MONTGOMERY MPO
YEAR 2045
LONG RANGE TRANSPORTATION PLAN

Adopted: January 20th, 2022

FINAL

Prepared by
Montgomery MPO Transportation Planning Staff with Assistancefrom J.R. Wilburn and Associates Inc., FuturePlan Consulting, and STRADA

Montgomery MPO

FINAL

Year 2045 Long Range Transportation Plan

This document is posted at:
http://www.montgomerympo.org

For further information, please contact:

Mr. Robert Smith
Director of Planning
Planning Department
City of Montgomery/Montgomery MPO
25 Washington Avenue
Montgomery, AL 36104
Phone: (334) 241-2218
Fax: (334) 241-2326
E-mail: rsmith@montgomeryal.gov

Adopted by the Metropolitan Planning Organization (MPO)
January 20th, 2022

This Long Range Plan is a cooperative effort of the U.S. Department of Transportation, Federal Highway Administration, Federal Transit Administration, Alabama Department of Transportation, and local governments in partial fulfillment of Task 3.1 of the FY 2015 Unified Planning Work Program. This document is prepared by the staff to the Metropolitan Planning Organization, pursuant to requirements set forth in amended 23 USC 134 (THE FAST ACT, Sections 1201 and 1202, July 2012) and 23 CFR 450. The contents of this document do not necessarily reflect the official views or policies of the U.S. Department of Transportation.

This page intentionally left blank

Montgomery Metropolitan Planning Organization
Policy Board Membership

Voting MPO Members

Mr. Charles Jinright, **MPO Chairman**
City Councilman, City of Montgomery

Mayor Jerry Willis, **MPO Vice-Chairman**
City of Wetumpka

Mayor James
Houston
Town of Coosada

Mayor W. Clayton Edgar
Town of Deatsville

Mayor Margaret White
Town of Elmore

Mayor Al Kelley
City of Millbrook

Mayor Steven
L.Reed
City of Montgomery

Mayor Gordon Stone
Town of Pike Road

Mayor William Gillespie
City of Prattville

Mr. Cornelius Calhoun
City Councilman, City of Montgomery

Mr. Clay McInnis
City Councilman, City of Montgomery

Mr. Oronde Mitchell
City Councilman, City of Montgomery

Mr. Jay Thompson
Autauga County Commission

Mr. Troy Stubbs
Elmore County Commission

Mr. Elton Dean
Montgomery County Commission

Mr. Dan Harris
Montgomery County Commission

Mr. Steve Graeben
ALDOT-Southeast Region
Engineer

Non-Voting MPO Members

Mr. Robert Smith, Planning Director,
MPO Secretary, City of Montgomery

Mr. Sam Tensley
General Manager, The M Transit

Mr. Brad Lindsey
State Local Transportation Engineer/Bureau Chief,
Local Transportation Bureau Progams
ALDOT

Mr. Mark D. Bartlett
Division Administrator
Federal Highway Administration

Ms. Ann Clemmons
City of Montgomery Planning Commission

Ms. Rose Thomas, Director
Autauga County Rural Transportation

Mr. Greg Clark, Executive Director
Central AL Regional Planning
and Development Commission

Ms. Nicole Spivey
Federal Transit Administration

MPO TRANSPORTATION PLANNING STAFF

Mr. Robert E. Smith Jr., Director of Planning/MPO
Mr. Casey Lewis, Transportation Planner
Ms. Lisa Walters, Transportation Planner
Mr. James Askew, Senior GIS Analyst
Ms. Nita Armstead, Acting Grants Accountant

Montgomery Metropolitan Planning Organization (MPO) Technical Advisory Committee (TAC) Membership

TCC-Voting Members

Mr. Robert E. Smith Jr., **TAC Chairman**
Director of Planning/MPO, City of Montgomery

Mr. Shabbir Olia
ADECA

Mr. Wesley Cox
Traffic Engineering Director, City of Montgomery

Ms. Vontra Giles
Federal Highway Administration

Mr. John Davies
County Engineer, Autauga County

Ms. Gwen Carter
Town Clerk, Town of Elmore

Mr. Greg Clark, Executive Director
CARPDC

Mr. Scott Stephens
Planning Director, City of Prattville

Mr. Jerry Peters
City Engineer, City of Millbrook

Mr. Sam Tensley
General Manager, The M Transit System

Mr. Patrick Dunson
City Engineer, City of Montgomery

Mr. Brad Flowers
Town of Pike Road

Mr. Chris Conway
Director of Public Works, City of Montgomery

Mr. Richie Beyer
County Engineer, Elmore County

Ms. Rose Thomas, Director
Autauga County Rural Transportation

Mr. Tommy Tyson
Land Use Controls Administrator
City of Montgomery

Mr. Justin Barrett
City of Wetumpka

Mr. George Speake
County Engineer, Montgomery County

Mr. David Bollie
Local Transportation Engineer, ALDOT Southeast Region

Vacant
ADEM Air Division Planning Branch

Mr. Stuart Peters
Town of Coosada

Non-Voting TCC Members

Mr. Brian Fair, Assist. Planning Engineer,
Local Transportation Bureau, ALDOT

Vacant
Montgomery Association for Retarded Citizens

Mr. Mark Colson, President
Alabama Trucking Association

Ms. Natasha Clay, Coordinator
Environmental Technical Section ALDOT

Vacant
Burnham Van Service

Barbara Hendricks, Transportation Planner, Local Transportation Bureau – ALDOT

Mr. Cliff Altizer, Executive Director,Montgomery Airport Authority

Montgomery Metropolitan Planning Organization (MPO)
Citizens Advisory Committee (CAC) Membership

Mr. Crews Reaves
City Council District #1
City of Montgomery

Mrs. Ruth Ott
City Council District #1
City of Montgomery

Mr. Willie Durham
City Council District #2
City of Montgomery

Mr. Robert Taylor II
City Council District #2
City of Montgomery

Mr. Joe Donaldson
City Council District #3
City of Montgomery

Vacant
City Council District #4
City of Montgomery

Vacant
City Council District #4
City of Montgomery

Vacant
City Council District #5
City of Montgomery

Mr. Theodore White
City Council District #5
City of Montgomery

Ms. Gracie Stroud
City Council District #6
City of Montgomery

Ms. Valeria Harman
City Council District #7
City of Montgomery

Vacant
City Council District #7
City of Montgomery

Mr. David Martin
City Council District #8
City of Montgomery

Mr. Augustus Townes, Jr.
City Council District #8
City of Montgomery

Ms. Kristin Gillis
City Council District #9
City of Montgomery

Ms. Kimberlin Love
City Council District #9
City of Montgomery

Vacant
Elmore County

Vacant
Elmore County

Mr. Rodger Burnette
Montgomery County

Vacant
City of Coosada

Vacant
City of Millbrook

Vacant
City of Prattville

Vacant
City of Prattville

Vacant
City of Wetumpka

Montgomery MPO Resolution Draft 2040 Long Range Transportation Plan (LRTP)

Montgomery Metropolitan Planning Organization (MPO)
Adopting the Draft 2040 Long Range Transportation Plan (LRTP)

WHEREAS, the Montgomery Metropolitan Planning Organization (MPO) is the organization designated by the Governor of the State of Alabama as being responsible, together with the State of Alabama, for implementing the applicable provisions of 23 USC 134, and 135 (amended by MAP-21, Section 1201 and 1202, July 2012); 42 USC 2000d-1,42 USC 7401; 23 CFR 450 and 500; 40 CFR 51 and 93; and

WHEREAS the U.S. Department of Transportation requires all urbanized areas, as established by the U.S. Bureau of the Census, doing area-wide urban transportation planning that involves more than one Department of Transportation operating administration, to submit a 2040 Long Range Transportation Plan (LRTP) as a condition for meeting the provisions of Title 23, U.S. Code, Section 134; and,

WHEREAS consistent with the declaration of these provisions, the Montgomery Metropolitan Planning Organization Transportation Planning Staff, in cooperation with the Alabama Department of Transportation, has prepared a Draft 2040 Long Range Transportation Plan (LRTP); and,

WHEREAS pursuant to its duties, functions, and responsibilities, the Montgomery Metropolitan Planning Organization (MPO) on this the 11th Day of June 2015, did review and evaluate the aforementioned 2040 Long Range Transportation Plan (LRTP), summarized on the attached pages; now,

THEREFORE BE IT RESOLVED by the Montgomery Metropolitan Planning Organization (MPO) that the same does hereby endorse and adopt said Draft *2040 Long Range Transportation Plan (LRTP)* as written.

Charles Jhright, MPO Chairman

Date: June 11, 2015

ATTEST:

Robert E. Smith, MPO Secretary

Montgomery Year 2045 Long Range Transportation Plan

Table of Contents

List of Figures

List of Tables

This page intentionally left blank

ES Executive Summary

ES.1 Introduction

The Montgomery, Alabama region includes the City of Montgomery and parts of three surrounding counties – Montgomery, Autauga, and Elmore. The region is a U.S. Census Bureau-designated Urban Area (UA, UZ, or UZA) with populationof over 50,000. US Department of Transortation planning rules require urban areas of 50,000 or more persons to form a Metropolitan Planning Organization (MPO).

The Montgomery urbanized population was 263,907, according to the 2010 U.S. Census, an increase of 67,001 from Census Year 2000. The growth was due to both population growth and the merging of the Montgomery Urbanized Area and the Prattville Urban Cluster. Urbanized Area population is not yet available from Census 2020, but the tri-county area grew by 3.4 percent from 2010 to 2020, adding 12,499 residents. Urban areas with more than 200,000 persons are designatedby as Transportation Management Area (TMA), which creates more extensive planning requirements under USDOT planning regulations.

This *Montgomery Study Area 2045 Long Range Transportation Plan* addresses the federal planning requirements that the Metropolitan Planning Organization (MPO) must meet in the transportation planning process. The LRTP must contain the following elements and perspectives:

- Address a minimum 20-year planning horizon
- Include long-range and short-range multimodal strategies that facilitate efficient movement of people and goods
- Be updated at least every five years
- Identify transportation demand over the plan horizon
- Include citizen and public official involvement and participation in the plan development process
- Consider local comprehensive and land use plans
- Include a financial plan

The previous *Montgomery Study Area 2040 Long Range Transportation Plan* was adopted by the Montgomery MPO in September 2015.

ES.2 Study Area

The 2040 LRTP study area has not changed, and remains the planning area defined by the Montgomery MPO for 2045. The study area's 950 square miles encompasses portions of Autauga, Elmore, and Montgomery counties. In addition to the Montgomery urbanized area as defined by the U.S. Census Bureau (area within the City of Montgomery), the Wetumpka Urban Cluster in included in the study area. Incorporated jurisdictions within the MPO study area include the Town of Coosada, Town of Deatsville, Town of Elmore, City of Millbrook, City ofMontgomery, Town of Pike Road, and City of Prattville. Figures ES.1 and ES.2 detail the Montgomery MPO study area. The Alabama and Tallapoosa Rivers divide the study area and serve as boundary lines between Montgomery County and Elmore and Autauga counties. Numerous bridge crossings unite the area, and Interstates 65 and 85 meet near the midpoint of the study area. The area has a rich history of human settlement, ranging from early Native Americans to the French occupation of Fort Toulouse to the development of the City of Montgomery as Alabama's State Capital.

ES.3 LRTP Goals

The process of identifying transportation needs and prioritizing recommendations is tied to projected federal, state, and local funding sources for implementation. Therefore, the LRTP goals balance the policy priorities of the Federal Highway Administration (FHWA), Alabama Department of Transportation (ALDOT), and local jurisdictions. This LRTP continuesthe local policy priorities adopted during the previous 2040 LRTP. Federal and state policy considerations include:

- The 2012 passage of the FAST Act, which sets policy priorities for federal transportation funding. Developing performance measures to evaluate the overall success of MPO projects and policies isa requirement in the FAST Act that is continued from THE FAST ACT's requirements.
- Issuance of ALDOT guidance to address Livability Principles and Indicators. These were adopted by ALDOT per FHWA guidance to address sustainability in the MPO transportation planning process.

This LRTP update was developed in a manner to comply with all required Title VI andother Civil Rights regulations, provisions, and programs. The goals for the 2045 LRTP, along with the emphasis areas they are intended to address, are shown below in Table ES.1.

Table ES.1: LRTP Goals and Related Emphasis Areas

2045 LRTP Goals	Related Emphasis Area(s)
Optimize the efficiency, effectiveness, connectivity, safety, and security of the transportation system	• Safety • Congestion Reduction • System Reliability
Promote state of good repair and prioritize maintenance needs	• Infrastructure Condition
Develop a financially feasible multimodal transportation system to support expansion of the regional economy	• Freight Movement and Economic Vitality • Reduce Project Delivery Delays
Provide viable travel choices to improve accessibility and mobility, sustain environmental quality, and preserve community values	• Environmental Sustainability (Natural) • Environmental Justice
Coordinate the transportation system with existing and future land use and planned development	• Project Coordination and Public Involvement
Increase jurisdictional coordination and citizen participation in the transportation planning process to enhance all regional travel opportunities	• Project Coordination and Public Involvement
Develop, maintain, and preserve a balanced multimodal transportation system that provides for safe, integrated, and convenient movement of people and goods	• Multimodal Transportation • Environmental Justice

Source: J.R. Wilburn and Associates, Inc. and MPO Staff

ES.4 LRTP Work Program

The definition of a specific program of projects for the 2045 LRTP resulted from the long range transportation planning process. The recommended projects provide multimodal solutions to address the area's future transportation needs. Because no one has a better understanding of the local needs than the area's residents and employers, efforts were undertaken toactively involve the public, local stakeholders, City, County, and MPO staff, and other interested partiesin the plan development process through meetings and public outreach efforts.

As required for LRTPs, the plan includes a financially constrained list of projects that represents the most critical projects able to be funded within projected funding amounts over the plan's 25-year horizon.

Projects that have been identified as needed, but cannot be funded through available sources, are considered Visionary or Needs. For planning purposes, ALDOT groups improvements into two distinct categories – roadway capacity and maintenance and operations (MO) projects. MO projects include intersection and operational improvements, railroad crossing improvements, bridge replacement or repair,resurfacing, bicycle and pedestrian improvements, and transit operations. The work program will require funding from federal, state, and local sources.

ES.4.1 Existing plus Committed (E+C) Projects

Projects that are currently under construction, or that have a project phase (Preliminary Engineering, Right of Way, Utility Relocation, or Construction) funded in the current TIP are listed below in Table ES.2 and mapped in Figure ES.1. These projects will continue through to completion and and are not listed or evaluated in the LRTP needs assessment.

Table ES.2: Existing plus Committed Projects

Project #	Road	From	To	Description	County
EC1	SR 108 Outer Loop	SR-110	I-85	New Freeway Segment	Montgomery
EC2	I-85	Ann Street	Taylor Road	Add Auxiliary Lanes	Montgomery
EC3	SR-6/US 82	SR-14	SR-3/US 31	Widen to Four Lane Divided	Autauga
EC4	SR 110 Vaughn Rd	Chantilly Pkwy	Outer Loop	Widen to Four Lanes Divided	Montgomery
EC5	SR-14	US 31	Jasmine Trail	Additional Lanes	Autauga
EC6	Vaughn Road	Wynnlakes Blvd	Glynnwood Trail	Widen to 4 Lanes Divided	Montgomery
EC7	SR-14	Ingram Road	Coosada Pkwy	Additional Lane	Elmore
EC8	Redland Road	Rifle Range Road	US 231	Additional Lanes	Elmore
EC9	East Fairview Ave	Court Street	Cloverdale Road	Convert from 4 Lanes to 3 Lanes	Montgomery
EC22	I-85	Taylor Road	Outer Loop	Widen from 4 Lanes to 6 Lanes	Montgomery

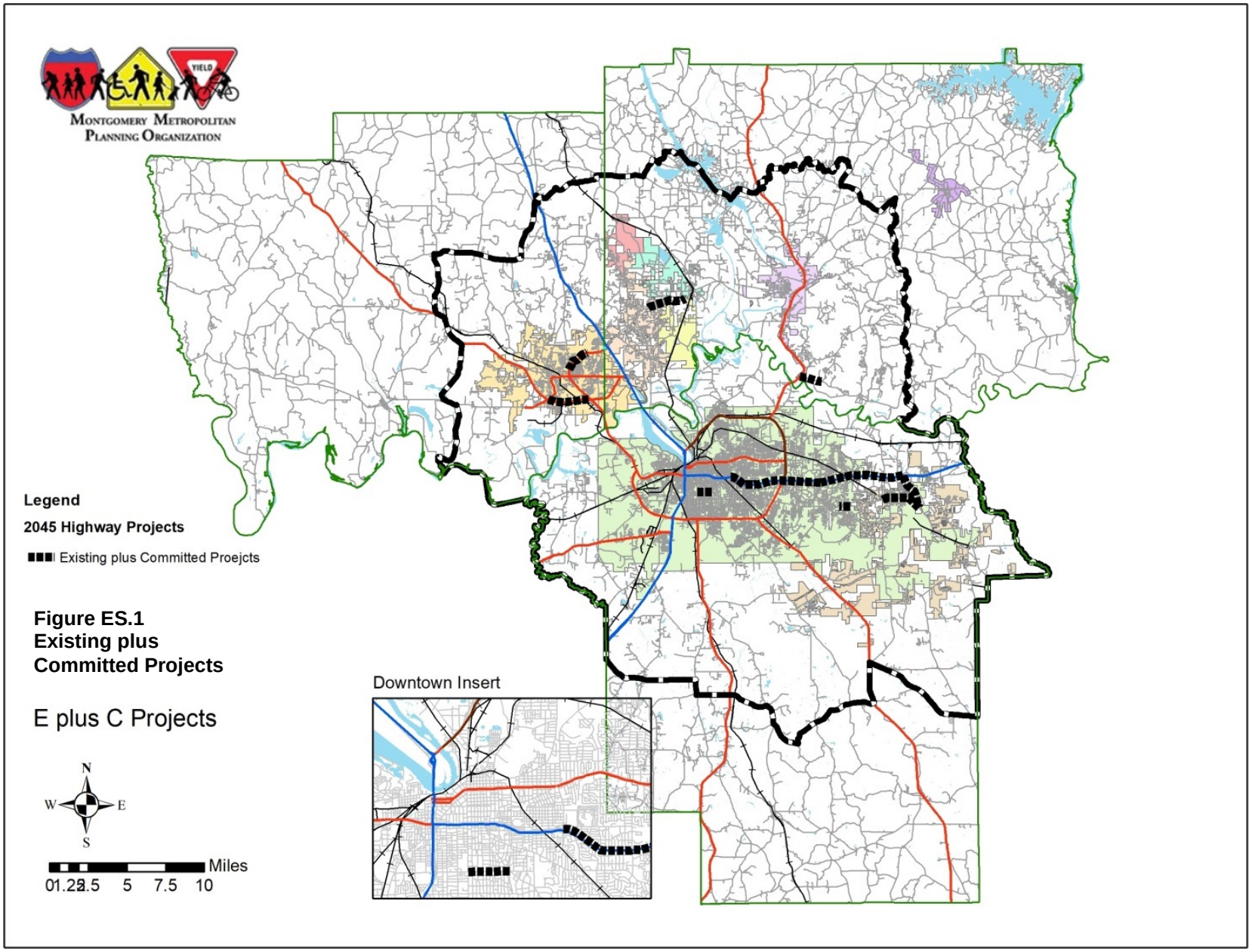


Figure ES.1
Existing plus Committed Projects

ES.4.2 Fiscally Constrained Projects

The fiscally constrained work program includes 27 capacity improvements at an estimated cost of $349 million, as shown in Figure ES.2 and listed in Table ES.2.

Fifteen O&M projects are considered high priority, as they are designed to address known operational and traffic flow problems in areas where additional travel lanes are not feasible or not required. These O&M projects have an estimated cost of $67 million in the fiscally constrained LRTP work program. The full list of fiscally constrained and committed O&M projects is presented in Section 6, Table 6.7.

Table ES.3: Financially Constrained and Committed Projects

Road Name	Location and Termini	Project Type	Financially Constrained (FC) or Vision
Adams Avenue	Decatur St to South Court St	O&M	FC
Atlanta Highway	Perry Hill Rd to Eastdale Mall	Capacity	FC
McQueen Smith Road	SR 3/US 31 to Cobbs Ford Rd	Capacity	FC
Perry Hill Rd	Harrison Rd to Atlanta Hwy	O&M	FC
Redland Rd	US 231 to Rifle Range Rd	Capacity	FC
Ryan Road	Vaughn Rd to Chantilly Pkwy	Capacity	FC
S. Court Street	Fairview to Arba St	O&M	FC
US-80	Waugh intersection to Marler Rd	Capacity	FC
Washington Avenue	Decatur St to Lawrence St	O&M	FC
Zelda Road	Ann St to Carter Hill Rd	O&M	FC
Atlanta Highway	Ann Street to Federal Dr	Capacity	FC
Carter Hill Road	Mulberry Street to Narrow Lane/Narrow Lane to Fairview	O&M	FC
Eastern Boulevard	N of Shirley Ln to Wetumpka Highway	O&M	FC
Fairview Ave (was SR-14) in Prattville	Old Farm Lane to east side of I-65	Capacity	FC
Perry Hill Rd	Carmichael Rd to Sunset Dr	O&M	FC
Eastern Boulevard	US 231 to I-85	Capacity	FC
South Boulevard	US 231 S to Rosa Parks Ave	Capacity	FC
Ann Street	I-85 to Poplar St	Capacity	FC
Atlanta Highway	Boyd Cooper Pkwy to I-85 northside ramps	Capacity	FC
I-65 Ramp Improvements	Ramps at SR 14 southside	Capacity	FC
I-85 Ramp Improvements	Taylor road I-85 WB on ramp	Capacity	FC
I-85 Ramp Improvements	Atlanta Highway to I-85 WB on ramp	Capacity	FC
US-231 (Wetumpka Hwy)	CR 74 to Jasmine Hill Road	Capacity	FC
Vaughn Road	Perry Hill Road to Eastern Blvd	Capacity	FC
Cobbs Ford Road	Between I-65 ramps	Capacity	FC
I-65 Ramp Improvements	Ramps at Clay St NB entry	Capacity	FC
I-85 Ramp Improvements	East Boulevard on ramps	Capacity	FC

Lagoon Park Dr	East Blvd to SR-9	O&M	FC
Main Street and West Bridge Streets	South Boundary St to North Bridge St	Capacity	FC
McGehee Road	Carter Hill Road to Governors Drive	Capacity	FC
SR-14	east side of I-65 to Kelley Blvd	Capacity	FC
Taylor Road	I-85 to East Dr	Capacity	FC
Vaughn Road	Eastern Blvd to Bell Road	Capacity	FC
Coliseum Boulevard	Federal Drive to Biltmore Ave	Capacity	FC
US-31	US 82 to West Blvd	Capacity	FC
US-31	CR 40 to SR 14	Capacity	FC
Carter Hill Road	Vaughn Road to McGehee Road	O&M	FC
Dickerson/Holt Streets	Between Clay and Herron Streets	O&M	FC
SR-143	I-65 to Alabama River Parkway	O&M	FC
Alabama River Parkway	SR-143 from North Boulevard	O&M	FC
Dozier Road	Wares Ferry Road to Rifle Range Road	O&M	FC
Grandview Road	SR 14 to SR 143	O&M	FC

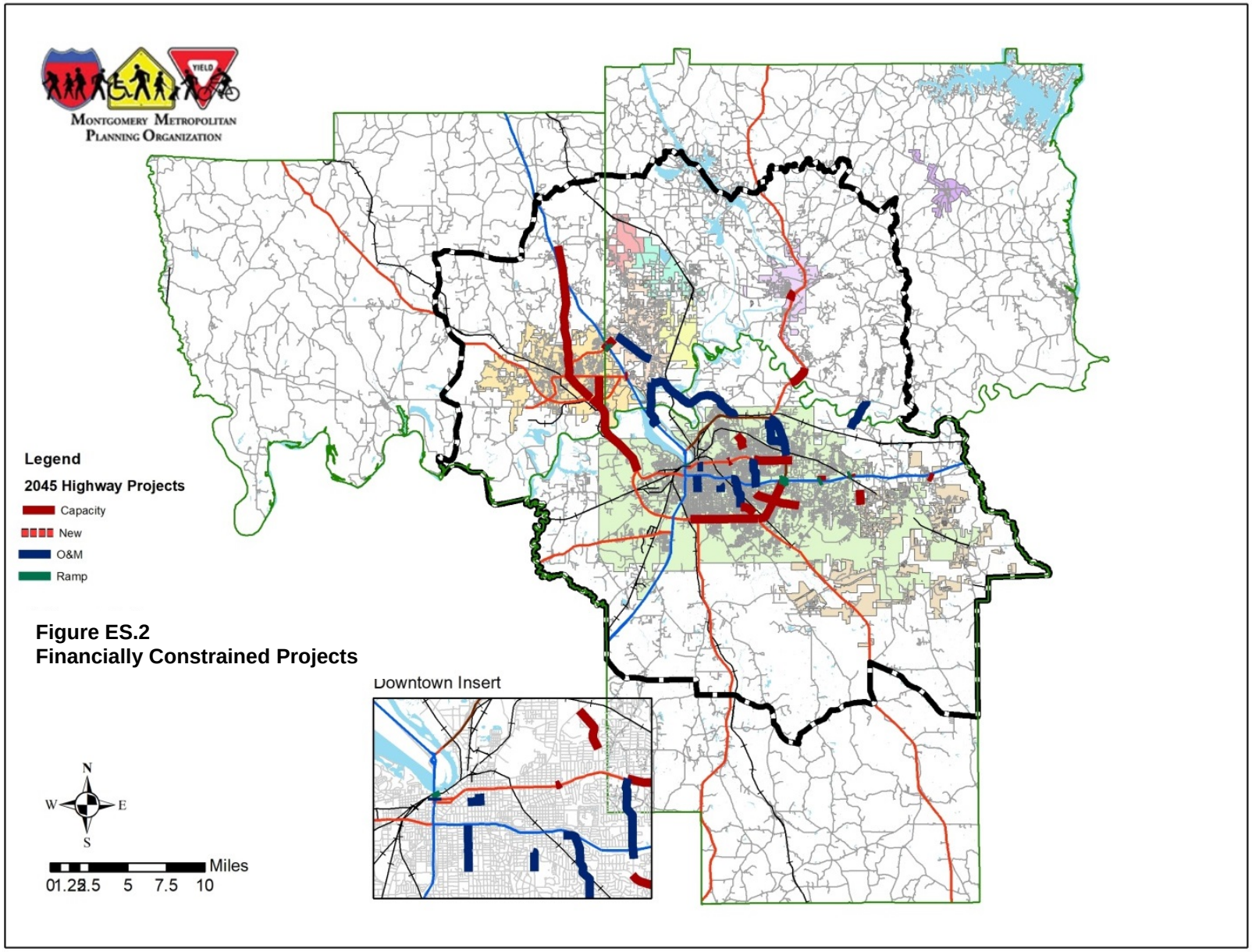


Figure ES.2
Financially Constrained Projects

ES.4.3 Visionary/Needs Projects

The needs assessment resulted in the identification of 71 capacity improvement and O&M projects to address traffic flow and safety needs for the region. Based on preliminary cost estimates and ALDOT anticipated funding, about half of these projects can be funded through 2045. However, all of the O&M projects identified in the LRTP needs assessment can be funded, a function of relatively low cost per mile for these projects and a higher total funding level for O&M projects compared to capacity projects. The cost for these O&M improvements is estimated at $158.8 million. Of these, 56 projects costing approximately $152.8 million are for improvements within the City of Montgomery. Most of these projects are for resurfacing and operational improvements. A complete list of visionary/needs improvement projects is provided in Table 8-2.

ES.4.4 Montgomery Outer Loop Projects

The Montgomery MPO has been working with ALDOT to develop the Montgomery Outer Loop, a set of roadway improvements and/or new roadways to facilitate mobility and accommodate development on the outskirts of the Montgomery metropolitan area. Of the improvements associated with the Outer Loop,only a lighting project (at an estimated cost of $4.7 million) is included in the fiscally constrained LRTP work program. The remainder of these improvements, totaling approximately $544.2 million, is projected to be constructed by 2039 or beyond. A complete set of the Outer Loop projects, including projected costsand completion dates, is provided in Table ES.4.

Table ES.4: Montgomery Outer Loop Projects

Improvement	Completion Dates	Estimated Costs*
New Roadway from SR 6 (US 231) to CR 85 (Carters Hill Road)	2039-2049	$80,478,638
New Roadway from CR 85 (Carters Hill Road) to SR 110	2039-2059	$131,057,932
Lighting from south of SR 110 to south of I-85	2019	$4,719,972
Widening SR 108 from I-65 to west of SR 9 (US 331), including an interchange at SR 3 (US 31)	2039-2044	$58,768,596
Widening SR 108 from SR 8 (US 80) to west of CR 103 (Felder Road), including an interchange at SR 8 (US 80)	2039-2042	$37,051,980
Widening SR 108 from west of CR 103 (Felder Road) to I-65, including an interchange at CR 103 (Felder Road)	2039	$57,451,243
Widening SR 108 from west of CR 39 (Woodley Road) to SR 6 (US 231), including an interchange at CR 39 (Woodley Road)	2039-2041	$42,531,799
Widening SR 108 from west of SR 9 (US 331) to west of CR 39 (Woodley Road), including an interchange at SR 9 (US 331)	2039	$97,440,909
SR 108 interchange, ramps, andbridges at I-65	2039-2043	$39,446,500

*Projected costs are in Year of Expenditure dollars. Out-year costs are projected at 1 percent per annum
Source: MPO Staff

ES.4.4 Freight-related Improvements

A regional freight plan was completed and adopted by the MPO in September, and establishes a set of policies and priorities for freight movement in the region. The freight plan is available on the MPO website and is incorporated here by reference.

Three key projects identified to improve freight flows within and through the region include capacity expansion on I-85 and I-65, Interchange improvements and reconfiguration at I-85/I-65, and construction of the Outer Loop between I-85 east of Montgomery and I-65 south.

ES.4.5 Bicycle and Pedestrian Improvements

A number of existing and planned pedestrian and bicycle facilities are located in the Montgomery study area. The two strategies for constructing bicycle and pedestrian facilities are either concurrently with planned roadway improvements or as stand-alone projects utilizing the Montgomery MPO allocation of Transportation Alternative Program (TAP) funds. The Montgomery MPO is projected to receive approximately $10.4 million, or $415,413 annually, in federal funding through the year 2045. Projects will be prioritized annually based upon the applications received and a project's relative merit.

ES.4.6 Public Transportation

The Montgomery MPO is projected to receive approximately $108.2 million, or $4,329,202 annually, of federal funding through the year 2045. The Montgomery Area Transit system has several visionary improvements over the next 25 years, which will be done as funding becomes available via competitive grants or by the City of Montgomery general fund. Tables ES.5 and ES.6 identify transit funds and projects, respectively.

