionary Plan includes projects that are needed in the planning area, but could not be included in the Financially Constrained side of the LRTP because adequate funding is not available. The MPO will maintain the visionary plan in hopes of additional funding availability in the future. The visionary plan serves as a source of pre-reviewed projects that could be added to the LRTP if any planned project is completed under cost, or with special funds, or is eliminated. The projects that are included in the 2045 Visionary Plan are included in Table 20 below and shown in Figure 14.

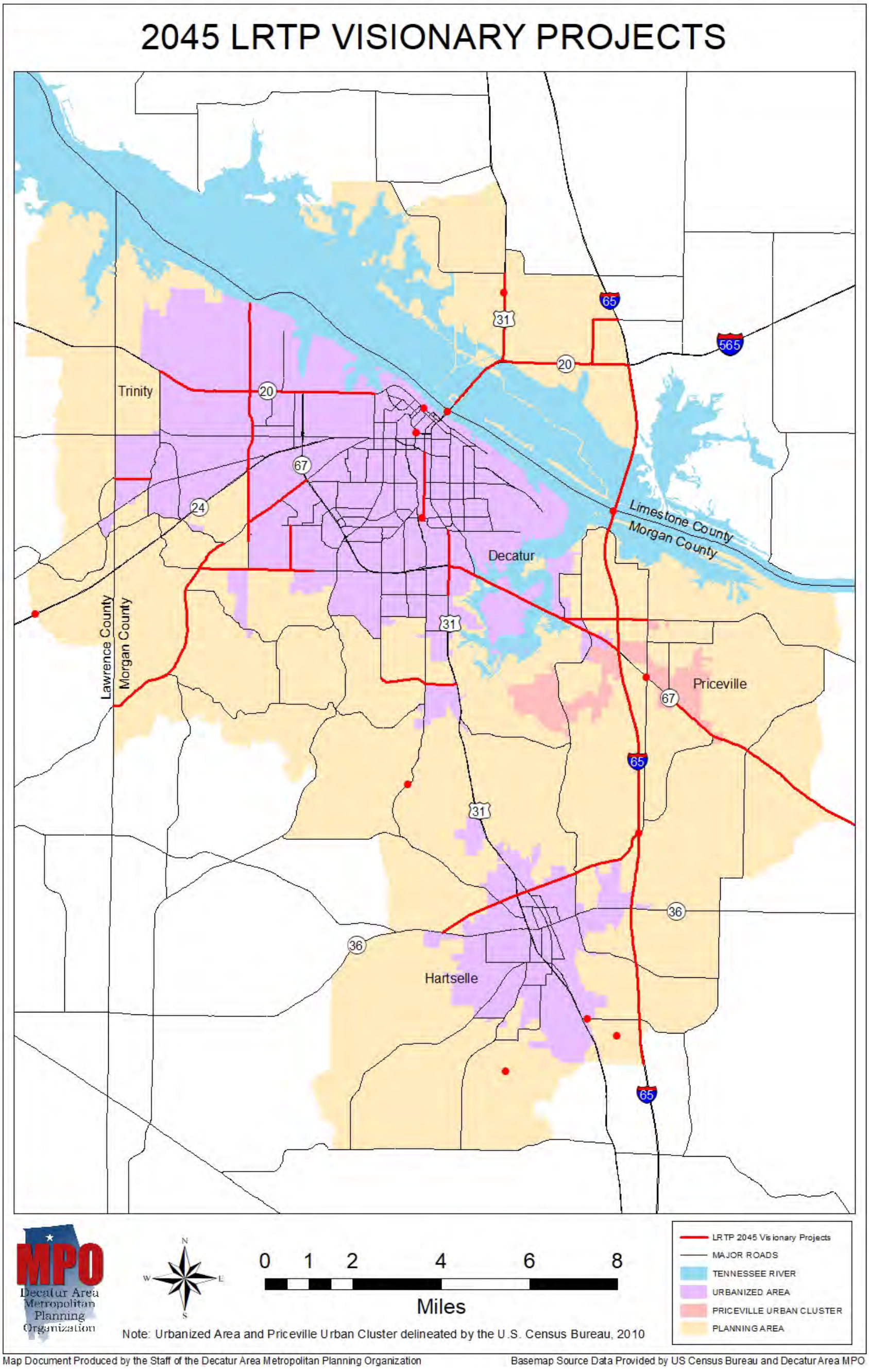
**Table 20 2045 Visionary Plan Projects**

| Project Description | Scope | Length (miles) | Improvement Type | Year of Expenditure (YOE) Costs |
|---|---|---|---|---|
| Improve SR-20 from Tennessee River Bridges to I-65 | PE, RW, UT, and CN | 3.50 | Capacity | $60,000,000 |
| New Interchange at I-65 and Bethel Road | PE, RW, UT, and CN | 1.00 | Capacity | $25,000,000 |
| Relocation of SR-36 from SR-36 to I-65 at Bethel Road | PE, RW, UT, and CN | 2.75 | Capacity | $27,500,000 |
| Add Lanes to Upper River Road from SR-67 to Bethel Road | PE, RW, UT, and CN | 2.00 | Capacity | $25,000,000 |
| Add lanes to SR-67 from Somerville to 4 lane section in Priceville | PE, RW, UT, and CN | 6.00 | Capacity | $60,000,000 |
| Add Lanes to Bibb Garrett Road from SR-20 to Planning Area Boundary | PE, RW, UT, and CN | 2.00 | Capacity | $12,000,000 |
| Add lanes to I-65 From I-565 Interchange to Urban Area boundary South of Thompson Road | PE, UT, CN | 8.00 | Capacity | $80,000,000 |
| Add lanes to U.S. Highway 31 from SR-20 to Thomas Hammons Road | PE, RW, UT, and CN | 1.75 | Capacity | $17,500,000 |
| Add lanes to SR-20 from 12th Avenue NW to North Seneca Drive Including Improvements at all Intersections | PE, RW, UT, and CN | 3.25 | Capacity | $32,500,000 |
| Add lanes to SR-67 from U.S. Highway 31 to I-65 | PE, RW, UT, and CN | 4.00 | Capacity | $40,000,000 |
| 14th Street Bridge Improvements Including Bicycle and Pedestrian Upgrades | CN | 0.50 | Operations/ Maintenance | $5,000,000 |
| Add lanes to Spring Avenue from Day Road to U.S. Hwy 31 | PE, RW, UT, and CN | 1.50 | Capacity | $20,000,000 |
| Add lanes to Modaus Road from Lexington Avenue to Old Moulton Road | PE, RW, UT, and CN | 2.50 | Capacity | $20,000,000 |
| Add lanes to Old Moulton from SR-67 to Woodall Road | PE, RW, UT, and CN | 1.50 | Capacity | $12,000,000 |
| Resurface 4th Avenue from Gordon Drive to 14th Street Including Bicycle and Pedestrian Upgrades | CN | 1.50 | Operations/ Maintenance | $2,500,000 |
| Add lanes to Woodall Road from Old Moulton Road to SR-24 | PE, RW, UT, and CN | 1.25 | Capacity | $12,000,000 |
| Construct Judge Crow Boulevard from Auburn Road to Modaus Road | PE, RW, UT, and CN | 1.00 | Capacity | $6,000,000 |
| Add lanes to U.S. Hwy 31 from Cedar Lake Road to Stratford Road | PE, RW, UT, and CN | 1.50 | Capacity | $15,000,000 |
| Thompson Road Bridge Improvements Including Bicycle and Pedestrian Upgrades | CN | 0.50 | Operations/ Maintenance | $5,000,000 |

| | | | | |
|---|---|---|---|---|
| Intersection Improvements on SR-67 at Bethel Road | PE, RW, UT, and CN | 0.50 | Operations/ Maintenance | $1,500,000 |
| Intersection Improvements at SR-24 and CR-327 | PE, RW, UT, and CN | 0.50 | Operations/ Maintenance | $1,000,000 |
| Resurface John Johnson Road from North Seneca Drive to Lawrence County Line | PE and CN | 0.75 | Operations/ Maintenance | $400,000 |
| Intelligent Transportation System (ITS) for Hudson Memorial Bridge and Interstate 65 Bridge | PE, UT and CN | 0.75 | Operations/ Maintenance | $1,000,000 |
| Parking Deck Downtown Decatur | PE, RW, UT, and CN | 0.25 | Operations/ Maintenance | $10,000,000 |
| Pedestrian Bridge over SR-20 connecting Downtown Decatur to Rhodes Ferry Park | PE, RW, UT, and CN | 0.25 | Operations/ Maintenance | $600,000 |
| Pedestrian Bridge over U.S. Hwy 31 connecting Calhoun Community College to the Robotics Center | PE, RW, UT, and CN | 0.25 | Operations/ Maintenance | $600,000 |
| Bridge Replacement on Cedar Creek Road over Cedar Creek | PE, RW, UT, and CN | 0.50 | Operations/ Maintenance | $1,000,000 |
| Huckaby Bridge Road, Bridge Replacement | PE, RW, UT, and CN | 0.50 | Operations/ Maintenance | $1,700,000 |
| Resurface Old Moulton Road from West Morgan Road to Lawrence County Line | PE, RW, UT, and CN | 4.90 | Operations/ Maintenance | $2,565,000 |
| Resurface Finley Island Road from SR-20 to Tennessee River | PE, RW, UT, and CN | 1.80 | Operations/ Maintenance | $1,270,000 |
| Resurface Woodall Road from SR-24 to SR-20 | PE, RW, UT, and CN | 1.70 | Operations/ Maintenance | $820,000 |
| Intersection Improvements at Norris Mill Road and Bowles Bridge Road | PE, RW, UT, and CN | 0.50 | Operations/ Maintenance | $400,000 |
| Add Lanes to Shady Grove Lane from Deerfoot Way to Old Moulton Road | PE, RW, UT, and CN | 0.50 | Capacity | $5,000,000 |

The planning area currently has two (2) bridges that cross the Tennessee River. These bridges will be over capacity before 2045, and the planning area will need another bridge to relieve congestion. Currently no funding or location has been identified for construction of a third bridge. Because of these factors, a bridge is not listed in the above table. The MPO will continue to work with federal, state, and local officials to identify funds for a new river crossing.

**Figure 14 2045 Visionary Projects**



### 7.4.1 2045 Visionary Network

The 2045 Visionary Network includes the 2045 future year network plus any visionary capacity projects from 2015 to 2045. Seventeen (17) transportation projects were added to the 2045 future year network to form the 2045 Visionary Network. These projects are listed in Table 20.

The 2045 Visionary Transportation Network was used to evaluate and determine traffic conditions in 2045. The 2045 Visionary Network identifies future transportation needs based on control measurements such as level of service (LOS) and travel times. A comparison of the existing and future roadway conditions indicates that roadways with existing deficiencies (level of service E and F) will get progressively worse in the future. Figure 9 on page 43 gives a description and definition of level of service. Table 21 gives a detailed description of the congested roadways for the 2045 Visionary Transportation Network. In addition, Figure 15 shows the location of congested roadways based on the volume/capacity ratio.

**Figure 15 2045 Visionary Network Level of Service**

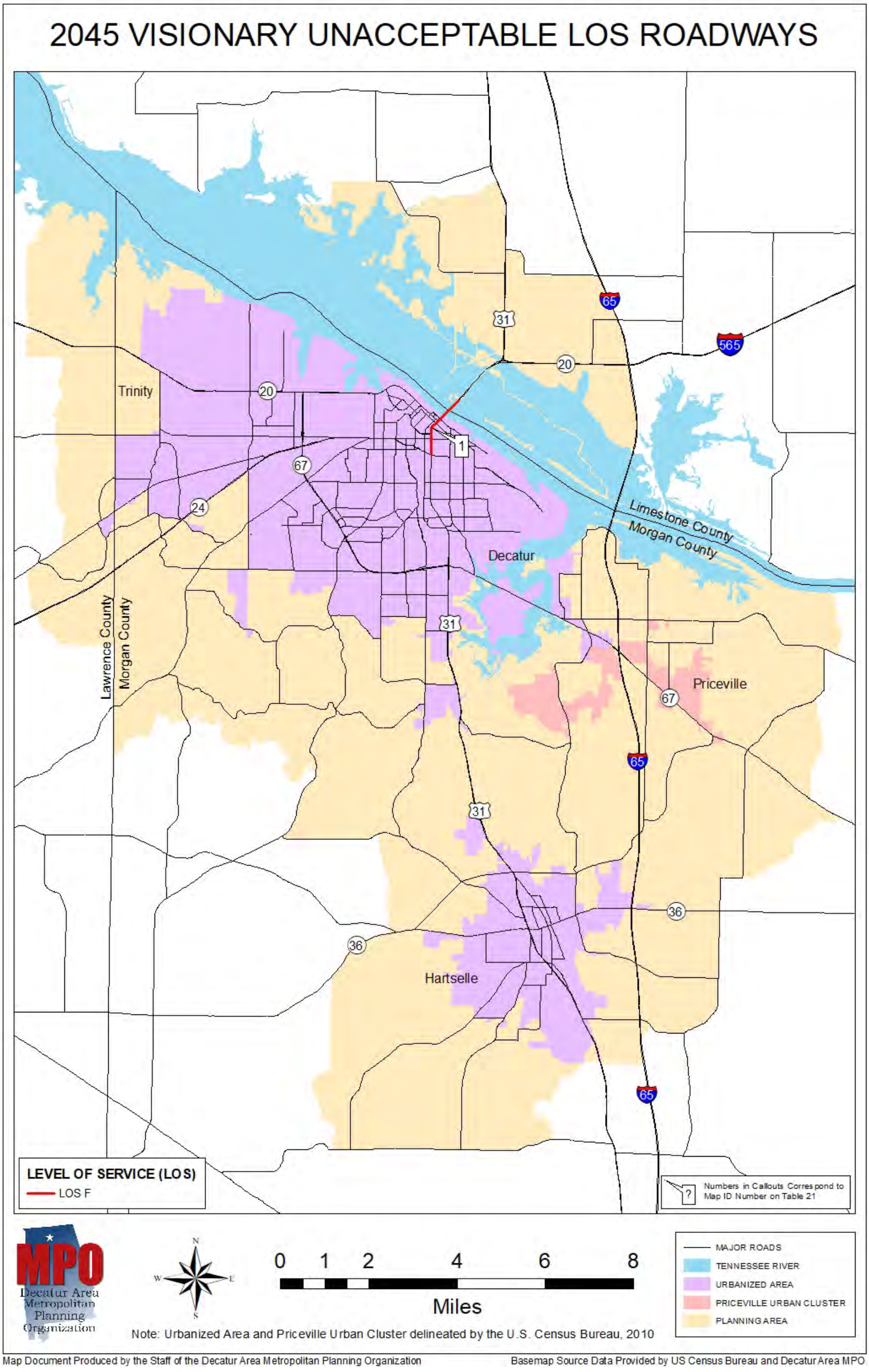


**Table 21 2045 Visionary Network Level of Service**

| Roadway | Roadway Segment Location | MAP ID (Figure 15) | Level of Service (LOS) |
|---|---|---|---|
| U.S. Highway 31 | North End of River Bridges to Gordon Drive SE | 1 | F |

# 8.0 Public Participation and Continuing Efforts

## 8.1 Public Participation Planning Process

**MPO Committee Meetings –** All meetings of the MPO Policy Board are preceded by meeting notices and agendas indicating the time, date, and place of the meeting. The meeting notice and agenda are circulated at least ten (10) days before a meeting. People that need special assistance to attend meetings may contact the MPO staff forty-eight (48) hours prior to the meetings to arrange for assistance to the meeting. Meeting details are also posted on the MPO website (https://www.cityofdecatural.com/departments/metropolitan-planning-organization/) ten (10) days before a meeting. Copies of meeting notices, news releases, comment forms and news articles are located in Section 9.9 of this document.

Any person who attends any of the MPO committee meetings is given an opportunity to participate in the planning process. A non-committee member may participate during any item included on the agenda. In addition, the committee chairperson recognizes non-members during every meeting and affords them the opportunity to speak on items not addressed on the agenda.

**Public Meetings and Reviews** - In order to facilitate public participation, the MPO held a public comment period as well as public meetings in the planning area. The public comment period was held after the Draft 2045 LRTP was adopted by the MPO on February 23, 2021 until March 23, 2021. The review period and all public meetings were advertised, and News Releases were provided to the local media prior to the public meetings. The Draft 2045 LRTP was also available at the following locations:

- Morgan County Courthouse
- Limestone County Courthouse
- City of Decatur
- City of Hartselle
- Town of Priceville
- Town of Trinity
- MPO Staff Office
- Decatur/Morgan County Chamber of Commerce
- NARCOG RTA Office
- Alabama Department of Transportation, Metropolitan Planning Section, Montgomery, Alabama
- Alabama Department of Transportation, North Region Office (Huntsville)
- Alabama Department of Transportation, Tuscumbia Area Office

Public Meetings

In order to receive public comments on the Draft 2045 LRTP, as well as to comply with requirements laid out in the Public Participation Plan (PPP), the following public meetings were held within the MPO Planning Area:

February 23, 2021 – 1:00 pm to 2:00 pm – Decatur City Hall
March 23, 2021 – 1:00 pm to 2:00 pm – Decatur City Hall

Announcements and sign-in sheets relating to these public meetings are attached in Section 9.9 of this document.

## 8.2 Conclusion and Continuing Efforts

The Decatur Planning Area 2045 Long-Range Transportation Plan has been carefully designed to accommodate existing as well as future transportation needs. In order to make this plan a viable document, the transportation system will be monitored carefully. This will involve regularly checking the plan contents to catch any miscalculations and make corrections. It also involves paying close attention to developing needs of unexpected changes in the planning area (new developments, changes in travel patterns, etc.). Any changes not predicted by this plan may call for addition, deletion, and/or shifting of projects. These alterations can be made by MPO amendments through the planning process.

Continuing Efforts involves preparation for the next Long-Range Transportation Plan. The MPO will begin the process of developing the 2050 LRTP in 2021. The MPO anticipates the 2050 LRTP will be completed and adopted in 2025.

Another Continuing Effort is updating the 2045 LRTP to conform to Air Quality issues. Currently the MPO planning area is classified as an Attainment Area by the EPA. If the planning area becomes Non-Attainment the current LRTP will need to be updated to meet regulations.

The transportation planning process involves more than the production of this plan. The process is intended to be continuous, comprehensive, and cooperative. These adjectives are used to define the 3C planning process that all MPOs are required to follow. The MPO and its committees meet on a regular basis to ensure that all requirements and needs of the 3C process are met, including the production of the Transportation Improvement Program (TIP) and the Unified Planning Work Program (UPWP). The meetings allow important transportation issues to be discussed and offer the public an opportunity to voice their concerns. The meetings also keep the key people in the process in touch with one another. All of these features help to ensure that the requirements of the 3C planning process are being met.

# 9.0 Appendixes

## 9.1 Abbreviations and Acronyms

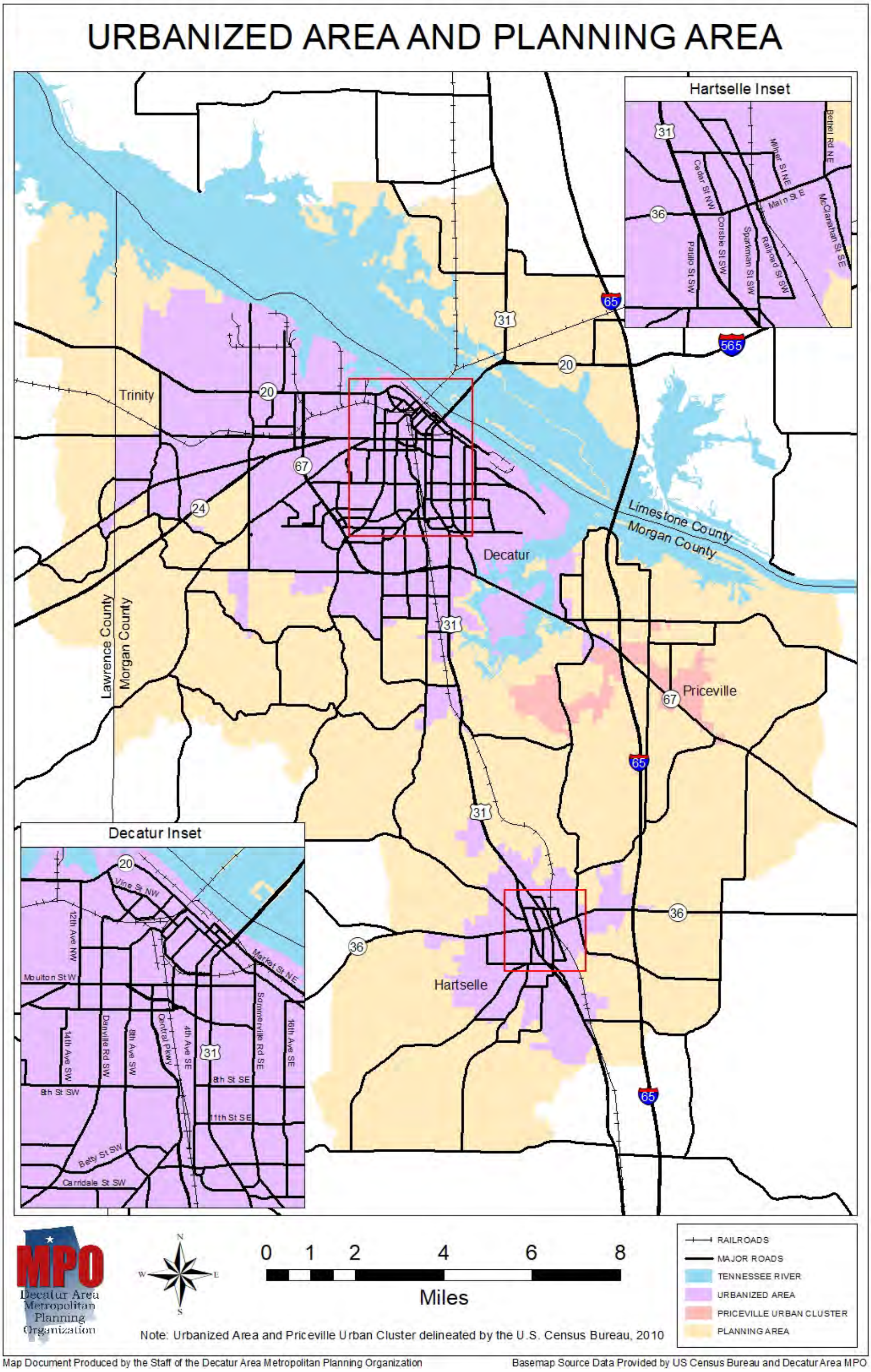
| | |
|---|---|
| AADT | Average Annual Daily Traffic |
| AASHTO | American Association of State Highway and Transportation Officials |
| ACS | American Community Survey |
| ADA | Americans with Disabilities Act |
| AL | Alabama |
| ALDOT | Alabama Department of Transportation |
| Alt | Alternate |
| Ave | Avenue |
| BIN | Bridge Identification Number |
| BPAC | Bicycle and Pedestrian Advisory Committee |
| BPP | Bicycle and Pedestrian Plan |
| BRAC | Base Realignment and Closure |
| BUILD | Better Utilizing Investments to Leverage Development |
| CAA | Clean Air Act |
| CAC | Citizens Advisory Committee |
| CBD | Central Business District |
| CFR | Code of Federal Regulations |
| CMAQ | Congestion Mitigation and Air Quality |
| CN | Construction |
| CR | County Road |
| Ct | Court |
| CTPP | Census Transportation Planning Package |
| DCU | Pryor Field Regional Airport |
| DDIR | Detailed Damage Inspection Report |
| DOT | Department of Transportation |
| Dr | Drive |
| E | East |
| E+C | Existing Plus Committed Network |
| E-E | External-External |
| EJ | Environmental Justice |
| EPA | Environmental Protection Agency |
| FAST Act | Fixing America's Surface Transportation Act |
| FHWA | Federal Highway Administration |
| FM | State Resurfacing Program |
| FP | Freight Plan |
| FR | Federal Register |
| FTA | Federal Transit Administration |
| FY | Fiscal Year |
| GHG | Greenhouse Gas |
| GIS | Geographic Information System |
| HBO | Home Based Other |
| HBW | Home Based Work |

| | |
|---|---|
| HSIP | Highway Safety Improvement Program |
| HSV | Huntsville International Airport |
| H+T | Housing and Transportation |
| HTF | Highway Trust Fund |
| Hwy | Highway |
| I | Interstate |
| I-E | Internal-External |
| IIC | International Intermodal Center |
| ITS | Intelligent Transportation System |
| LCEDA | Limestone County Economic Development Association |
| LED | Light Emitting Diode |
| LEP | Limited English Proficiency |
| Ln | Lane |
| LOS | Level of Service |
| LRTP | Long-Range Transportation Plan |
| MAP-21 | Moving Ahead for Progress in the 21st Century Act |
| MC | State Maintenance Project |
| MCEDA | Morgan County Economic Development Association |
| MP | Milepost |
| MPA | Metropolitan Planning Area |
| MPO | Metropolitan Planning Organization |
| MSA | Metropolitan Statistical Area |
| MUTCD | Manual on Uniform Traffic Control Devices |
| N | North |
| NAAQS | National Ambient Air Quality Standards |
| NARCOG | North Central Alabama Regional Council of Governments |
| NB | Northbound |
| NCHRP | National Cooperative Highway Research Program |
| NE | North East |
| NHB | Non-Home Based |
| NHPP | National Highway Performance Program |
| NHS | National Highway System |
| NPMRDS | National Performance Management Research Data Set |
| NPMS | National Pipeline Mapping System |
| NW | North West |
| NWR | National Wildlife Refuge |
| O&M | Operations and Maintenance |
| PBPP | Performance-Based Program and Planning |
| PE | Preliminary Engineering |
| Pkwy | Parkway |
| PM1 | Safety Performance Measures |
| PM2 | Bridge/Pavement Performance Measures |
| PM3 | System Performance Measures |
| PPB | Parts Per Billion |
| PPP | Public Participation Plan |
| Rd | Road |

| | |
|---|---|
| RMSE | Root Mean Squared Error |
| RR | Railroad |
| RTA | Regional Transit Agency |
| RW | Right-of-Way Acquisition |
| S | South |
| SAFETEA-LU | Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users |
| SE | South East |
| SHSP | Strategic Highway Safety Plan |
| SGR | State of Good Repair |
| SMAART | Safer Multimodal Activity along AL Route 20 |
| SP | Special Project |
| SR | State Route |
| SRTS | Safe Routes to Schools |
| St | Street |
| STA | Station |
| STIP | State Transportation Improvement Program |
| STPOA | Surface Transportation Program Other Area |
| SW | South West |
| TAM | Transit Asset Management |
| TAMP | Transportation Asset Management Plan |
| TARCOG | Top of Alabama Regional Council of Governments |
| TAZ | Traffic Analysis Zone |
| TCC | Technical Coordinating Committee |
| TDM | Travel Demand Model |
| TERM | Transit Economic Requirements Model |
| TIGER | Topologically Integrated Geographic Encoding and Referencing |
| TIP | Transportation Improvement Program |
| TSMO | Transportation Systems Management and Operations |
| T-T | Truck-Taxi |
| TTTR | Truck Travel Time Reliability |
| UA | Urbanized Area |
| UC | Urban Cluster |
| ULB | Useful Life Benchmark |
| UPWP | Unified Planning Work Program |
| US | United States |
| USC | United States Code |
| USDOT | United States Department of Transportation |
| UT | Utility Relocation |
| VHT | Vehicle Hours Traveled |
| VMT | Vehicle Miles Traveled |
| W | West |
| WMA | Wildlife Management Area |
| YOE | Year of Expenditure |
| 5M0 | Hartselle-Morgan County Regional Airport |

## 9.2 Planning Area Map

**Figure 16 Decatur Area MPO Planning Area**



## 9.3 Performance Measures Agreement

### ALABAMA PERFORMANCE MANAGEMENT AGREEMENT
### Per 23 CFR 450.314(h)

THIS AGREEMENT is made and entered into by and between the State of Alabama, acting by and through the Alabama Department of Transportation, hereinafter referred to as STATE; and the Decatur Metropolitan Planning Organization, hereinafter referred to as MPO;

**WHEREAS**, the United States Department of Transportation promulgated transportation planning regulations in 23 CFR 450.314, and

**WHEREAS**, MPO(s), the STATE(s), and providers of public transportation are required by 23 CFR 450.314 to cooperatively determine their mutual responsibilities in carrying out the performance-based planning and programming requirements established by federal law, and

**WHEREAS**, the 23 CFR 450.314(h) requires that MPO(s), the STATE(s), and providers of public transportation shall jointly agree upon and develop specific written procedures for cooperatively developing and sharing information related to transportation performance data, the selection of performance targets, the reporting of performance targets, the reporting of performance to be used in tracking progress toward attainment of critical outcomes for the region of the MPO, and the collection of data for the State asset management plan for the National Highway System (NHS).