1.0 Introduction

The Montgomery, Alabama region, which includes the City of Montgomery and parts of three surrounding counties, is a U.S. Census Bureau-designated Urban Area (UA, UZ, or UZA) with a population over 50,000 requiring the formation of a Metropolitan Planning Organization (MPO). The 2015 urbanized population was 263,907, according to the 2010 Census, an increase of 67,001 between 2000 and 2015 due to both population growth and the merging of the Montgomery Urbanized Area and the Prattville Urban Cluster. The three-county Metropolitan area had a 2020 population of 375,736, an increase of 12,499 since 2010; most of this population growth has occurred within the MPO area, although Census 2020 urbanized area population numbers have not been released at the time of this report. Additionally, the Montgomery urbanized area has been designated by the Secretary of Transportation and the Governor as a Transportation Management Area (TMA), with a population over 200,000 [P.L. 112-141, Section 1201 §134(k)(1)(A)]. As such, the Montgomery regionis subject to metropolitan transportation planning requirements under Section 134 of Title 23 and Section 5303 of Title 49 of the United States Code and in the Code of Federal Regulations (CFR) Title 23, Part 450. The statute states that each metropolitan area shall have:

> *"A continuing, cooperative, and comprehensive transportation planning process that results in plans and programs that consider all transportation modes and supports metropolitan community development and social goals. These plans and programs shall lead to the development and operation of an integrated, Intermodal transportation system that facilitates the efficient, economic movement of people and goods" (23 CFR 450.300).*

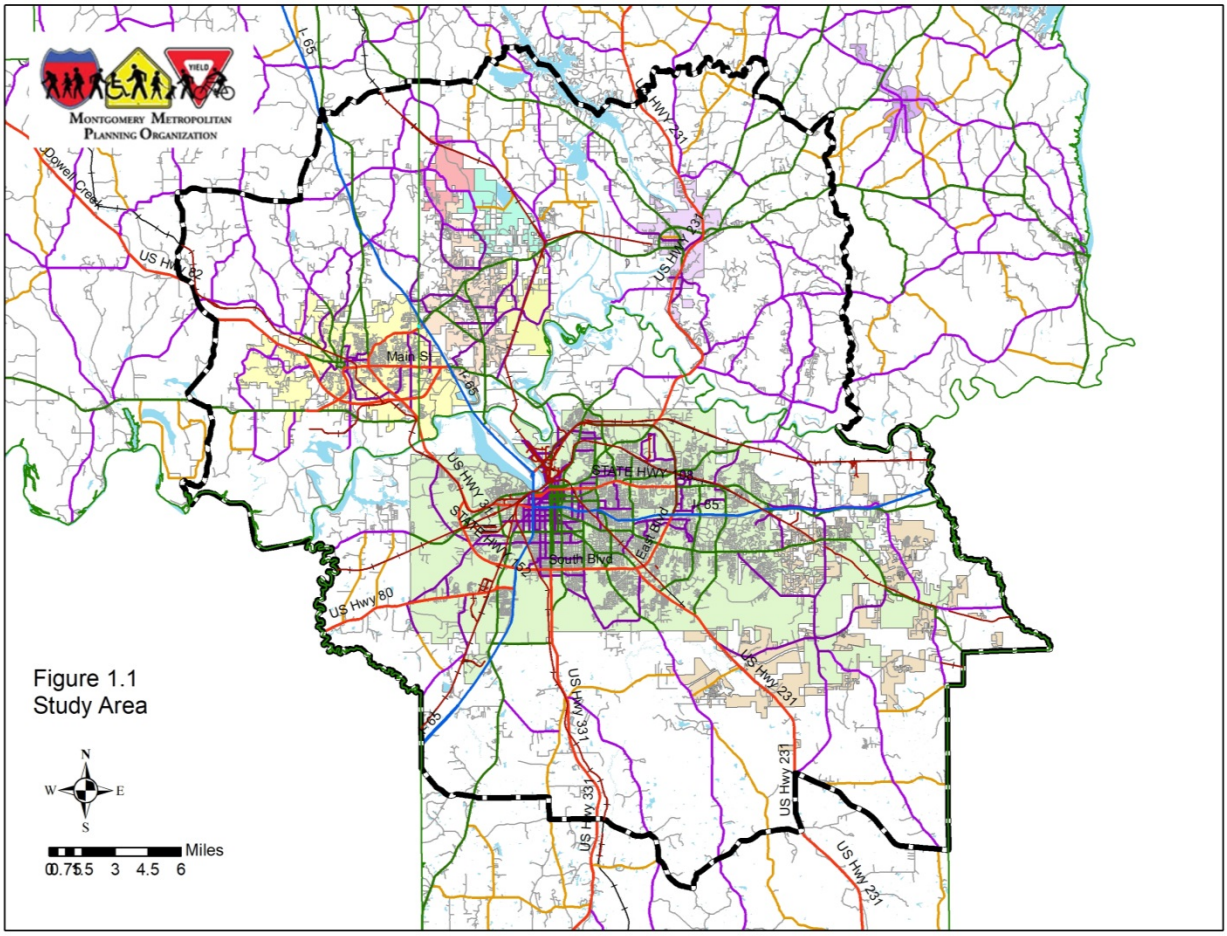
The Long Range Transportation Plan (LRTP) is one of the key products of the planning process. The *Montgomery Study Area 2045 Long Range Transportation Plan* addresses the federal planning requirements that are the responsibility of the Metropolitan Planning Organization (MPO) as the organization authorized to carry out the transportation planning process. Specific LRTP requirements are itemized in CFR Title 23, Section 450.322. The LRTP must contain the following elements and perspectives:

- Address a minimum 20-year planning horizon
- Include long-range and short-range multimodal strategies that facilitate efficient movement of people and goods
- Be updated at least every five years
- Include citizen and public official involvement and participation in the plan development process
- Consider local comprehensive and land use plans
- Include a financial plan

The previous *Montgomery Study Area 2040 Long Range Transportation Plan* was adopted by the Montgomery MPO in September 2015. To assist with development of the 2045 LRTP update, the MPO contracted with J. R. Wilburn and Associates, Inc. in September 2020.

1.1 LRTP Study Area

The 2045 LRTP study area, the planning area defined by the Montgomery MPO, encompasses portions of Autauga, Elmore, and Montgomery Counties. The Montgomery urbanized area as defined by the U.S. Census Bureau plus the Wetumpka Urban Cluster is in the study area. Incorporated jurisdictions within the study area include the Town of Coosada, Town of Deatsville, Town of Elmore, City of Millbrook, City of Montgomery, Town of Pike Road, and City of Prattville. Figure 1.1 and 1.2 detail the Montgomery MPO Study Area. The study area has been characterized as the region that will beurbanized in a 25 year timeframe, and thus why it is included in long range planning efforts. The study area is characterized by its physiographic province as a settlement within the Alabama-Coosa-Tallapoosa River basin. The Alabama and Tallapoosa Rivers serve as boundary lines between Montgomery, Elmore, and Autauga Counties.



1.2 Montgomery MPO Structure

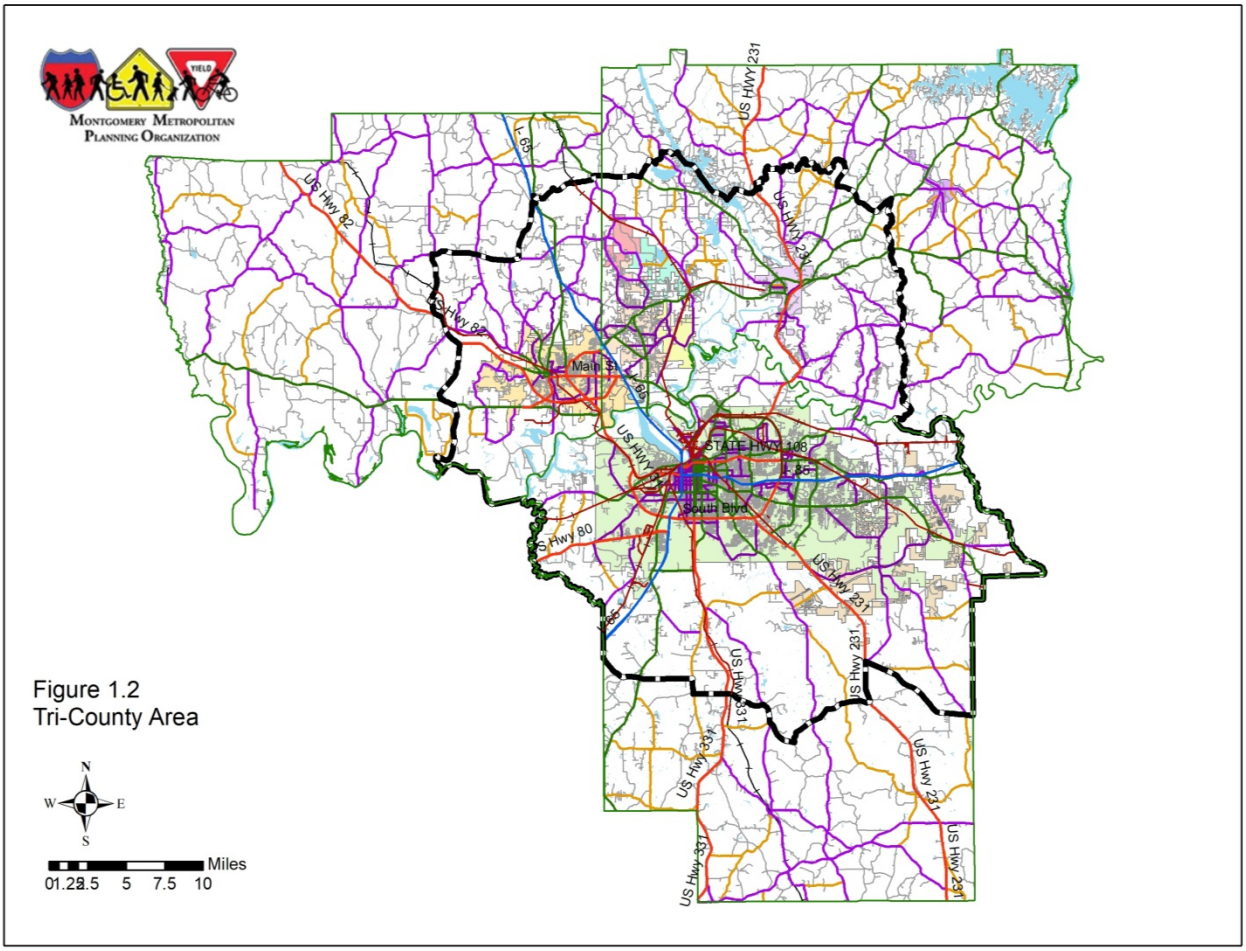
Federal law establishes transportation planning areas for metropolitan regions throughout the country and requires the organization of MPOs to cooperatively develop goals for transportation improvements. After passage of the 1962 Federal Aid Highway Act, new transportation projects that included federal funds could not be approved for urban areas with populations of more than 50,000, unless these projects were based on a "comprehensive, coordinated, and continuing (3-C)" planning process between the state and local communities (23 CFR 450.200). The Montgomery MPO was created in 1973 to guide the 3-C planning process.

The MPO is comprised of an MPO Policy Board, Technical Coordinating Committee, and Citizens Advisory Committee and is supported by a staff who performs the planning duties, including development and approval of the LRTP. The MPO Policy Board membership includes locally elected officials and the Alabama Department of Transportation (ALDOT) Southeast Region Engineer. Representatives of the Federal Highway Administration (FHWA), Federal Transit Administration (FTA), the M Transit System, Central Alabama Regional Planning and Development Commission, and theAutauga County Rural Transportation System are non-voting Policy Board members.

The MPO is supported by two advisory committees, the Technical Coordinating Committee (TCC), and the Citizens Advisory Committee (CAC). The TCC provides the technical advisory guidance for the planning process. It is composed of planners, project engineers, transit managers, and other professional persons from the MPO planning area. The TCC also includes representatives from federal, state and localagencies,

including the Central Alabama Regional Planning and Development Commission, The MTransit System, and Autauga County Rural Transportation System. The Montgomery Regional Airport Director is a non-voting member of the TCC.

The CAC provides advisory input from a citizen's perspective on plans, programs, and projects in the MPO study area. The 25-member committee is appointed by the MPO Policy Board from their respective jurisdictional areas. The MPO planning staff supports the MPO, TCC, and CAC and is housed in the Transportation Planning Division of the City of Montgomery's Planning Department. A list of members of the MPO, TCC, and CAC committees are in the beginning of this document.



1.3 LRTP Development

The *Montgomery MPO 2045 LRTP* was developed in cooperation and coordination with local, state, and federal planning partners, as well as the general public. LRTP development proceeded with full cooperation and coordination from all local jurisdictions, ALDOT, and FHWA. The process has closely followed federal regulations and requirements. Transportation plan development began with an evaluation of the area's transportation network. The review addressed the spectrum of elements that comprise the area's mobility network and development.

Since the 2015 Base Year is not a decennial U.S. Census survey year, the household data was developed through review of development activity and consultation with local planning staff members. The 2015

employment data was obtained from InfoUSA and then individually confirmed by MPOstaffers. The school data was obtained from the Alabama Department of Education, while the daycare enrollment was obtained from the Department of Human Resources and confirmed by MPO staffers.Land use and development patterns, transportation system infrastructure inventory and operations, and multimodal facility utilization were also researched. Stakeholder and public outreach and involvement were key components of the LRTP process.

Throughout the process, special efforts were made to interact directly with citizens, stakeholders, andlocal governments throughout the region. The MPO staffers coordinated with local City and County staff to determine future population and employment growth.The consultation process between MPO planners, TCC members, CAC members, and member city and county staffs enabled each municipality to determine the population and employment characteristics of their area in 2045. Development of the LRTP development was covered in the local media, such as general circulation and the MPO internet site. The combined results can be seen in the recommended list of programs and projects that have identified transportation needs, potential solutions, and local priorities.

The 2045 LRTP document is organized into eight sections: Section 1 provides introductory material. Sections 2 and 3 describe the plan development process, which includes the technical, quantitative, and qualitative means used to develop the LRTP. Section 3 provides the planning context for analyzing the transportation system such as current trends, development patterns, socioeconomic characteristics, and demographic factors. Section 4 presents the inventory of the transportation system by mode. Section 5 describes the Congestion Management Process (CMP). Section 6 describes the transportation system needs identified through the technical analysis, as well as the tools used for the technical analysis.Section 7 details the project identification and prioritization process. Section 8 presents the LRTP program of projects financial plan, discussion about transportation financing, plan implementation, and future planning efforts.

1.4 LRTP Amendment Process

The MPO is responsible for official adoption of the LRTP. When deciding upon a plan for adoption, the MPO relies on public input, the recommendations of the two standing committees, and advice from the staff performing the actual planning activities. The adopted plan may subsequently be amended as changing events require. Amendments to formal planning documents containing project listings and funding, will be carried out pursuant to sections of Title 23 CFR 450, applicable to road and highway projects under various FHWA funding programs and those transportation projects and funding actions under FTA programs. While governing regulations are specific to the Metropolitan Transportation Plan (the Long Range Plan), the short-range Transportation Improvement Program (TIP), and the Statewide Transportation Improvement Program (STIP), other plans and programs are included in the process. Alabama extends the process to those plans with projects and funding presented in tabular or listedformat, including the Congestion Management Plan (CMP), Bicycle and Pedestrian Plan, and amended project listings of the LRTP and TIP documents under the Air Quality Conformity Process.

An amendment to the LRTP, TIP, or STIP documents may take one of two forms: Administrative Modification or Formal Amendment Process.

1.4.1 Administrative Modification

An Administrative Modification is a minor change to project costs, funding sources, or project/phase start dates. Such minor changes or adjustments do not require public involvement activities, reestablishment of financial constraint, or, in areas of air quality nonconformity, confirmation of conformity determination. Amendments of this nature are generally conducted through coordination of ALDOT Bureau of Transportation Planning and Modal Programs staff and MPO staff to minimize plan modifications, documentation activities, and additional costs.

1.4.2 Formal Amendment Process

The Formal Amendment Process is a major change to project costs, design scope, funding amounts, project/phase start dates, or a revision approved and required in the MPO plans by the State as an adjunct to its public involvement process. This process requires public notice, addition to MPO monthly meeting agendas, review by the public and MPO advisory committees, review by federal agencies, a vote by the MPO Policy Board, and an executed Resolution of adoption. The process criteria under which a formal amendment occurs is when a plan or document adds a project, deletes a project, exceeds the original projected costs by 20 percent or more, or changes the project design scope.

Amendments to Congestion Management Plans (TMAs only) and Bicycle Pedestrian Plans (now a formal plan in Alabama) are subject to the same processes as above. However, ALDOT will generally work with MPOs to make adjustments to these documents on a more informal basis in order to accommodate public involvement meetings and advisory committee scheduling.

1.5 Legislation and Regulations

1.5.1 Scope of the Planning Process

The 2045 LRTP has been developed in accordance with the most recently passed transportation legislation, Fixing America's Surface Transportation (the FAST Act), signed into law on December 4, 2015. Otherwise known as Public Law 114-94, the FAST Act continues the Metropolitan Planning Process as a cooperative, continuous, and comprehensive framework for making transportation investment decisions inmetropolitan areas. Furthermore, MPOs are encouraged to consult or coordinate with planning officials responsible for other types of planning activities affected by transportation, including planned growth, economic development, environmental protection, airport operations, and freight movement.

The FAST Act retains the eight planning factors from the previous MAP 21 and SAFETEA-LU Planning Factors as the Scope of the Planning Process. The factors must be considered in all plans, projects, and programs of the MPO including the 2045 LRTP, but the factors themselves remain unchanged. They include:

- Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency
- Increase the safety of the transportation system for motorized and non-motorized users
- Increase the security of the transportation system for motorized and non-motorized users
- Increase the accessibility and mobility of people and for freight
- 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
- Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight
- Promote efficient system management and operation
- Emphasize the preservation of the existing transportation system

1.5.2 Title VI in the Development of the Long Range Plan

The Montgomery MPO will be compliant with the Americans with Disabilities Act (ADA) 1990 and the Rehabilitation Act of 1973 (Section 504) by July 2015. The MPO is compliant with all other Title VI laws, processes, and programs, including the following:

- **Title VI of the Civil Rights Act of 1964 (Title VI)** states that "no person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be deniedthe benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance." Title VI prohibits discrimination on the basis of race, color, and national origin in programs and activities receiving federal financial assistance.
- **Rehabilitation Act of 1973 (29 USC 794)** prohibits discrimination on the basis of a disability,

including access to the transportation planning process.

- **Americans with Disabilities Act (ADA) of 1990** prohibits discrimination based solely on disability. ADA encourages the participation of people with disabilities in the development of transportation and paratransit plans and services. In accordance with ADA guidelines, all meetings conducted by the Montgomery MPO, including sites where public involvement activities occur and information is presented, must take place in locations accessible by persons with mobility limitations or other impairments. In highway planning, ADA requires developmentof access at sidewalks and ramps, street crossings, and in parking or transit access facilities.

- **Equal Employment Opportunity (EEO)** states that applicants to and employees of most private employers, state and local governments, educational institutions, employment agencies, and labor organizations are protected under federal law from discrimination on the following bases:
    - **Title VII of the Civil Rights Act of 1964**, as amended, protects applicants and employees from discrimination in hiring, promotion, discharge, pay, fringe benefits, job training, classification, referral, and other aspects of employment, on the basis of race, color, religion, sex (including pregnancy), or national origin.
    - **Title I and Title V of the Americans with Disabilities Act of 1990**, as amended, protect qualified individuals from discrimination on the basis of disability in hiring, promotion, discharge, pay, fringe benefits, job training, classification, referral, and other aspects of employment.
    - **Age Discrimination in Employment Act of 1967**, as amended, protects applicants and employees 40 years of age or older from discrimination based on age in hiring, promotion, discharge, pay, fringe benefits, job training, classification, referral, and other aspects of employment.
    - **Equal Pay Act of 1963**, as amended, prohibits sex discrimination in the payment of wages to women and men performing substantially equal work, in jobs that require equal skill, effort, and responsibility, under similar working conditions, in the sameestablishment, beyond sex discrimination prohibited by Title VII of the Civil Rights Act.
    - **Title II of the Genetic Information Nondiscrimination Act of 2008** protects applicants and employees from discrimination based on genetic information in hiring, promotion, discharge, pay, fringe benefits, job training, classification, referral, and other aspects of employment.
- **Prohibition of Discrimination on the Basis of Gender (23 USC 324)** states that no person shall on the ground of sex be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal assistance under this title or carried on under this title. This provision will be enforced through agency provisions and rules similar to those already established, with respect to racial and other discrimination, under Title VI of the Civil Rights Act of 1964.
- **National Environmental Policy Act of 1969 (NEPA)** established a U.S. national policy promoting the enhancement of the environment, including requirements for formal analysis of environmental impacts of major federal government actions (Environmental Impact Statements and Environmental Assessments). Environmental impacts to be considered include hydrological/geological, biological/ecological, social, and health in addition to more recent requirements related to archeological, historical, cultural, and financial impacts. Subsequent Presidential Executive Orders and legislation clarify consideration of impacts on low-income and minority communities.
- **Executive Order 12898 on Environmental Justice (EO 12898)**, instated February 11, 1994, further reinforces Title VI by requiring that federal agencies make environmental justice part of their mission. Specifically, agencies are required to consider, identify, and correct programs, policies, and activities that might have disproportionately high and adverse human health or environmental effects on minority and low-income populations.
- **Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (URA)** is intended to provide uniform, fair, and equitable treatment of persons who are displaced in

connection with federally funded projects; to ensure relocation assistance is provided; to ensure that decent, safe, and sanitary housing is available within the person's financial means; to help improve the housing conditions of displaced persons currently living in substandard housing; and to encourage and expedite acquisition of property without coercion.

- **Disadvantaged Business Enterprise (DBE) Program (49 CFR 26)** of the U.S. Department of Transportation provides a vehicle for increasing the participation by DBEs in state and local procurement. DOT DBE regulations require state and local transportation agencies that receive DOT financial assistance to establish goals for the participation of DBEs.
- **Safe, Accountable, Flexible Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU)**, enacted in 2005, placed additional emphasis on environmental stewardship, the consideration of environmental issues as a part of metropolitan and statewide transportation planning, and the linking of planning and the environmental assessment process. Each of these aspects strengthens the linkages between planning and environment and creates opportunities to examine the potential for environmental justice issues early on and throughout the project delivery process.
- **Executive Order 13166 on Persons with Limited English Proficiency (LEP),** issued August 11, 2000, and FTA Circular C 4702.1B, issued October 2012, require federal agencies to examinethe services they provide, identify any need for services to those populations with Limited English proficiency (LEP), and, without unduly burdening the agency, develop and implement a system to provide those services. Federal agencies are required to ensure that recipients of federal financial assistance provide meaningful access to their LEP applicants and beneficiaries. The policy guidance document, *Enforcement of Title VI of the Civil Rights Act of 1964 – National Origin Discrimination Against Persons with Limited English Proficiency; Policy Guidance*–Federal Register Vol. 65, No. 159, August 16, 2000, p. 50123, setsforth compliance standards to ensure that programs and activities normally provided in English are accessible to LEP persons and thus do not discriminate on the basis of national origin in violation of the Title VI prohibition against national origin discrimination.

1.5.3 Public Participation Plan (PPP)

The purpose of the 2045 LRTP is to identify and document future transportation needs inthe Montgomery metropolitan planning area, validate projects in the existing TIP, and recommend a phased implementation program that can be realistically implemented with anticipated funds. The LRTP must be developed in accordance with guidelines and objectives outlined in the FAST Act, as well as local requirements for the LRTP update. The LRTP was developed in a close working relationship with the MPO technical staff, Policy Board, TCC, and CAC. Other area stakeholders and general public were alsoinvolved at specific points in the LRTP development process. Specific study objectives include:

- Identify community goals and objectives and define the role of transportation in Montgomery area.
- Conduct a comprehensive evaluation of transportation needs.
- Formulate a transportation program with a financially feasible/cost effective mix of services.
- Develop recommendations for transportation services that would best achieve community needs.
- Prepare an action plan to implement the recommendations.

The public involvement activities were closely coordinated to ensure that the MPO committees and public understand the issues and needs of the developed and developing areas within the Montgomery metropolitan area.

In accordance with federal regulations, the Montgomery MPO 2021 Public Participation Plan (PPP) outlines how and when public involvement shall be conducted as it pertains to the LRTP, subsequent

meetings, public notice, and public comment.

Public involvement shall be conducted for transportation planning activities identified in 23 CPR Part 450 and 49 CFR Part 613, including:

Long Range Transportation Plan adoptions and subsequent revisions or amendments.

Meetings

A public involvement meeting shall be held for the following transportation planning activities: *Long-Range Transportation Plan* adoptions and subsequent revisions or amendments.

Public Notice

Publication shall be in newspapers of general circulation in Montgomery, Autauga, and Elmore counties and by additional means and methods. A meeting notice of at least 14 calendar days will be provided, when possible, but no less than 7 days (Alabama law). The information to be distributed at the public involvement meeting shall be available to the public at the time of notice. Information may be placed on the MPO web site *www.montgomerympo.org*.

Public Comment

As required under 23 CFR 450.316 (a)(1)(viii), the Montgomery MPO will hold a 7 to 14 day public comment period, place documents at document review sites, notify committee members and other interested persons on the mailing list, place public meeting notices in general circulation newspaper(s), and hold a public hearing in a centralized meeting location that is accessible to persons with disabilitiesfor LRTPs and TIPs that differ significantly from the original or amended version made available for public comment.

The public has been encouraged to participate in the development of the 2045 LRTP Update to support the public participation goals of the Montgomery MPO. COVID-19 has created some challenges to the traditional public engagement process. The following approaches were used to address those challenges:

- Online survey and comment form
- Email campaign to promote participation in the online survey
- Advertisement via social media and newspaper
- Hosting of a hybrid public engagement meeting

Documentation of Public Involvement Meeting Results

The process used to address individual comments will first include documenting the written comments provided by those attending the public involvement meeting or comments received outside of meetings. A name and address shall be provided in order for a comment to be documented. Comments by the public concerning the material provided at a public involvement opportunity shall be on a Comment Form, email, fax, or by separate letter before the closing date identified for the public involvement period. The comments shall be summarized by the MPO planning staff and a response prepared and documented in a written report.

The written report for the public involvement meeting or meetings shall include a record of attendance, a summary of the background material distributed at the public involvement meeting, a summary of each comment, the number of persons making the summary comment, and a response to the summary comment.

The written summary of the public involvement meeting(s) and the written comments received shall then be provided to the Metropolitan Planning Organization prior to the MPO decision on the public involvement subject. Comments are made available to the MPO prior to any action being taken on the final plan or proposal. The written summary of the public involvement shall also be available to the public at the MPO staff office or on the MPO website at *www.montgomerympo.org*.

1.6 Planning Emphasis Areas

The FHWA and FTA Offices of Planning have jointly issued Planning Emphasis Areas (PEAs), which are planning topical areas to be emphasized in state and MPO planning work programs. The PEAs for FY 2015 are included below. In March 2015, a joint FHWA/FTA letter to MPOs and state DOTs encouraged the reiteration and continued emphasis of these planning emphasis areas in their respective planning work programs for FY 2016.

1) **FAST Act Implementation**

   Transition to Performance Based Planning and Programming. The development and implementation of a performance-based approach to transportation planning and programming that supports the achievement of transportation system performance outcomes.

2) **Models of Regional Planning Cooperation**

   Promote cooperation and coordination across MPO boundaries and across State boundaries where appropriate to ensure a regional approach to transportation planning. This is particularly important where more than one MPO or state serves an urbanized area or adjacent urbanized areas. This cooperation could occur through the metropolitan planning agreements that identify how the planning process and planning products will be coordinated

   through the development of joint planning products and/or by other locally determinedmeans. Coordination across MPO and across state boundaries includes the coordinating of transportation plans and programs, corridor studies, and projects across adjacent MPO and State boundaries. It also includes the collaboration among state DOTs, MPOs, and operators of public transportation on activities such as: data collection, data storage and analysis, analytical tools, and performance-based planning.

3) **Ladders of Opportunity**

   Access to Essential Services — As part of the transportation planning process, identify transportation connectivity gaps in access to essential services. Essential services include housing, employment, healthcare, schools, and recreation. This emphasis area could include MPO and state identification of performance measures and analytical methods to measure the transportation system's connectivity to essential services and the use of this information to identify gaps in transportation system connectivity that preclude access of public, including traditionally underserved populations, to essential services.

Activities to be undertaken by the MPO to incorporate the PEAs into the planning process are summarized below:

1. **FAST Act Implementation—***Transition to Performance Based Planning and Programming.*

ALDOT's recent adoption of the Livability Principles and Indicators as a sustainability measurement against future actions supports this area. Additional performance measures will also be utilized in evaluating potential projects for recommendation in the LRTP. This includes not only mobility measures, but also those that promote economic development and social equity.

2. **Models of Regional Planning Cooperation**—*Promote cooperation and coordination across MPO boundaries and across State boundaries where appropriate to ensure a regional approach to transportation planning.*

As noted in Section 1.1, the Montgomery MPO area consists of the core area of the City of Montgomery and surrounding communities within Montgomery, Elmore, and Autauga counties in the central area of Alabama. While there are no adjacent MPO areas, portions of all three counties fall outside the designated Montgomery MPO study area. Therefore,

intergovernmental coordination is necessary to ensure that the MPO work program tiesdirectly into the work programs for each county.

3. **Ladders of Opportunity**—*Access to Essential Services: As part of the transportation planning process, identify transportation connectivity gaps in access to essential services.*

   The Montgomery MPO 2045 LRTP will take a comprehensive approach to assessing needs and opportunities, ensuring the interconnected relationships that affect and are affected by transportation are given proper consideration.

1.7 Livability Principles

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. Enhance 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 Montgomery MPO will provide the following **Livability Indicators**:

1. Percent increase in trips by transit and other non-vehicle modes
2. Percent increase in trips by for low income and non-vehicle owning population
3. Percent increase of workforce living within a thirty (30) minute or less commute from primary job centers
4. Percent increase in funding that enhances accessibility of existing transportation systems
5. Percent increase in leveraged funding sources for transportation projects
6. Percent increase of households within walking distance of recreational amenities and schools

1.8 Consistency with Other Plans

There are general and specific directions under the FAST Act (Section 1201) for the consistency requirementand states

> "The secretary shall encourage each metropolitan planning organization to consult with officials responsible for other types of planning activities…economic development, environmental protection, airport operations, and freight movements…to coordinate its planning process…with such planning activities." - 23 USC 134, Section 1201(a)(g)(3)(A)
>
> "Under the metropolitan planning process, transportation plans and TIPs shall be developed with due consideration of other related planning activities…" – 23 USC 134, Section 1201(a)(g)(3)(B)

The MPO addresses this requirement by including planning, economic development, engineering, and other technical personnel from various levels of government on the TCC, which interacts with private business, citizens, and other factions. In addition, the MPO consults with agencies and officials responsible for other planning activities within the Study Area that are affected by transportation when developing the LRTP and TIP. This includes federal, state, and local agencies responsible for:

- Economic growth and development

- Environmental protection
- Airport operations
- Freight movement
- Land use management
- Natural resources
- Conservation
- Historic preservation
- Human service transportation providers

A contact list of these officials and agencies has been developed and is maintained by MPO staff. Incorporating these key individuals in the transportation planning process allows for a broad understanding of transportation planning and land use development activities at the local and regional level, which can afford opportunities for cooperation and coordination.

The spirit and intent of THE FAST ACT, Section 1201, are clear. In accordance with Public Law 112-141 policy provisions and subsequent agency interpretation, the metropolitan plan should acknowledge consistency with other plans that include transportation and land use components: regional, long range, municipal and county comprehensive and master plans (airport, multimodal, transit, and utility), CongestionManagement Plans, Air Quality Conformity Determination, freight, bicycle/pedestrian, Public Participation, and environmental plans.

1.9 Performance Measures

On December 4, 2015, President Obama signed the Fixing America's Surface Transportation (FAST) Act (Pub. L. No. 114-94) into law—the first federal law in over a decade to provide long-term funding certainty for surface transportation infrastructure planning and investment. The FAST Act authorized $305 billion over fiscal years 2016 through 2020 for highway, highway and motor vehicle safety, public transportation, motor carrier safety, hazardous materials safety, rail, and research, technology, and statistics programs. The FAST Act maintains a focus on safety, keeps intact the established structure of the various highway-related programs we manage, continues efforts to streamline project delivery and, for the first time, provides a dedicated source of federal dollars for freight projects.