**NOW, THEREFORE, BE IT RESOLVED,** that the parties do hereby agree to adhere to the following coordination mechanisms to meet performance-based planning and programming requirements for highways in accordance with 23 CFR 450.314(h) and established federal guidance.

1. Development of transportation performance data

    a. The STATE will collect data used in developing statewide targets to meet the federal performance management requirements for highways[1] to include the following:

        i. Targets for assessing the **Highway Safety Improvement Program (PM1)** for the following measures[2]:

            1. Number of fatalities
            2. Rate of fatalities per 100 million Vehicle Miles Traveled (VMT)
            3. Number of serious injuries
            4. Rate of serious injuries per 100 million VMT
            5. Number of combined non-motorized fatalities and non-motorized serious injuries

        ii. Targets for assessing **Pavement and Bridge Condition for the National Highway Performance Program (PM2)** for the following measures:

            1. Percentage of pavements on the Interstate System in Good condition
            2. Percentage of pavements on the Interstate System in Poor condition
            3. Percentage of pavements on the NHS (excluding the Interstate System) in Good condition
            4. Percentage of pavements on the NHS (excluding the Interstate System) in Poor condition
            5. Percentage of NHS bridge deck area classified in Good condition
            6. Percentage of NHS bridge deck area classified in Poor condition

[1] 23 CFR Part 490

[2] PM1/Safety performance measures and targets are applicable to all public roads regardless of ownership or functional classification; 23 CFR Part 924

iii. Targets for assessing performance of the **National Highway System, Freight Movement on the Interstate System and Congestion Mitigation and Air Quality Improvement Program (PM3)** for the following performance measures:

1. Percent of Person-Miles traveled on the Interstate System that are Reliable
2. Percent of Person-Miles traveled in the Non-Interstate System that are Reliable
3. Percent Change in Tailpipe CO2 Emissions on the NHS from the Calendar Year 2017[3]
4. Percentage of the Interstate System Mileage providing Reliable Truck Travel Times
5. Annual hours of Peak-Hour Excessive Delay Per Capita
6. Percent of Non-Single-Occupant-Vehicle (SOV) Travel
7. Total Emissions Reduction

iv. Targets for assessing performance of **the Transit Asset Management (TAM) Plan** for the following performance measures:

1. Asset Category: Rolling Stock (All revenue vehicles)
    a. Age- % of revenue vehicles within an asset class that have met or exceed their Useful Life Benchmark
2. Asset Category: Equipment (Non-revenue vehicles)
    a. Age- % of revenue vehicles within an asset class that have met or exceed their Useful Life Benchmark
3. Asset Category: Facilities (the STATE will only rate FTA funded facilities)
    a. Condition- % of facilities with a condition rating below 3.0 on a FTA Transit Economic Requirement Modal (TERM) Scale
4. Public Transportation agencies that are a part of the TAM will provide transit data by asset class (both revenue and non-revenue) and facilities conditions on an annual basis to the STATE.
5. Public Transportation agencies and MPOs developing their own TAM plan will provide their targets and the final report to the STATE.

b. Those MPOs that are currently designated as being in non-attainment or maintenance for air quality[4] will coordinate with the STATE on the collection and provision of data used in developing targets for the Congestion Mitigation and Air Quality (CMAQ) traffic congestion measures (Annual Hours of Peak-Hour Excessive Delay per capita and Percent Non-SOV Travel) and the Total Emission Reduction Measures.

c. The STATE will distribute transportation performance data used in developing statewide highway and transit targets to each Alabama MPO.

i. The STATE will provide performance data each time a statewide target is established or revised, per Section 2 of this agreement.

ii. Where possible and practicable, the STATE will provide performance data for each MPO planning area for purposes of tracking progress towards attainment of critical outcomes for each region's required System Performance Reports, per Section 4 of this agreement.

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[3] This measure and associated target will only be required if it is not repealed. Reference: Federal Register/Vol. 82, No. 215/Wednesday, November 8, 2017/ Proposed Rules; FHWA Docket No. FHWA-2017-0025.

[4] As determined through annual *Applicability Determination: CMAQ Traffic Congestion and CMAQ On-Road Mobile Source Emissions Measures,* 23 CFR Part 490.

iii. Notwithstanding any provision of this Agreement to the contrary, the parties agree that any safety data or information protected by 23 U.S.C. §§ 148 (h)(4) and 409 and State law shall be confidential. The parties agree that all crash and traffic data used by the parties for or in transportation improvement plans, highway safety improvement programs and strategic highway safety plans will not be disclosed to third parties without the express written permission of the STATE. The parties agree that the data shall not be referenced, disclosed, discussed or otherwise made public. The provision of the above data by the STATE shall not be considered a waiver of 23 U.S.C. §§ 148 (h)(4) and 409 or State precedent. Upon execution of this Agreement, the parties and their agents, servants, officers, officials and employees in both their official and individual capacities, agree that the data provided pursuant to the above referenced request shall not be discussed, disclosed, used, published or released without prior written consent of the STATE. If the data in any form should be disclosed, released or published in any manner without the consent of the STATE or should an attempt be made to use the data in an action for damages against the parties, their officials or employees, then access to the data shall terminate immediately. The STATE expressly reserves its right under 23 U.S.C. §§ 148 (h)(4) and 409 and State precedent to object to the use of the data and any opinions drawn from the data and to recover damages caused by the improper and unauthorized release of the data.

iv. The MPO shall defend, indemnify and hold harmless the STATE of Alabama, the Alabama Department of Transportation, its officials and employees, both in their official and individual capacities, and their agents and servants from and against all claims, damages, losses or expenses thereof, including but not limited to reasonable attorneys' fees, arising out of or resulting from faults, errors, mistakes, omissions, misconduct or negligent acts or omissions of the MPO, its subconsultants, agents, or employees caused as a result of or related to the service or work provided under this AGREEMENT. The MPO shall ensure that its subconsultants, agents, or employees possess the experience, knowledge and character necessary to qualify them to perform the particular duties assigned by The MPO. This indemnity is not limited by any insurance coverage required by this AGREEMENT.

v. By entering into this agreement, the MPO is not an agent of the STATE, its officers, employees, agents or assigns. The MPO is an independent entity from the STATE and nothing in this agreement creates an agency relationship between the parties.

d. If an MPO chooses to develop its own target for any highway measure, it will collect and provide the STATE with the performance target(s) and any supplemental data used in association with the MPO target setting process

2. Selection of transportation performance targets

a. The STATE and the MPOs will establish or revise performance targets in coordination with each other.

i. Coordination may include the following opportunities, as deemed appropriate, for each performance measure and target: in-person, meeting, webinars, conference calls, and email/written communication.

ii. MPOs will be given an opportunity to provide comment on the STATE targets no less than 30-days prior to the STATE's establishment or revision of highway targets.

iii. If an MPO chooses to set its own target, the MPO will develop the target in coordination with the STATE. The MPO will provide the STATE with the opportunity to comment on MPO targets no less than 30-days prior to MPO adoption of targets.

b. The STATE will select statewide performance targets to meet the federal performance management requirements for highways.

i. The STATE will provide written notice to the MPOs when the STATE selects a target. This notice will provide the target and the date the STATE set the target, which will begin the 180-day time-period in which the MPO must set a corresponding performance target.

ii. If an MPO chooses to support the statewide target, the MPO will provide written documentation to STATE that the MPO agrees to plan and program projects that will contribute toward the achievement of the statewide highway performance target.

iii. If the MPO chooses to set its own target, the MPO will provide the STATE written documentation that includes the target and the date the MPO plans to adopt. Documentation will be provided no less than 30-days prior to MPO adoption of target (consistent with Section 2a).

c. Those MPOs currently in non-attainment or maintenance for air quality[1] and the STATE will coordinate to select single, unified targets for the CMAQ traffic congestion measures (Annual Hours of Peak-Hour Excessive Delay Per Capita and Percent of Non-SOV Travel) and to select mobile source emission reduction targets for their respective non-attainment areas of ozone.

3. Reporting of performance targets

a. The STATE will report all performance targets to the Federal Highway Administration (FHWA) as applicable and in accordance with 23 CFR Part 490 and Federal Transit Administration (FTA) as applicable and in accordance with 49 CFR Part 625.

i. Through the Highway Safety Improvement Program Annual Report for PM1 measures.

ii. Through the required Baseline, Mid and Full Performance Reports and the Transportation Asset Management Plan (TAMP) for PM2 measures.

iii. Through the required Baseline, Mid and Full Performance Period Reports for PM3 measures, to include CMAQ Performance Plans where applicable.

b. The STATE will include a description of performance measures and performance targets, along with a System Performance Report, in accordance with 23 CFR 450.216(f) in any statewide transportation plan amended or adopted after May 27, 2018, and in accordance with 23 CFR 450.218(q) in any State Transportation Improvement Program adopted or amended after May 27, 2018.

4. Reporting of performance to be used in tracking progress toward attainment of critical outcomes for the region of the MPO.

a. The MPO will include a description of performance measures and performance targets, along with a System Performance Report, in accordance with 23 CFR 450.324(f) (3-4) in

any Metropolitan Transportation Plan amended or adopted after May 27, 2018, and in accordance with 23 CFR 450.326(d) in any Transportation Improvement Program amended or adopted after May 27, 2018, for PM1 measures.

b. The MPO will include a description of performance measures and performance targets, along with a System Performance Report, in accordance with 23 CFR 450.324(f)(3-4) in any Metropolitan Transportation Plan amended or adopted after May 20, 2019, and in accordance with 23 CFR 450.326(d) in any Transportation Improvement Program amended or adopted after May 20, 2019, for PM2 and PM3 measures.

c. The MPO will include a description of performance measures and performance targets, along with a System Performance Report, in accordance with 23 CFR 450.324(f) (3-4) in any Metropolitan Transportation Plan amended or adopted after October 1, 2019, and in accordance with 23 CFR 450.326(d) in any Transportation Improvement Program amended or adopted after October 1, 2019, for the GHG measure.

5. A collection of data for the State asset management plans for the NHS

   a. The STATE will be responsible for collecting pavement condition data for the NHS. This includes NHS roads that are not on the State Highway System, but instead are under the ownership of local jurisdictions, if such roads exist.

6. By signing this contract, the contracting parties affirm, for the duration of the agreement, that they will not violate federal immigration law or knowingly employ, hire for employment, or continue to employ an unauthorized alien within the State of Alabama. Furthermore, a contracting party found to be in violation of this provision shall be deemed in breach of the agreement and shall be responsible for all damages resulting therefrom.

*All parties agree that email communications shall be considered written notice for all portions of this agreement.*

**[signature page to follow]**

IN WITNESS WHEREOF, the parties hereto have executed this Agreement by those officers and officials duly authorized to execute same, and to be effective on the date hereinafter stated as the date of its approval by the Governor of Alabama.

ATTEST:

By: _____
Dewayne Hellums

Title: Director, MPO

MPO: Decatur MPO

BY: _____
Melvin Duran

Title: Chairman

By: _____
Jeff Pruitt
Title, NARCOG Transit Agency

This agreement has been legally reviewed and approved as to form and content.

By: _____
William F. Patty
Chief Counsel, Legal Bureau

RECOMMENDED FOR APPROVAL:

_____
D.E. Phillips, Jr. P.E.
State Local Transportation Engineer

_____
Don T. Arkle, P.E.
Chief Engineer

STATE OF ALABAMA, ACTING BY AND THROUGH THE ALABAMA DEPARTMENT OF TRANSPORTATION

_____
John R. Cooper
Transportation Director

The foregoing Agreement is hereby executed in the name of the State of Alabama and signed By the Governor on the 23 day of August, 2018.

_____
Kay Ivey
Governor, State of Alabama

## 9.4 Livability Principles and Indicators

1. Provide more transportation choices

   Develop safe, reliable, and economical transportation choices to decrease household transportation costs, reduce our nation's dependence on foreign oil, improve air quality, reduce greenhouse emissions, and promote public health.

   Indicators
   - Percentage of Transit Ridership in the Planning Area = 1.0%**
   - Percentage of workers using other means of transportation to work (transit, walk, bicycle etc...) = 1.5% ****

2. Promote equitable, affordable housing

   Expand location and energy efficient housing choices for people of all ages, incomes, races, and ethnicities to increase mobility, and lower the combined cost of housing and transportation.

   - Percentage of Household Income spent on housing and transportation = 55%**

3. Enhance economic competitiveness

   Improve economic competitiveness through reliable and timely access to employment centers, educational opportunities, services, and other basic needs by workers, as well as expanded business access to markets

   - Percentage of housing units located within one (1) mile of a Central Business District (CBD) = 20.98%***

4. Support existing communities

   Target federal funding toward existing communities through such strategies as transit-oriented mixed use development and land recycling – to increase community revitalization, improve the efficiency of public works investments, and safeguard rural landscapes.