2.0 Plan Development Process

The Montgomery Area 2045 LRTP defines a program of projects to address the MPO study area's existing and future multimodal transportation needs. The plan will be used to guide future investments through the TIP process. The LRTP evaluates a wide range of transportation solutions to accommodate expected changes in transportation demands as a result of new development/redevelopment and from population, employment, and other socioeconomic types of growth through the horizon year 2045. The process for developing the LRTP included a multifaceted study approach that combined technical analysis with qualitative and quantitative assessment and input. This section presents the steps taken to create the LRTP, including:

- Project goals
- Project selection and funding availability
- Public outreach
- Data collection
- Technical tools and analysis
- Program screening and approval

2.1 LRTP Goals

The process of identifying transportation needs and prioritizing recommendations begins with a framework that defines the overall purpose of the Montgomery LRTP update. LRTP recommendations are tied to projected federal, state, and local funding sources for implementation. Therefore, the LRTP goals need to balance the policy priorities of the FHWA, ALDOT, and local jurisdictions. From a transportation perspective, this LRTP continues the local policy priorities adopted during the previous 2040 LRTP.

This section documents:

- The evaluation of the 2045 LRTP goals against relevant documents developed since its adoption in 2015 that influence transportation policy and funding
- The development of goals related to project identification and prioritization based on policy priorities at the local, state, and federal levels

2.1.1 Policy Influences on the LRTP Development Process

Since adoption of the previous LRTP, federal and state policy level changes have included:

- The 2015 passage of the FAST Act, sets policy priorities for federal transportation funding. Developing performance measures to evaluate the overall success of MPO projects and policies is one of the FAST Act's requirements.
- Issuance of ALDOT guidance to address Livability Principles and Measures. These were adopted by ALDOT per FHWA guidance to address sustainability in the MPO transportation planning process.

2.1.2 Policy Overview and Comparison

Table 2.1 presents a comparison of the goals outlined in the FAST Act, the 2040 LRTP, and the 2045 LRTP.As shown, the previous 2040 LRTP goals are consistent with those from the FAST Act. To better define the overall objectives of the LRTP, the goals have been tied to specific emphasis areas defined by the FAST Act orother relevant federal, state, or local policy.

Table 2.1: Consistency of LRTP Goals with the FAST Act

Emphasis Area	The FAST Act	2040 LRTP Goals	2045 LRTP Goals
Safety	To achieve a significant reduction in traffic fatalities and serious injuries on all public roads	Optimize the efficiency, effectiveness, connectivity, safety, and security of the transportation system.	Optimize the efficiency, effectiveness, connectivity, safety, and security of the transportation system.
Congestion Reduction	To achieve a significant reduction in congestion on the National Highway System		
System Reliability	To improve the efficiency of the surface transportation system		
Infrastructure Condition	To maintain the highway infrastructure asset system in a state of good repair	Promote state of good repair and prioritize maintenance	Promote state of good repair and prioritize maintenance
Freight Movement and Economic Vitality	To improve the national freight network, strengthen the ability of rural communities to access national and international trade markets, and support regional economic development	Develop a financially feasible multimodal transportation system to support expansion of the regional economy	Develop a financially feasible multimodal transportation system to support expansion of the regional economy
Reduced Project Delivery Delays	To reduce project costs, promote jobs and the economy, and expedite the movement of people and goods by accelerating project completion through eliminating delays in the project development and delivery process, including reducing regulatory burdens and improving agencies' work practices		
Environmental Sustainability (Natural)	To enhance the performance of the transportation system while protecting and enhancing the natural environment	Provide viable travel choices to improve accessibility and mobility, sustain environmental quality, and preserve community values	Provide viable travel choices to improve accessibility and mobility, sustain environmental quality, and preserve community values

Source: J.R. Wilburn and Associates, Inc. and MPO Staff

Table 2.2 provides an overview of ALDOT's Livability Principles and the overall emphasis areas they represent in comparison to the 2040 and 2045 LRTP goals. As shown:

- Livability Principles not addressed in the 2040 LRTP policy framework related to environmental justice and promoting efficient project delivery.
- Environmental justice is not addressed in the 2040 LRTP or the FAST Act although it is wellestablished policy area at the federal level.
- Reducing project delivery delays was an emphasis area added to the framework as a result of the FAST Act.

Table 2.2: Consistency of LRTP Goals with Livability Principles

Emphasis Area	Livability Principles	Applicable 2040 LRTP Goals	2045 LRTP Goals
Economic Vitality	Enhance economic competitiveness	Develop a financially feasible multimodal transportation system to support expansion of the regional economy	Develop a financially feasible multimodal transportation system to support expansion of the regional economy
Environmental Justice	Support existing communities	Provide viable travel choices to improve accessibility and mobility, sustain environmental quality, and preserve community values	Provide viable travel choices to improve accessibility and mobility, sustain environmental quality, and preserve community values
	Promote equitable, affordable housing	Develop, maintain, and preserve a balanced multimodal transportation system that provides for safe, integrated, and convenient movement of people and goods	Develop, maintain, and preserve a balanced multimodal transportation system that provides for safe, integrated, and convenient movement of people and goods
Project Coordination and Public Involvement	Value communities and neighborhoods	Coordinate the transportation system with existing and future land use and planned development	Coordinate the transportation system with existing and future land use and planned development
	Coordinate policies and leverage investment	Increase jurisdictional coordination and citizen participation in the transportation planning process to enhance all regional travel opportunities	Increase jurisdictional coordination and citizen participation in the transportation planning process to enhance all regional travel opportunities
Multimodal Transportation	Provide more transportation choices	Develop, maintain, and preserve a balanced multimodal transportation system that provides for safe, integrated, and convenient movement of people and goods	Develop, maintain, and preserve a balanced multimodal transportation system that provides for safe, integrated, and convenient movement of people and goods

Source: J.R. Wilburn and Associates, Inc. and MPO Staff

2.1.3 CMP Goals and Objectives

In May 2014, MPO staff led completion of the *Congestion Management Process (CMP) 2014 – 2018* to provide a clear direction for congestion management in the MPO area through 2018. More detail on the CMP and its relationship to the overall LRTP is provided in Section 5. The CMP includes a set of goals developed to specifically address congestion relief, safety, and multimodal travel:

- Goal 1: To provide effective management of new and existing transportation facilities through use of travel demand reduction and operational management strategies
- Goal 2: Optimize the safety of the current transportation network
- Goal 3: Optimize the effectiveness and reliability of the regional transportation network
- Goal 4: Increase multimodal transportation access

The CMP goals are consistent with the overall LRTP goals as they primarily concentrate and operations, safety, and multimodal travel. It should also be noted that the CMP established objectives and related performance measures that were also considered during development of the LRTP work program.

2.1.4 LRTP Goals

The goals for the 2045 LRTP along with the emphasis areas they are intended to address are shown below in **Table 2.3**.

Table 2.3: LRTP Goals and Related Emphasis Areas

2045 LRTP Goals	Related Emphasis Area(s)
Optimize the efficiency, effectiveness, connectivity, safety, and security of the transportation system	• Safety • Congestion Reduction • System Reliability
Promote state of good repair and prioritize maintenance needs	• Infrastructure Condition
Develop a financially feasible multimodal transportation system to support expansion of the regional economy	• Freight Movement and Economic Vitality • Reduce Project Delivery Delays
Provide viable travel choices to improve accessibility and mobility, sustain	• Environmental Sustainability
environmental quality, and preserve community values	(Natural) • Environmental Justice
Coordinate the transportation system with existing and future land use and planned development	• Project Coordination and Public Involvement
Increase jurisdictional coordination and citizen participation in the transportation planning process to enhance all regional travel opportunities	• Project Coordination and Public Involvement
Develop, maintain, and preserve a balanced multimodal transportation system that provides for safe, integrated, and convenient movement of people and goods	• Multimodal Transportation • Environmental Justice

Source: J.R. Wilburn and Associates, Inc. and MPO Staff

2.2 Public Involvement

To be Updated by after survey responses are completed and public meetings are held.

Public input is essential to developing community-focused transportation recommendations and determining the long range transportation needs of the Montgomery metropolitan area. Public outreach has been a vital and ongoing element throughout the 2045 LRTP development process. Study stakeholders, including local governments, businesses, community and special interest groups, and the general public, provided input and feedback throughout the study through meetings, interviews, and work sessions. A summary of the public involvement efforts is detailed in Table 2.4.

Appendix B contains a copy of all display ads for meeting and public hearings regarding the 2045 LRTP, as well as associated materials.

2.2.1 Public Information Meetings

Public meetings were held on _____ at _____. Appendix B also contains the sign-in sheets and display ads for each series of meetings.

Table 2.4
Public and Stakeholder Meetings

Summary of Activity	Date	Agenda Items	Attendees
MPO Policy Board (MPO) **Technical Coordinating Committee (TCC)** **Citizens Advisory Committee (CAC)**	November 18, 2021 November 16, 2021 November 16, 2021	- Draft Planpresentation - Draft Plan presentation - Draft Plan Presentation	MPO Committee Members TCC Members CAC Members
Individual County Work Sessions - Autauga County and City of Prattville - Elmore County, City of Millbrook, Town of Coosada, City of Wetumpka - City of Montgomery - Town of Pike Road	April through August 2021	- Introduce 2045 LRTP study - Discuss travel demand model and required input - In depth discussion of employment, household, and school/daycare enrollment for the 2015 Base Year and 2045 Forecast Year	Agency stakeholders and other interested parties
MPO Policy Board (MPO) **Technical Coordinating Committee (TCC)** **Citizens Advisory Committee (CAC)**	January 2022 January 2022 January 2022	- Adopt Plan - Recommend Plan adoption - Recommend Plan adoption	MPO Committee Members TCC Members CAC Members
Public Information Meetings – - City of Wetumpka and Elmore County - City of Prattville and Autauga County - Montgomery County and the City of Montgomery	TBD TBD TBD	- Presentation of 2015 and 2045 traffic forecast, socioeconomic data, funding and recommendations	Open house to public and area stakeholders

2.2.2 Survey, Website and Media Outreach

To be Updated after survey and public outreach is complete. A 2045 LRTP survey was developed and distributed through MPO member jurisdiction websites, promoted with social media advertisements, and emailed directly to stakeholders. Media outreach is one of the key means to reach the general public. A variety of media outreach tools were used to increase both attendance and participant diversity at public information meetings. Public information meetings were publicized through newspaper ads in the *Montgomery Independent, Montgomery Advertiser, Prattville Progress,* and *Wetumpka Herald.*

2.2.3 MPO Coordination

Coordination and consultation with the MPO committees and staff occurred regularly throughout the LRTP planning process. As identified in Section 1, the MPO Policy Committee is responsible for adopting the 2045 LRTP. From study kickoff through plan adoption, the study team conducted five sets of meetings with the MPO committee, TCC, and CAC, as well as one working meeting with just the TCC. Each committee was engaged throughout LRTP development, providing data sources, reviewing materials and providing comments. Participation has contributed to making the LRTP a much more comprehensive evaluation, reflecting the priorities of all parts of the region.

2.2.4 Public Outreach Evaluation

Evaluation of public involvement efforts is critical to the continuing success of the program, and helps in determining the effectiveness of the tools utilized. It is important to document the results of the public involvement effort and the level of public participation achieved. Table 2.5 outlines the qualitative and quantitative evaluation criteria used to monitor each public involvement technique and evaluate the success of the public involvement activities.

Public involvement is continuous in the planning process. Understanding which public involvement methodologies work best in the region will be important to the MPO as it continues to consult with the public in the future. Evaluation of the LRTP program outreach success will be important to the planning process. Appendix B includes documentation of the public outreach efforts.

Table 2.5: Public Involvement Evaluation Criteria

PIP Technique	Evaluation Criteria	
	Quantitative	**Qualitative**
Technical Review Committee Meetings	Attendance Diversity of Representation Quantity of Feedback Received	Was Input Used in Planning Process? Effectiveness of Meeting Format
Media Outreach	Extent and Quantity of Media Coverage	
News Articles	Number of Additions to Mailing List Quantity of Articles Distributed	
Website	Number of Visitors Number of Comments Received Number of Comment Responses	
Public Meetings	Number of Events/Opportunities for Public Involvement Number of Comments Received Number of Participants Diversity of Attendees	

Source: J.R. Wilburn and Associates, Inc. and MPO Staff

Effectiveness of Notification and Communication ToolsHow and How Often Contact Was Made

Concise and Clear InformationEffectiveness of News articles

Comments to MPO Webmaster on WebsiteFormat/Presentation of Information

Effectiveness of Meeting FormatPublic Understanding of ProcessQuality of Feedback Obtained Timing of Public Involvement
Meeting Convenience: Time, Place, and AccessibilityWas Public's Input Used in Developing the Plan?

2.3 Data Collection

The breadth and depth of data collected and reviewed is a key factor in the success of the planning process. Both qualitative and quantitative data are needed. Qualitative data sources include input from all members of the community such as elected officials, agency staff, stakeholders, and the general public. In addition, existing documents and plans provide qualitative input. Quantitative data collected for the LRTP includes any data that can be used to analyze the system such as that collected by state and local transportation departments and agencies, the U.S. Census Bureau, and other state agencies. The greatest need for reliable, timely, and accurate data is for updating the travel demand model. Updating the model requires traffic counts, population, employment, school enrollment, and income data, and roadway network characteristics (number of lanes, speed limits, and functional classification). Another analysis tool requiring robust data is the geographic information system (GIS) processor. Table 2.6 presents a summary of information collected and utilized throughout the planning process.

Table 2.6: Data Summary

Category	Data Resources
Plans/Programs	Montgomery Study Area 2045 Long Range Transportation Plan (September2015)
	2021 Public Participation Plan for the Montgomery Area MPO LRTP Update
	Summary of Public Involvement for the 2045 Long Range Transportation Plan (September 20152015)
	Montgomery Area Metropolitan Planning Organization (MPO) Transportation Improvement Program (TIP), Fiscal Years (FY) 2020 through 2023 (September 2019)
	Montgomery Area Metropolitan Planning Organization (MPO) Transportation Improvement Program (TIP), Fiscal Years (FY) 2016 through 2019
	Montgomery Metropolitan Planning Organization (MPO)Congestion Management Plan (CMP)2014 – 2018 (May 2014)
	Montgomery Downtown Plan (January 2009)
	City of Prattville, AL Comprehensive Plan (January 21, 2010)
	Montgomery Strategic Development Concept (2008)
	Montgomery Riverfront and Downtown Master Plan (May 2001)
	ALDOT Railway Plan (2014)
Socioeconomic Data	Forecast of Selected Socioeconomic Variables for Montgomery, Elmore, and Autauga Counties in the Montgomery MPO Area, University of Alabama CBER (November 2014)
	Census American Community Survey (ACS) Travel Data 2011-2015
	2015 Base Year and Forecast Year 2045 Socioeconomic Data
	2015 US Census Data
	2015-2011 IRS Migration Statistics
	“Alabama’s Top 100 Private Companies” Business Alabama (December 2008)
	Montgomery Area Chamber of Commerce
	Town of Coosada (2015-2014), City of Millbrook (2015-2014), City of Montgomery (2015-2014), City of Prattville (2015-2014), Town of Pike Road (2015-2014) and City of Wetumpka (2015-2014) Building Permit Data
	Elmore County Five Year Capital Plan Report by the Alabama State Department of Education
	“State Board of Education School Report Card for 2015” for each public school in Montgomery MPO
	Alabama State Department of Human Resources List of Licensed Daycares by County
	Montgomery Public Schools Facility Study Final Report (January 2006)
	InfoUSA Socioeconomic Data package (2015)

Category	Data Resources
Roadway Network	Montgomery MPO Travel Demand Model (2015)
	Montgomery Study Area Functional Classification Map (ALDOT - 2013)
	University of Alabama, CARE Safety Data
	Alabama Department of Transportation Website
	ALDOT Bridge Sufficiency Data (2012)
Freight	CSX Transportation, Inc (2015)
	Alabama State Port Authority Website: www.asdd.com
	Norfolk Southern (2015)
Transit System	Montgomery Urbanized Area Transit Development Plan 2017 – 2021
	Montgomery Area Transit System data for Fiscal Years 2015 through 2020
	Transit Route Maps
	National Transit Database
	ALDOT Transit Reporting System: Section 5311 Quarterly Reports
	Montgomery Area Transit System On-Board Passenger Ridership Study (2007)
	Autauga Rural Transit 4th Quarter Transportation Management Reports (FY 2015)
	Montgomery Street Car Rail Lines from Alabama Power
Bicycle and Pedestrian	A Master Plan for the Elmore County Trail of Legends by the Central Alabama Regional Planning and Development Commission (1997)
	2012 Montgomery MPO Bicycle and Pedestrian Plan
Historical Sites and Districts	City of Montgomery Historic Registry
	City of Prattville Historic Registry
	Alabama Register of Landmarks and Heritage
	Alabama Historical Commission
	National Register of Historic Places
Environmental	Environmental Protection Agency
	Alabama Department of Environmental Management
Cemetery	The USGenWeb Archives Project - Alabama
	Website: http://alabama.hometownlocator.com
Air	Montgomery Regional Airport website
	Federal Aviation Administration Data
	Website: www.airnav.com
Waterways	Coalition of Alabama Waterways
	Outdoor Alabama Website www.outdooralabama.com
Organizations	Montgomery Transportation Coalition – Organization Information and Goals

Source: MPO Staff

2.4 Needs Identification Process

The process of identifying needs relied on a combination of technical analysis and assessment, input from the public and advisory committee members, and addressing the goals set forth in the LRTP. A more detailed description of the project needs identification and prioritization process is provided in Section 7. Needs identification varies by specific project type(s). Examples include:

- Roadway Capacity - Most of the technical analysis for identifying roadway capacity needs is based on output from the travel demand model. Other considerations could include the ability to accommodate freight, service to activity centers, promoting future land use and growth patterns, and serving traditionally underserved populations.
- Roadway Maintenance and Operations – Identification of roadway-related operations and maintenance needs for several categories (e.g., bridges and resurfacing) primarily comes from ALDOT and local government representatives through coordination on the respective work programs. Much like roadway capacity improvements, other factors such as freight travel and overall traffic volumes are also considered.
- Bicycle and Pedestrian - Bicycle and pedestrian needs are identified by evaluating gaps in the current network, particularly related land uses that promote bicycle travel such as schools, parks, and other activity centers.
- Transit – Transit needs are identified based on an assessment of ridership trends and service characteristics.

The following documents developed for the Montgomery MPO also assisted in needs identification:

- *The Montgomery Metropolitan Planning Organization (MPO) Congestion Management System (CMS) 2014 – 2018*
- *Montgomery Metropolitan Planning Organization (MPO) 2012 Bicycle and Pedestrian Plan*

2.5 Plan Development and Approval

The 2045 LRTP program of projects was developed to provide solutions for future transportation needs. The Montgomery area has a number of planned improvements in the existing short-range FY 2020-2023 TIP, as well as the previous TIPs since the 2015 LRTP update. Other projects were also identified from each area to consider for inclusion in the plan. During theproject development phase, each project was screened to identify the level of need, potential benefits, impacts, and cost. The final program of projects must be fiscally constrained by anticipated future revenue stream from local, state, federal and other sources.

A draft 2045 LRTP list of projects was reviewed at the November 2021 MPO Policy Board, TCC, and CAC meetings. The draft 2045 LRTP document was released to the MPO and advisory committees in November 2021 for review followed by a two week public review and comment period. Comments from the meetings were reviewed and incorporated into the final plan. The final Montgomery Study Area 2045 LRTP was presented for adoption by the MPO and advisory committees at the scheduled MPO, TCC, andCAC meetings in January 2022.

3.0 Montgomery Planning Environment

This section provides the transportation planning context for development of the 2045 LRTP. The transportation system is dependent upon the economical, physical, and cultural characteristics of the area population. The intensity of transportation infrastructure investment needs to match land development patterns: urban, suburban, or rural. Addressing this issue, planners should examine how people live, where they live, and their travel patterns in order to determine transportation solutions. High speed highways and heavy rail investments facilitate travel between home and work over longer distances and interregional travel. Conversely, pedestrian infrastructure such as sidewalks provide a safe travel environment for local, compact trip making between home and shopping areas or from home to school. The various economic, social and land development considerations that impact travel demand are presented here. These considerations influence the planning environment and are essential to creating a plan that reflects and meets community needs for an integrated transportation system.

3.1 Population, Household, School/Daycare Enrollment, and Employment Trends

Addressing transportation needs involves understanding area growth patterns and distribution. Identifying high growth areas versus stable areas helps to determine what kinds of transportation investment, if any may be needed to serve the community. Developing growth areas may need new infrastructure whereas established areas may need maintenance or enhancement investments. Understanding household distribution is also important since transportation needs vary by conditions, from rural to urban. Density plays an important factor in identifying feasible transit services as well. Fixed route transit services require greater household densities while other transit options may be suited to areas of lower density.

3.1.1 Population and Household Trends

The household characteristics in the study area vary. According to the 2020 U.S. Census, the least populated county is Autauga County with a population of 58,805 and an estimated 22,971 households; Elmore County is the second most populated county with a population of 87,977 and an estimated 34,100 households. Montgomery County had a 2020 population of 228,954 and an estimated 93,071 households. Census Bureau has not released actual household counts as of this writing; household estimates were calculated by applying the American Community Survey 2015 to 2019 persons-per-household estimates to the 2020 Census population count.

Montgomery County's population remained essentially unchanged from 2010 to 2020, with a slight population decline of 409 persons. Elmore County added 10.9 percent to its' population, gaining 8,674 persons. Autauga County added 4,234 persons, a 7.8% increase. The Tri-County region added 12,499 persons, a 3.4% growth rate for the decade.

Historic population change by county, state, and MPO study area is shown in Table 3.1, from 1990 through 2015. Table 3.2 details the population estimates for each county between 2011 and 2015 released by the U.S. Census, and Table 3.3 details the households for each county between 2011 and 2015 with the percent change.

To facilitate forecasting households to the year 2045, a report from the University of Alabama Center for Business and Economic Research was commissioned by the Montgomery MPO. Table 3.4 details the household projections from 2010 to 2045. Figure 3.1 and Figure 3.2 map the 2015 and 2045 households by TAZ, respectively.

Table 3.1: Population Total and Percent Change from 1990 to 2020

Geographic Area	1990	2000	2010	2020	1990-2000	2000-2010	2000-2020
Alabama	4,040,587	4,447,100	4,779,736	5,024,279	10.1%	7.5%	13.0%
Montgomery MPO Study Area	Not Available	299,180	328,333	341,920 estimated	Not Available	9.7%	14.3%
Autauga County*	34,222	43,671	54,571	58,805	27.6%	25.0%	34.7%
Elmore County*	49,210	65,874	79,303	87,977	33.9%	20.4%	33.6%
Montgomery County*	209,085	223,510	229,363	228,954	6.9%	2.6%	2.4%
Tri-County Area	292,517	333,055	363,237	375,736	13.9%	9.1%	12.8%
Percent within MPO	Not Available	89.8%	90.4%	91.0% estimated	n/a	n/a	n/a

*Note: Population is shown for the entire county and includes areas outside of the MPO study area.Data Source: U.S. Census
Source: MPO Staff

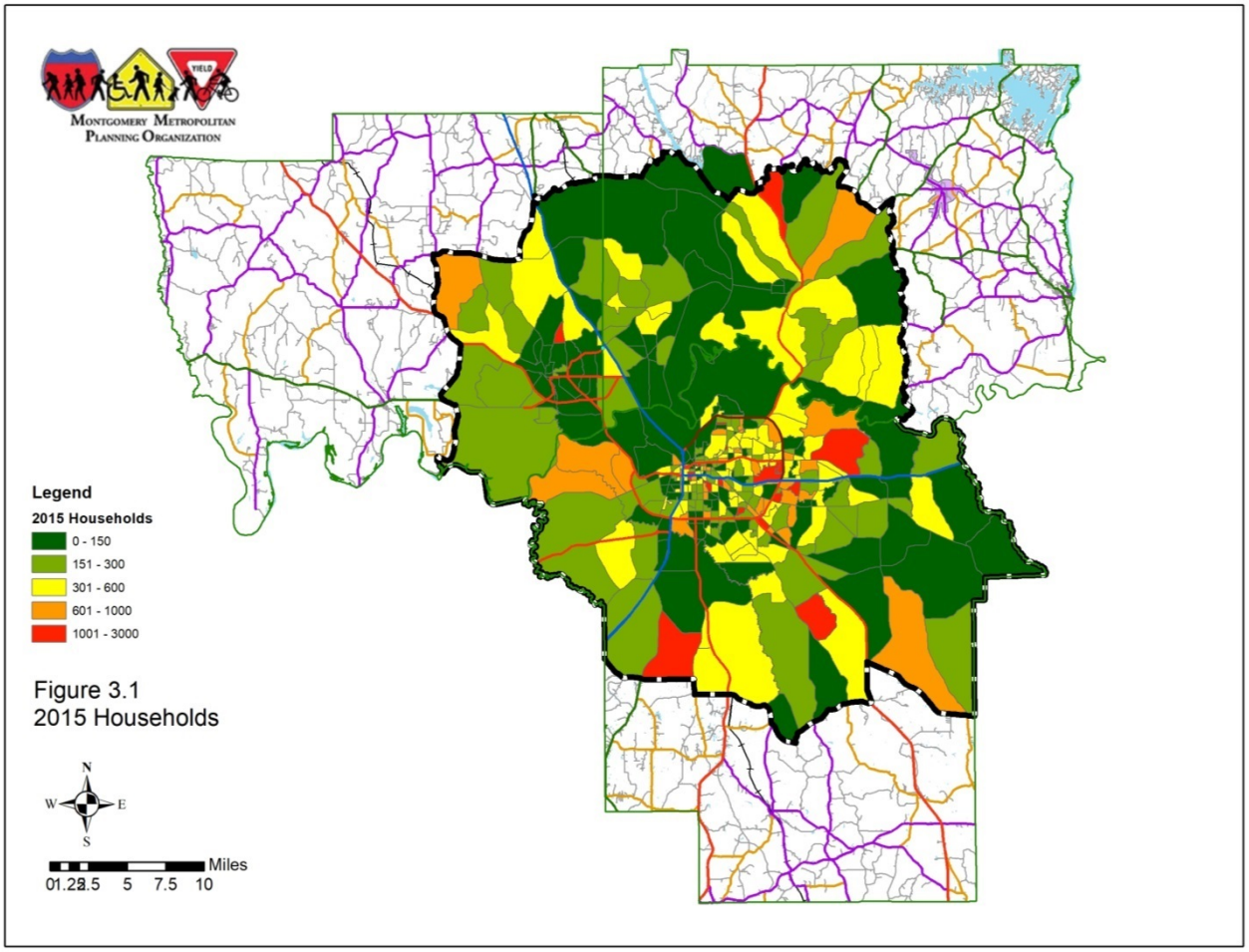


Figure 3.1
2015 Households

Table 3.2: Population by County

County	2005	2010	2015	2020
Autauga*	47,882	54,571	55,275	58,805
Elmore*	73,254	79,303	80,903	87,977
Montgomery*	222,071	229,363	227,420	228,954

*Note: Population is shown for the entire county and includes areas outside of the MPO study area.Data Sources: U.S. Census
Source: MPO Staff

Table 3.3: Total Household from 2000 to 2020 by County

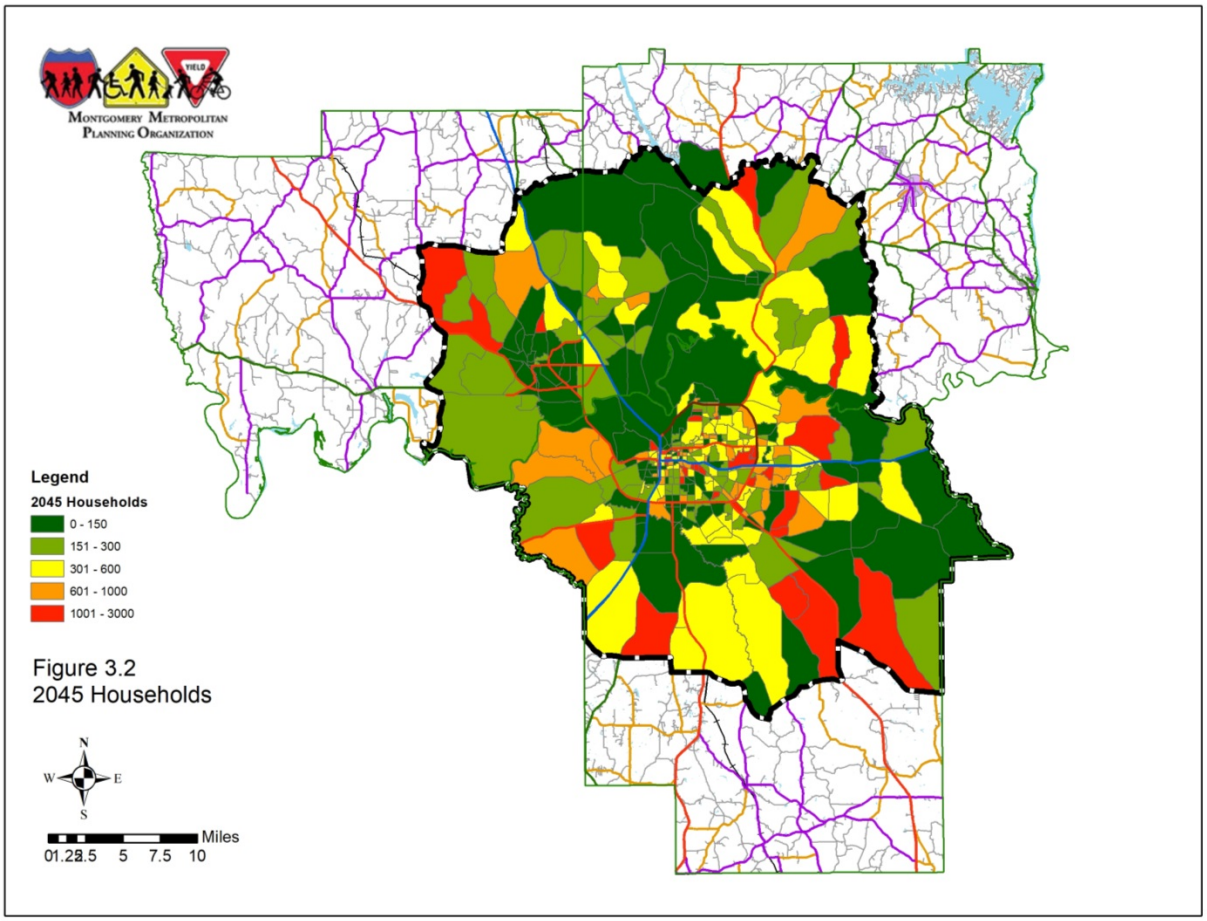
County	2000	2005	2010	2020 Est.	2000-2010	2000-2020
Autauga County*	16,003	19,263	20,221	22,971	26.4 %	43.5%
Elmore County*	22,737	28,046	28,301	34,100	24.4%	50.0%
Montgomery County*	86,068	99,880	89,981	93,071	4.5%	8.1%

*Note: Households is shown for the entire county and includes areas outside of the MPO study area.Data Source: U.S. Census; American Community Survey 2015 to 2019 five year estimates
Source: MPO Staff and JRWA household estimates based on Census 2020 Population and average persons/HH

Table 3.4: Household Projections from 2010 to 2045 by County

	Census	Projections						Change 2010-2045	
County	2010	2015	2020	2025	2030	2040	2045	Number	Percent
Autauga*	20,221	20,809	22,485	24,057	25,533	26,970	28,321	8,100	40.1%
Elmore*	28,301	29,863	31,977	33,898	35,590	37,031	38,234	9,933	35.1%
Montgomery*	89,981	91,409	93,170	94,917	96,466	97,684	98,626	8,645	9.6%
MPO Total	138,503	142,081	147,631	152,872	157,589	161,685	165,181	26,678	19.3%

*Note: Households is shown for the entire county and includes areas outside of the MPO study area.Data Source: U.S. Census and University of Alabama Center for Business and Economic Research Source: MPO Staff



The U.S. Census releases annual population estimates for Census designated places in addition to the annual county estimates. Table 3.5 details the Census designated place population estimates from 2010 and 2020.