   - Number of projects contained in the current Transportation Improvement Program that enhances or supports existing communities. (non-highway projects) = 3****

5. Coordinate policies and leverage investment

   Align federal policies and funding to remove barriers to collaboration, leverage funding, and increase the accountability and effectiveness of all levels of government to plan for future growth, including making smart energy choices such as locally generated renewable energy.

- Number of projects in the current Transportation Improvement Program that includes Public and Private collaboration and funding = 1*****

6. Value communities and neighborhoods

   Enhance the unique characteristics of all communities by investing in healthy, safe, and walkable neighborhoods – rural, urban or suburban

   - Number of house within ½ mile of a regional trail system = 3,875*

Source – 2010 U.S. Census Block data, MPO GIS Sidewalk, Bicycle Trail Inventory *
Source – The Affordability and Location Efficiency H+T Affordability Index **
Source – 2010 U.S. Census Block data and Tiger Files ***
Source – 2017 American Community Survey 5-Year Estimates ****
Source – 2020-2023 Decatur Transportation Improvement Program *****

## 9.5 Existing Bicycle and Pedestrian Facilities Maps

**Figure 17 Decatur Existing Bicycle and Pedestrian Facilities**

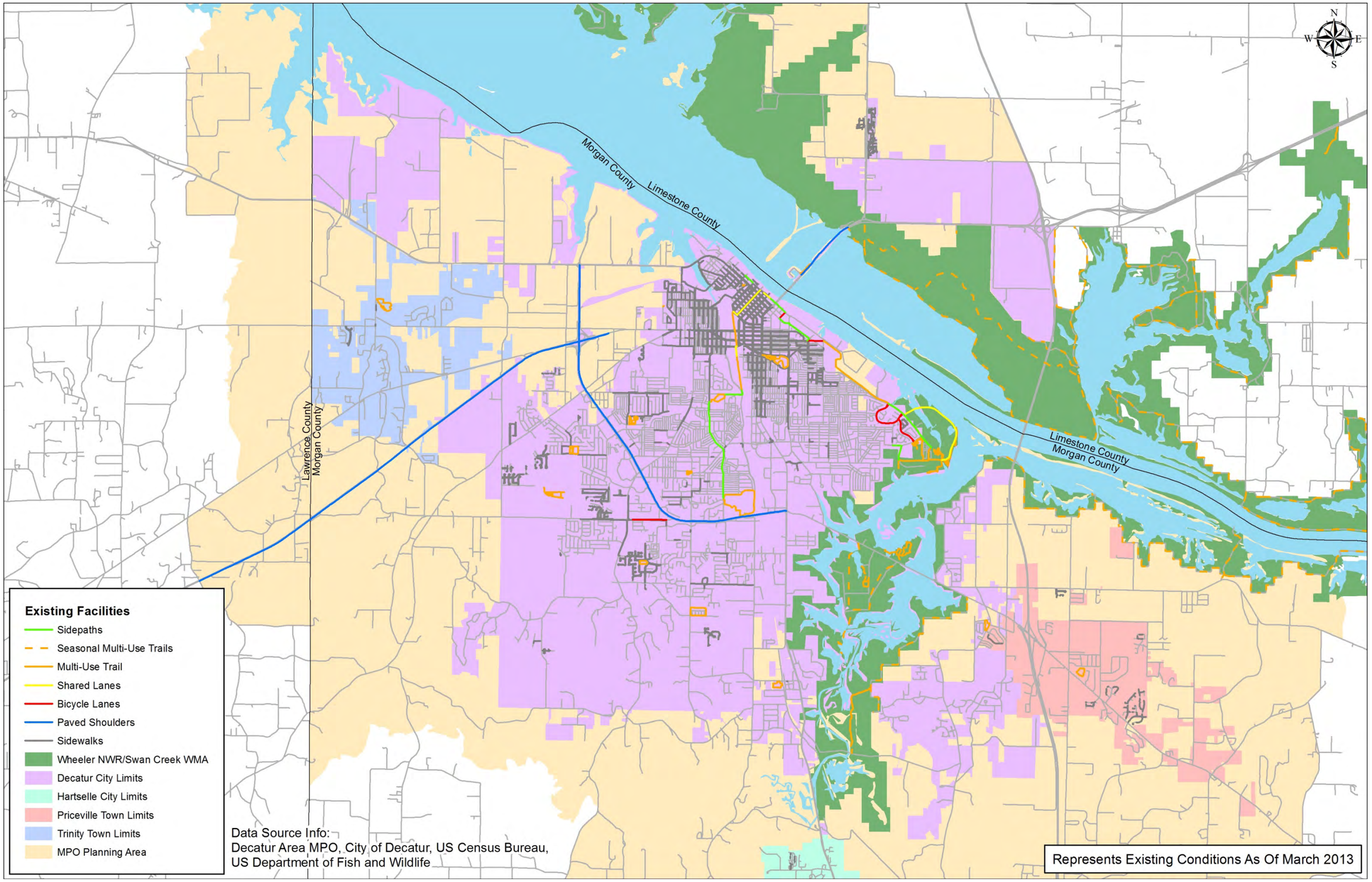


**Figure 18 Hartselle Existing Bicycle and Pedestrian Facilities**

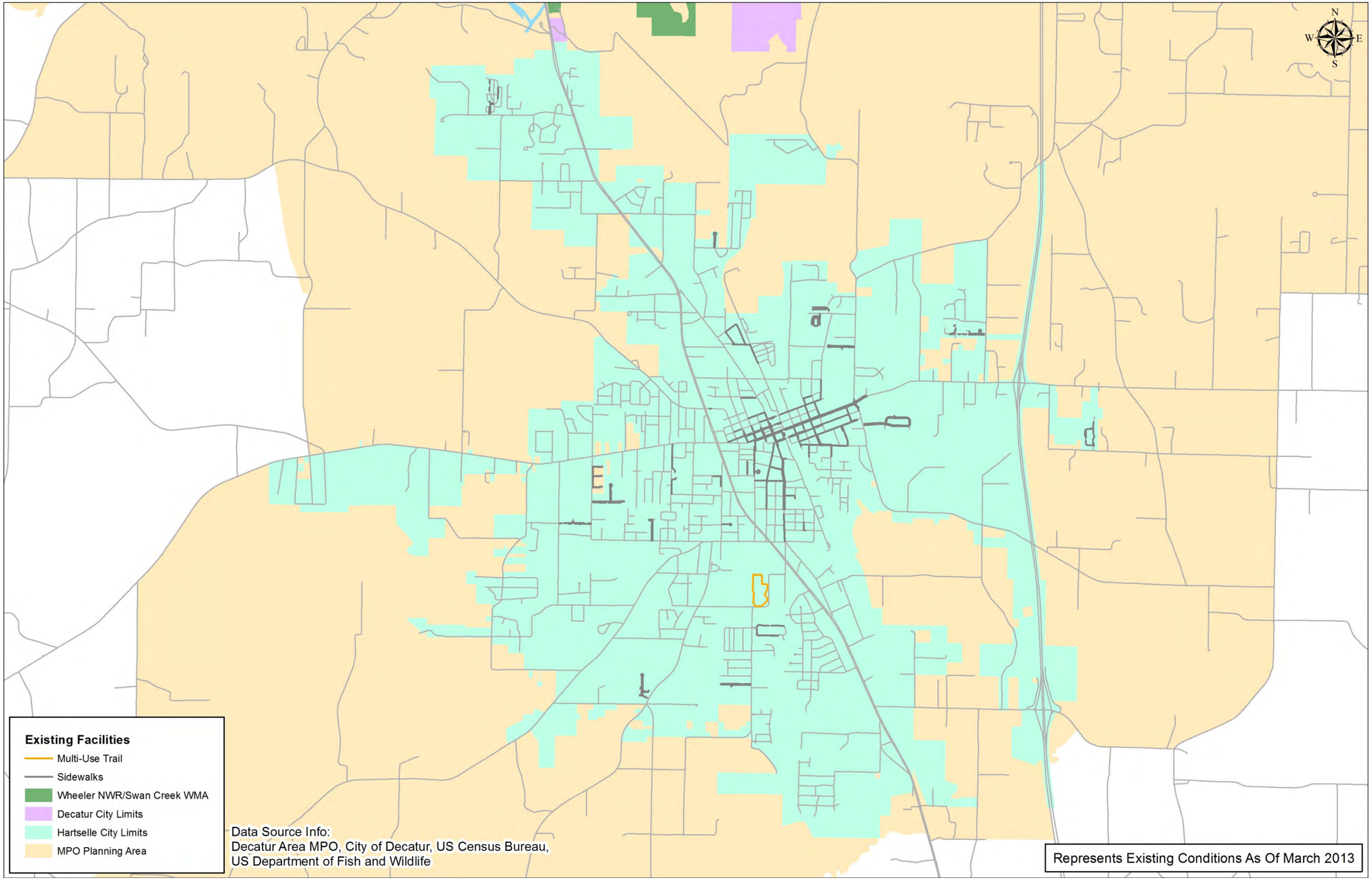


**Figure 19 Priceville Existing Bicycle and Pedestrian Facilities**

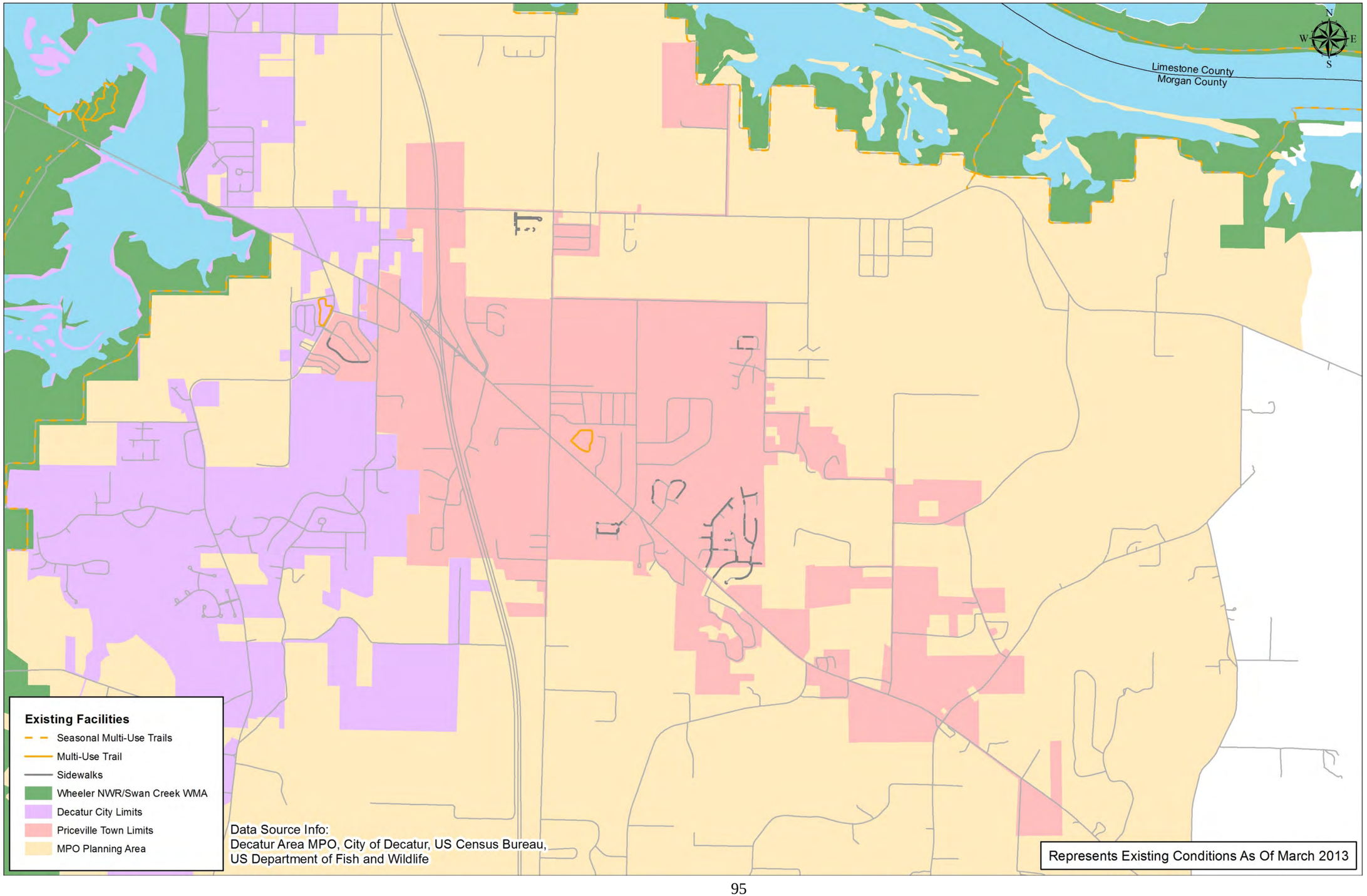
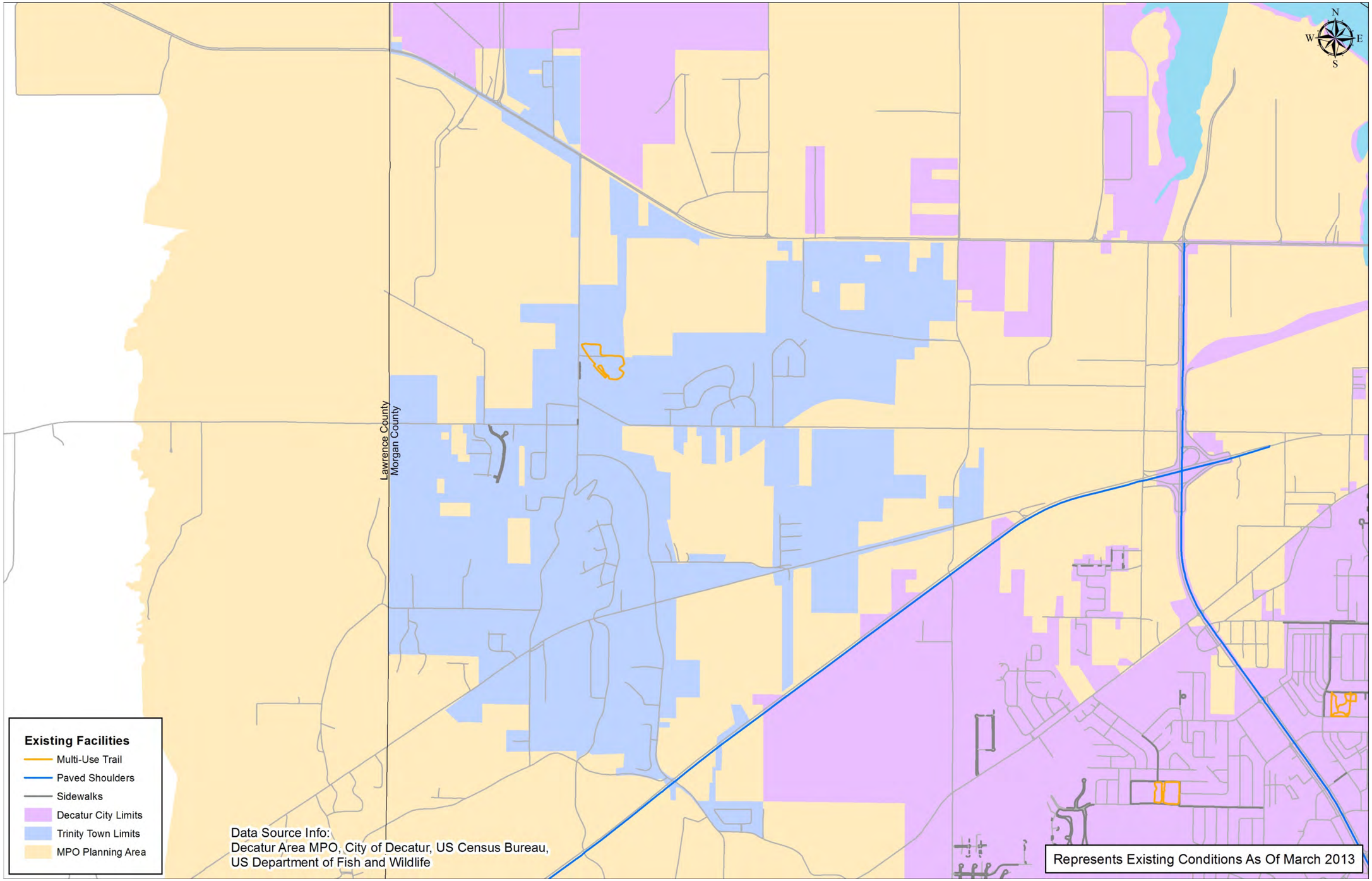