Table 3.5: Population Estimates from 2010 to 2020 by Census Designated Place

Census Designated Place	2010	2020
Coosada	1,224	1,315
Deatsville	1,154	1,243
Elmore	1,262	1,352
Millbrook	14,640	457
Montgomery	205,764	200,603
Pike Road	5,406	9,439
Prattville	33,960	37,781
Wetumpka	6,528	7,220

Sources: 2010 Census; 2020 Census for places over 5,000 population; University of Alabama, Center for Business and Economic Research, population estimates for places under 5,000 population

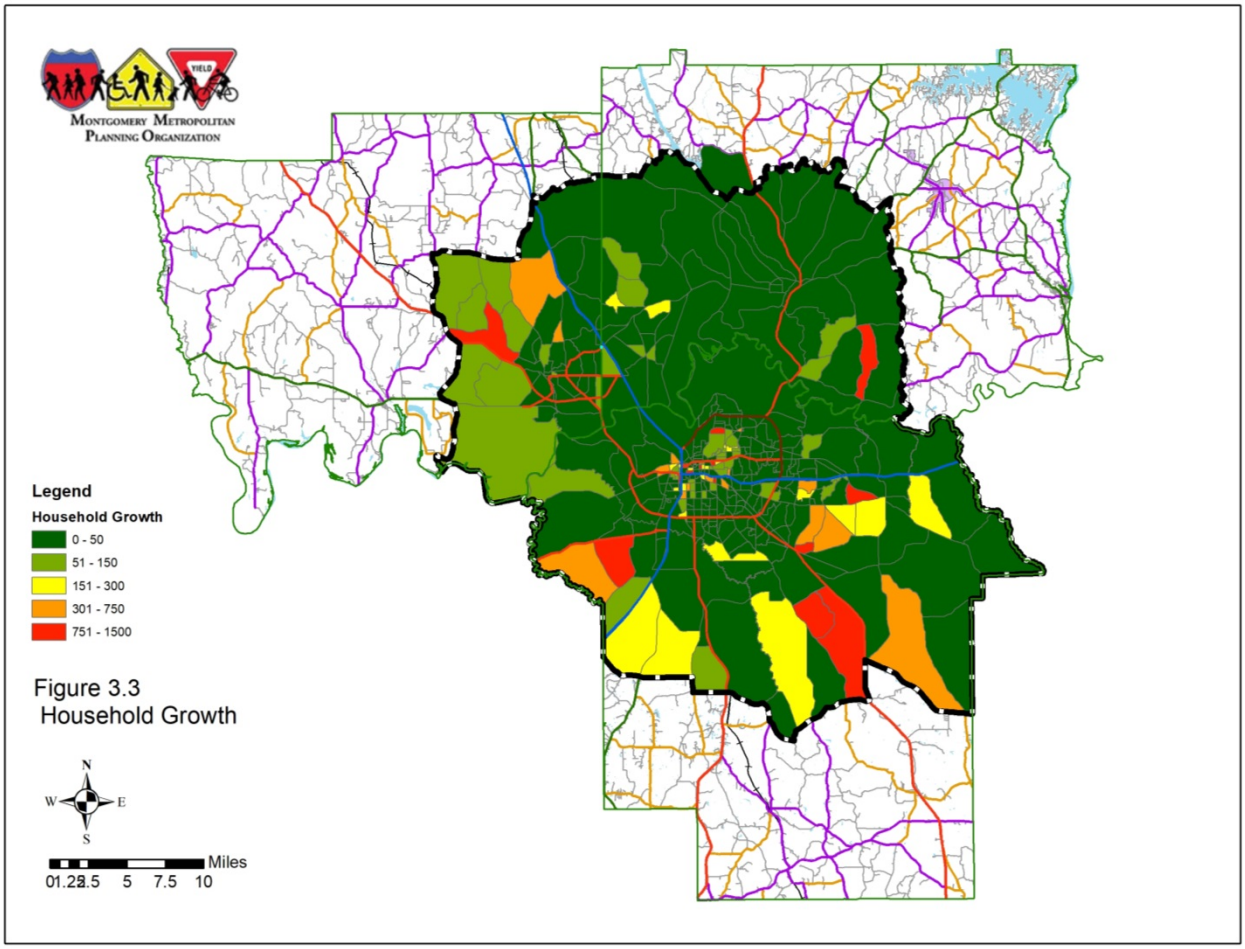


Table 3.6 shows the 2015 population and household density for the MPO study area, for the part of each county in the MPO study area, and the State of Alabama according to the U.S. Census. Table 3.7 shows the 2045 household density for the MPO study area and for the part of each county in the MPO study area.

Figures 3.3 shows projected household growth from 2015 to 2045. Figure 3.4 shows existing 2015 household density, and Figure 3.5 shows projected 2045 household density by TAZ.

Table 3.6: 2015 Household Density

Geographic Area	Population	Households	Land Area (Square Miles)	Population per Square Mile	Households per Square Mile
Alabama	4,854,803	1,867,893	50,744	95.6	36.8
Montgomery MPO Study Area	328,333[1]	123,773[1]	954	344.2	129.7
Autauga County*	54,903	21,446	161	341.0	133.2
Elmore County*	80,903	31,358	276	293.1	113.6
Montgomery County*	227,420	92,447	517	439.9	178.8

*Area within the MPO Study AreaData Source: U.S. Census Source: MPO Staff
[1] Estimated

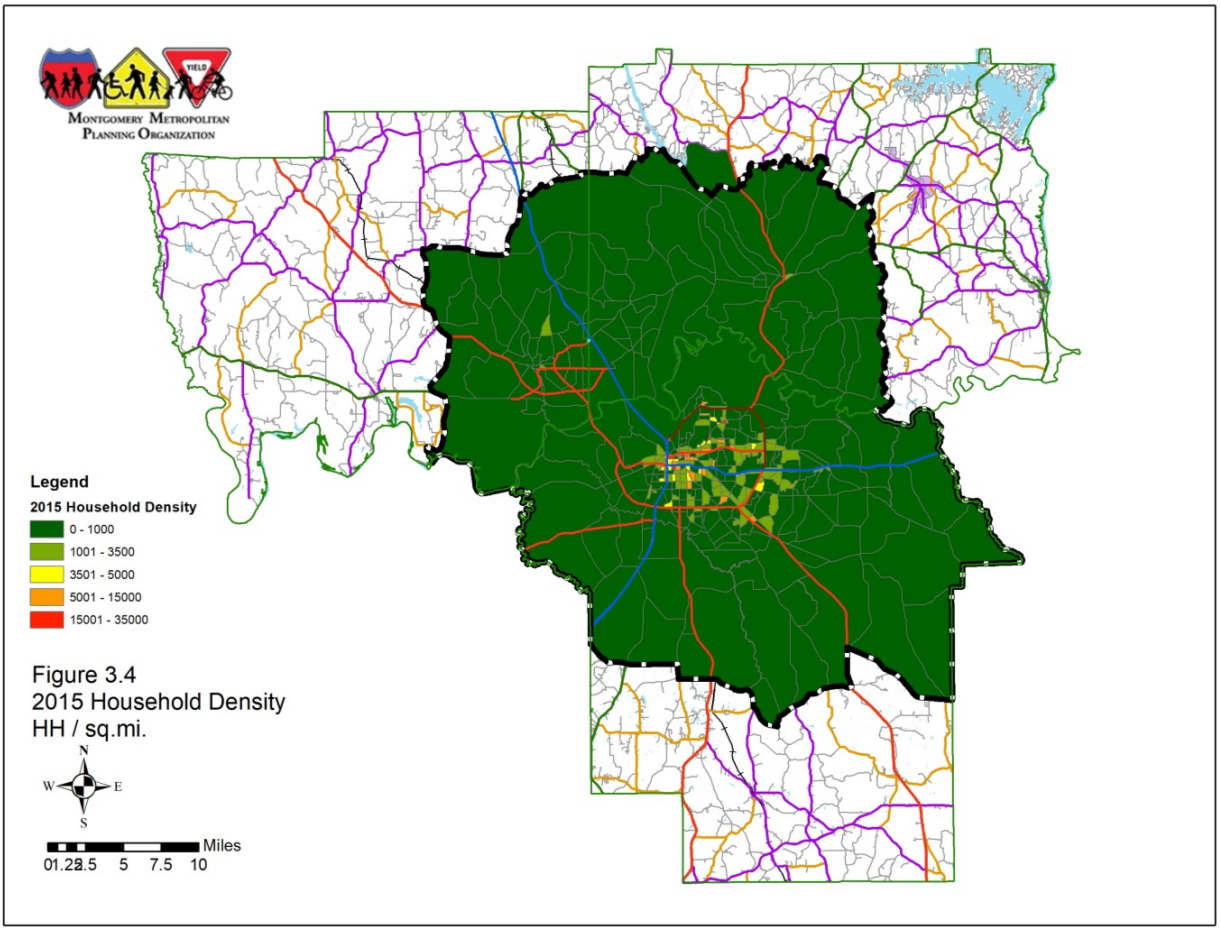
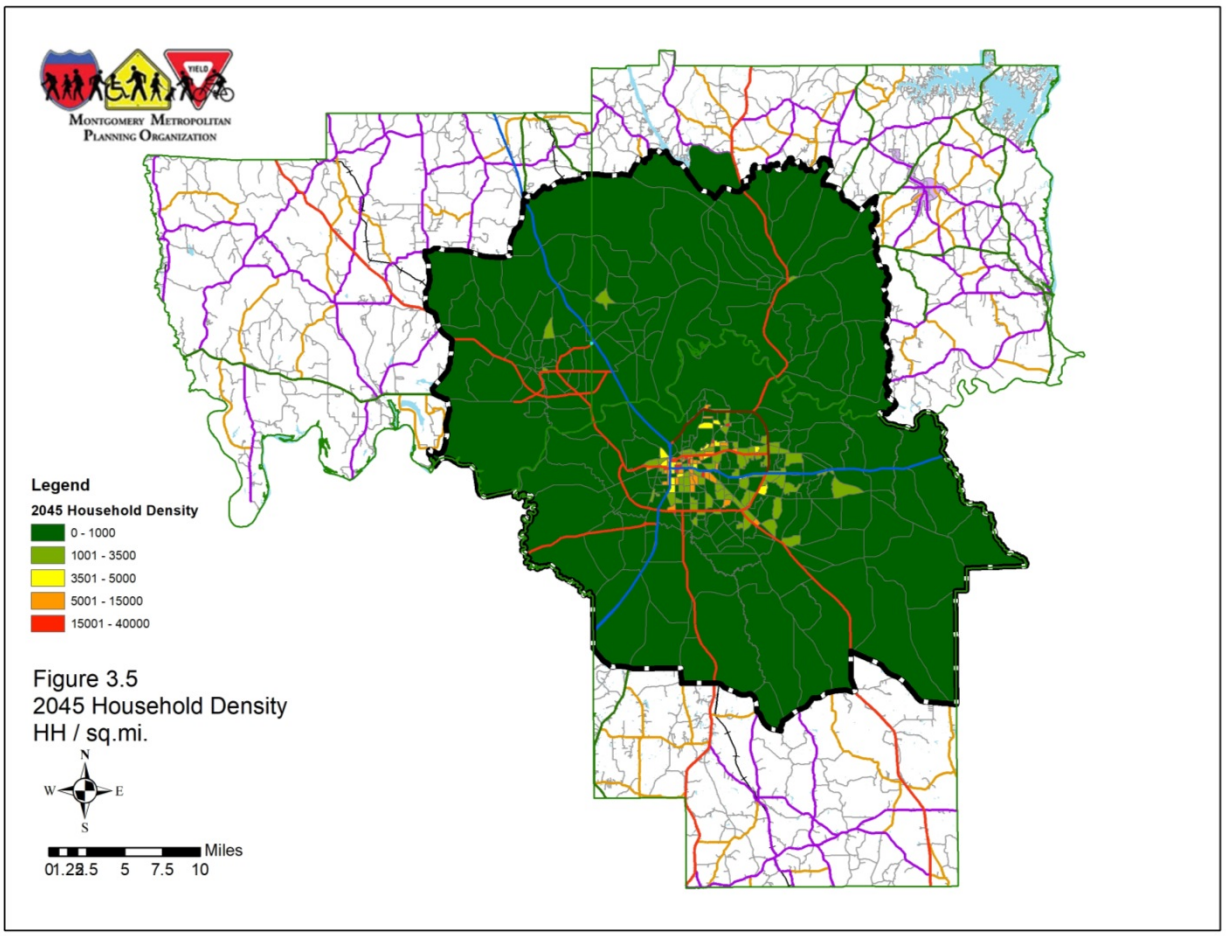


Table 3.7: 2045 Household Density

Geographic Area	Households	Land Area (Square Miles)	Households per Square Mile
Montgomery MPO Study Area	147,364	954	154.5
Autauga County*	21,411	161	133.0
Elmore County*	28,714	276	104.0
Montgomery County*	97,239	517	188.0

*Area within the MPO Study Area
Data Source: U.S. Census and University of Alabama Center for Business and Economic ResearchSource: MPO Staff



The distribution patterns show the greatest household densities are found in multiple locations. In Autauga County, the greatest densities are found within the City of Prattville off of Cobbs Ford Road/Main Street. In Elmore County, the greatest densities are found in the City of Millbrook off of Highway 14 and in the City of Wetumpka downtown area. In Montgomery County, the greatest densities are found along Vaughn Road east of the Eastern Boulevard; along the Eastern Boulevard/East South Boulevard between Woodley Road and Wares Ferry Road; in the historic neighborhoods of Capital Heights, Old Cloverdale and the Garden District; along South Court Street; along I-65 between I-85 and West Fairview Avenue; and along Ray Thorington Road.

Between 2015 and 2045, it is anticipated that the household growth in Montgomery County will be concentrated in east Montgomery County along I-85, Vaughn Road, Taylor Road, Ray Thorington Road, and Pike Road. In Autauga County the growth is anticipated to be concentrated along Highway 14 and Cobbs Ford Road/Main Street. The growth in Elmore County is anticipated to be concentrated along Highway 14, US 231, and Redland Road.

3.1.2 School and Daycare Enrollment Trends

School enrollment is a component of the transportation planning model. Areas with a high amount of residential development tend to have a correlating higher amount of schools and daycare facilities. Since 2005, Montgomery County has built an additional elementary school, secondary school, and high school in the eastern portion of the City of Montgomery, and closed schools with low enrollment in other parts ofthe City of Montgomery. A new high school has opened in Pike Road in August 2018. Elmore County has opened an elementary school and has plans to expand and build new schools to accommodate new residential development. The increase in school enrollment in Autauga County is dispersed throughout the City of Prattville, typically at current school/daycare sites. Figures 3.6 and 3.7 show existing (2015) and projected (2045) school/day care enrollment. Figure 3.8 details the school and daycare enrollment change from 2015 to 2045 by TAZ.

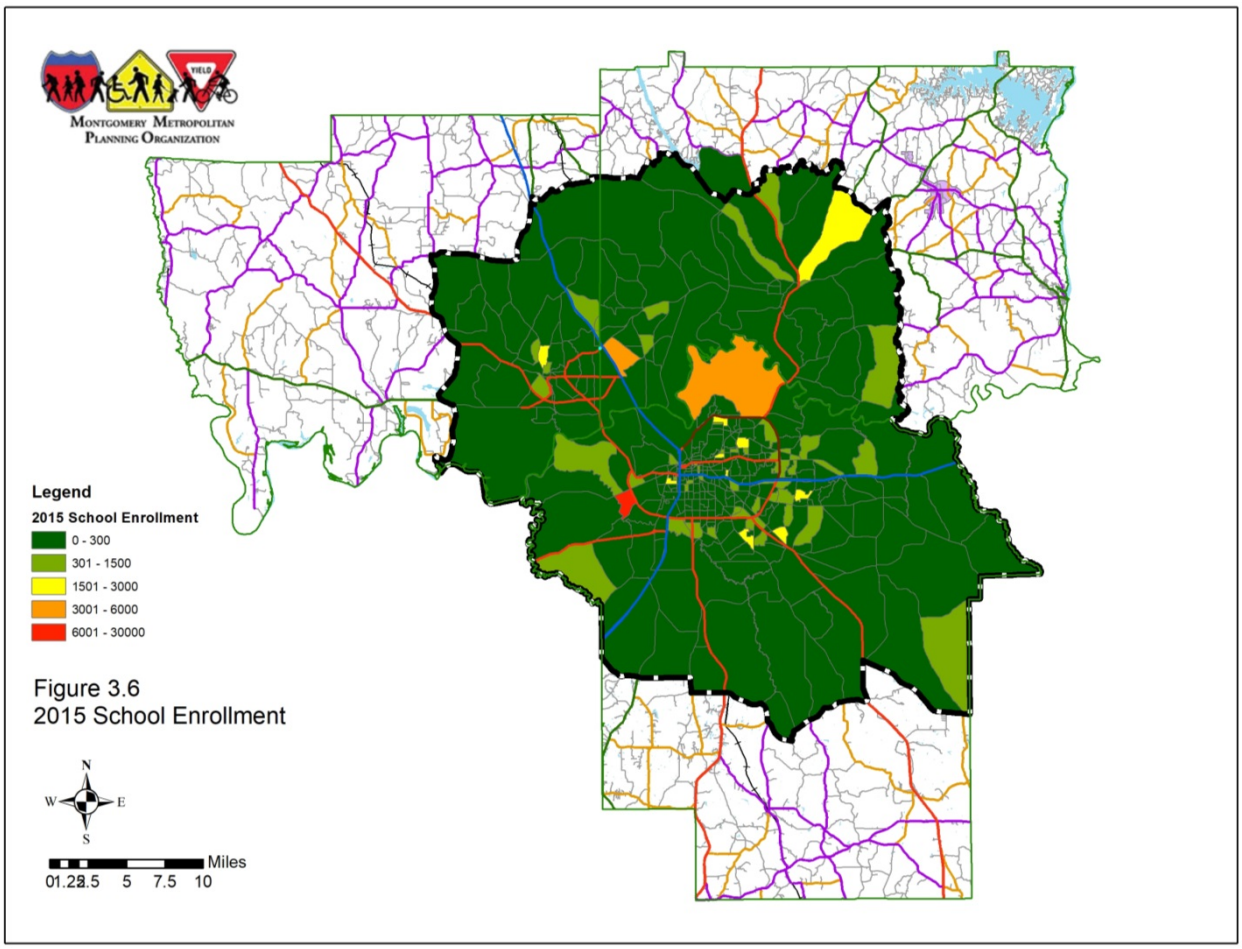


Figure 3.6
2015 School Enrollment

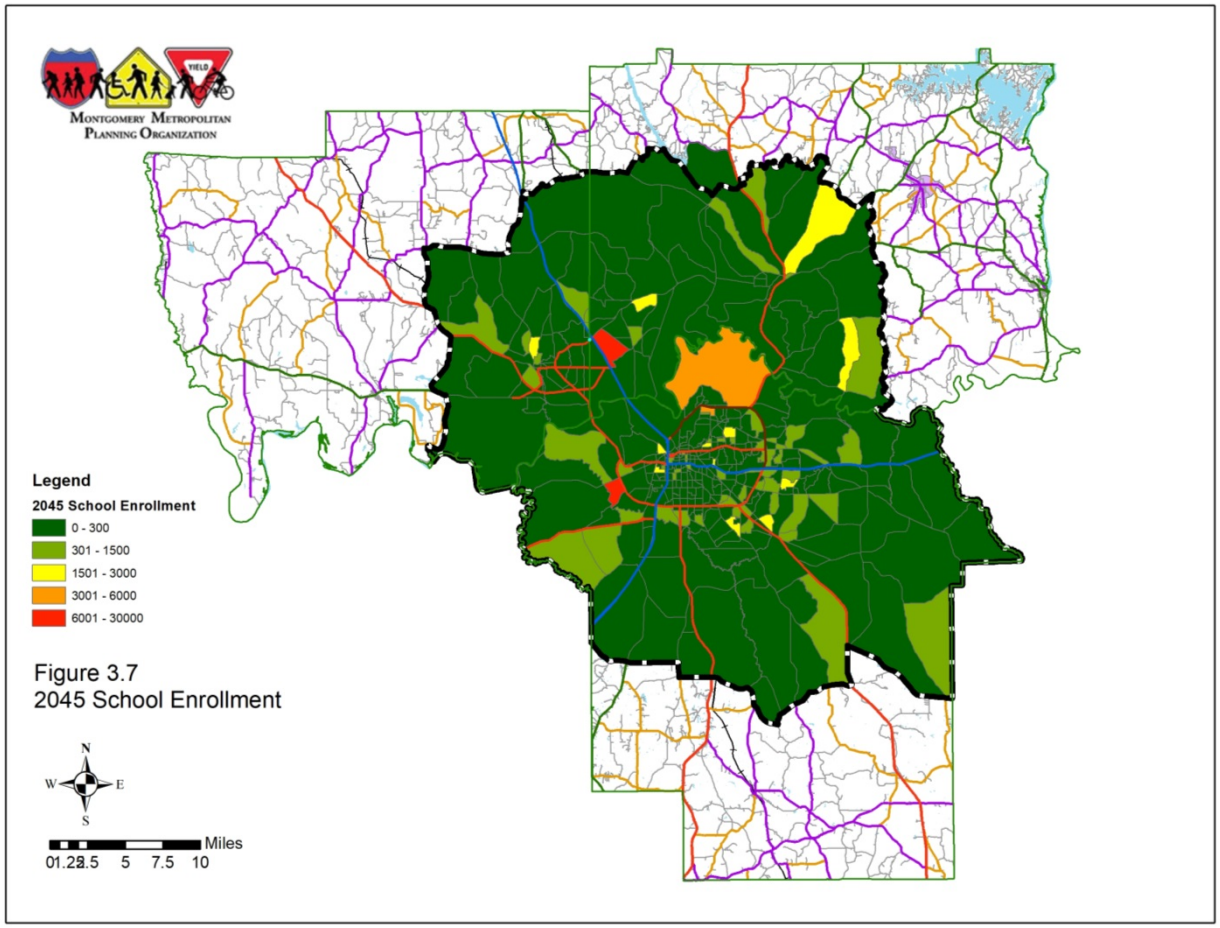
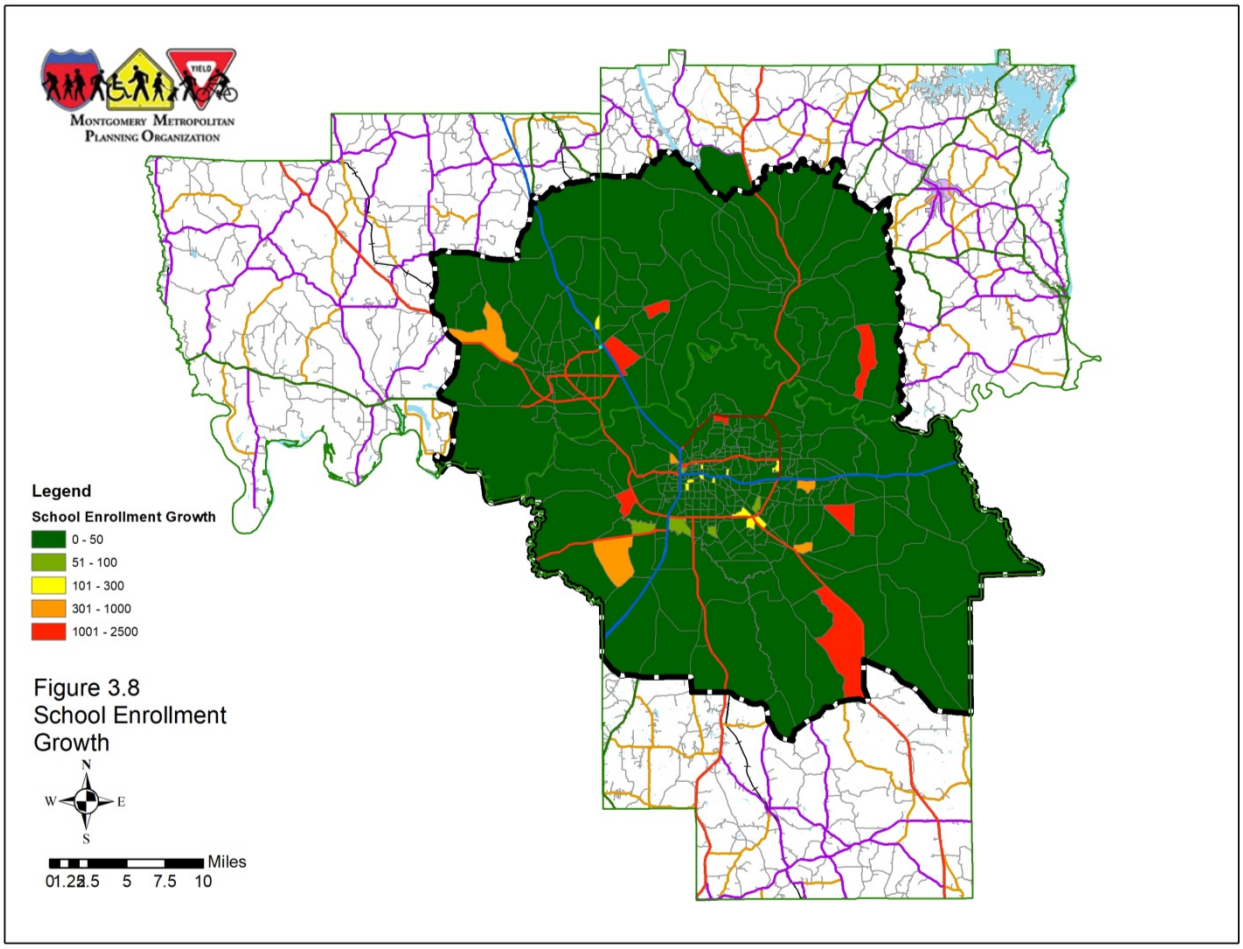


Table 3.8: Total and Percent Change in School and Daycare Enrollment from 2015 to 2045

Geographic Area	Total School and Daycare Enrollment		Change	
	2015	2045	Total	Percent
Montgomery MPO Study Area	106,038	124,259	18,221	17.2%
Autauga County within the Study Area	6,436	7,255	819	12.7%
Elmore County within the Study Area*	13,071	19,262	6,191	47.4%
Montgomery County within the Study Area*	86,531	97,742	11,211	13.0%

* Includes upper level education enrollment.
Data Source: Alabama Department of Education and University of Alabama Center for Business and Economic Research.
Source: MPO Staff



3.1.3 Employment Trends

Employment growth is an important component in transportation planning because different types of employment categories typically generate different types and levels of trips. Areas with concentrations of retail businesses generate more traffic than areas with non-retail employment, such as finance, insurance, and real estate businesses. Similarly, growth in the transportation and wholesale trade categories indicate the increased importance of freight movement in a community. Employment growth generates work tripsand creates commuting patterns which can result in congestion on the transportation system due to employees being attracted to employment locations generally at the same time of day or night.

The Department of Industrial Relations and the Bureau of Labor Statistics releases employment data annually for each county. Data from 2010 and 2014 was analyzed to determine trends in overallemployment at the county level. Table 3.9 details the labor force, employment, unemployment, and unemployment rate in 2015 and 2014 for each county, the State of Alabama, and the Montgomery Metropolitan Statistical Area.

Table 3.9: 2010 and 2014 Labor Force, Employment, Unemployment, and Unemployment Rate

County/ Municipality	2010				2014			
	Labor Force	Employment	Unemployment	Unemployment Rate	Labor Force	Employment	Unemployment	Unemployment Rate
Autauga County	25,713	23,431	2,282	8.90%	25,429	23,933	1,496	5.90%
Elmore County	36,683	33,362	3,321	9.10%	36,381	34,281	2,100	5.80%
Montgomery County	108,753	97,892	10,861	10.00%	104,838	97,592	7,246	6.90%
Montgomery MSA	175,499	158,232	17,267	9.80%	170,554	159,208	11,346	6.70%
Alabama	2,196,053	1,964,561	231,492	10.50%	2,150,128	2,003,916	146,212	6.80%

Data Source: The Department of Industrial Relations and the Bureau of Labor Statistics.Source: MPO Staff

Data from the InfoUSA database was utilized to establish the base year retail and non-retail employment by TAZ. MPO staff confirmed, when possible, all employers that had 10 or more employees according to InfoUSA. After these employers were confirmed, the database for each county was reviewed for the known large employers within the study area to ensure no major employers were excluded from the database. Once employers and number of employees were confirmed, the total retail and non-retail employees were aggregated to each TAZ. The data was aggregated to the TAZs and was termed as the build-out total for each TAZ. The Center for Business and Economic Research at the University of Alabama completed a socioeconomic forecast establishing a 2010 and 2040 county wide total for retail and non-retail employment. After analyzing the report, the growth rate for retail and non- retail employment for each county was determined. This growth rate was applied to the 2015 total retail and non-retail employment for each county to determine the 2045 control retail and non-retail employees total for each county. The build-out total for each county was subtracted from the 2045 county control total, and the result was termed the county retail and non-retail growth total. Representatives from each county were asked to disperse the county retail and non-retail growth total to TAZs within their county. MPO staff reviewed the data for completeness and accuracy. The result was the 2045 totals per TAZ for retail and non-retail employment.

Existing and forecast employment from 2015 through 2045 is shown in Tables 3.10 and 3.11. From 2015to 2045, retail employment is expected to increase 5.84 percent from 44,908 in 2015 to 47,529 in 2045. Montgomery County is expected to experience the greatest rate of retail employment growth, 6.1 percent. Autauga and Elmore County are expected to experience similar rates of increase in retail employment, 4.82 percent and 4.75 percent respectively. Montgomery County, in particular the City of Montgomery, is expected to have the largest share of retail employment in the area with 80 percent of the region's 2045 total.

From 2015 to 2045, non-retail employment is expected to increase 19.79 percent, from 148,751 in 2015to 178,194 in 2045. Elmore County is expected to experience the greatest rate of non-retail employment growth at 27.28 percent, followed by Montgomery County at 19.4 percent. Autauga County is expected to experience the least rate of non-retail employment growth, 16.75 percent. Montgomery County has the greatest actual non-retail employment increase with a gain of 24,996 non-retail employees.

Table 3.10: Total and Percent Change in Retail Employment from 2015 to 2045

Geographic Area	Total Retail Employment		Change	
	2015	2045	Total	Percent
Montgomery MPO Study Area	44,908	47,529	2,621	5.84%
Autauga County within the Study Area	3,441	3,607	166	4.82%
Elmore County within the Study Area	5,580	5,845	265	4.75%
Montgomery County within the Study Area	35,887	38,077	2,190	6.10%

Data Source: InfoUSA
Source: MPO Staff

Table 3.11: Total and Percent Change in Non-Retail Employment from 2015 to 2045

Geographic Area	Total Non-Retail Employment		Change	
	2015	2045	Total	Percent
Montgomery MPO Study Area	148,751	178,194	29,443	19.79%
Autauga County within the Study Area	9,361	10,929	1,568	16.75%
Elmore County within the Study Area	10,552	13,431	2,879	27.28%
Montgomery County within the Study Area	128,838	153,834	24,996	19.40%

Data Source: InfoUSA
Source: MPO Staff

Figure 3.9 shows existing (2015) total employment and Figure 3.10 shows projected future (2045) total employment by TAZ. Figure 3.11 shows existing (2015) retail employment and Figure 3.12 shows projected future (2045) retail employment by TAZ. Figure 3.13 details the retail employment change from 2015 to 2045 by TAZ. Figure 3.14 shows existing (2015) non-retail employment and Figure 3.15 shows projected future (2045) non-retail employment by TAZ. Figure 3.16 details the non-retail employment change from 2015 to 2045 by TAZ. The distribution patterns show the greatest retail employment in established and developing shopping areas. The distribution patterns show the greatest non-retail employment occurs in the downtown area of the City of Montgomery, as well as along the Eastern Boulevard, the E. South Boulevard, the I-85 corridor, Cobbs Ford Road/Main Street in the City ofPrattville, and within the area between Highway 14 and US 231 in the City of Wetumpka. Figure 3.17 details the employers that had 25 or more employees in 2010. The highest concentration of large employers is in Downtown Montgomery, along major corridors, and in industrial or manufacturing areas.

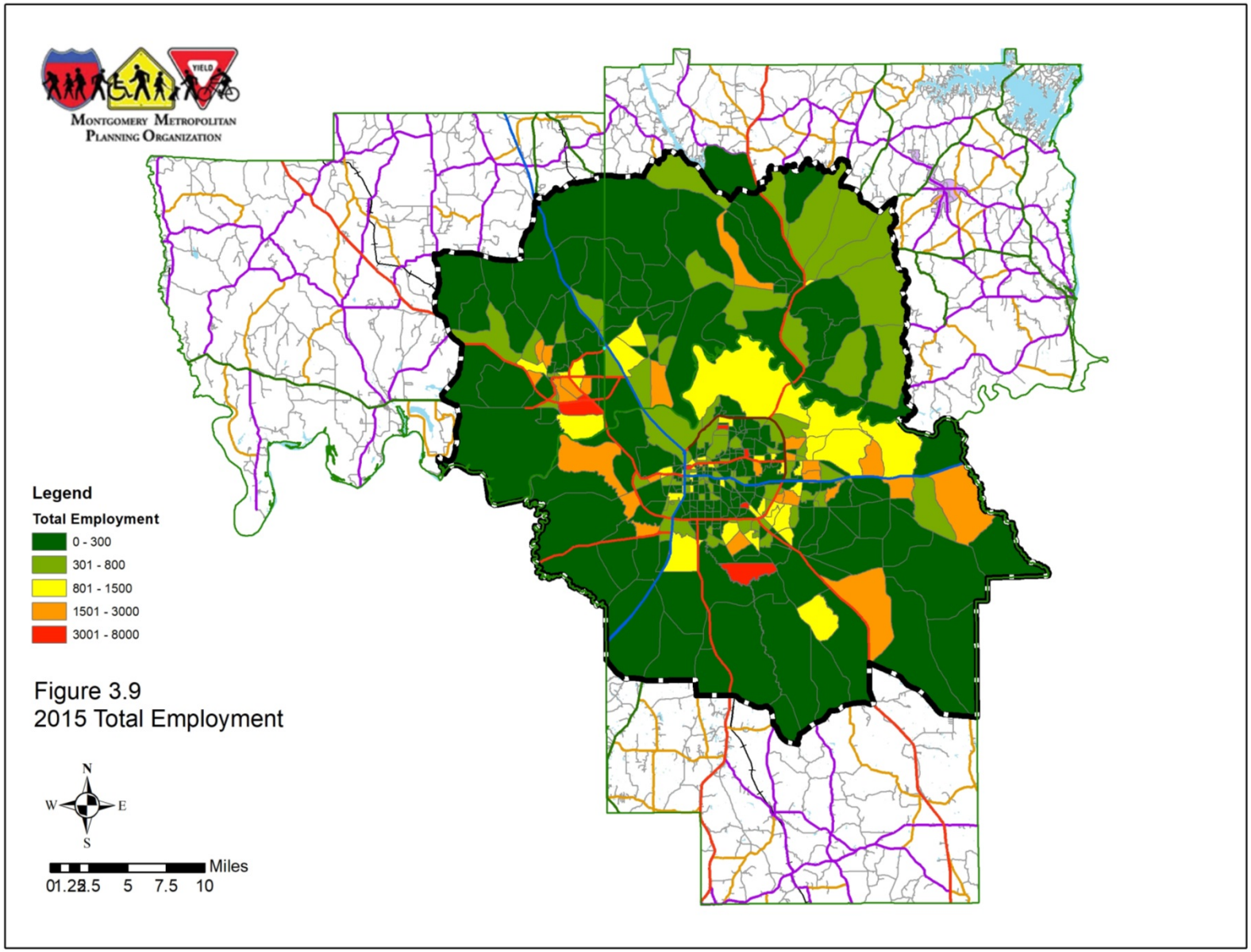


Figure 3.9
2015 Total Employment

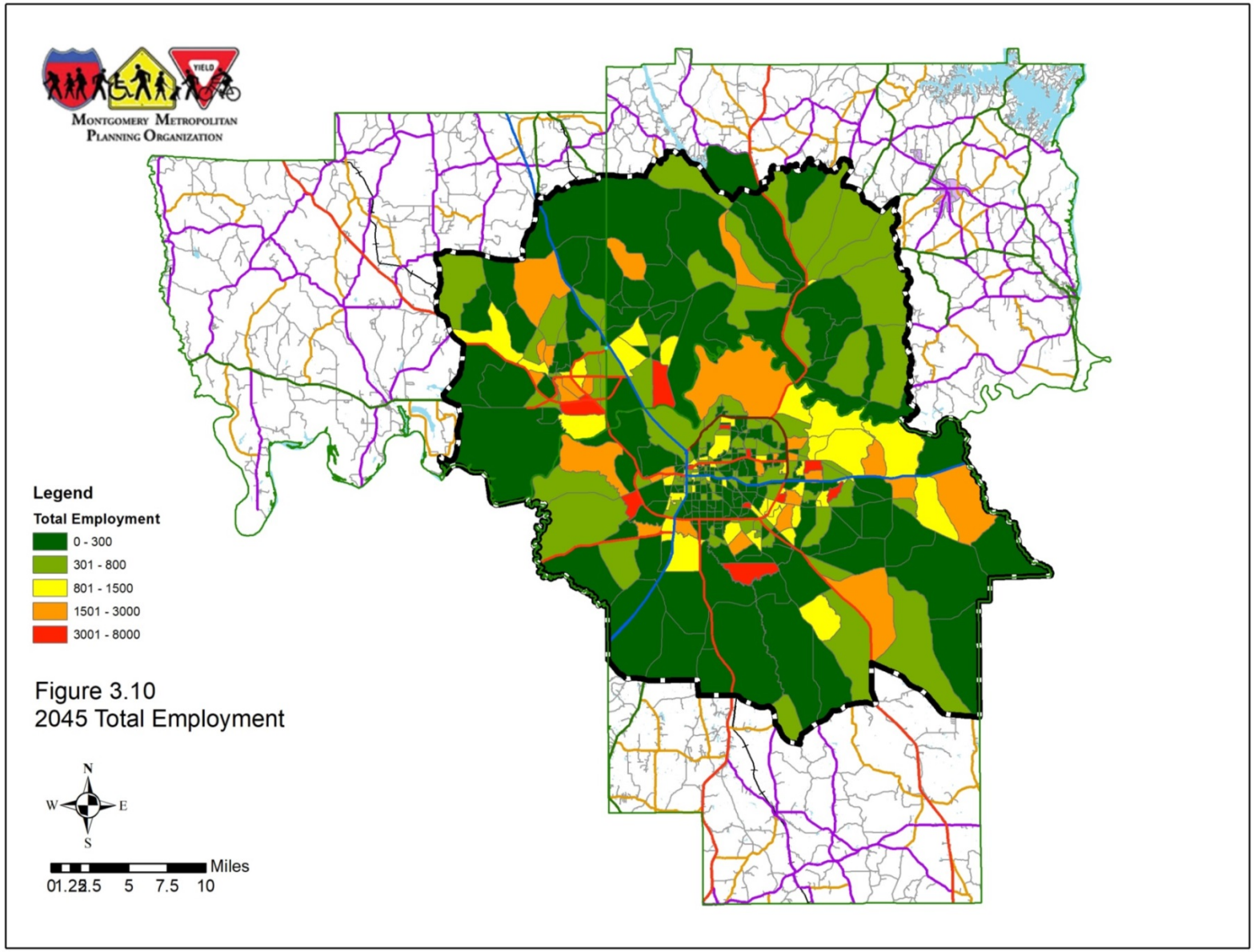


Figure 3.10
2045 Total Employment

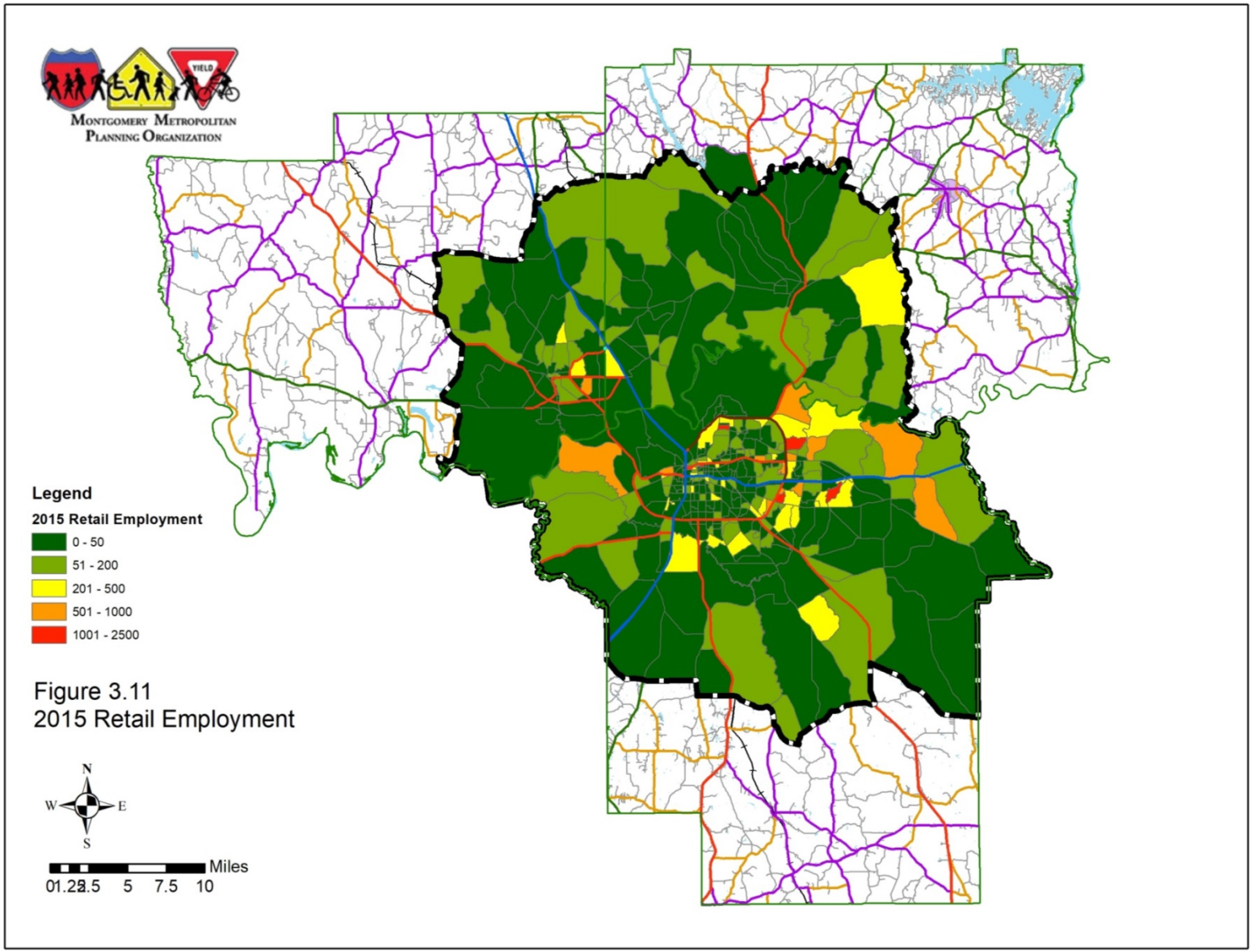


Figure 3.11
2015 Retail Employment

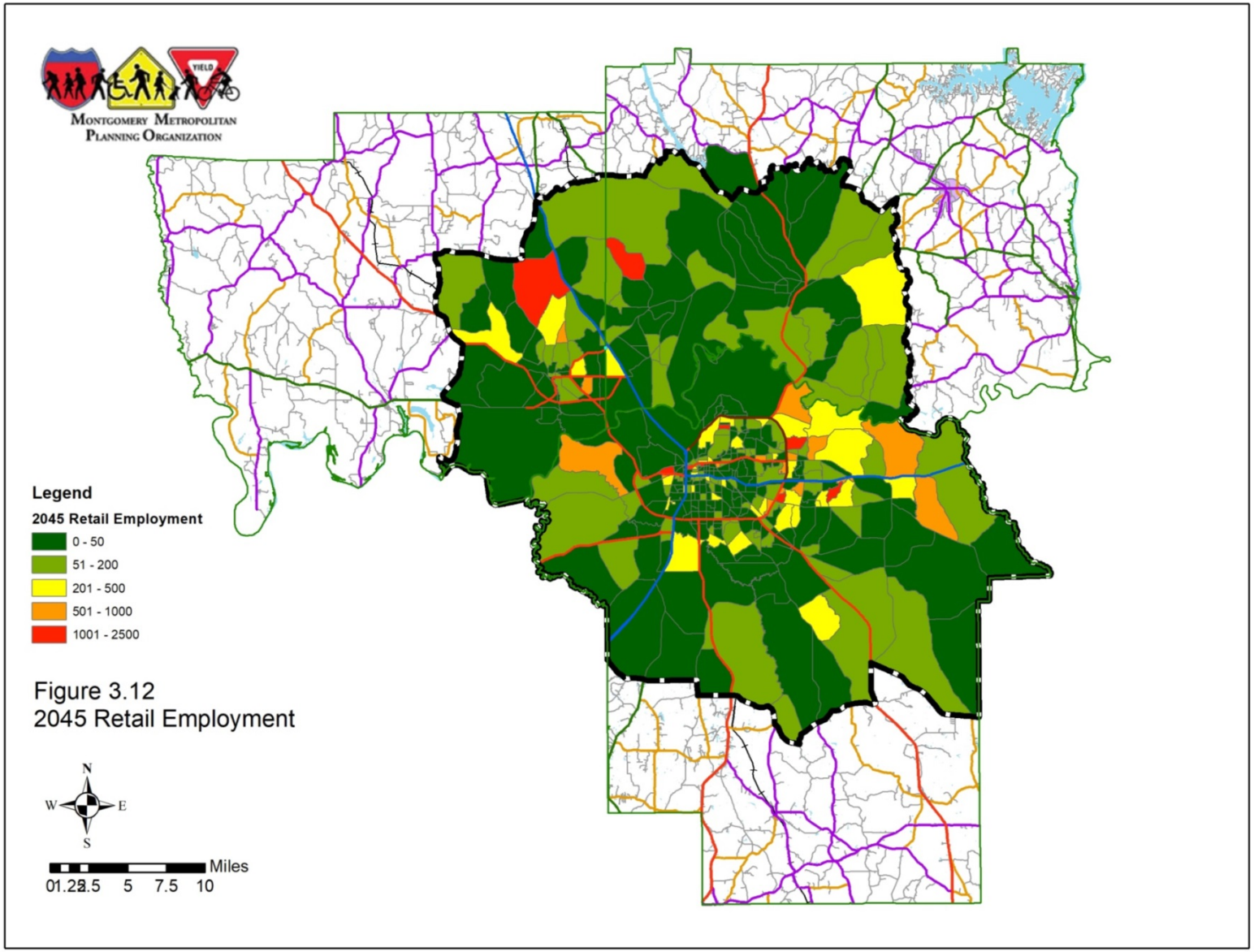


Figure 3.12
2045 Retail Employment

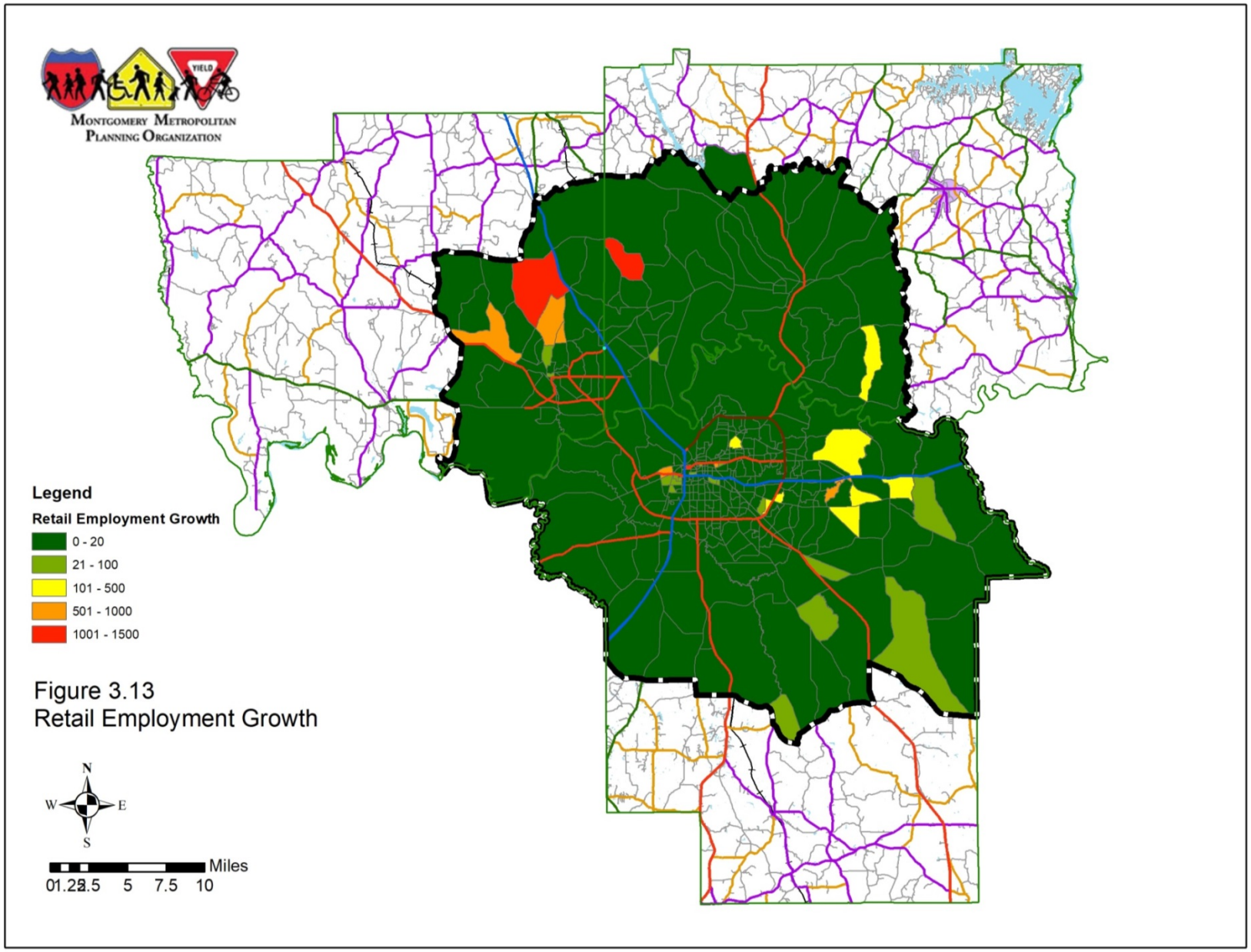


Figure 3.13
Retail Employment Growth

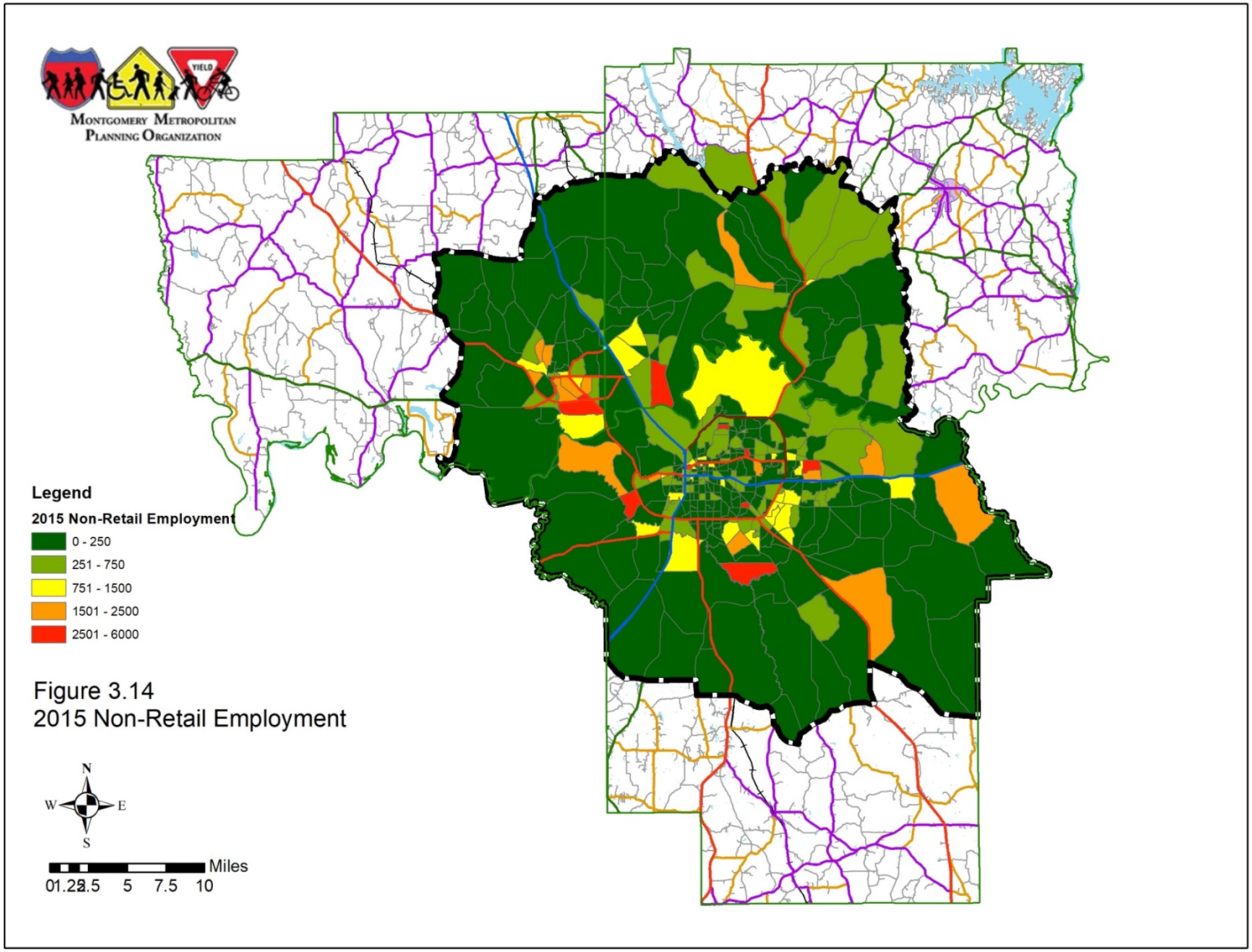


Figure 3.14
2015 Non-Retail Employment

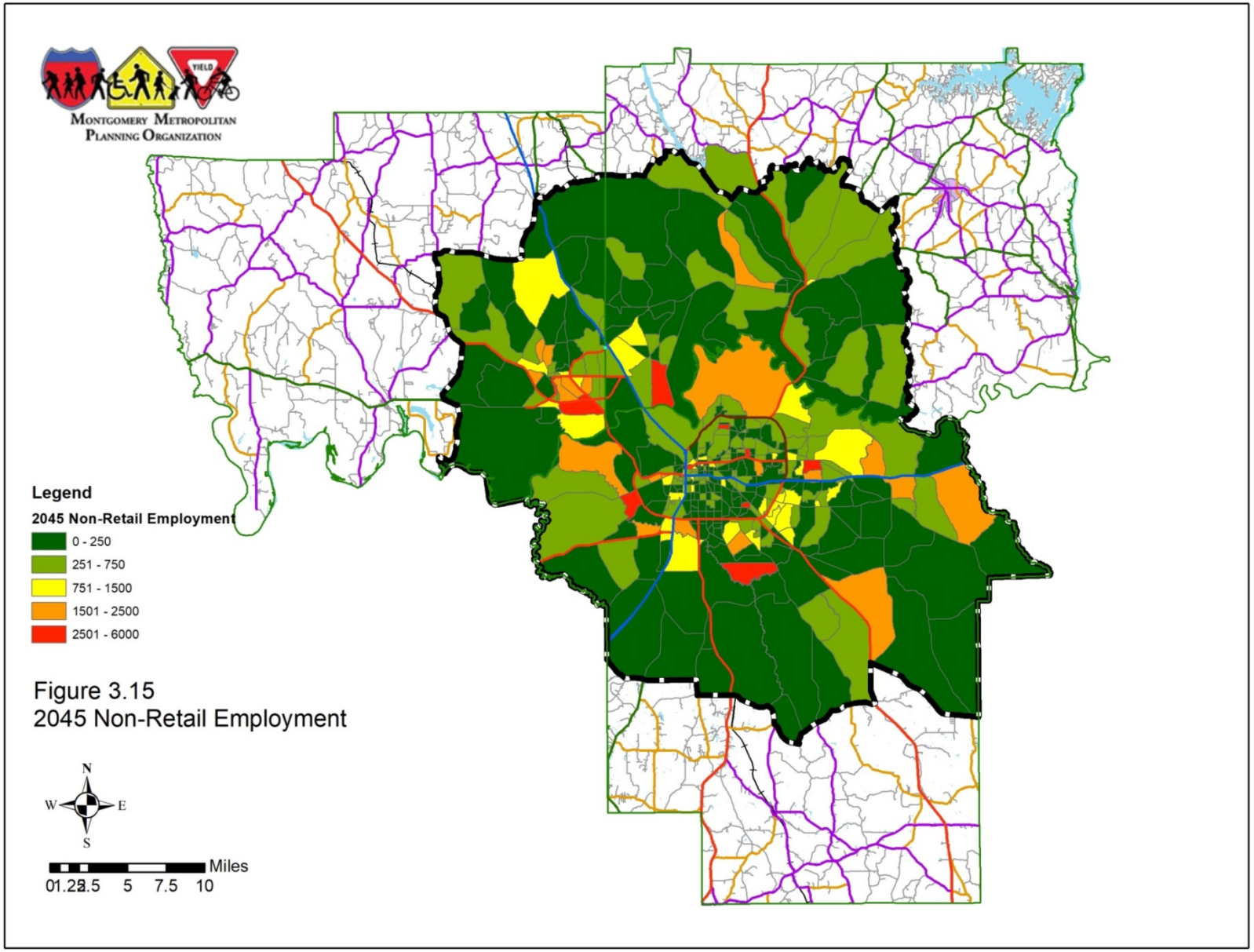


Figure 3.15
2045 Non-Retail Employment

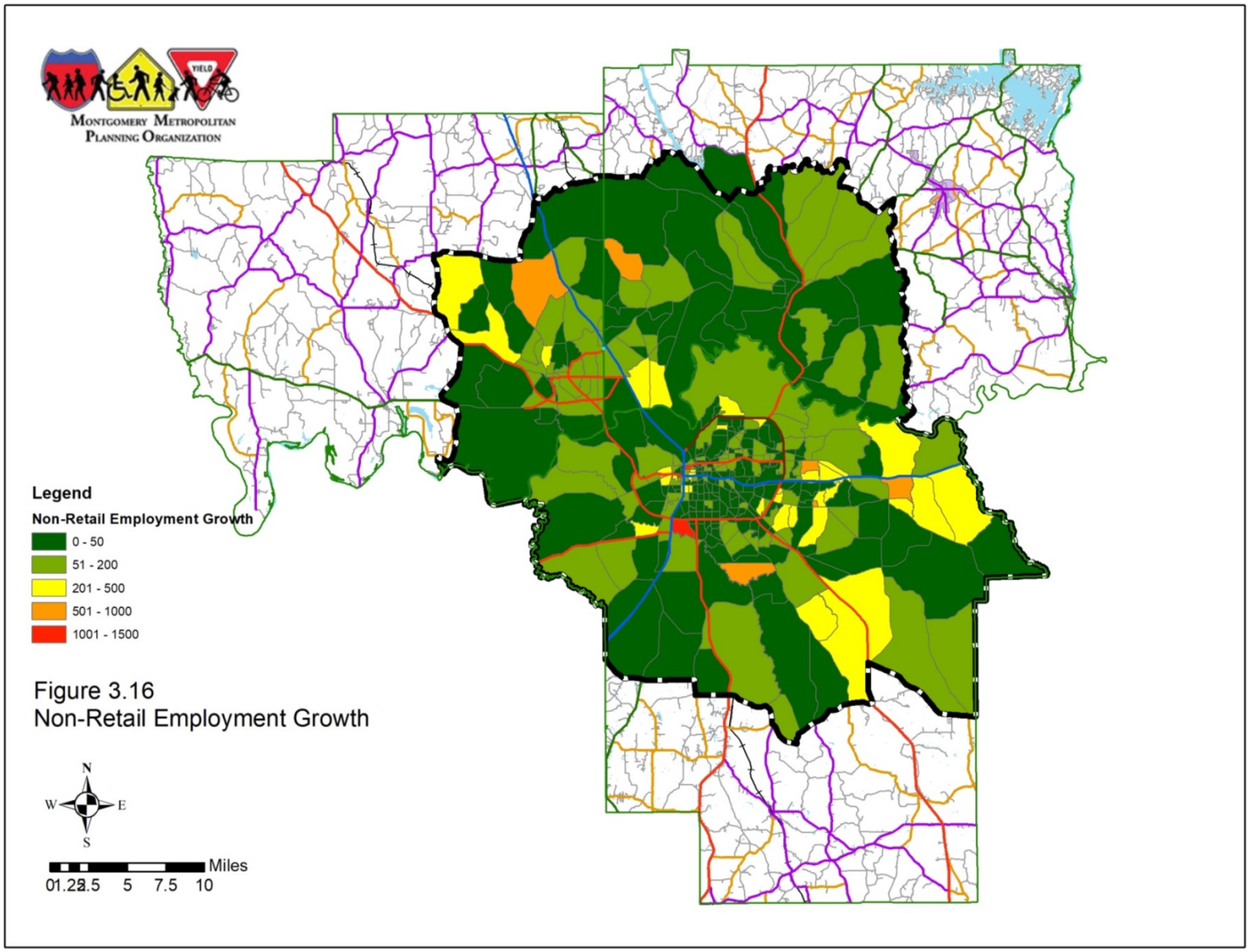
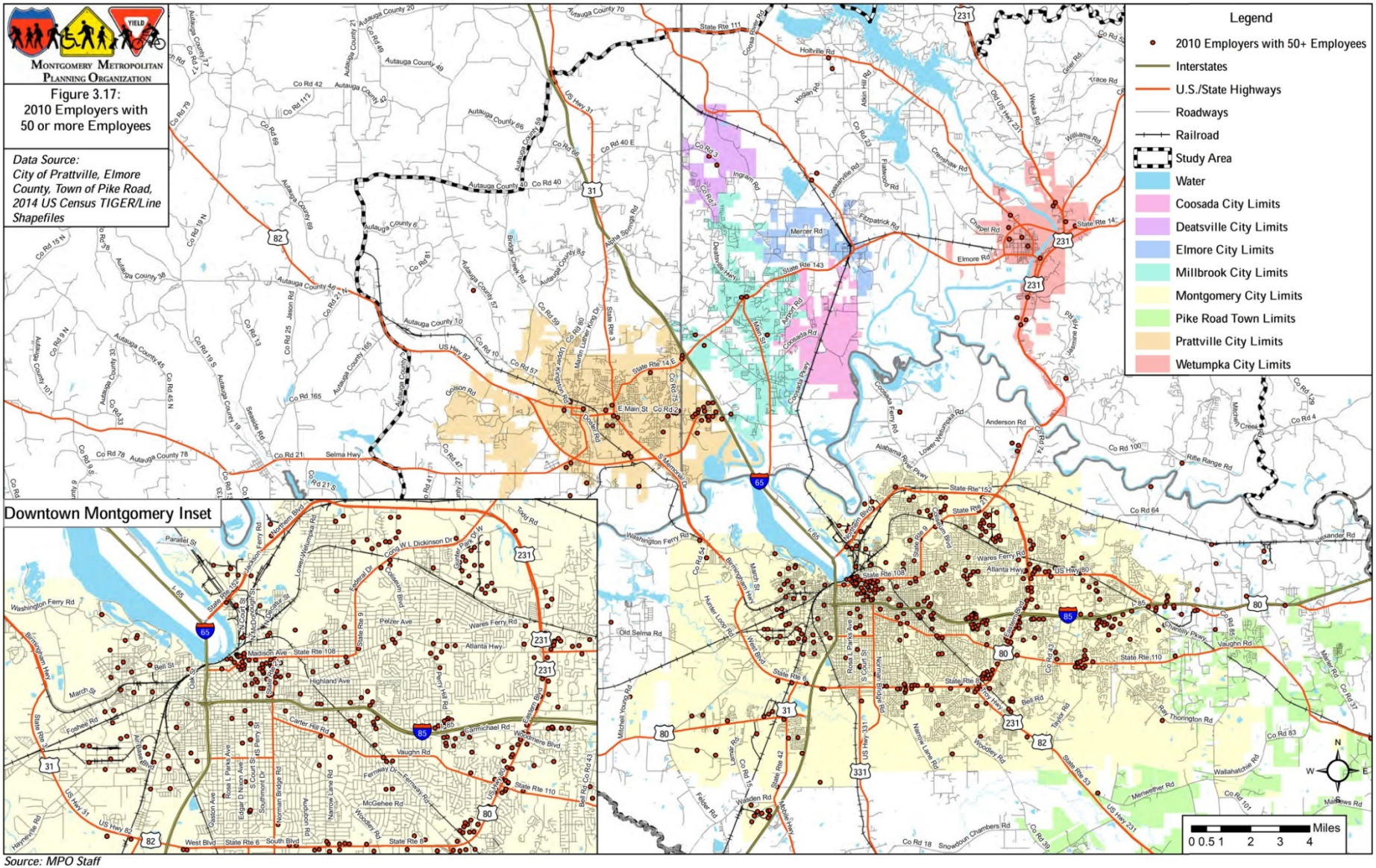


Figure 3.16
Non-Retail Employment Growth



Source: MPO Staff

3.2 Land Use

Transportation planning is quickly evolving from an era of strict interpretation of when and where road capacity and improvements are necessary to a flexible field that requires understanding the implications and effects of transportation decisions and the ability to implement unique, multimodal solutions. Land use can be both adversely and positively affected by transportation decisions. Transportation projects canbe utilized to encourage desired land uses for nearby parcels. For example, industrial land uses tend to becentral around interstate access. The decision to not build transportation infrastructure in an area tends to discourage heavy development; therefore, encouraging agricultural and large lot residential land use. Understanding the effect of transportation decisions on current and future land use is quickly becomingthe heart of the movement known as *smart growth*. In the future, models will be able to predict the most likely effect on land use for each transportation decision allowing all planners to cultivate and develop their community and culture.