**Figure 20 Trinity Existing Bicycle and Pedestrian Facilities**



## 9.6 Bicycle and Pedestrian Project Listing

| Proposed Bicycle and Pedestrian Improvements | | |
|---|---|---|
| **Project Number** | **Description** | **Municipality** |
| 1 | Improve Bicycle and Pedestrian Access Along 8th St. SE from Point Mallard Dr. SE to 4th Ave. SE | Decatur |
| 2 | Improve Bicycle and Pedestrian Access Along Moulton St. from Trinity Ln. to Somerville Rd. | Decatur |
| 3 | Improve Bicycle and Pedestrian Access Along Danville Rd. and Memorial Dr. from Vestavia Dr. SW to Washington St. NW | Decatur |
| 4 | Upgrade Crosswalks and Repair Pedestrian Facilities Along 6th Ave. from Beltline Rd. to Wilson St. NE | Decatur |
| 5 | Improve Bicycle and Pedestrian Access Along Somerville Rd. and Country Club Rd. from Point Mallard Pkwy. to Church St. NE | Decatur |
| 6 | Improve Bicycle and Pedestrian Access Along Woodall Rd. SW and Shady Grove Ln. SW from Modaus Rd. SW to Old Hwy. 24 | Decatur |
| 7 | Restripe, Add Directional Signage, and Make General Repairs to the Dr. Bill Sims Bikeway | Decatur |
| 8 | Connect the Dr. Bill Sims Bikeway from Wilson Morgan Park to Existing Bicycle Lanes and Sidewalks on Modaus Rd. SW at Fairground Rd. SW | Decatur |
| 9 | Continue Bicycle and Pedestrian Facilities Along Modaus Rd. SW from Danville Rd. SW to Shady Grove LN. SW | Decatur |
| 10 | Improve Bicycle and Pedestrian Access Along Gordon Dr. from W Moulton St. to Somerville Rd. SE | Decatur |
| 11 | Improve Bicycle and Pedestrian Access Along Vestavia Dr. SW from Danville Rd. SW to Spring Ave. SW | Decatur |
| 12 | Improve Bicycle and Pedestrian Access Along Cedar Lake Rd. from Spring Ave. SW to Hwy. 31 S | Decatur |
| 13 | Improve Bicycle and Pedestrian Access Along Austinville Flint Rd. and Mill Rd. from Day Rd. SW to Hwy. 31 S | Decatur |
| 14 | Improve Bicycle and Pedestrian Access Along Spring Ave. SW from Cedar Lake Rd. SW to Beltline Rd. | Decatur |
| 15 | Improve Bicycle and Pedestrian Access Along Sandlin Rd. SW from Tammy St. SW to Beltline Rd. | Decatur |
| 16 | Connect the Dr. Bill Sims Bikeway from Shodes Ferry Park to Ingalls Harbor | Decatur |
| 17 | Improve Bicycle and Pedestrian Access Along Old Moulton Rd. from Woodall Rd. SW to W Moulton St. | Decatur |
| 18 | Improve Bicycle and Pedestrian Access Along 14th St. SE from Central Pkwy. SW to 6th Ave. SE | Decatur |
| 19 | Improve Bicycle and Pedestrian Access Along 4th Ave.  From 14th St. SE to Lee St. NE | Decatur |
| 20 | Improve Bicycle and Pedestrian Access Along Indian Hills Rd. SE from Hwy 67 S to Red Bank Rd. | Decatur |
| 21 | Restripe Beltline Rd. to Include Bicycle Lanes from Hwy 20 to 6th Ave. SE | Decatur |
| 22 | Improve Bicycle and Pedestrian Access Along Lee St. NE and Bank St. NE from 6th Ave. NE to Church St. NE | Decatur |
| 23 | Improve Bicycle and Pedestrian Access Along 2nd St. SW from Old Moulton Rd. to Gordon Dr. SE | Decatur |
| 24 | Improve Bicycla and Pedestrian Access Along Washington St. NW from Memorial Dr. NW to Vine St. NW | Decatur |
| 25 | Improve Bicycle and Pedestrian Access Along Vine St. NW from Davis St. NW to Bank St. NE | Decatur |
| 26 | Connect Dr. Bill Sims Bikeway Under Wilson St. NW at Railroad Bridge Along Railroad St. NW and Sycamore St. NW to Vine St. NW | Decatur |
| 27 | Improve Bicycle and Pedestrian Access Along Davis St. NW and Grove St. NW from Wilson St. NW to Vine St. NW | Decatur |
| 28 | Improve Bicycle and Pedestrian Access Along Tammy St. SW from Spring Ave. SW to Sandlin Rd. SW | Decatur |
| 29 | Improve Bicycle and Pedestrian Access Along Auburn Dr. SW from Grissom Ave. SW to Westmead Dr. SW | Decatur |
| 30 | Improve Bicycle and Pedestrian Access Along Westmead Dr. SW from Auburn Dr. SW to Danville Rd. SW | Decatur |
| 31 | Improve Bicycle and Pedestrian Access Along Magnolia St. SE from Somerville Rd. SE to Pennylane SE | Decatur |
| 32 | Improve Bicycle and Pedestrian Access Along Pennylane SE from Magnolia ST. SE to Stratford Rd. SE | Decatur |
| 33 | Improve Bicycle and Pedestrian Access Along Stratford Rd. SE from Country Club Rd. SE to Palmetto Dr. SE | Decatur |
| 34 | Improve Bicycle and Pedestrian Access Along US Hwy 31 N from Hwy 31/Hwy 20 Interchange to Thomas L. Hammonds Rd. | Decatur |
| 35 | Improve Bicycle and Pedestrian Access Along Hwy 67 S from Beltline Rd. to Marco Dr. | Decatur/Priceville |
| 36 | Improve Bicycle and Pedestrian Access Along Patillo St. SW from Hwy. 31 SW to Nance Ford Rd. SW | Hartselle |
| 37 | Improve Bicycle and Pedestrian Access Along Nance Ford Rd. SW from Hwy 31 SW to Mitwede St. SW | Hartselle |
| 38 | Improve Bicycle and Pedestrian Access Along Barkley Bridge Rd. SW from Nance Ford Rd. SW to Groover Rd. SW | Hartselle |
| 39 | Improve Bicycle and Pedestrian Access Along Barkley Bridge Rd. SW from Groover Rd. SW to Salem Rd. SW | Hartselle |
| 40 | Improve Bicycle and Pedestrian Access Along Groover Rd. SW, Madison St. SW and Adams St. SW | Hartselle |
| 41 | Improve Bicycle and Pedestrian Access Along Garner Rd. SW from Groover Rd. SW to Blue Ridge Rd. | Hartselle |
| 42 | Improve Bicycle and Pedestrian Access Along Sparkman St. SW from Karl Prince Dr. SW to Main St. | Hartselle |
| 43 | Improve Bicycle and Pedestrian Access Along Bethel Rd. NE from Main St. E to Meadowview Dr. NE | Hartselle |

Proposed Bicycle and Pedestrian Improvements Continued

| Project Number | Description | Municipality |
|---|---|---|
| 44 | Improve Bicycle and Pedestrian Access Along Bethel Rd. NE from Meadowview Dr. NE to Kyle Rd. NE | Hartselle |
| 45 | Improve Bicycle and Pedestrian Access Along Main St. E from Railroad St. to Bethel Rd. NE | Hartselle |
| 46 | Improve Bicycle and Pedestrian Access Along Nance Ford Rd. SW and Karl Prince Dr. SW from Corsbie St. SW to Sparkman St. SW | Hartselle |
| 47 | Improve Bicycle and Pedestrian Access Along Thompson Rd. from Hwy 31 SW to I-65 | Hartselle |
| 48 | Future Addition to Sparkman Park Multi-Use Trail | Hartselle |
| 49 | Improve Bicycle and Pedestrian Access Along Cave Springs Rd. from N Bethel Rd. to Bridge over Ginhouse Branch | Priceville |
| 50 | Improve Bicycle and Pedestrian Access Along N Bethel Rd. from Hwy 67 S to E Upper River Rd. | Priceville |
| 51 | Improve Bicycle and Pedestrian Access Along Hwy 67 S from Marco Dr. to Cove Creek Dr. | Priceville |
| 52 | Improve Bicycle and Pedestrian Access Along Skidmore Rd. from Hwy 67 S to Cave Springs Rd. | Priceville |
| 53 | Improve Bicycle and Pedestrian Access Along Greenway Dr. and West Morgan Rd. from Barxton Ct. to N Seneca Dr. | Trinity |
| 54 | Improve Bicycle and Pedestrian Access Along Old Hwy 24 from West Town Limits to Gordon Terry Pkwy. | Trinity |
| 55 | Improve Bicycle and Pedestrian Access Along N Seneca Dr. from N Greenway Dr. to Hwy 20 | Trinity |
| 56 | Improve Bicycle and Pedestrian Access Along Mountain Home Rd. from N Seneca Dr. to West Town Limits | Trinity |
| | | |

Proposed Crosswalk Improvements

| Project Number | Description | Municipality |
|---|---|---|
| 1 | Upgrade Crosswalks at 6th Ave. SE and 8th St. SE | Decatur |
| 2 | Pedestrian Bridge Across Beltline Rd. at Wilson Morgan Park | Decatur |
| 3 | Pedestrian Bridge Across Wilson St. NE Connceting Founders Park and Rhodes Ferry Park | Decatur |
| 4 | Upgrade Corsswalks at 6th Ave. SE and Gordon Dr. SE and 6th Ave. SE and Prospect Dr. SE | Decatur |
| 5 | Upgrade Crosswalks at Railroad St. SW and Hickroy St. SW | Hartselle |
| 6 | Pedestrian crosswalk with Protected Median Shelters Across Hwy 31 SW at Nance Ford Rd. SW | Hartselle |
| 7 | Upgrade Crosswalks at Railroad St. and Main St. E | Hartselle |
| 8 | Upgrade Crosswalks at Sparkman St. and Main St. | Hartselle |
| 9 | Upgrade Crosswalks at Sycamore St. and Main St. W | Hartselle |
| | | |

Bicycle and Pedestrian Improvements Currently Under Construction

| Project Number | Description | Municipality |
|---|---|---|
| 1 | Multi-Use Trail Along Spring Ave. SW from Cedar Lake Rd. SW to Day Rd. SW | Decatur |
| 2 | Pedestrian Improvements Along Wilson St. NE from Railroad Bridge to Intersection of Wilson St. NE and 6th Ave. NE With Connection to Dr. Bill Sims Bikeway | Decatur |
| 3 | Multi-Use Trail Inside Sparkman Park | Hartselle |