3.3 Future Growth Trends and Commute Patterns

The long term trend within the Montgomery MPO Study Area continues to indicate a decentralization of population and development into suburban Autauga County, suburban Elmore County, and eastern Montgomery County with limited residential and commercial development in the urban are of the City of Montgomery. However, a resurgence of housing options in downtown Montgomery in the last decade has helped revitalize the downtown as an evening entertainment and dining destination. In addition, the downtown area of the City of Prattville continues to maintain residents and employment. Table 3.12 details the population growth trends from 1990 to 2015 for each county. Elmore County had the largest increase in both total population and percent population change between 1990 and 2020 at 30,093 and 37.9 percent.

Table 3.12: County Population Change 1990 to 2020

	Census			Change 1990-2000		Change 2000-2020		Change 1990-2020	
County	1990	2000	2020	Number	Percent	Number	Percent	Number	Percent
Autauga*	34,222	43,671	54,571	9,449	17.3%	10,900	20.0%	20,349	37.3%
Elmore*	49,210	64,874	79,303	15,664	19.8%	14,429	18.2%	30,093	37.9%
Montgomery*	209,085	223,510	229,363	14,425	6.3%	5,853	2.6%	20,278	8.8%
Total	292,517	332,055	363,237	39,538	10.9%	31,182	8.6%	70,720	19.5%

*Note: Population is shown for the entire county and includes areas outside of the MPO study area.
Data Source: U.S. Census Bureau
Source: MPO Staff

The Census collects data on local travel characteristics for persons age 16 years and older who commuteto work. The data provides insight on where people work. Since the morning and afternoon commute periods are most often the peak travel demand periods, the data gives insight into the transportationsystem utilization across modes and geographically. Table 3.13 summarizes journey to work data for Autauga, Elmore, and Montgomery counties from the U.S. Census 2006-2015 American Community Survey (ACS) 5-Year Estimates, specifically the County to County Commuting Flows for the population of each county. Montgomery County attracts the greatest share of workers from all three counties in the study area. Between 89.9 percent and 92.8 percent of persons living in Montgomery County work in Montgomery County, followed by Elmore County at between 49.9 percent and 55.7 percent and Autauga County at between 46.6 percent and 51.6 percent. Within Autauga and Elmore counties, the dataindicates a fairly substantial housing-work imbalance in that nearly two-thirds of Elmore County and Autauga County workers leave the county of residence to work. The 2006-2015 data also indicates a comparatively low travel flow between Autauga and Elmore counties, with only 5.6 percent to 7.6 percentof Autauga County workers commuting to Elmore County, and 4.3 percent to 6.0 percent of Elmore County workers commuting to Autauga County.

Table 3.13: Residence County to Workplace County Flows by Residence Geography: 2006-2015

County of Residence	Total Workers	County of Workplace	Number	MOE	% of Total County Workers	
					Low	High
Autauga County	24,499	Montgomery County	12,036	610	46.6%	51.6%
		Autauga County	8,768	602	33.3%	38.2%
		Elmore County	1,630	259	5.6%	7.7%
		Dallas County	599	194	1.7%	3.2%
		Chilton County	385	105	1.1%	2.0%
		Other	1,081	985	0.4%	8.4%
Elmore County	32,399	Montgomery County	17,109	932	49.9%	55.7%
		Elmore County	11,365	669	33.0%	37.1%
		Autauga County	1,680	274	4.3%	6.0%
		Tallapoosa County	476	151	1.0%	1.9%
		Lee County	326	121	0.6%	1.4%
		Other	1,443	1,345	0.3%	8.6%
Montgomery County	101,033	Montgomery County	92,299	1,429	89.9%	92.8%
		Elmore County	2,301	373	0.4%	2.6%
		Autauga County	1,533	312	0.3%	1.8%
		Macon County	728	191	0.2%	0.9%
		Lowndes County	548	181	0.2%	0.7%
		Other	3,624	3,113	3.1%	6.7%

Data Source: U.S. Census Bureau, County to County Commuting Flows, 2006-2015
Source: MPO Staff

It should be noted that since the American Community Survey is an estimate, the value is calculated with a margin of error, such that there is a 90 percent probability that the actual value is between the value minus the margin of error and the value plus the margin of error. The percent of the population in Montgomery County that live and work in Montgomery County plus the percent of the population in Autauga and Elmore counties that work outside the county can be explained by the large concentration of employment in the City of Montgomery. The commuting patterns demonstrate the decentralized pattern of residential growth that has occurred over the past couple of decades.

In addition, the U.S. Census 2006-2010 American Community Survey 5-Year ACS estimates were analyzed to determine the net migration for the population within each county. The net migration data details the influx of population from within the state and other states. The information by county is detailed in Table 3.14. Elmore County had the greatest influx of new residences with a net migration of 2,407, while Montgomery County had the highest influx from other states with a net out-of-state migration of 1,223. The only county with an overall negative net migration was Autauga County.

Table 3.14: 2006 – 2010 Net Migration by County

	Autauga County	Elmore County	Montgomery County
Moved From/To Autauga County	n/a	267	-318
Moved From/To Elmore County	-267	n/a	-656
Moved From/To Montgomery County	318	656	n/a
Moved From/To Another Alabama County	-241	1,474	338
Moved From/To Another State	163	10	1,223
Total	-27	2,407	587

Data Source: U.S. Census Bureau, 2006-2015 American Community Survey
Source: MPO Staff

Retail development is also surging within the outlying counties, such as in the City of Prattville, whichhas been called the central shopping hub for metropolitan Montgomery, north of the Alabama River. Recent projects such as the 85-acre Legends Park mixed-use district indicate that accessibility to I-65 and available undeveloped land will continue to make this area ripe for future commercial and residential growth.

Development trends within Montgomery County indicate the highest rates of growth in the eastern reaches of the County. This eastward migration trend within Montgomery County began several decades ago, and is evident by tracing the County's historic retail center developments: Normandale Shopping Center, Montgomery Mall, Eastdale Mall, and now EastChase. It should be noted that redevelopment is being discussed and considered at Normandale Shopping Center and the Montgomery Mall. Eastdale Mall is still open, as well as the new EastChase shopping development. Residential development is following a similar pattern and is projected to continue the eastward migration until at least the 2045 horizon year. However, redevelopment is taking place in inner City Montgomery as it is anticipated that land supply will decrease and likely cease to exist.

Several accomplishments and new initiatives within the downtown Montgomery central business district may alter historic decentralizing trends and bring new life to downtown, and other locations. Recent accomplishments in inner city Montgomery include the Riverfront renaissance, which has brought a newconvention center, four-star hotel, the Riverwalk, amphitheater, a Class AA baseball stadium, intermodal bus transfer center with pedestrian access way and pedestrian access tower connecting to the Riverwalk, Alleyway Entertainment area, and numerous new entertainment, dining, accommodations, residential, and business opportunities. A West Montgomery renaissance is expected to be sparked by the West Fairview Avenue Initiative and I-65 corridor planning, Maxwell-Gunter Air Force Base, and a large state employee base which will continue to provide development and redevelopment opportunities within the Montgomery urban core.

3.4 Socioeconomic Characteristics

Understanding study area demographics indicates the types of transportation infrastructure and services that may be needed. For instance, some population groups are more likely to need or use transit, including low-income, elderly, young, or non-white individuals and households without vehicle access. The geographic distribution of population groups is also a component for meeting federal environmental justice guidelines. Environmental justice regulations require any federally supported investment, whethera planning study or road widening, not to disproportionately impact minority and low-income communities. The investments should allow environmental justice groups to fully share in the benefits of the investment, equal to other non-minorities. The transportation planning process should be inclusive and provide a public outreach program to include environmental justice communities in the process.

Table 3.17 summarizes the 2015 population and household characteristics by jurisdiction within the Montgomery MPO study area. This detailed data has not yet been released from the 2020 Census and could not be updated for the current plan. The percent non-white, persons 65 and above and persons age 15-19 are from the 2015 Census, while the persons below poverty and households without vehicles are from the 2006-2015 ACS. Statewide statistics are shown for comparison.

Table 3.17: Demographic Characteristics by Jurisdiction - 2015

Geographic Area	Total		Percent				
	Population	Households	Non-White Persons	Persons below Poverty	Persons Age 65+	Persons Age 15-19	Households without Vehicles
Alabama	4,779,736	1,889,791	30.5%	17.1%	7.9%	3.5%	6.5%
Montgomery Urbanized Area*	263,907	112,998	54.3%	n/a	11.7%	7.4%	n/a
Autauga County**	54,571	20,221	21.5%	10.6%	5.2%	3.8%	5.4%
Elmore County**	79,303	28,301	23.8%	12.4%	6.5%	3.4%	3.8%
Montgomery County**	229,363	89,981	60.5%	18.9%	7.1%	3.6%	7.9%
Town of Coosada	1,224	434	42.3%	15.5%	6.5%	4.1%	4.2%
Town of Deatsville	1,154	391	22.4%	0.2%	6.6%	6.2%	2.2%
Town of Elmore	1,262	423	35.7%	20.3%	7.8%	7.7%	10.0%
City of Millbrook	14,640	5,446	25.8%	8.0%	9.3%	7.8%	2.2%
City of Montgomery	205,764	92,115	62.7%	19.7%	4.7%	3.7%	8.2%
Town of Pike Road	5,406	1,933	31.5%	7.1%	5.1%	3.1%	0.7%
City of Prattville	33,960	12,711	21.5%	8.7%	4.9%	3.9%	5.3%
City of Wetumpka	6,528	2,230	32.1%	20.1%	4.6%	5.8%	11.9%

*As defined by the U.S. Census
**Note: Data is shown for the entire county and includes areas outside of the MPO study area.
Data Source: 2015 U.S. Census, 2006-2015 American Community Survey
Source: MPO Staff

The data shows a wide variation in the distribution of diverse population groups across the area as shown in Figures 3.18 through 3.21. In the Montgomery urbanized area, the proportion of non-white individuals (54.3 percent) exceeded the statewide average (30.5 percent) in 2015. The greatest proportion of non-white individuals live in the City of Montgomery (62.7 percent), followed by Montgomery County (60.5 percent), the Town of Coosada (42.3 percent), Town of Elmore (35.7 percent), City of Wetumpka (32.1 percent), and Town of Pike Road (31.5 percent). The proportion of non-white individuals was less than statewide in Elmore County (23.8 percent), City of Millbrook (25.8 percent), Autauga County (21.5 percent), City of Prattville (21.5 percent) and Town of Deatsville (22.4 percent).

The percent of individuals living below poverty in the State of Alabama was 17.1 percent in 2015. The greatest proportion of individuals living below poverty live in the Town of Elmore (20.3 percent), followed by the City of Wetumpka (20.1 percent), City of Montgomery (19.7 percent), and Montgomery County (18.9 percent). The Town of Deatsville had the smallest proportion of individuals living below poverty in the area at 0.2 percent, followed by the Town of Pike Road (7.1 percent), City of Millbrook (8.0 percent), City of Prattville (8.7 percent), Autauga County (10.6 percent), Elmore County (12.4 percent), and Town of Coosada (15.5 percent).

The greatest proportion of individuals age 65 and older live in the City of Millbrook (9.3 percent), followed by the Town of Elmore (7.8 percent), Montgomery County (7.1 percent), Town of Deatsville (6.6 percent), and Elmore County and the Town of Coosada (6.5 percent). The City of Wetumpka had the smallest proportion of individuals age 65 and older at 4.6 percent, followed by the City of Montgomery (4.7 percent), City of Prattville (4.9 percent), Town of Pike Road (5.1 percent), and Autauga County (5.2 percent).

The distribution of individuals age 15 to 19 in 2015 varied from a low of 3.1 percent in the Town of Pike Road to a high of 7.8 percent in the City of Millbrook. All of the jurisdictions except the Town of Pike Road (3.1 percent) and Elmore County (3.4 percent) had proportionally more persons age 15 to 19 than the statewide average (3.5 percent).

The distribution of households without access to private vehicles reflects the distribution of persons living below poverty. The greatest proportion of zero car households live in the City of Wetumpka (11.9 percent), followed by the Town of Elmore (10.0 percent), City of Montgomery (8.2 percent), and Montgomery County (7.9 percent). The greatest vehicle ownership was in the Town of Pike Road, where 99.3 percent of households owned a vehicle. Other jurisdictions with relatively high vehicle ownership included the Town of Deatsville and City of Millbrook (97.8 percent), Elmore County (96.2 percent), Town of Coosada (95.8 percent), City of Prattville (94.7 percent), and Autauga County (94.6 percent).

Table 3.18 details the Median Household Income from the 2006 - 2015 ACS.

Table 3.18: Median Income by County – 2006-2010 Estimates

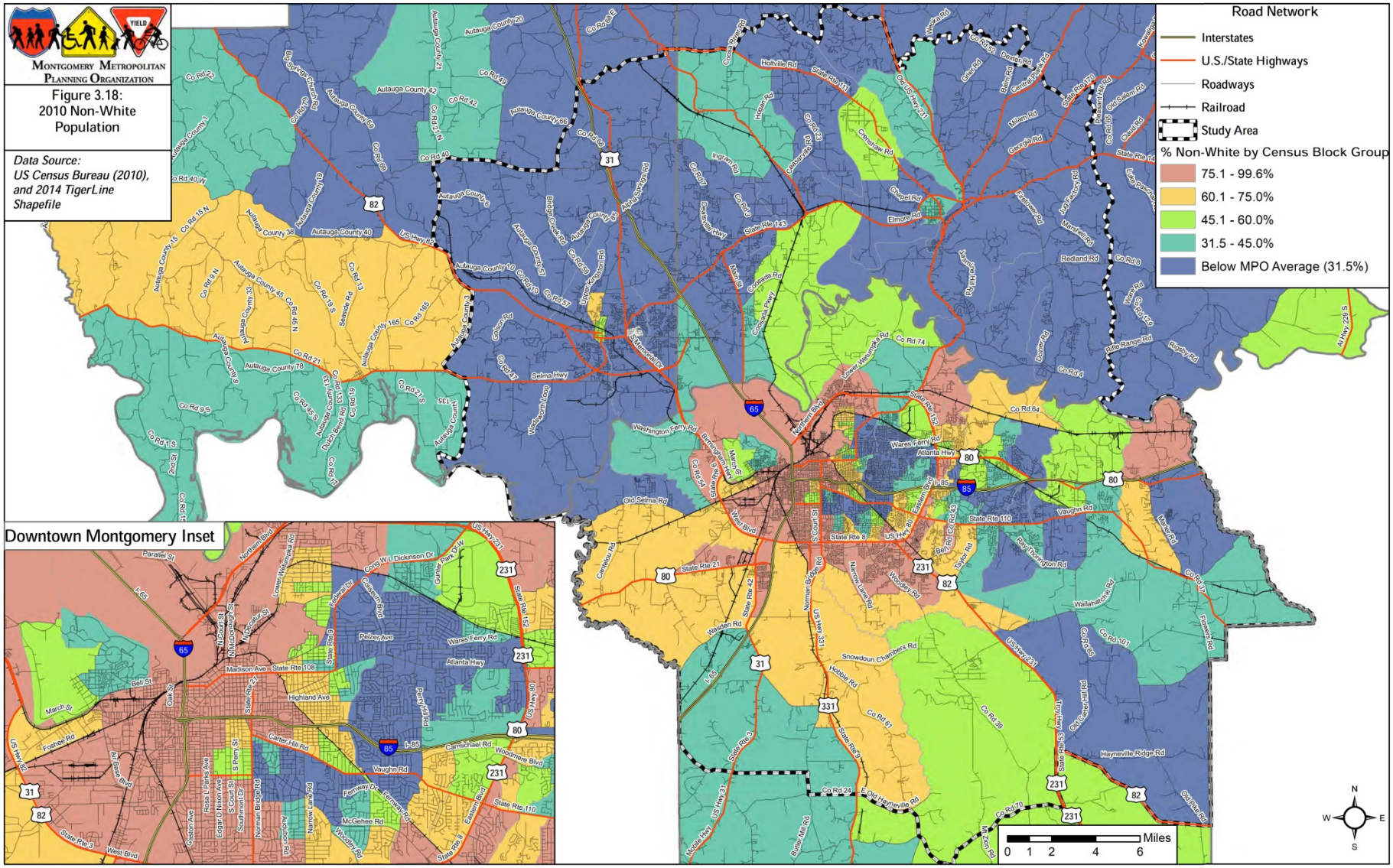
	Autauga County		Elmore County		Montgomery County	
	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error
Total households	19,718	+/-348	27,762	+/-596	88,772	+/-852
Less than $10,000	1,316	+/-232	1,717	+/-288	8,233	+/-643
$10,000 to $14,999	996	+/-147	1,370	+/-226	6,841	+/-707
$15,000 to $24,999	1,724	+/-231	2,902	+/-368	10,576	+/-663
$25,000 to $34,999	2,070	+/-259	3,459	+/-390	9,723	+/-759
$35,000 to $49,999	3,059	+/-369	3,670	+/-419	13,861	+/-824
$50,000 to $74,999	4,120	+/-368	5,861	+/-422	14,537	+/-783
$75,000 to $99,999	2,943	+/-318	3,788	+/-329	10,727	+/-728
$100,000 to $149,999	2,557	+/-282	3,515	+/-325	8,854	+/-572
$150,000 to $199,999	632	+/-144	939	+/-160	2,987	+/-300
$200,000 or more	301	+/-106	541	+/-143	2,433	+/-316
Median household income (dollars)	53,255	+/-2,420	53,128	+/-1,566	43,725	+/-1,042
Mean household income (dollars)	64,733	+/-2,378	63,370	+/-1,631	61,229	+/-1,195

Data Source: U.S. Census Bureau, 2006-2015 American Community Survey
Source: MPO Staff

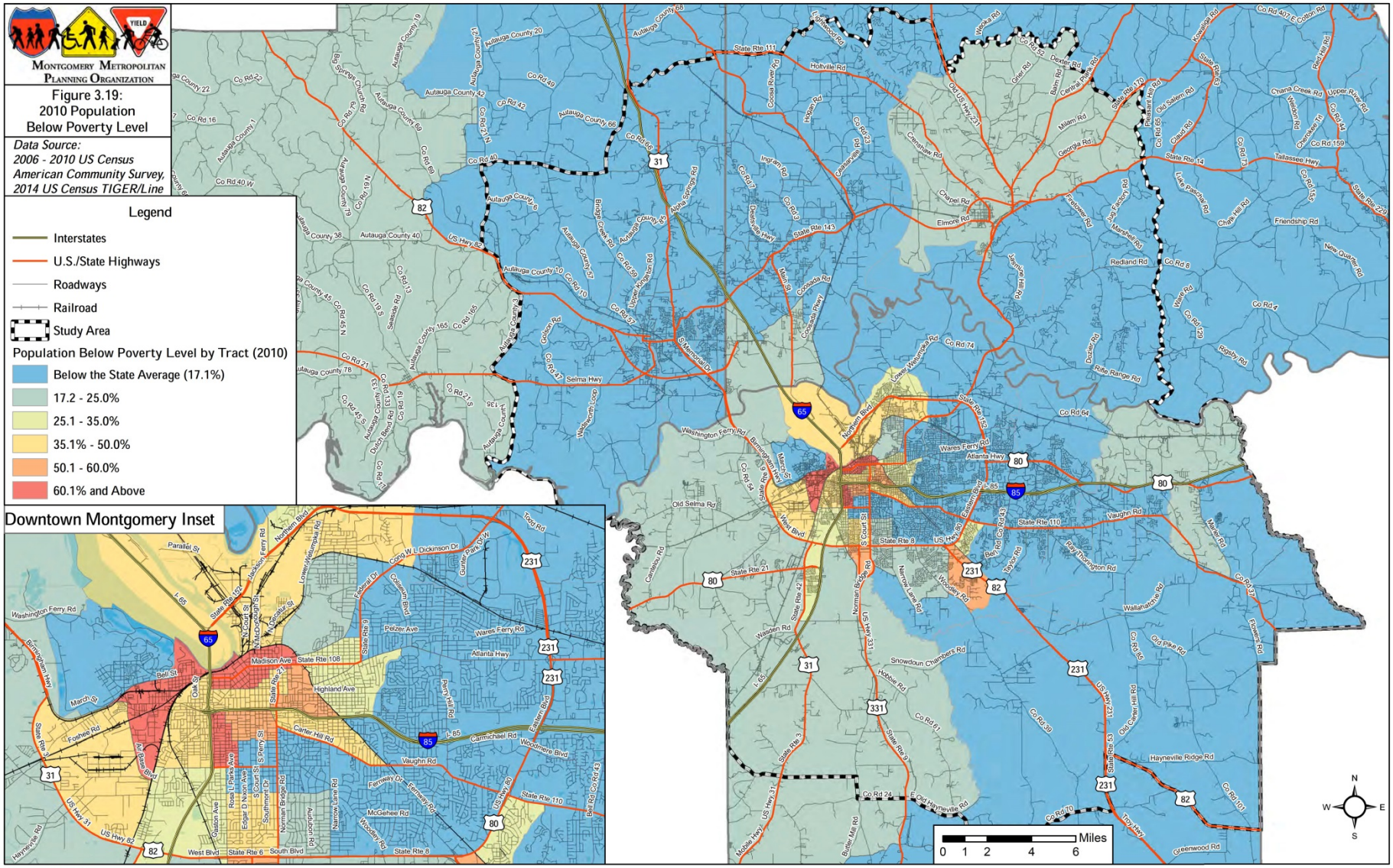
Table 3.19: 2006-2013 per Capita Personal Income by County

Year	Autauga County	Elmore County	Montgomery County	State of Alabama	United States
2006	$30,471	$30,085	$37,887	$31,616	$38,127
2007	$31,306	$31,415	$38,172	$32,777	$39,804
2008	$32,358	$33,075	$38,949	$33,715	$40,873
2009	$31,904	$33,019	$37,962	$32,961	$39,379
2015	$32,498	$34,236	$38,077	$33,984	$40,144
2011	$33,559	$35,166	$38,966	$35,010	$42,332
2012	$34,284	$35,828	$39,326	$35,942	$44,200
2013	$34,843	$36,261	$40,168	$36,481	$44,765

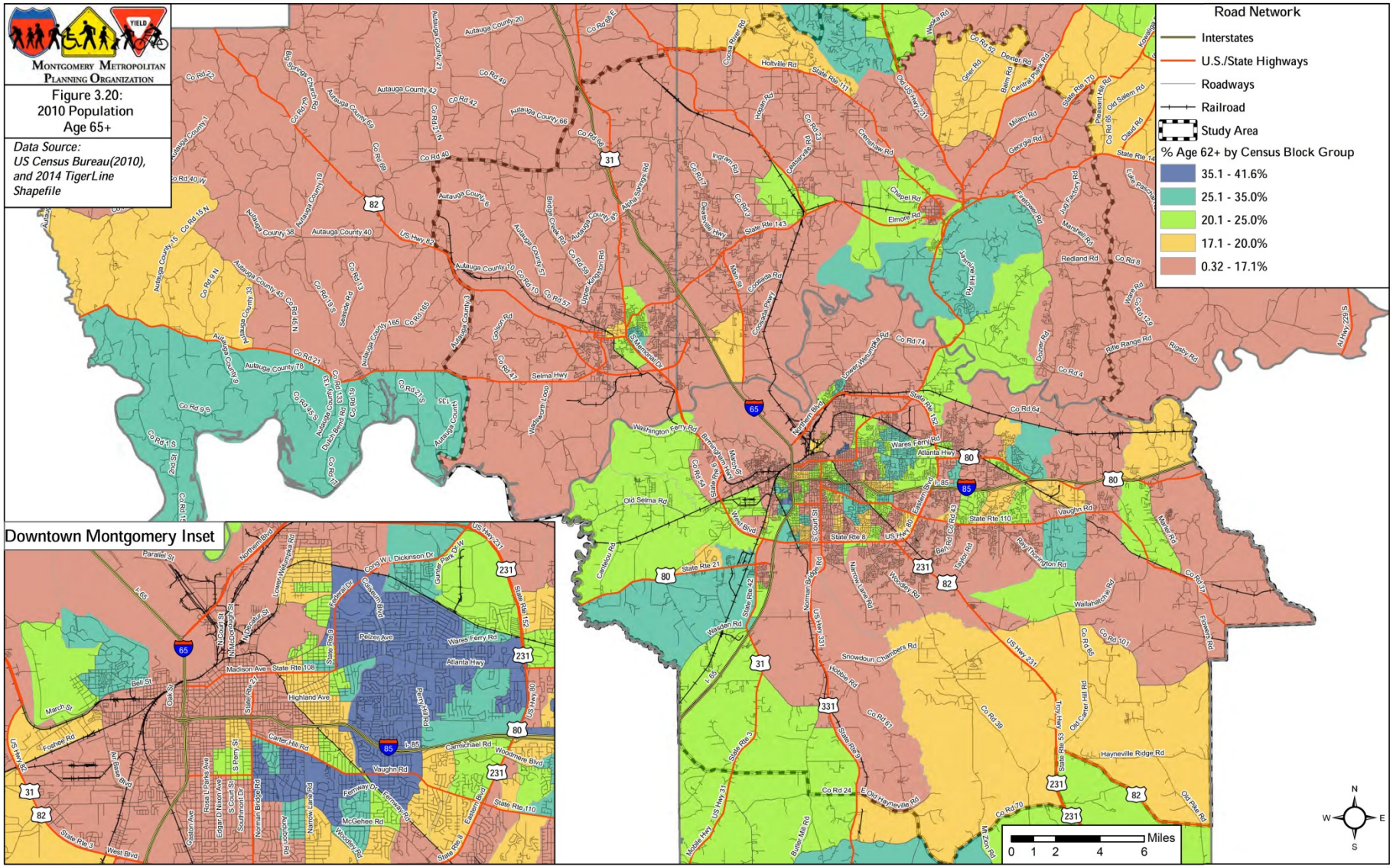
Data Source: U.S. The Regional Economic Information System, Bureau of Economic Analysis and U.S. Census.
Source: MPO Staff



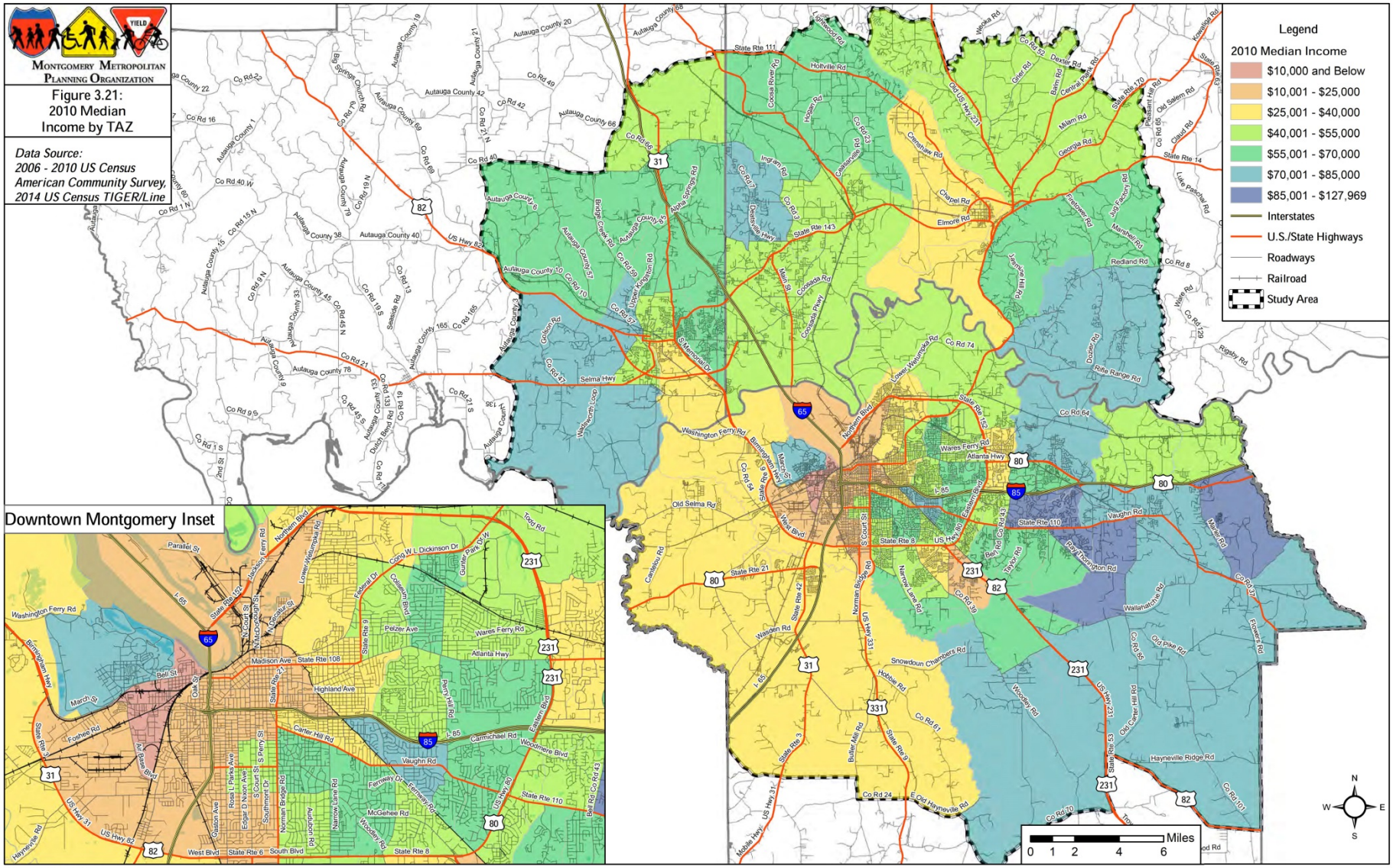
Source: MPO Staff



Source: MPO Staff



Source: MPO Staff



Source: MPO Staff

3.5 Commute Characteristics

In addition to demographic information, the Census collects data on local travel characteristics forpersons age 16 years and older who commute to work. Because the morning and afternoon commute periods are most often the peak travel demand periods, the data gives insight into the transportation system utilization across modes. Tables 3.20 and 3.21 summarize by geographic area the average commute time and the manner in which persons living in the Montgomery MPO study area travel to work.

Table 3.20: County Commute Characteristics – 2006 to 2010

Subject	Alabama		Autauga County*		Elmore County*		Montgomery County*	
	Estimate	MOE	Estimate	MOE	Estimate	MOE	Estimate	MOE
Workers 16 years and over	1,973,623	+/-6,442	24,499	+/-560	32,399	+/-1,122	101,033	+/-1,495
MEANS OF TRANSPORTATION TO WORK								
Car, truck, or van	94.7%	+/-0.1	96.1%	+/-1.0	95.8%	+/-0.7	95.1%	+/-0.5
Drove alone	85.0%	+/-0.2	86.9%	+/-1.8	84.4%	+/-1.5	84.2%	+/-0.9
Carpooled	9.8%	+/-0.2	9.2%	+/-1.5	11.4%	+/-1.3	10.9%	+/-0.8
In 2-person carpool	7.5%	+/-0.2	7.0%	+/-1.3	9.6%	+/-1.2	8.5%	+/-0.7
In 3-person carpool	1.4%	+/-0.1	1.5%	+/-0.6	1.4%	+/-0.4	1.7%	+/-0.4
In 4-or-more person carpool	0.9%	+/-0.1	0.8%	+/-0.4	0.4%	+/-0.2	0.7%	+/-0.2
Workers per car/ truck/van	1.06	+/-0.01	1.06	+/-0.01	1.07	+/-0.01	1.07	+/-0.01
Public transportation	0.5%	+/-0.1	0.3%	+/-0.2	0.2%	+/-0.1	0.8%	+/-0.2
Walked	1.2%	+/-0.1	0.8%	+/-0.4	0.9%	+/-0.4	1.0%	+/-0.2
Bicycle	0.1%	+/-0.1	0.0%	+/-0.1	0.0%	+/-0.1	0.1%	+/-0.1
Taxicab, motorcycle, or other means	0.9%	+/-0.1	0.8%	+/-0.4	0.8%	+/-0.4	0.6%	+/-0.2
Worked at home	2.6%	+/-0.1	1.9%	+/-0.7	2.4%	+/-0.5	2.4%	+/-0.3
TIME LEAVING HOME TO GO TO WORK								
12:00 a.m. to 4:59 a.m.	5.5%	+/-0.1	4.4%	+/-0.7	4.9%	+/-0.9	3.7%	+/-0.5
5:00 a.m. to 5:29 a.m.	4.9%	+/-0.1	4.5%	+/-0.9	3.6%	+/-0.6	2.5%	+/-0.4
5:30 a.m. to 5:59 a.m.	6.0%	+/-0.1	5.4%	+/-0.9	6.6%	+/-0.8	4.6%	+/-0.5
6:00 a.m. to 6:29 a.m.	10.3%	+/-0.2	11.4%	+/-1.4	12.5%	+/-1.1	8.4%	+/-0.7
6:30 a.m. to 6:59 a.m.	12.0%	+/-0.2	14.5%	+/-1.3	15.9%	+/-1.4	12.4%	+/-0.8
7:00 a.m. to 7:29 a.m.	16.3%	+/-0.2	21.3%	+/-1.7	21.8%	+/-1.9	18.6%	+/-0.9
7:30 a.m. to 7:59 a.m.	12.8%	+/-0.2	11.2%	+/-1.1	11.2%	+/-1.2	16.1%	+/-0.9
8:00 a.m. to 8:29 a.m.	7.7%	+/-0.1	7.0%	+/-1.1	6.1%	+/-1.0	8.1%	+/-0.6
8:30 a.m. to 8:59 a.m.	3.4%	+/-0.1	2.4%	+/-0.5	2.1%	+/-0.5	3.7%	+/-0.4
9:00 a.m. to 11:59 p.m.	21.0%	+/-0.2	17.9%	+/-2.0	15.4%	+/-1.5	21.8%	+/-1.0
TRAVEL TIME TO WORK								
Mean travel time to work (minutes)	24.2	+/-0.1	25.1	+/-0.8	27.5	+/-0.7	19.7	+/-0.4

*Note: Data is shown for the entire county and includes areas outside of the MPO study area.
Data Source: 2006 – 2015 U.S. Census American Community Survey
Source: MPO Staff

Table 3.21

Municipality Commute Characteristics – 2006 to 2015

Subject	Coosada		Deatsville		Elmore		Millbrook		Montgomery		Pike Road		Prattville		Wetumpka	
	Total		Total		Total		Total		Total		Total		Total		Total	
	Estimate	MOE	Estimate	MOE	Estimate	MOE	Estimate	MOE	Estimate	MOE	Estimate	MOE	Estimate	MOE	Estimate	MOE
Workers 16 years and over	581	+/-115	405	+/-129	540	+/-137	6,531	+/-311	90,573	+/-1,429	2,738	+/-257	15,324	+/-469	2,393	+/-470
MEANS OF TRANSPORTATION TO WORK																
Car, truck, or van	98.6%	+/-1.4	93.6%	+/-6.0	95.0%	+/-3.9	97.2%	+/-1.1	95.1%	+/-0.5	94.4%	+/-3.4	96.0%	+/-1.2	94.9%	+/-2.3
Drove alone	88.3%	+/-6.1	75.8%	+/-8.7	80.6%	+/-7.5	84.7%	+/-3.1	84.0%	+/-1.0	88.7%	+/-4.6	88.3%	+/-1.9	83.0%	+/-5.3
Carpooled	10.3%	+/-5.8	17.8%	+/-9.1	14.4%	+/-7.0	12.5%	+/-3.0	11.1%	+/-0.9	5.7%	+/-3.0	7.7%	+/-1.6	12.0%	+/-4.9
In 2-person carpool	8.1%	+/-5.0	17.8%	+/-9.1	10.2%	+/-6.0	10.8%	+/-2.9	8.7%	+/-0.7	3.7%	+/-2.5	5.8%	+/-1.2	11.4%	+/-4.8
In 3-person carpool	2.2%	+/-2.4	0.0%	+/-7.7	1.3%	+/-2.2	1.2%	+/-0.6	1.7%	+/-0.4	2.0%	+/-1.5	1.5%	+/-0.7	0.5%	+/-0.6
In 4-or-more person carpool	0.0%	+/-5.4	0.0%	+/-7.7	3.0%	+/-4.0	0.5%	+/-0.5	0.6%	+/-0.2	0.0%	+/-1.2	0.4%	+/-0.4	0.1%	+/-0.2
Workers per car, truck, or van	1.06	+/-0.04	1.10	+/-0.06	1.09	+/-0.06	1.07	+/-0.02	1.07	+/-0.01	1.04	+/-0.02	1.05	+/-0.01	1.07	+/-0.03
Public transportation	0.0%	+/-5.4	0.0%	+/-7.7	0.6%	+/-0.8	0.0%	+/-0.5	0.8%	+/-0.2	0.0%	+/-1.2	0.4%	+/-0.3	0.3%	+/-0.4
Walked	0.9%	+/-1.2	0.0%	+/-7.7	3.3%	+/-3.6	0.1%	+/-0.2	1.0%	+/-0.2	0.8%	+/-1.2	1.0%	+/-0.6	2.4%	+/-1.7
Bicycle	0.0%	+/-5.4	0.0%	+/-7.7	0.0%	+/-5.8	0.2%	+/-0.4	0.2%	+/-0.1	0.0%	+/-1.2	0.0%	+/-0.2	0.0%	+/-1.3
Taxicab, motorcycle, or other means	0.5%	+/-0.7	3.7%	+/-4.6	0.0%	+/-5.8	1.4%	+/-0.9	0.6%	+/-0.2	0.1%	+/-0.2	1.0%	+/-0.5	0.8%	+/-0.7
Worked at home	0.0%	+/-5.4	2.7%	+/-4.2	1.1%	+/-1.7	1.0%	+/-0.7	2.3%	+/-0.3	4.7%	+/-3.3	1.8%	+/-0.8	1.6%	+/-1.1
TIME LEAVING HOME TO GO TO WORK																
12:00 a.m. to 4:59 a.m.	2.8%	+/-2.4	2.3%	+/-2.7	1.7%	+/-2.8	4.5%	+/-1.6	3.8%	+/-0.5	1.8%	+/-1.4	3.0%	+/-0.8	5.9%	+/-3.6
5:00 a.m. to 5:29 a.m.	7.7%	+/-4.9	4.3%	+/-4.6	2.8%	+/-2.6	2.1%	+/-1.2	2.4%	+/-0.4	4.4%	+/-2.6	3.4%	+/-1.0	2.0%	+/-1.4
5:30 a.m. to 5:59 a.m.	4.8%	+/-3.3	6.9%	+/-4.6	8.2%	+/-6.1	6.4%	+/-2.1	4.6%	+/-0.6	0.8%	+/-0.8	3.4%	+/-1.2	7.3%	+/-2.6
6:00 a.m. to 6:29 a.m.	6.5%	+/-3.4	18.3%	+/-8.5	15.9%	+/-8.4	10.6%	+/-2.4	8.2%	+/-0.8	4.5%	+/-2.3	9.5%	+/-1.4	15.8%	+/-4.8
6:30 a.m. to 6:59 a.m.	17.0%	+/-9.8	24.4%	+/-11.7	19.9%	+/-14.4	17.2%	+/-2.9	11.8%	+/-0.9	15.0%	+/-4.7	14.7%	+/-1.5	11.0%	+/-3.7
7:00 a.m. to 7:29 a.m.	11.5%	+/-6.2	20.8%	+/-9.6	15.9%	+/-8.5	23.0%	+/-3.7	18.3%	+/-0.9	28.7%	+/-6.5	23.1%	+/-2.1	24.0%	+/-5.7
7:30 a.m. to 7:59 a.m.	10.5%	+/-6.7	4.1%	+/-5.2	9.6%	+/-5.9	9.5%	+/-2.2	16.6%	+/-0.9	14.2%	+/-4.5	13.2%	+/-1.8	10.2%	+/-3.5
8:00 a.m. to 8:29 a.m.	5.9%	+/-3.9	8.1%	+/-7.5	5.1%	+/-3.6	5.1%	+/-2.1	8.2%	+/-0.7	11.8%	+/-4.3	7.1%	+/-1.2	7.6%	+/-4.0
8:30 a.m. to 8:59 a.m.	16.2%	+/-8.0	3.8%	+/-4.6	0.9%	+/-1.0	1.4%	+/-0.9	3.7%	+/-0.5	4.3%	+/-2.7	2.6%	+/-0.8	1.2%	+/-0.8
9:00 a.m. to 11:59 p.m.	17.0%	+/-7.2	7.1%	+/-5.5	20.0%	+/-8.8	20.3%	+/-3.7	22.6%	+/-1.1	14.5%	+/-5.7	20.0%	+/-2.7	15.0%	+/-4.5
TRAVEL TIME TO WORK																
Mean travel time to work (minutes)	24.3	+/-2.1	29.8	+/-3.5	25.1	+/-4.4	23.7	+/-1.3	19.0	+/-0.4	22.1	+/-1.0	21.9	+/-0.9	25.6	

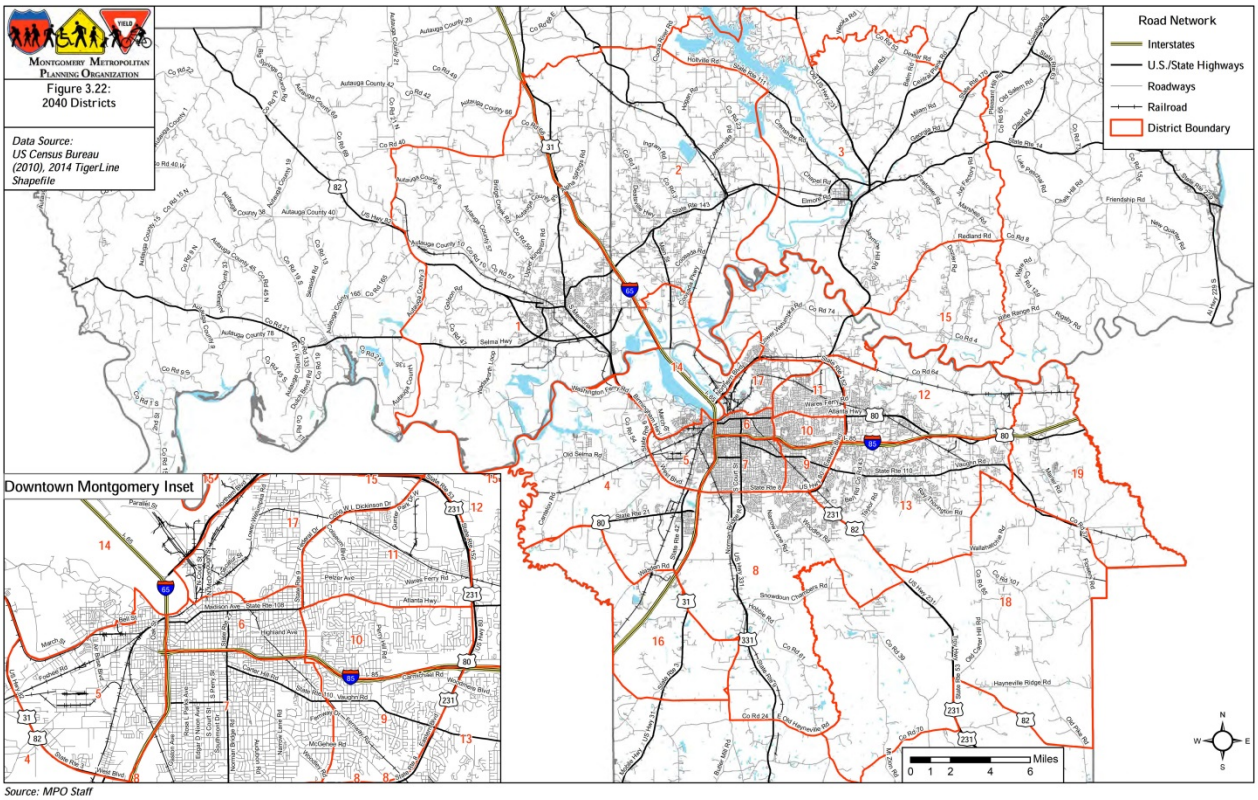
Data Source: U.S. Census Bureau, 2015-2007 American Community Survey
Source: MPO Staff

In 2015, Montgomery County commuters experienced shorter overall average commutes (19.7 minutes) than the statewide average (24.2 minutes), but the average commutes for Autauga County (25.1 minutes) and Elmore County (27.1 minutes) were higher than the state average. The likely reason is that a large percentage of Autauga County and Elmore County workers leave their county to work elsewhere.

How Montgomery area commuters get to work generally parallels state trends, with a vast majority of workers driving single occupant vehicles. The Town of Pike Road had the greatest percentage of persons driving alone (88.7 percent), followed by the Town of Coosada and City of Prattville (88.3 percent), Autauga County (86.9 percent), City of Millbrook (84.7 percent), Elmore County (84.4 percent), Montgomery County (84.2 percent), City of Montgomery (84.0 percent), City of Wetumpka (83.0 percent), Town of Elmore (80.6 percent), and Town of Deatsville (75.8 percent). Persons living in Montgomery County and the City of Montgomery had the greatest propensity for using transit (0.8 percent), primarily due to transit availability. The Town of Elmore (3.3 percent) and City of Wetumpka (2.4 percent) had the highest use of walking as a means of transport.

As noted previously, the 2011-2015 ACS is an estimate and the value is calculated with a margin of error, such that there is a 90 percent probability that the actual value is between the value minus the margin of error and the value plus the margin of error.

Figure 3.22 and corresponding Table 3.22 present a numeric summary of daily work (vehicle) trips by origination and destination districts within the Montgomery MPO study area. This model information indicates the strong employment center destinations within the City of Montgomery's central business district, which serves as a major work destination for residents of outlying suburban areas in Autauga, Elmore, and eastern Montgomery counties.



Source: MPO Staff

Table 3.22

2045 Daily Work (Vehicle) Trips By District

		Destination District																		
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
Origin District	1	8,411	5,265	2,219	2,403	3,579	7,171	8,907	5,227	3,283	2,482	3,367	4,292	8,503	2,121	1,362	430	2,769	631	621
	2	2,617	1,631	1,256	938	1,174	4,788	3,918	2,249	2,208	1,908	2,896	2,707	4,452	917	665	184	1,776	298	318
	3	2,389	1,403	909	963	2,104	2,277	2,152	1,465	1,179	978	2,467	1,741	2,548	1,201	590	170	3,069	144	145
	4	1,007	369	170	922	1,026	1,905	3,944	2,245	983	473	747	987	1,800	583	154	178	471	105	63
	5	3,102	1,435	1,163	1,612	1,654	2,616	8,210	6,271	5,710	3,570	2,808	3,901	7,467	1,162	675	346	1,423	498	385
	6	7,536	5,321	4,832	2,384	5,163	8,657	7,719	4,621	3,533	3,638	9,737	7,372	9,221	2,715	2,452	354	5,161	628	645
	7	6,549	4,161	5,873	3,777	3,702	8,382	18,192	21,760	22,207	9,617	10,211	22,291	44,454	2,679	3,009	789	3,614	2,181	1,811
	8	8,001	3,678	2,211	10,635	3,682	4,128	7,267	7,478	4,446	2,501	4,312	10,788	21,841	2,938	1,587	1,009	2,051	3,232	1,014
	9	1,533	1,255	2,109	690	843	2,886	3,461	2,631	2,744	1,762	3,003	11,778	16,109	771	3,108	134	1,155	2,018	3,469
	10	6,620	1,452	672	511	603	2,825	1,821	646	575	1,182	1,586	1,034	1,172	1,477	729	93	1,085	53	54
	11	41,770	6,781	1,503	2,049	2,243	3,817	3,165	1,904	1,460	1,103	2,873	1,597	1,998	2,691	593	288	1,410	84	61
	12	14,716	10,209	1,159	1,100	1,336	3,998	2,895	1,083	990	812	1,886	1,302	1,472	1,735	465	211	1,063	50	43
	13	7,943	12,199	32,854	1,199	1,416	7,775	5,309	2,255	3,031	2,187	6,189	6,136	7,066	2,768	6,471	232	2,638	292	288
	14	12,170	3,633	673	475	523	1,756	1,630	806	722	498	944	2,706	2,632	644	344	72	449	244	2,837
	15	6,885	6,891	1,914	580	708	1,322	933	593	611	366	1,109	895	837	929	363	105	667	27	24
	16	914	3,495	664	494	312	323	703	716	535	260	453	757	3,054	229	181	997	275	136	69
	17	1,026	621	692	777	756	2,830	2,547	4,077	2,444	1,316	2,211	6,270	16,362	574	768	214	813	2,360	1,256
	18	1,611	1,428	1,752	546	677	573	1,581	2,400	2,094	1,208	2,332	6,834	12,942	512	1,783	93	800	843	878
	19	1,545	170	64	99	105	602	298	88	64	71	138	87	99	127	53	16	66	5	4

Data Source: Montgomery Study Area 2045 LRTP Travel Demand Model

3.6 Safety

3.6.1 Crash Characteristics

The FAST Act supports an aggressive safety agenda to reduce injuries and fatalities on public roads. It retains the Highway Safety Improvement Program (HSIP) as a core highway safety program and requires a data-driven, strategic approach that focuses on performance. Funding eligibility is dependent on a project's inclusion in the state's Strategic Highway Safety Plan. Examples of eligible projects include intersectionimprovements, shoulder construction, high risk rural road improvements, traffic calming, data collection,and improvements for bicyclists, pedestrians, and individuals with disabilities.

The analysis of roadway transportation safety requires examining three components: driver safety (human factors), vehicle safety, and roadway safety. Numerous national and state agencies collaborate to ensure overall transportation safety. For example, the National Highway Traffic Safety Administration (NHTSA) evaluates vehicle safety and conducts crash tests to ensure vehicles on the road meet a standard level of safety. The Alabama Department of Public Safety oversees driver licensing requirements to ensure that all of Alabama's licensed drivers have acceptable driving proficiency levels and can operate vehicles safely. The Law Enforcement and Traffic Safety Division (LETS) of the Alabama Department of Economic and Community Affairs administers federal funding for an array of victims' services, law enforcement, juvenile justice, and highway traffic safety programs. LETS supports law enforcement and educational efforts to increase safety awareness and to reduce crashes, injuries, and fatalities on Alabama roadways. Finally, ALDOT and the local governments apply roadway design standards to ensure facilities meet all national safety requirements.

Development of the Montgomery 2045 LRTP included a review of safety data obtained from the Center for Advanced Public Safety's (CAPS) Critical Analysis Reporting Environment (CARE) database. County-wide crash data for Autauga, Elmore, and Montgomery counties for years 2018-2019 issummarized in Tables 3.23 and 3.24.

Table 3.23: Crash Rates for All Crashes by Facility Type and Number of Lanes

Crash Rate (All Crashes)	**Number of Lanes**						
Facility Type	**1**	**2**	**3**	**4**	**5**	**6**	**Total**
Interstate		0.82	1.41	1.25	1.22	1.02	1.14
Freeway		1.38	0.91				1.28
Principal Arterial	4.83	8.71	10.24				8.54
Minor Arterial	10.72	16.29	14.30				12.81
Collector	250.01	53.44	12.74				237.69
Grand Total	**177.91**	**18.58**	**7.74**	**1.25**	**1.22**	**1.02**	**123.13**

Data Source: Center for Advanced Public Safety, CARE
Note: Covers period from 1/1/2018-10/13/2019

Table 3.34: Crash Severity by Area

	Crash Severity				
City or Rural part of County	**Fatal Injury**	**Incapacitating Injury**	**Non-Incapacitating Injury**	**Possible Injury**	**Property Damage Only**
Autaugaville		1	3		2
Coosada			4	2	7
Deatsville					1
Eclectic	1	1	3	1	12
Elmore			1		8
Millbrook	1	9	23	45	188
Montgomery	7	136	379	958	4860
Pike Road		1	3	2	25
Prattville	1	28	53	75	594
Rural Autauga	7	18	49	20	287
Rural Elmore	9	18	67	57	396
Rural Montgomery	7	17	74	59	487
Tallassee		4	12	6	60
Wetumpka	2	7	18	35	218

Safety improvements are critical to the long range planning process. Regular monitoring of safety needs helps enhance the safety of the roadway network and improve efficiency by reducing delays caused by incidents. Evaluating high crash locations can assist in determining the potential for localized roadway or operational improvements to reduce accidents.

3.6.2 Transportation Alternatives Program (TAP)

The FAST Act retained from THE FAST ACT the Transportation Alternatives Program (TAP), which replaced the long standing Transportation Enhancement (TE) Program. Most of the TE activities are still eligible under TAP. A listing of the eligible TAP activities includes:

- Construction of on-road and off-road trail facilities for pedestrians, bicyclists, and other non-motorized forms of transportation, including sidewalks, bicycle infrastructure, pedestrian lighting, downtown streetscape (combination of sidewalks, pedestrian lighting and landscaping), and other transportation projects to achieve compliance with the Americans with Disabilities Act of 1990.
- Construction of infrastructure-related projects and systems that will provide safe routes for non-drivers, including children, older adults, and individuals with disabilities to access daily needs.
- Conversion and use of abandoned railroad corridors for trails for pedestrians, bicyclists, or other non-motorized transportation users.
- Construction of turnouts, overlooks, and viewing areas.

- Community improvement activities, including:
  - Inventory, control, or removal of outdoor advertising;
  - Historic preservation and rehabilitation of historic transportation facilities;
  - Vegetation management practices in transportation rights-of-way to improve, roadway safety,prevent against invasive species, and provide erosion control;
  - Archaeological activities relating to impacts from the implementation of transportation projectseligible under Title 23
- Any environmental mitigation activity, including pollution prevention and pollution abatementactivities and mitigation to:
  - Address storm water management, control, and water pollution prevention or abatement related tohighway construction or due to highway runoff.
  - Reduce vehicle-caused wildlife mortality or to restore and maintain connectivity among terrestrialor aquatic habitats.

Funds for TAP projects are sub-allocated to the six largest MPOs, cities in the population range from5,000 to 199,999, and to the small cities, towns, and rural areas. The Montgomery MPO is allocated $430,458 annually. Nine projects are authorized by ALDOT, with four additional projects planned, as detailed in Table 3.25.

Table 3.25: Transportation Alternative Program (TAP) Projects

Type	Sponsor	Title/Location	Brief Description	Federal	Match	Total
Authorized Projects	City of Montgomery	Lighting Improvements on Monroe Street	Lighting	$444,589	$0	$444,589
	City of Wetumpka	Downtown Streetscape on Main Street Phase 1	Streetscape	$200,000	$1,100	$201,100
	City of Wetumpka	Pedestrian Connector on East Bridge Street	Sidewalk	$540,996	$135,249	$676,245
	Town of Pike Road	Multi-purpose trail on Wallahatchie Road Phase 2	Bicycle and Pedestrian Facilities	$296,710	$0	$296,710
	Town of Pike Road	Multi-purpose trail on Wallahatchie Road Phase 2	Bicycle and Pedestrian facilities	$48,532	$0	$48,532
	TBD	Downtown Pedestrian Path in City of Prattville	Sidewalk	$119,749	$612	$120,362
	TBD	Montgomery Capitol Complex lighting improvements	Lighting	$61,770	$0	$61,770
	TBD	Montgomery Capitol Complex lighting improvements	Lighting	$197,607	$0	$197,607
	TBD	Sidewalks and Pedestrian Bridge, Bridge Street Wetupmka	Sidewalk	$537,020	$0	$537,020
Planned Projects	TBD	Riverfront Greenway Trail Montgomery	Bicycle and Pedestrian Facilities	$640,000	$160,000	$800,000
	TBD	Multi-purpose trail on Wallahatchie Road Phase 3	New Nature Trail	$187,850	$46,963	$234,813
	TBD	Multi-purpose trail on Wallahatchie Road Phase 4	New Nature Trail	$200,000	$50,000	$250,000
	Town of Pike Road	Pike Road Trail Meriweather Road	Bicycle and Pedestrian Facilities	$200,202	$50,050	$250,252
			TOTAL	$3,675,025	$443,975	$4,119,000

Source: MPO Staff

3.7 Environmental Justice

Title VI, Executive Order 12898 and Section 450 of the SAFETEA-LU legislation establish environmental justice requirements for federal agencies and federally funded programs. The three major principles of environmental justice are:

- Provide a full and fair participation by minority and low-income communities
- Avoid, minimize, or mitigate disproportional impact to minority and low-income communities
- Ensure that low-income and minority citizens fully share in the benefits

MPOs are required to make sure transportation plans and programs meet the environmental justice requirements. During the Montgomery Study Area 2045 LRTP development process, environmental justice populations and issues were considered. Planned projects in the 2045 LRTP were screened to determine the potential for impacts to environmental justice populations.

3.7.1 Identifying Minority and Low-Income Populations

The initial activity for fulfilling environmental justice requirements is identifying environmental justice communities within the study area. Though no standards exist for population identification, a fairly common method is to utilize U.S. Census data to identify areas of greatest low-income and minority population concentrations. For the Montgomery area, data by Census block group were utilized for race/ethnicity, and data by Census tract were utilized for income. In order to identify potential environmental justice communities, the data was mapped using GIS, and areas exceeding the study area's average for that population group were shown (see Figures 3.18 to 3.21). The non-white (minority) population consists of all persons who consider themselves a race other than white and includes personsof Hispanic origin. For the low-income identifier, population of persons below the poverty level was used. The detailed demographic data necessary to update this analysis has not been released for the 2020 Census, so this LRTP update must rely on the 2015 analysis, which remains valid.

3.7.2 Environmental Justice Outreach

Specific measures utilized to engage environmental justice community members included conducting twosets of public meetings in the City of Montgomery, City of Prattville, and City of Wetumpka. During each public meeting, information was distributed and ample opportunity for public comment was provided. The location of the City of Montgomery public meetings was the Downtown Intermodal Transfer Facility, which is the downtown transfer facility for The M Transit System (Formerly MATS). Meeting advertisements included advertising in general circulation newspapers in advance.