## 9.7 Base Year Socio-Economic Data Totals by TAZ Zone

| TAZ | Housing Units | Median Income | Retail Employment | Non-Retail Employment | School Enrollment | Dorm Rooms |
|---|---|---|---|---|---|---|
| 25 | 227 | 40439 | 26 | 82 | 0 | 0 |
| 26 | 163 | 21261 | 0 | 217 | 0 | 0 |
| 27 | 42 | 29756 | 9 | 0 | 0 | 0 |
| 28 | 23 | 72426 | 5 | 185 | 0 | 0 |
| 29 | 180 | 81680 | 5 | 1027 | 0 | 0 |
| 30 | 0 | 41280 | 14 | 100 | 240 | 0 |
| 31 | 0 | 0 | 1 | 350 | 0 | 0 |
| 32 | 5 | 87972 | 11 | 114 | 0 | 0 |
| 33 | 45 | 108197 | 37 | 151 | 0 | 0 |
| 34 | 4 | 0 | 63 | 886 | 0 | 0 |
| 35 | 0 | 0 | 4 | 15 | 0 | 0 |
| 36 | 0 | 19064 | 13 | 108 | 0 | 0 |
| 37 | 0 | 45692 | 0 | 420 | 0 | 0 |
| 38 | 109 | 57868 | 29 | 349 | 0 | 0 |
| 39 | 4 | 22110 | 0 | 20 | 0 | 0 |
| 40 | 0 | 7270 | 5 | 128 | 0 | 0 |
| 41 | 10 | 14537 | 0 | 16 | 0 | 0 |
| 42 | 28 | 18171 | 0 | 3 | 0 | 0 |
| 43 | 25 | 25109 | 0 | 11 | 0 | 0 |
| 44 | 35 | 48331 | 67 | 135 | 0 | 0 |
| 45 | 119 | 37664 | 4 | 122 | 348 | 0 |
| 46 | 65 | 22688 | 0 | 5 | 0 | 0 |
| 47 | 0 | 22625 | 0 | 0 | 0 | 0 |
| 48 | 75 | 28816 | 0 | 0 | 0 | 0 |
| 49 | 193 | 30413 | 0 | 0 | 0 | 0 |
| 50 | 65 | 21994 | 3 | 0 | 0 | 0 |
| 51 | 38 | 24132 | 0 | 0 | 0 | 0 |
| 52 | 10 | 34237 | 0 | 0 | 0 | 0 |
| 53 | 46 | 31682 | 0 | 0 | 0 | 0 |
| 54 | 152 | 29137 | 0 | 5 | 0 | 0 |
| 55 | 66 | 24666 | 3 | 3 | 0 | 0 |
| 56 | 45 | 22573 | 0 | 0 | 0 | 0 |
| 57 | 25 | 19191 | 0 | 235 | 0 | 0 |
| 58 | 274 | 30768 | 4 | 51 | 0 | 0 |
| 59 | 206 | 36934 | 4 | 68 | 298 | 0 |
| 60 | 86 | 31807 | 2 | 40 | 0 | 0 |
| 61 | 255 | 44020 | 0 | 17 | 0 | 0 |

| TAZ | Housing Units | Median Income | Retail Employment | Non-Retail Employment | School Enrollment | Dorm Rooms |
|---|---|---|---|---|---|---|
| 62 | 140 | 36262 | 67 | 10 | 0 | 0 |
| 63 | 34 | 42982 | 66 | 112 | 0 | 0 |
| 64 | 62 | 25342 | 23 | 227 | 0 | 0 |
| 65 | 36 | 35686 | 5 | 0 | 0 | 0 |
| 66 | 78 | 22311 | 16 | 2 | 0 | 0 |
| 67 | 201 | 20555 | 0 | 93 | 0 | 0 |
| 68 | 306 | 17721 | 19 | 153 | 276 | 0 |
| 69 | 385 | 17721 | 13 | 625 | 0 | 0 |
| 70 | 22 | 0 | 34 | 3027 | 0 | 0 |
| 71 | 16 | 37043 | 309 | 2320 | 0 | 0 |
| 72 | 21 | 16155 | 0 | 1818 | 0 | 0 |
| 73 | 39 | 20395 | 0 | 69 | 0 | 0 |
| 74 | 289 | 46702 | 2 | 31 | 0 | 0 |
| 75 | 157 | 57468 | 2 | 79 | 0 | 0 |
| 76 | 53 | 61601 | 3 | 198 | 561 | 0 |
| 77 | 181 | 36749 | 27 | 1053 | 0 | 0 |
| 78 | 0 | 38566 | 9 | 1100 | 0 | 0 |
| 79 | 2 | 0 | 0 | 395 | 0 | 0 |
| 80 | 28 | 0 | 114 | 265 | 0 | 0 |
| 81 | 16 | 38566 | 0 | 1043 | 0 | 0 |
| 82 | 14 | 45093 | 11 | 358 | 0 | 0 |
| 83 | 1 | 0 | 2 | 27 | 0 | 0 |
| 84 | 27 | 51787 | 29 | 11 | 0 | 0 |
| 85 | 756 | 56600 | 12 | 401 | 0 | 0 |
| 86 | 0 | 51791 | 12 | 103 | 0 | 0 |
| 87 | 68 | 54997 | 5 | 17 | 0 | 0 |
| 88 | 111 | 53453 | 30 | 154 | 789 | 0 |
| 89 | 139 | 59752 | 20 | 27 | 0 | 0 |
| 90 | 4 | 57704 | 0 | 0 | 0 | 0 |
| 91 | 77 | 54907 | 4 | 6 | 0 | 0 |
| 92 | 225 | 59296 | 2 | 39 | 0 | 0 |
| 93 | 40 | 38042 | 0 | 5 | 0 | 0 |
| 94 | 23 | 67254 | 0 | 29 | 0 | 0 |
| 95 | 211 | 46601 | 0 | 53 | 0 | 0 |
| 96 | 209 | 49464 | 10 | 32 | 0 | 0 |
| 97 | 109 | 57956 | 0 | 11 | 0 | 0 |
| 98 | 58 | 75959 | 0 | 11 | 0 | 0 |
| 99 | 913 | 51530 | 5 | 162 | 0 | 0 |
| 100 | 336 | 33557 | 195 | 861 | 0 | 0 |

| TAZ | Housing Units | Median Income | Retail Employment | Non-Retail Employment | School Enrollment | Dorm Rooms |
|---|---|---|---|---|---|---|
| 101 | 197 | 45689 | 3 | 15 | 0 | 0 |
| 102 | 249 | 46670 | 0 | 68 | 0 | 0 |
| 103 | 816 | 49771 | 2 | 68 | 395 | 0 |
| 104 | 483 | 51030 | 21 | 515 | 0 | 0 |
| 105 | 196 | 49502 | 90 | 296 | 0 | 0 |
| 106 | 11 | 58245 | 14 | 166 | 0 | 0 |
| 107 | 0 | 45168 | 0 | 101 | 0 | 0 |
| 108 | 64 | 13394 | 47 | 264 | 0 | 0 |
| 109 | 197 | 45168 | 0 | 20 | 0 | 0 |
| 110 | 103 | 54113 | 0 | 174 | 1434 | 0 |
| 111 | 742 | 44768 | 14 | 170 | 0 | 0 |
| 112 | 210 | 47392 | 0 | 8 | 0 | 0 |
| 113 | 202 | 44454 | 0 | 9 | 0 | 0 |
| 114 | 400 | 35299 | 0 | 189 | 339 | 0 |
| 115 | 67 | 24860 | 80 | 947 | 504 | 0 |
| 116 | 130 | 42060 | 74 | 529 | 0 | 0 |
| 117 | 18 | 13463 | 132 | 370 | 0 | 0 |
| 118 | 0 | 16579 | 87 | 512 | 0 | 0 |
| 119 | 10 | 45665 | 374 | 1339 | 0 | 0 |
| 120 | 670 | 29640 | 24 | 706 | 0 | 0 |
| 121 | 8 | 28615 | 9 | 129 | 0 | 0 |
| 122 | 236 | 41673 | 1 | 38 | 0 | 0 |
| 123 | 195 | 35048 | 0 | 0 | 0 | 0 |
| 124 | 76 | 36446 | 3 | 0 | 0 | 0 |
| 125 | 285 | 19198 | 95 | 197 | 0 | 0 |
| 126 | 86 | 22101 | 3 | 43 | 0 | 0 |
| 127 | 266 | 31305 | 0 | 89 | 370 | 0 |
| 128 | 548 | 36085 | 45 | 215 | 0 | 0 |
| 129 | 500 | 30313 | 281 | 786 | 0 | 0 |
| 130 | 359 | 25712 | 385 | 637 | 0 | 0 |
| 131 | 844 | 65949 | 2 | 99 | 873 | 0 |
| 132 | 171 | 77862 | 0 | 12 | 0 | 0 |
| 133 | 69 | 67490 | 0 | 1 | 0 | 0 |
| 134 | 304 | 79671 | 9 | 19 | 0 | 0 |
| 135 | 244 | 78621 | 0 | 7 | 0 | 0 |
| 136 | 1327 | 56466 | 2 | 135 | 522 | 0 |
| 137 | 48 | 48090 | 200 | 284 | 0 | 0 |
| 138 | 317 | 42036 | 527 | 349 | 0 | 0 |
| 139 | 449 | 27570 | 67 | 98 | 0 | 0 |

| TAZ | Housing Units | Median Income | Retail Employment | Non-Retail Employment | School Enrollment | Dorm Rooms |
|---|---|---|---|---|---|---|
| 140 | 54 | 28738 | 229 | 169 | 0 | 0 |
| 141 | 58 | 34098 | 74 | 905 | 0 | 0 |
| 142 | 505 | 33600 | 3 | 79 | 0 | 0 |
| 143 | 474 | 38767 | 0 | 86 | 417 | 0 |
| 144 | 409 | 59802 | 7 | 65 | 553 | 0 |
| 145 | 75 | 55102 | 54 | 337 | 0 | 0 |
| 146 | 25 | 42279 | 18 | 151 | 0 | 0 |
| 147 | 92 | 64179 | 0 | 20 | 0 | 0 |
| 148 | 123 | 61532 | 0 | 23 | 0 | 0 |
| 149 | 361 | 50530 | 0 | 76 | 0 | 0 |
| 150 | 289 | 58141 | 2 | 77 | 0 | 0 |
| 151 | 311 | 53256 | 471 | 295 | 0 | 0 |
| 152 | 405 | 44300 | 46 | 92 | 0 | 0 |
| 153 | 20 | 53483 | 0 | 0 | 0 | 0 |
| 154 | 98 | 50344 | 1 | 6 | 0 | 0 |
| 155 | 382 | 58861 | 2 | 24 | 0 | 0 |
| 156 | 775 | 36092 | 100 | 413 | 432 | 0 |
| 157 | 127 | 27021 | 2 | 78 | 0 | 0 |
| 158 | 96 | 49219 | 6 | 64 | 0 | 0 |
| 159 | 30 | 42773 | 0 | 2 | 0 | 0 |
| 160 | 249 | 46997 | 1 | 10 | 0 | 0 |
| 161 | 63 | 42129 | 0 | 13 | 0 | 0 |
| 162 | 49 | 44496 | 0 | 3 | 0 | 0 |
| 163 | 65 | 35750 | 1 | 3 | 0 | 0 |
| 164 | 44 | 35750 | 0 | 0 | 0 | 0 |
| 165 | 46 | 40108 | 0 | 4 | 0 | 0 |
| 166 | 192 | 53643 | 1 | 60 | 341 | 0 |
| 167 | 344 | 52178 | 0 | 12 | 0 | 0 |
| 168 | 129 | 55514 | 0 | 14 | 0 | 0 |
| 169 | 597 | 71458 | 22 | 101 | 0 | 0 |
| 170 | 22 | 41206 | 0 | 78 | 0 | 0 |
| 171 | 9 | 36903 | 0 | 150 | 0 | 0 |
| 172 | 0 | 39274 | 0 | 0 | 0 | 0 |
| 173 | 59 | 45203 | 0 | 133 | 0 | 0 |
| 174 | 44 | 56735 | 51 | 582 | 0 | 0 |
| 175 | 3 | 68285 | 18 | 37 | 0 | 0 |
| 176 | 1 | 67715 | 4 | 5 | 0 | 0 |
| 177 | 85 | 25031 | 1 | 3 | 0 | 0 |
| 178 | 27 | 7379 | 0 | 0 | 0 | 0 |

| TAZ | Housing Units | Median Income | Retail Employment | Non-Retail Employment | School Enrollment | Dorm Rooms |
|---|---|---|---|---|---|---|
| 179 | 5 | 20871 | 26 | 63 | 0 | 0 |
| 180 | 84 | 22749 | 34 | 166 | 0 | 0 |
| 181 | 69 | 17814 | 0 | 17 | 0 | 0 |
| 182 | 1 | 12089 | 11 | 3 | 0 | 0 |
| 183 | 30 | 4919 | 2 | 22 | 0 | 0 |
| 184 | 10 | 30185 | 18 | 164 | 0 | 0 |
| 185 | 49 | 33857 | 0 | 107 | 504 | 0 |
| 186 | 80 | 39189 | 7 | 86 | 455 | 0 |
| 187 | 50 | 29192 | 0 | 57 | 0 | 0 |
| 188 | 139 | 54570 | 2 | 12 | 0 | 0 |
| 189 | 139 | 48804 | 0 | 7 | 0 | 0 |
| 190 | 22 | 55256 | 0 | 0 | 0 | 0 |
| 191 | 22 | 52131 | 0 | 2 | 0 | 0 |
| 192 | 3 | 30838 | 0 | 0 | 0 | 0 |
| 193 | 12 | 53907 | 0 | 0 | 0 | 0 |
| 194 | 24 | 47692 | 0 | 2 | 0 | 0 |
| 195 | 136 | 54821 | 0 | 3 | 0 | 0 |
| 196 | 80 | 69963 | 3 | 2 | 0 | 0 |
| 197 | 141 | 69665 | 11 | 57 | 0 | 0 |
| 198 | 0 | 63132 | 0 | 115 | 0 | 0 |
| 199 | 86 | 57895 | 0 | 4 | 0 | 0 |
| 200 | 80 | 74843 | 0 | 8 | 0 | 0 |
| 201 | 230 | 57908 | 9 | 117 | 0 | 0 |
| 202 | 130 | 59173 | 5 | 5 | 0 | 0 |
| 203 | 38 | 60988 | 5 | 25 | 0 | 0 |
| 204 | 173 | 68008 | 4 | 37 | 0 | 0 |
| 205 | 79 | 52112 | 0 | 160 | 1352 | 0 |
| 206 | 485 | 50573 | 3 | 222 | 0 | 0 |
| 207 | 11 | 35977 | 52 | 263 | 0 | 0 |
| 208 | 123 | 23688 | 45 | 159 | 0 | 0 |
| 209 | 317 | 42864 | 63 | 329 | 0 | 0 |
| 210 | 185 | 45368 | 0 | 27 | 0 | 0 |
| 211 | 103 | 56767 | 2 | 14 | 0 | 0 |
| 212 | 126 | 38721 | 13 | 274 | 0 | 0 |
| 213 | 16 | 25124 | 0 | 6 | 0 | 0 |
| 214 | 39 | 41727 | 0 | 2 | 0 | 0 |
| 215 | 58 | 35825 | 0 | 0 | 0 | 0 |
| 216 | 71 | 73606 | 0 | 21 | 0 | 0 |
| 217 | 91 | 77762 | 0 | 30 | 120 | 0 |

| TAZ | Housing Units | Median Income | Retail Employment | Non-Retail Employment | School Enrollment | Dorm Rooms |
|---|---|---|---|---|---|---|
| 218 | 521 | 82375 | 12 | 245 | 0 | 0 |
| 219 | 6 | 118399 | 4 | 3 | 0 | 0 |
| 220 | 12 | 90839 | 0 | 4 | 0 | 0 |
| 221 | 90 | 48173 | 0 | 0 | 0 | 0 |
| 222 | 157 | 58684 | 13 | 101 | 0 | 0 |
| 223 | 230 | 56168 | 38 | 95 | 0 | 0 |
| 224 | 272 | 57952 | 1 | 58 | 0 | 0 |
| 225 | 234 | 55403 | 4 | 37 | 0 | 0 |
| 226 | 459 | 63638 | 9 | 85 | 0 | 0 |
| 227 | 124 | 52717 | 0 | 10 | 0 | 0 |
| 228 | 53 | 76787 | 0 | 5 | 0 | 0 |
| 229 | 255 | 46515 | 0 | 11 | 0 | 0 |
| 230 | 10 | 91512 | 0 | 0 | 0 | 0 |
| 231 | 0 | 67314 | 0 | 0 | 0 | 0 |
| 232 | 85 | 97977 | 2 | 6 | 0 | 0 |
| 233 | 306 | 84618 | 52 | 168 | 720 | 0 |
| 234 | 80 | 66284 | 12 | 145 | 785 | 0 |
| 235 | 137 | 100709 | 14 | 144 | 0 | 0 |
| 236 | 53 | 138583 | 9 | 26 | 0 | 0 |
| 237 | 29 | 65623 | 129 | 189 | 0 | 0 |
| 238 | 2 | 60832 | 4 | 4 | 0 | 0 |
| 239 | 525 | 45856 | 6 | 197 | 0 | 0 |
| 240 | 10 | 52290 | 0 | 405 | 0 | 0 |
| 241 | 207 | 57271 | 375 | 1064 | 0 | 0 |
| 242 | 35 | 87732 | 129 | 217 | 0 | 0 |
| 243 | 50 | 75153 | 13 | 297 | 0 | 0 |
| 244 | 410 | 84927 | 2 | 30 | 0 | 0 |
| 245 | 23 | 76410 | 0 | 69 | 0 | 0 |
| 246 | 113 | 79082 | 0 | 4 | 0 | 0 |
| 247 | 63 | 40696 | 0 | 1 | 0 | 0 |
| 248 | 8 | 58556 | 0 | 448 | 0 | 0 |
| 249 | 355 | 89832 | 2 | 57 | 217 | 0 |
| 250 | 466 | 63498 | 0 | 20 | 0 | 0 |
| 251 | 254 | 57731 | 0 | 14 | 0 | 0 |
| 252 | 397 | 25337 | 4 | 31 | 0 | 0 |
| 253 | 296 | 42922 | 0 | 3 | 0 | 0 |
| 254 | 0 | 19003 | 1342 | 335 | 0 | 0 |
| 255 | 0 | 0 | 0 | 584 | 0 | 0 |
| 256 | 522 | 16527 | 6 | 185 | 0 | 0 |

| TAZ | Housing Units | Median Income | Retail Employment | Non-Retail Employment | School Enrollment | Dorm Rooms |
|---|---|---|---|---|---|---|
| 257 | 48 | 24776 | 0 | 97 | 652 | 0 |
| 258 | 505 | 35891 | 4 | 49 | 0 | 0 |
| 259 | 156 | 55160 | 0 | 44 | 300 | 0 |
| 260 | 39 | 61366 | 0 | 0 | 0 | 0 |
| 261 | 271 | 30314 | 0 | 3 | 0 | 0 |
| 262 | 183 | 45177 | 146 | 349 | 0 | 0 |
| 263 | 247 | 31248 | 9 | 259 | 0 | 0 |
| 264 | 99 | 34465 | 59 | 597 | 0 | 0 |
| 265 | 250 | 35756 | 8 | 1166 | 422 | 0 |
| 266 | 326 | 54851 | 23 | 411 | 1022 | 0 |
| 267 | 334 | 71227 | 1 | 82 | 0 | 0 |
| 268 | 178 | 52742 | 0 | 3 | 0 | 0 |
| 269 | 44 | 67359 | 759 | 304 | 0 | 0 |
| 270 | 1 | 29756 | 10 | 167 | 0 | 0 |
| 271 | 0 | 9622 | 0 | 204 | 0 | 0 |
| 272 | 0 | 16274 | 0 | 0 | 0 | 0 |
| 273 | 10 | 52418 | 3 | 0 | 0 | 0 |
| 274 | 5 | 45385 | 0 | 0 | 0 | 0 |
| 275 | 12 | 47283 | 4 | 406 | 4059 | 0 |
| 276 | 29 | 34274 | 5 | 139 | 0 | 0 |
| 277 | 9 | 47712 | 0 | 2 | 0 | 0 |
| 278 | 33 | 43761 | 0 | 234 | 0 | 0 |
| 279 | 38 | 46352 | 0 | 5 | 0 | 0 |
| 280 | 17 | 34878 | 0 | 8 | 0 | 0 |
| 281 | 118 | 37375 | 0 | 9 | 0 | 0 |
| 282 | 278 | 41895 | 10 | 51 | 0 | 0 |
| 283 | 152 | 43917 | 5 | 58 | 0 | 0 |
| 284 | 68 | 41330 | 2 | 56 | 0 | 0 |
| 285 | 58 | 43871 | 2 | 40 | 0 | 0 |
| 286 | 65 | 62895 | 0 | 3 | 0 | 0 |
| **Totals** | 39,800 | $ 45,256 | 8,607 | 46,195 | 19,300 | 0 |

## 9.8 Future Year Socio-Economic Data Totals by TAZ Zone

| TAZ | Housing Units | Median Income | Retail Employment | Non-Retail Employment | School Enrollment | Dorm Rooms |
|---|---|---|---|---|---|---|
| 25 | 232 | 40439 | 51 | 92 | 0 | 0 |
| 26 | 163 | 21261 | 0 | 243 | 0 | 0 |
| 27 | 42 | 29756 | 19 | 0 | 0 | 0 |
| 28 | 23 | 72426 | 20 | 207 | 0 | 0 |
| 29 | 195 | 81680 | 32 | 1150 | 0 | 0 |
| 30 | 40 | 41280 | 54 | 112 | 305 | 0 |
| 31 | 5 | 0 | 26 | 392 | 0 | 0 |
| 32 | 7 | 87972 | 31 | 128 | 0 | 0 |
| 33 | 47 | 108197 | 67 | 169 | 0 | 0 |
| 34 | 54 | 0 | 118 | 992 | 0 | 50 |
| 35 | 0 | 0 | 4 | 17 | 0 | 0 |
| 36 | 2 | 19064 | 28 | 121 | 0 | 0 |
| 37 | 10 | 45692 | 15 | 470 | 0 | 0 |
| 38 | 134 | 57868 | 54 | 391 | 0 | 0 |
| 39 | 19 | 22110 | 0 | 22 | 0 | 0 |
| 40 | 25 | 7270 | 45 | 143 | 0 | 0 |
| 41 | 10 | 14537 | 0 | 18 | 0 | 0 |
| 42 | 33 | 18171 | 0 | 3 | 0 | 0 |
| 43 | 27 | 25109 | 0 | 12 | 0 | 0 |
| 44 | 35 | 48331 | 67 | 151 | 0 | 0 |
| 45 | 134 | 37664 | 4 | 137 | 442 | 0 |
| 46 | 70 | 22688 | 0 | 6 | 0 | 0 |
| 47 | 0 | 22625 | 0 | 0 | 0 | 0 |
| 48 | 85 | 28816 | 0 | 0 | 0 | 0 |
| 49 | 198 | 30413 | 0 | 0 | 0 | 0 |
| 50 | 67 | 21994 | 3 | 0 | 0 | 0 |
| 51 | 39 | 24132 | 0 | 0 | 0 | 0 |
| 52 | 10 | 34237 | 0 | 0 | 0 | 0 |
| 53 | 48 | 31682 | 0 | 0 | 0 | 0 |
| 54 | 157 | 29137 | 0 | 6 | 0 | 0 |
| 55 | 71 | 24666 | 3 | 3 | 0 | 0 |
| 56 | 46 | 22573 | 0 | 0 | 0 | 0 |
| 57 | 25 | 19191 | 0 | 263 | 0 | 0 |
| 58 | 289 | 30768 | 4 | 57 | 0 | 0 |
| 59 | 211 | 36934 | 4 | 76 | 378 | 0 |
| 60 | 111 | 31807 | 2 | 45 | 0 | 0 |
| 61 | 355 | 44020 | 0 | 19 | 0 | 0 |

| TAZ | Housing Units | Median Income | Retail Employment | Non-Retail Employment | School Enrollment | Dorm Rooms |
|---|---|---|---|---|---|---|
| 62 | 190 | 36262 | 67 | 11 | 0 | 0 |
| 63 | 49 | 42982 | 221 | 125 | 0 | 0 |
| 64 | 72 | 25342 | 23 | 254 | 0 | 0 |
| 65 | 86 | 35686 | 25 | 0 | 0 | 0 |
| 66 | 83 | 22311 | 46 | 2 | 0 | 0 |
| 67 | 211 | 20555 | 15 | 104 | 0 | 0 |
| 68 | 356 | 17721 | 54 | 171 | 351 | 0 |
| 69 | 410 | 17721 | 68 | 700 | 0 | 0 |
| 70 | 22 | 0 | 49 | 3302 | 0 | 0 |
| 71 | 16 | 37043 | 334 | 2686 | 0 | 0 |
| 72 | 21 | 16155 | 0 | 2036 | 0 | 0 |
| 73 | 79 | 20395 | 0 | 77 | 0 | 0 |
| 74 | 329 | 46702 | 2 | 35 | 0 | 0 |
| 75 | 207 | 57468 | 2 | 88 | 0 | 0 |
| 76 | 203 | 61601 | 3 | 222 | 712 | 0 |
| 77 | 221 | 36749 | 67 | 1179 | 0 | 0 |
| 78 | 0 | 38566 | 39 | 1232 | 0 | 0 |
| 79 | 2 | 0 | 20 | 442 | 0 | 0 |
| 80 | 28 | 0 | 144 | 297 | 0 | 0 |
| 81 | 16 | 38566 | 0 | 1168 | 0 | 0 |
| 82 | 39 | 45093 | 31 | 401 | 0 | 0 |
| 83 | 1 | 0 | 22 | 30 | 0 | 0 |
| 84 | 52 | 51787 | 379 | 12 | 0 | 0 |
| 85 | 831 | 56600 | 62 | 449 | 0 | 0 |
| 86 | 0 | 51791 | 27 | 115 | 0 | 0 |
| 87 | 143 | 54997 | 35 | 19 | 0 | 0 |
| 88 | 261 | 53453 | 75 | 172 | 1002 | 0 |
| 89 | 189 | 59752 | 20 | 30 | 0 | 0 |
| 90 | 19 | 57704 | 0 | 0 | 0 | 0 |
| 91 | 92 | 54907 | 4 | 7 | 0 | 0 |
| 92 | 300 | 59296 | 2 | 44 | 0 | 0 |
| 93 | 55 | 38042 | 0 | 6 | 0 | 0 |
| 94 | 33 | 67254 | 0 | 32 | 0 | 0 |
| 95 | 286 | 46601 | 0 | 59 | 0 | 0 |
| 96 | 254 | 49464 | 10 | 36 | 0 | 0 |
| 97 | 154 | 57956 | 0 | 12 | 0 | 0 |
| 98 | 133 | 75959 | 0 | 12 | 0 | 0 |
| 99 | 1113 | 51530 | 45 | 181 | 1821 | 0 |
| 100 | 346 | 33557 | 275 | 964 | 0 | 0 |

| TAZ | Housing Units | Median Income | Retail Employment | Non-Retail Employment | School Enrollment | Dorm Rooms |
|---|---|---|---|---|---|---|
| 101 | 197 | 45689 | 3 | 17 | 0 | 0 |
| 102 | 249 | 46670 | 20 | 76 | 0 | 0 |
| 103 | 941 | 49771 | 2 | 76 | 502 | 0 |
| 104 | 558 | 51030 | 46 | 577 | 0 | 0 |
| 105 | 198 | 49502 | 120 | 332 | 0 | 0 |
| 106 | 11 | 58245 | 34 | 186 | 0 | 0 |
| 107 | 0 | 45168 | 0 | 113 | 0 | 0 |
| 108 | 69 | 13394 | 62 | 296 | 0 | 0 |
| 109 | 202 | 45168 | 0 | 22 | 0 | 0 |
| 110 | 108 | 54113 | 0 | 195 | 0 | 0 |
| 111 | 792 | 44768 | 14 | 190 | 0 | 0 |
| 112 | 230 | 47392 | 0 | 9 | 0 | 0 |
| 113 | 207 | 44454 | 0 | 10 | 0 | 0 |
| 114 | 410 | 35299 | 0 | 212 | 431 | 0 |
| 115 | 67 | 24860 | 80 | 1061 | 640 | 0 |
| 116 | 130 | 42060 | 129 | 592 | 0 | 0 |
| 117 | 18 | 13463 | 172 | 414 | 0 | 0 |
| 118 | 0 | 16579 | 107 | 573 | 0 | 0 |
| 119 | 15 | 45665 | 479 | 1500 | 0 | 0 |
| 120 | 680 | 29640 | 24 | 791 | 0 | 0 |
| 121 | 8 | 28615 | 9 | 144 | 0 | 0 |
| 122 | 251 | 41673 | 1 | 43 | 0 | 0 |
| 123 | 200 | 35048 | 0 | 0 | 0 | 0 |
| 124 | 81 | 36446 | 3 | 0 | 0 | 0 |
| 125 | 300 | 19198 | 95 | 221 | 0 | 0 |
| 126 | 91 | 22101 | 3 | 48 | 0 | 0 |
| 127 | 281 | 31305 | 0 | 100 | 470 | 0 |
| 128 | 573 | 36085 | 90 | 241 | 0 | 0 |
| 129 | 515 | 30313 | 361 | 880 | 0 | 0 |
| 130 | 369 | 25712 | 515 | 713 | 0 | 0 |
| 131 | 994 | 65949 | 2 | 111 | 1109 | 0 |
| 132 | 421 | 77862 | 0 | 13 | 0 | 0 |
| 133 | 144 | 67490 | 0 | 1 | 0 | 0 |
| 134 | 379 | 79671 | 9 | 21 | 0 | 0 |
| 135 | 344 | 78621 | 0 | 8 | 0 | 0 |
| 136 | 1342 | 56466 | 42 | 151 | 663 | 0 |
| 137 | 48 | 48090 | 255 | 318 | 0 | 0 |
| 138 | 332 | 42036 | 607 | 391 | 0 | 0 |
| 139 | 464 | 27570 | 97 | 110 | 0 | 0 |

| TAZ | Housing Units | Median Income | Retail Employment | Non-Retail Employment | School Enrollment | Dorm Rooms |
|---|---|---|---|---|---|---|
| 140 | 64 | 28738 | 284 | 189 | 0 | 0 |
| 141 | 68 | 34098 | 104 | 1014 | 0 | 0 |
| 142 | 507 | 33600 | 3 | 88 | 0 | 0 |
| 143 | 476 | 38767 | 0 | 96 | 530 | 0 |
| 144 | 634 | 59802 | 7 | 73 | 702 | 0 |
| 145 | 150 | 55102 | 84 | 377 | 0 | 0 |
| 146 | 100 | 42279 | 58 | 169 | 0 | 0 |
| 147 | 142 | 64179 | 0 | 22 | 0 | 0 |
| 148 | 143 | 61532 | 0 | 26 | 0 | 0 |
| 149 | 421 | 50530 | 20 | 85 | 0 | 0 |
| 150 | 344 | 58141 | 2 | 86 | 0 | 0 |
| 151 | 436 | 53256 | 526 | 330 | 0 | 0 |
| 152 | 455 | 44300 | 76 | 103 | 0 | 0 |
| 153 | 115 | 53483 | 0 | 0 | 0 | 0 |
| 154 | 148 | 50344 | 1 | 7 | 0 | 0 |
| 155 | 447 | 58861 | 2 | 27 | 0 | 0 |
| 156 | 790 | 36092 | 150 | 463 | 549 | 0 |
| 157 | 129 | 27021 | 47 | 87 | 0 | 0 |
| 158 | 98 | 49219 | 41 | 72 | 0 | 0 |
| 159 | 40 | 42773 | 0 | 2 | 0 | 0 |
| 160 | 304 | 46997 | 1 | 11 | 0 | 0 |
| 161 | 103 | 42129 | 0 | 14 | 0 | 0 |
| 162 | 74 | 44496 | 0 | 3 | 0 | 0 |
| 163 | 100 | 35750 | 1 | 3 | 0 | 0 |
| 164 | 94 | 35750 | 0 | 0 | 0 | 0 |
| 165 | 96 | 40108 | 0 | 4 | 0 | 0 |
| 166 | 247 | 53643 | 1 | 67 | 433 | 0 |
| 167 | 444 | 52178 | 0 | 13 | 0 | 0 |
| 168 | 204 | 55514 | 0 | 16 | 0 | 0 |
| 169 | 722 | 71458 | 77 | 113 | 0 | 0 |
| 170 | 52 | 41206 | 0 | 87 | 0 | 0 |
| 171 | 39 | 36903 | 0 | 168 | 0 | 0 |
| 172 | 2 | 39274 | 0 | 0 | 0 | 0 |
| 173 | 109 | 45203 | 0 | 283 | 0 | 0 |
| 174 | 46 | 56735 | 86 | 652 | 0 | 0 |
| 175 | 3 | 68285 | 43 | 41 | 0 | 0 |
| 176 | 1 | 67715 | 4 | 6 | 0 | 0 |
| 177 | 90 | 25031 | 1 | 3 | 0 | 0 |
| 178 | 29 | 7379 | 0 | 0 | 0 | 0 |

| TAZ | Housing Units | Median Income | Retail Employment | Non-Retail Employment | School Enrollment | Dorm Rooms |
|---|---|---|---|---|---|---|
| 179 | 7 | 20871 | 76 | 71 | 0 | 0 |
| 180 | 89 | 22749 | 89 | 186 | 0 | 0 |
| 181 | 71 | 17814 | 0 | 19 | 0 | 0 |
| 182 | 11 | 12089 | 36 | 3 | 0 | 0 |
| 183 | 32 | 4919 | 2 | 25 | 0 | 0 |
| 184 | 11 | 30185 | 48 | 184 | 0 | 0 |
| 185 | 54 | 33857 | 0 | 120 | 640 | 0 |
| 186 | 90 | 39189 | 7 | 96 | 578 | 0 |
| 187 | 55 | 29192 | 18 | 64 | 0 | 0 |
| 188 | 149 | 54570 | 2 | 13 | 0 | 0 |
| 189 | 149 | 48804 | 0 | 8 | 0 | 0 |
| 190 | 67 | 55256 | 0 | 0 | 0 | 0 |
| 191 | 37 | 52131 | 0 | 252 | 0 | 0 |
| 192 | 3 | 30838 | 0 | 0 | 0 | 0 |
| 193 | 22 | 53907 | 0 | 0 | 0 | 0 |
| 194 | 34 | 47692 | 0 | 2 | 0 | 0 |
| 195 | 181 | 54821 | 25 | 3 | 0 | 0 |
| 196 | 105 | 69963 | 3 | 2 | 0 | 0 |
| 197 | 186 | 69665 | 51 | 64 | 0 | 0 |
| 198 | 0 | 63132 | 75 | 129 | 0 | 0 |
| 199 | 586 | 57895 | 0 | 4 | 0 | 0 |
| 200 | 95 | 74843 | 0 | 9 | 0 | 0 |
| 201 | 265 | 57908 | 9 | 131 | 0 | 0 |
| 202 | 480 | 59173 | 55 | 6 | 0 | 0 |
| 203 | 63 | 60988 | 45 | 28 | 0 | 0 |
| 204 | 248 | 68008 | 24 | 41 | 0 | 0 |
| 205 | 124 | 52112 | 0 | 179 | 1717 | 0 |
| 206 | 525 | 50573 | 13 | 249 | 0 | 0 |
| 207 | 13 | 35977 | 72 | 295 | 0 | 0 |
| 208 | 138 | 23688 | 85 | 178 | 0 | 0 |
| 209 | 327 | 42864 | 143 | 368 | 0 | 0 |
| 210 | 210 | 45368 | 0 | 30 | 0 | 0 |
| 211 | 108 | 56767 | 2 | 16 | 0 | 0 |
| 212 | 151 | 38721 | 13 | 307 | 0 | 0 |
| 213 | 18 | 25124 | 15 | 7 | 0 | 0 |
| 214 | 314 | 41727 | 0 | 2 | 0 | 0 |
| 215 | 108 | 35825 | 0 | 0 | 0 | 0 |
| 216 | 221 | 73606 | 0 | 24 | 0 | 0 |
| 217 | 116 | 77762 | 0 | 34 | 152 | 0 |

| TAZ | Housing Units | Median Income | Retail Employment | Non-Retail Employment | School Enrollment | Dorm Rooms |
|---|---|---|---|---|---|---|
| 218 | 746 | 82375 | 162 | 274 | 0 | 0 |
| 219 | 11 | 118399 | 4 | 3 | 0 | 0 |
| 220 | 14 | 90839 | 0 | 4 | 0 | 0 |
| 221 | 105 | 48173 | 0 | 0 | 0 | 0 |
| 222 | 232 | 58684 | 163 | 113 | 0 | 0 |
| 223 | 280 | 56168 | 38 | 106 | 0 | 0 |
| 224 | 297 | 57952 | 1 | 65 | 0 | 0 |
| 225 | 259 | 55403 | 4 | 41 | 0 | 0 |
| 226 | 534 | 63638 | 9 | 95 | 0 | 0 |
| 227 | 144 | 52717 | 0 | 11 | 0 | 0 |
| 228 | 68 | 76787 | 0 | 6 | 0 | 0 |
| 229 | 330 | 46515 | 0 | 12 | 0 | 0 |
| 230 | 35 | 91512 | 0 | 0 | 0 | 0 |
| 231 | 0 | 67314 | 0 | 0 | 0 | 0 |
| 232 | 635 | 97977 | 2 | 7 | 0 | 0 |
| 233 | 606 | 84618 | 127 | 188 | 914 | 0 |
| 234 | 105 | 66284 | 112 | 162 | 997 | 0 |
| 235 | 212 | 100709 | 264 | 161 | 0 | 0 |
| 236 | 428 | 138583 | 9 | 29 | 0 | 0 |
| 237 | 104 | 65623 | 444 | 212 | 0 | 0 |
| 238 | 17 | 60832 | 334 | 4 | 0 | 0 |
| 239 | 750 | 45856 | 131 | 221 | 0 | 0 |
| 240 | 10 | 52290 | 0 | 454 | 0 | 0 |
| 241 | 217 | 57271 | 700 | 1192 | 0 | 0 |
| 242 | 110 | 87732 | 159 | 243 | 0 | 0 |
| 243 | 52 | 75153 | 33 | 333 | 0 | 0 |
| 244 | 412 | 84927 | 2 | 34 | 0 | 0 |
| 245 | 23 | 76410 | 0 | 77 | 0 | 0 |
| 246 | 238 | 79082 | 0 | 4 | 0 | 0 |
| 247 | 73 | 40696 | 0 | 1 | 0 | 0 |
| 248 | 158 | 58556 | 0 | 502 | 0 | 0 |
| 249 | 357 | 89832 | 2 | 64 | 276 | 0 |
| 250 | 470 | 63498 | 0 | 22 | 0 | 0 |
| 251 | 259 | 57731 | 0 | 16 | 0 | 0 |
| 252 | 407 | 25337 | 4 | 35 | 0 | 0 |
| 253 | 299 | 42922 | 0 | 3 | 0 | 0 |
| 254 | 0 | 19003 | 4 | 1855 | 0 | 0 |
| 255 | 0 | 0 | 0 | 654 | 0 | 0 |
| 256 | 527 | 16527 | 6 | 207 | 0 | 0 |

| TAZ | Housing Units | Median Income | Retail Employment | Non-Retail Employment | School Enrollment | Dorm Rooms |
|---|---|---|---|---|---|---|
| 257 | 50 | 24776 | 0 | 109 | 536 | 0 |
| 258 | 515 | 35891 | 4 | 55 | 0 | 0 |
| 259 | 166 | 55160 | 0 | 49 | 381 | 0 |
| 260 | 41 | 61366 | 0 | 0 | 0 | 0 |
| 261 | 276 | 30314 | 0 | 3 | 0 | 0 |
| 262 | 188 | 45177 | 206 | 391 | 0 | 0 |
| 263 | 257 | 31248 | 59 | 290 | 0 | 0 |
| 264 | 109 | 34465 | 74 | 669 | 0 | 0 |
| 265 | 255 | 35756 | 8 | 1306 | 1298 | 0 |
| 266 | 331 | 54851 | 58 | 460 | 828 | 0 |
| 267 | 344 | 71227 | 41 | 92 | 0 | 0 |
| 268 | 183 | 52742 | 0 | 3 | 0 | 0 |
| 269 | 44 | 67359 | 759 | 340 | 0 | 0 |
| 270 | 1 | 29756 | 10 | 187 | 0 | 0 |
| 271 | 0 | 9622 | 0 | 228 | 0 | 0 |
| 272 | 0 | 16274 | 0 | 0 | 0 | 0 |
| 273 | 20 | 52418 | 3 | 0 | 0 | 0 |
| 274 | 555 | 45385 | 575 | 250 | 0 | 0 |
| 275 | 287 | 47283 | 528 | 906 | 5139 | 0 |
| 276 | 34 | 34274 | 35 | 289 | 0 | 0 |
| 277 | 9 | 47712 | 0 | 2 | 0 | 0 |
| 278 | 43 | 43761 | 0 | 376 | 0 | 0 |
| 279 | 53 | 46352 | 0 | 6 | 0 | 0 |
| 280 | 22 | 34878 | 0 | 824 | 0 | 0 |
| 281 | 138 | 37375 | 0 | 10 | 0 | 0 |
| 282 | 298 | 41895 | 30 | 57 | 0 | 0 |
| 283 | 192 | 43917 | 5 | 65 | 0 | 0 |
| 284 | 96 | 41330 | 2 | 63 | 0 | 0 |
| 285 | 73 | 43871 | 2 | 45 | 0 | 0 |
| 286 | 75 | 62895 | 0 | 3 | 0 | 0 |
| **Totals** | 50,248 | $ 45,256 | 13,838 | 55,350 | 24,496 | 50 |

## 9.9 Public Participation

Announcements and sign-in sheets relating to the public meetings held to receive public comments on this document are attached on the following pages.

To be completed after the Public Comment Period and Public Meetings