3.8 Environmental and Social Factors

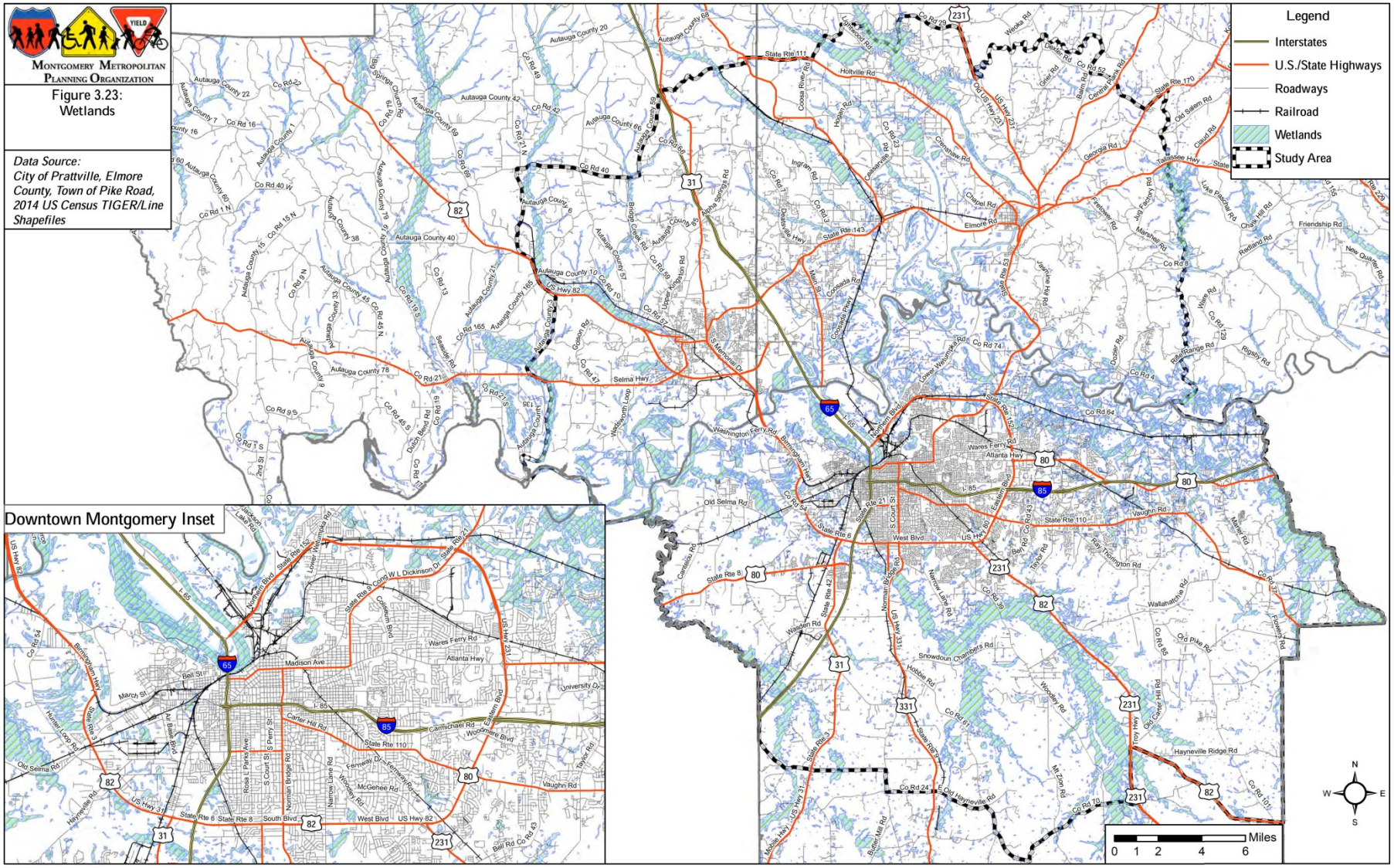
A variety of environmental and social factors affect transportation planning decisions. Some environmental factors such as wetland, floodplains, and floodways can be minimized or mitigated for planned projects where feasible, while other environmental factors like hazardous sites can be, when fiscally feasible, cleaned up in conjunction with planned transportation projects. Social factors often prove to be the most controversial and publically challenged factors in planned transportation projects.

3.8.1 Wetlands, Floodplains, and Floodways

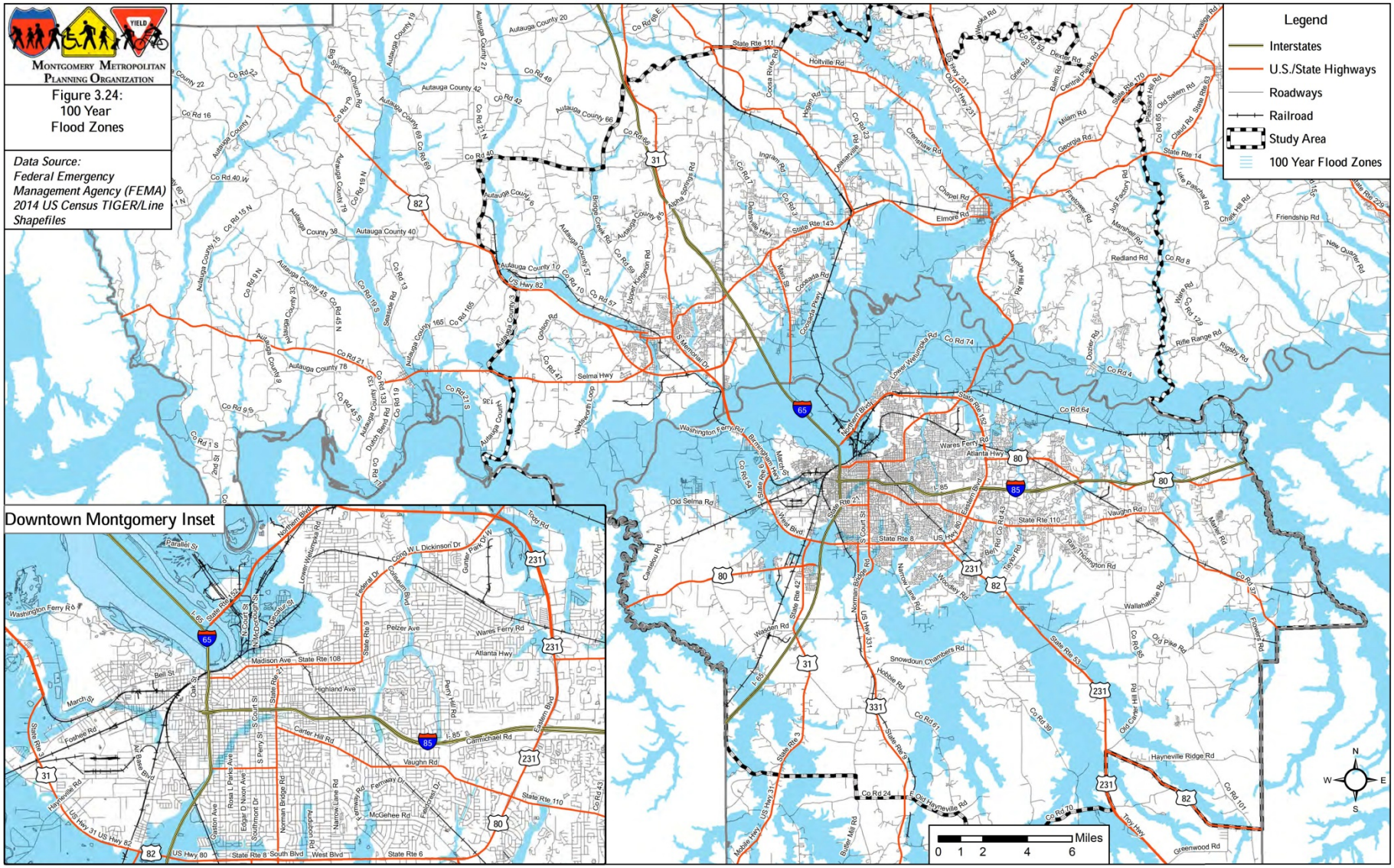
According to Environmental Protection Agency (EPA) Regulations listed at 40 CFR 230.3(t), wetlandsare defined as "those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetationtypically adapted for life in saturated soil conditions. Wetlands generally

include swamps, marshes, bogs and similar areas."

Executive Order 11990 requires that MPOs avoid, minimize, or mitigate wetland impacts to the extent possible. The Montgomery MPO has a large amount of wetlands throughout the area; therefore, numerous roads within the existing transportation system already impact wetlands. Figure 3.23 detailsthe wetlands throughout the Montgomery MPO study area.



Source: MPO Staff

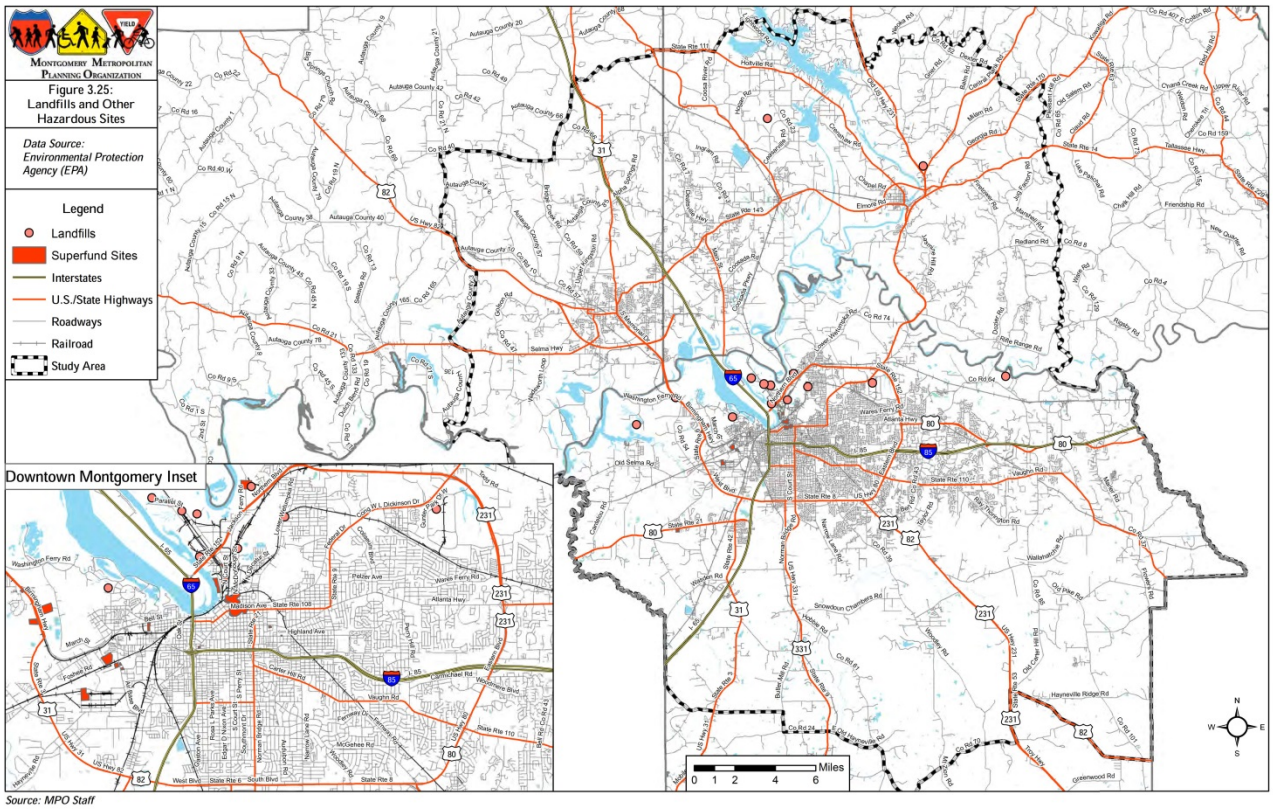


Source: MPO Staff

The development patterns in the MPO study area correlate with the floodplain areas. The large overall growth in population in east Montgomery County is located between two sections of floodplains, whilethe large increase in households in Autauga and Elmore counties generally develops outside the established floodplain. Generally the flood plain extends east to west with Montgomery County to the south and Autauga and Elmore counties to the north. In Montgomery County, the floodplain covers a large section in the northwest corner of the county, a large portion south of South Boulevard between US 331 and US 231, the easternmost section of the county east of the Town of Pike Road, and sporadically throughout the rest of the county. In Autauga County, the floodplain covers a much smaller amount of the county. In Elmore County, the floodplain covers a large portion of the City of Wetumpka and sporadically throughout all municipalities in the county. Figure 3.24 details the 100 Year Flood Zones.

3.8.2 Landfills and Hazardous Sites

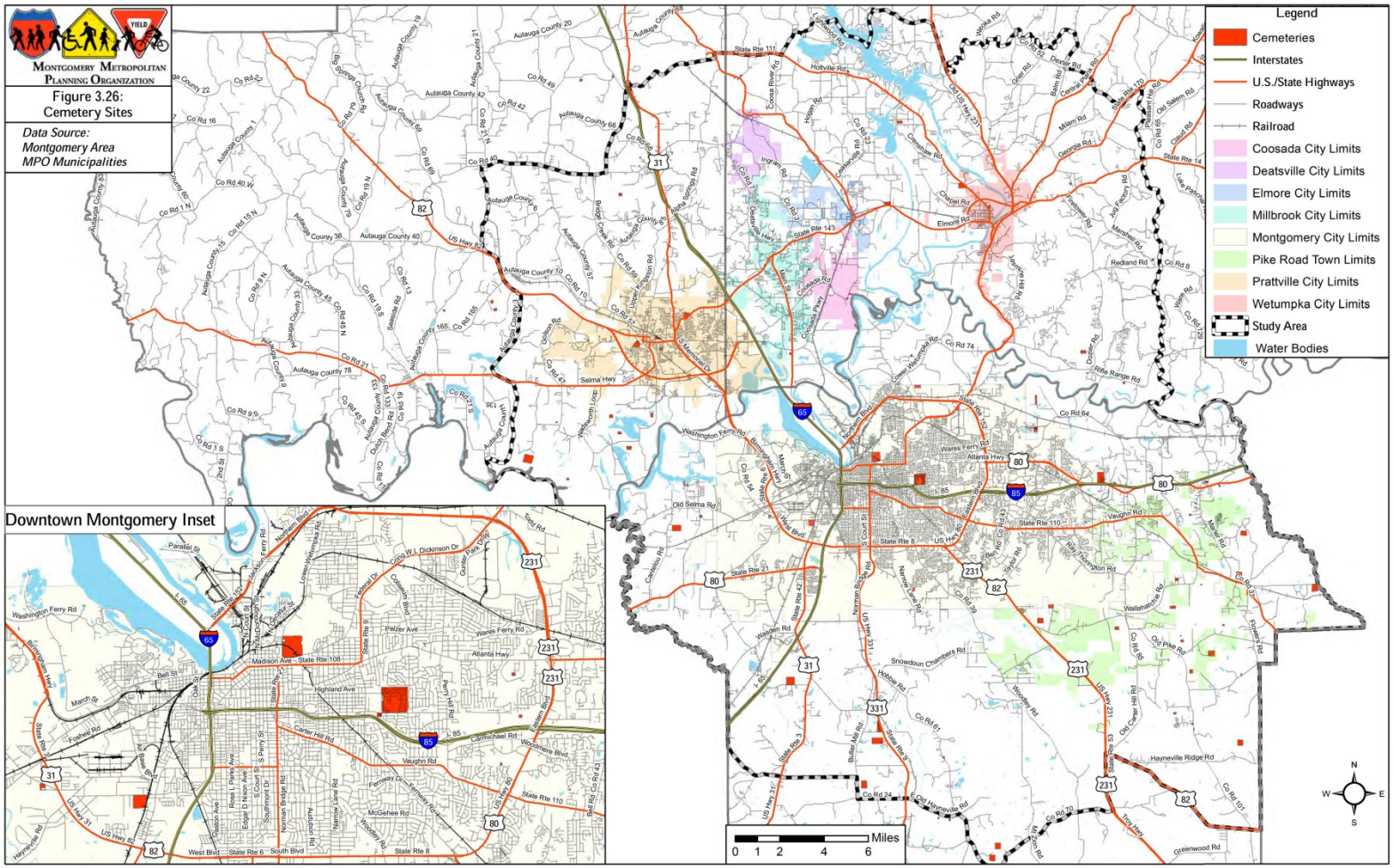
Hazardous sites include, but are not limited to, superfund sites, brownfields, and landfills. Many hazardous sites are heavily regulated due to the significant health risks associated with each. The Environmental Protection Agency (EPA) regulates the designation and clean-up of superfund and brownfield sites, while landfills are typically monitored by the associated municipalities. Knowing wherehazardous and landfill sites enable planners and engineers to assess potential impacts due to proposed projects because of the health hazards, the cost, the time delays, and the probable liability of local, state, and federal agencies in regards to existing and acquired right-of-way. Knowing where these sites arehelps to determine costs and benefits associated with cleanup of these sites. It helps to know if development/redevelopment is going to be difficult and at times fiscally and or physically impossible. Figure 3.25 details the location, per the EPA source when available, of hazardous locations throughout theMPO Study Area.



Source: MPO Staff

3.8.3 Churches and Cemeteries

Church and cemetery locations are important environmental and social factors when assessing each potential project in the program of projectsThe preliminary engineering phase of theproposed project will further detail potential positive or negative effects, if any. Figure 3.26 details the cemeteries in the MPO study area. It should be noted that not all cemeteries are featured on the map because some cemeteries lacked detailed location information.



Source: MPO Staff

3.8.4 Schools and Daycares

In 2015, the Montgomery MPO study area included three school districts: Autauga County, Elmore County, and Montgomery County. In addition to public schools, each county has private schools and multiple daycare facilities that are included in the enrollment total. Additionally, Montgomery County, the total enrollment includes numerous colleges, universities, and trade schools. Total 2015 enrollment within the MPO study area includes Autauga County at 8,831, Elmore County at 12,426, and Montgomery County at 91,006. Starting in the 2015-2016 school year, a fourth school district was created in Pike Road, with an elementary, intermediate, junior high and high school.

New schools spur an increase in residential development around the new school location, and conversely, heavy residential development increases demand for a public school to serve new residents. Currently, in Montgomery County, the greatest concentration of residential growth corresponds with the location of the newest elementary school and middle School on Ray Thorington Road as well as in Pike Road in response to the coming new school district. The large population increases in east Montgomery County and throughout Autauga and Elmore counties is creating an increased need for classroom space inpreviously agricultural areas. In addition, the population increase is causing a shortage of affordable daycare facilities. Figure 3.27 shows the daycares and schools within the Montgomery MPO study area. Tables 3.26 to 3.28 detail the enrollment in public schools, private schools, and Department of Human Resources certified daycares in 2015 in Autauga, Elmore, and Montgomery counties, respectively

Enrollment in higher education in Montgomery reflects the multitude of colleges, universities, and trade schools available. In addition, Maxwell Air Force Base has a large enrollment in higher education specifically for military personnel. Table 3.29 details the 2015 enrollment in higher education by college, university, or trade school.

Table 3.26: Autauga County Public, Private, and Daycare Enrollment in 2015

NAME	2015 Enrollment
Autauga Academy & Preschool	228
Camellia Baptist Church	71
Daniel Pratt Elementary School	1,105
East Memorial Baptist Church	107
East Memorial Christian Academy	280
Kiddie College School	160
Kinder Care Learning Center #753	50
North Highland Head Start Center	40
Prattville Christian Academy	260
Prattville Elementary School	652
Prattville High School	2,141
Prattville Intermediate School	624
Prattville Junior High School	1099
Prattville Kindergarten	445
Prattville Primary School	639
Prattville YMCA Preschool and CDC	55
The Church of the Living Waters	105
The Learning Tree Child Dev Center	90
Tri County Christian Academy	275
Wee Bee Child Development Center	75

Data Source: Alabama Department of Human Resources and the Alabama Department of Education.
Source: MPO Staff

Table 3.27: Elmore County Public, Private, and Daycare Enrollment in 2015

NAME	2015 Enrollment
Cain's Chapel Weekday Children's Ministry	50
Calvary Baptist Church/ Noah's Ark	54
Chapman Christian Academy	350
Cobblestone Learning Center	75
Coosada Elementary School	609
Cousin Jane's Preschool	76
Creative Learning Center	21
Delightful Child Care Center	19
Edgewood Academy	300
Emerald Mountain Christian School	100
First Baptist Church Wetumpka	130
Holtville Elementary School	617
Holtville High School	492
Holtville Middle School	519
JF Ingram State Technical College	553
Kiddie College	45
Millbrook First United Methodist Church	45
Millbrook Middle/Junior High School	1,154
New Life Christian Academy	250
Periscope After School Summer Program	45
Pine Level Elementary School Prattville	951
Redland Elementary School	789
Refuge International Corporation	84
Robinson Springs Elementary School	564
Sandtown Head Start Program	58
Sesame Street Clubhouse	67
Stanhope Elmore High School	1,189
The Learning Tree CDC Millbrook	65
Thelma Baker Bradford Head Start Program	39
Victory Baptist School Junior and Senior High/Nursery and Preschool	106
Victory Baptist School K4-6th Grade	154
Wetumpka Early Head Start	587
Wetumpka Elementary School	968
Wetumpka Head Start Daycare	30
Wetumpka High School	1,132
Wetumpka Intermediate School	929
Wetumpka Junior High School	929
Wetumpka Preschool and Child Development Center	55

Data Source: Alabama Department of Human Resources and the Alabama Department of Education.
Source: MPO Staff

Table 3.28: Montgomery County Public, Private, and Daycare Enrollment in 2015

NAME	2015 Enrollment
Baldwin Arts/Academic Magnet School	586
Bear Elementary School	569
Bellingrath Junior High School	797
Blount Elementary School	627
Booker T Washington Magnet High School	479
Brewbaker Intermediate School	587
Brewbaker Junior High School	590
Brewbaker Primary School	746
Brewbaker Technology Magnet High School	606
Capitol Heights Junior High School	383
Carver Elementary School	510
Carver High School	1,247
Catoma Elementary School	227
Chisholm Elementary School	751
Dalraida Elementary School	608
Dannelly Elementary School	791
Davis Elementary School	393
Dozier Elementary School	363
Dunbar Ramer Elementary School	194
ED Nixon Elementary School	513
Fews Secondary Alternative School	14
Fitzpatrick Elementary School	555
Flowers Elementary School	300
Floyd Elementary School	401
Floyd Middle Magnet School	482
Forest Avenue Elementary School	720
Garret Elementary School	666
Georgia Washington Junior High School	330
Goodwyn Junior High School	439
Halcyon Elementary School	600
Harrison Elementary School	230
Hayneville Road Elementary School	283
Head Elementary School	536
Highland Avenue Elementary School	381
Highland Gardens Elementary School	525
Houston Hill Junior High School	286
Jefferson Davis High School	2,081
Loveless Academic Magnet Program High School	448
MacMillan International Academy	273
Martin Luther King Elementary	278
McIntyre Middle School	361
McKee Elementary School (New)	657
McKee Junior High School (New)	438
Morningview Elementary School	625
Paterson Elementary School	184
Peter Crump Elementary School	535
Peterson Elementary School	153
Pintlala Elementary School	192
Robert E Lee High School	2,039

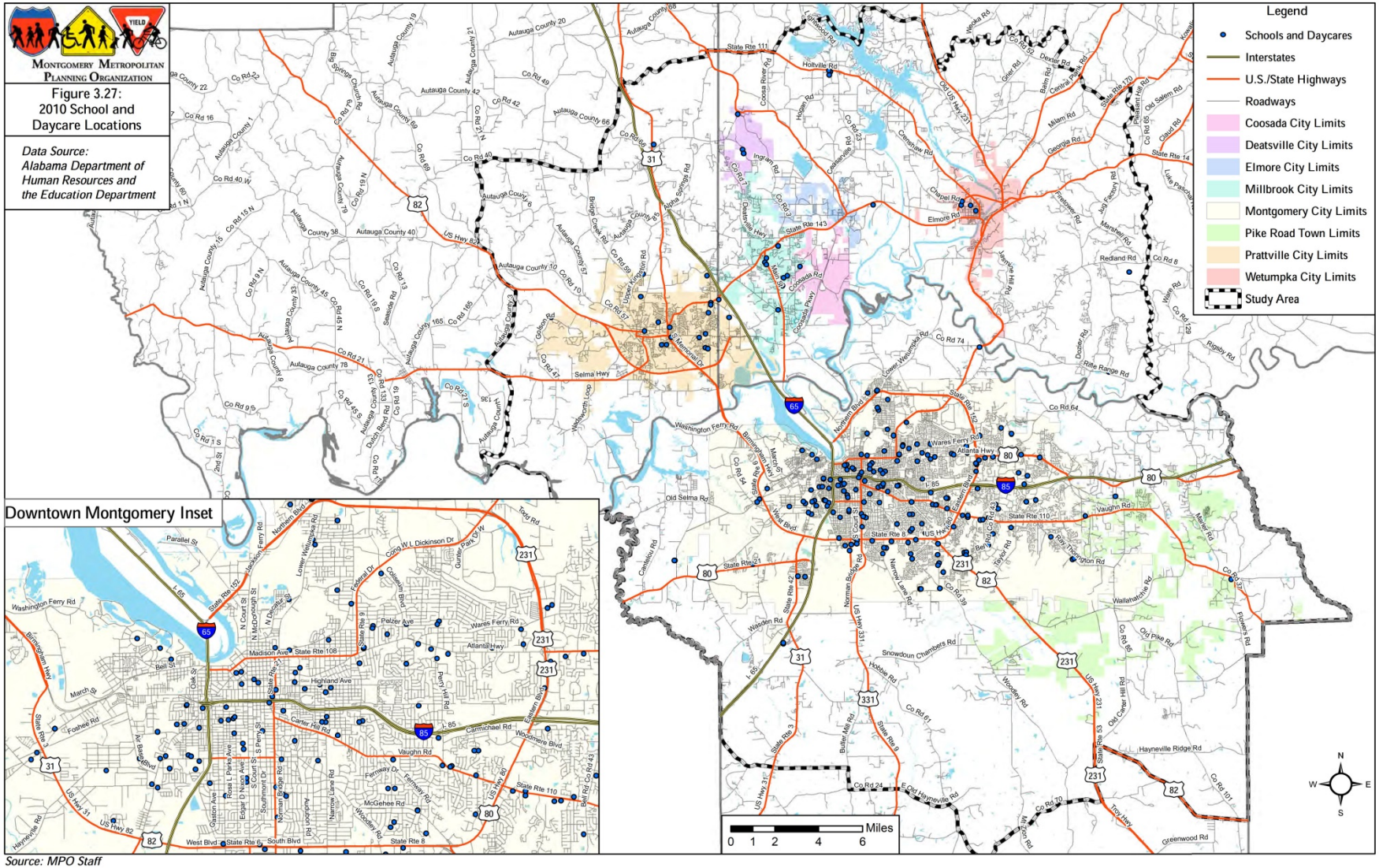
Seth Johnson Elementary School	449
Sidney Lanier High School	1,109
Southlawn Elementary School	365
Southlawn Middle School	466
TS Morris Elementary School	456
Vaughn Road Elementary School	605
Wares Ferry Road Elementary School	587

Data Source: Alabama Department of Human Resources and the Alabama Department of Education.
Source: MPO Staff

Table 3.29: 2015 Higher Education Enrollment

College, University, or Trade School Name	2015 Enrollment
USAF Air University (Maxwell-Gunter Air Force Base)	24,408
Alabama Police Academy	52
Alabama State University	5,469
Ambridge University	720*
Auburn University at Montgomery	5,128
Faulkner University	1,780
Huntington College	790
JK Ingram State Technical College (Montgomery)	276
Montgomery Job Corps	322
Prince Institute of Professional Studies	59
South University	363
Trenholm State Technical College (Air Base Blvd)	602
Trenholm State Technical College (Troy Highway)	796
Troy State University Montgomery	4,257
Troy State University School of Nursing	440

*97% online
Source: Each university, college, or trade school.
Source: MPO Staff



Source: MPO Staff

3.8.5 Historic Sites and Districts

Historic sites are protected by Section 4(f) of the Departments of Transportation Act (as amended) and Section 106 of the Historic Preservation Act. The preservation of historic sites/districts enables the preservation of structural and cultural artifacts that define and shape our past and future. In particular, theCity of Montgomery has significant historical sites from the Civil Rights Movement. The National Register of Historic Places, the Alabama Register of Landmarks and Heritage, and Local Historic Listingswere used to compile the list of historical sites/districts. Table 3.30 lists the MPO study area Historic Districts, and Figure 3.28 details their locations.

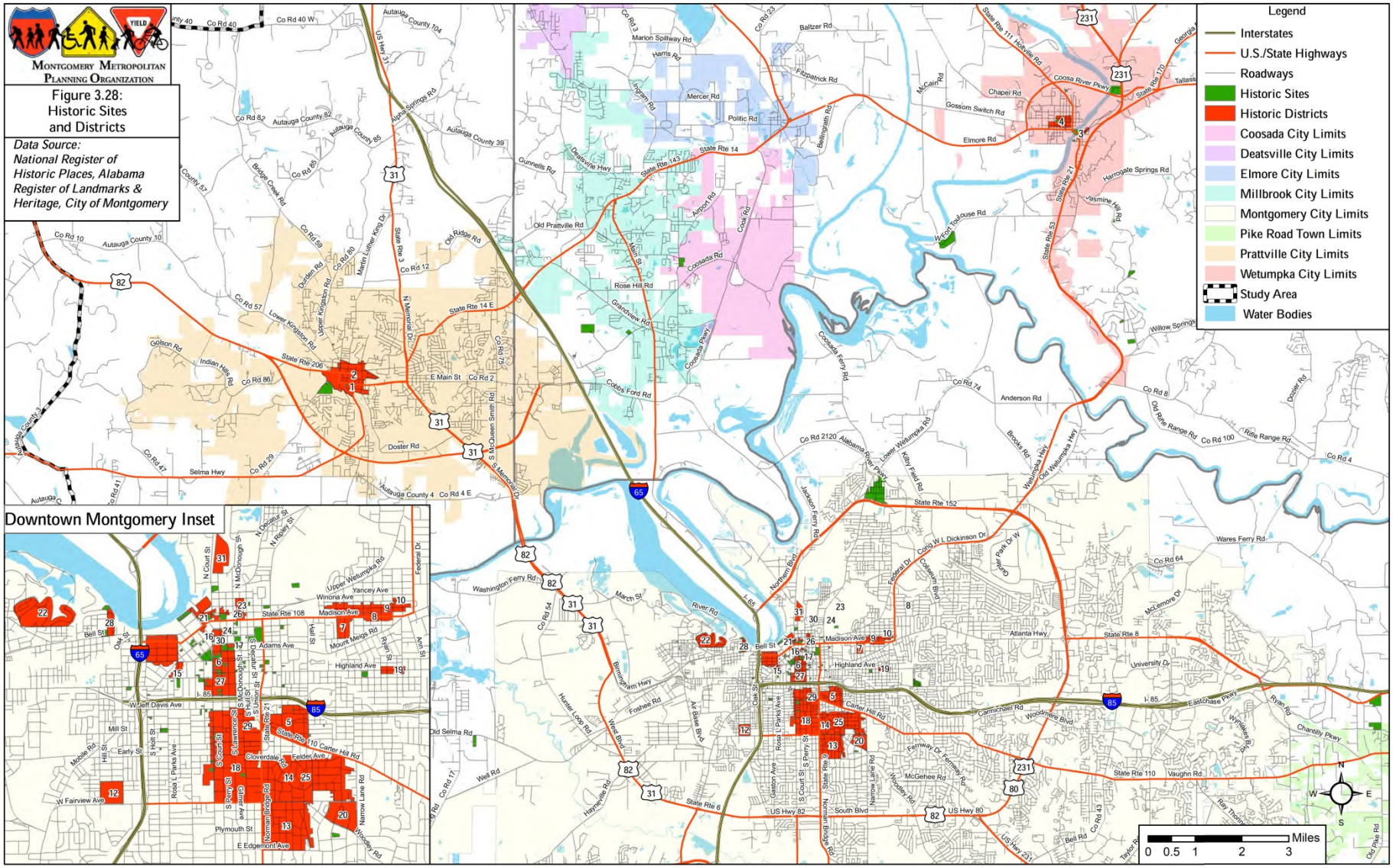
3.8.6 Hospitals, Libraries, YMCA, Parks, and Community Centers

Hospitals, libraries, parks, community centers, and YMCAs are social/environmental factors that affect quality of life and development patterns. Increasing access to medical care is a possible positive outcome for transportation projects, while decreasing or eliminating park lands is a possible negative outcome. Unlike many other factors, these factors can both negatively and positively be affected by the sameproject depending on the population questioned. The possibility of affecting one of these factors can be evaluated at the project proposal phase, and the possible positive or negative effects can be detailed in the preliminary engineering phase of each project. Figure 3.29 details the location of each throughout the study area.

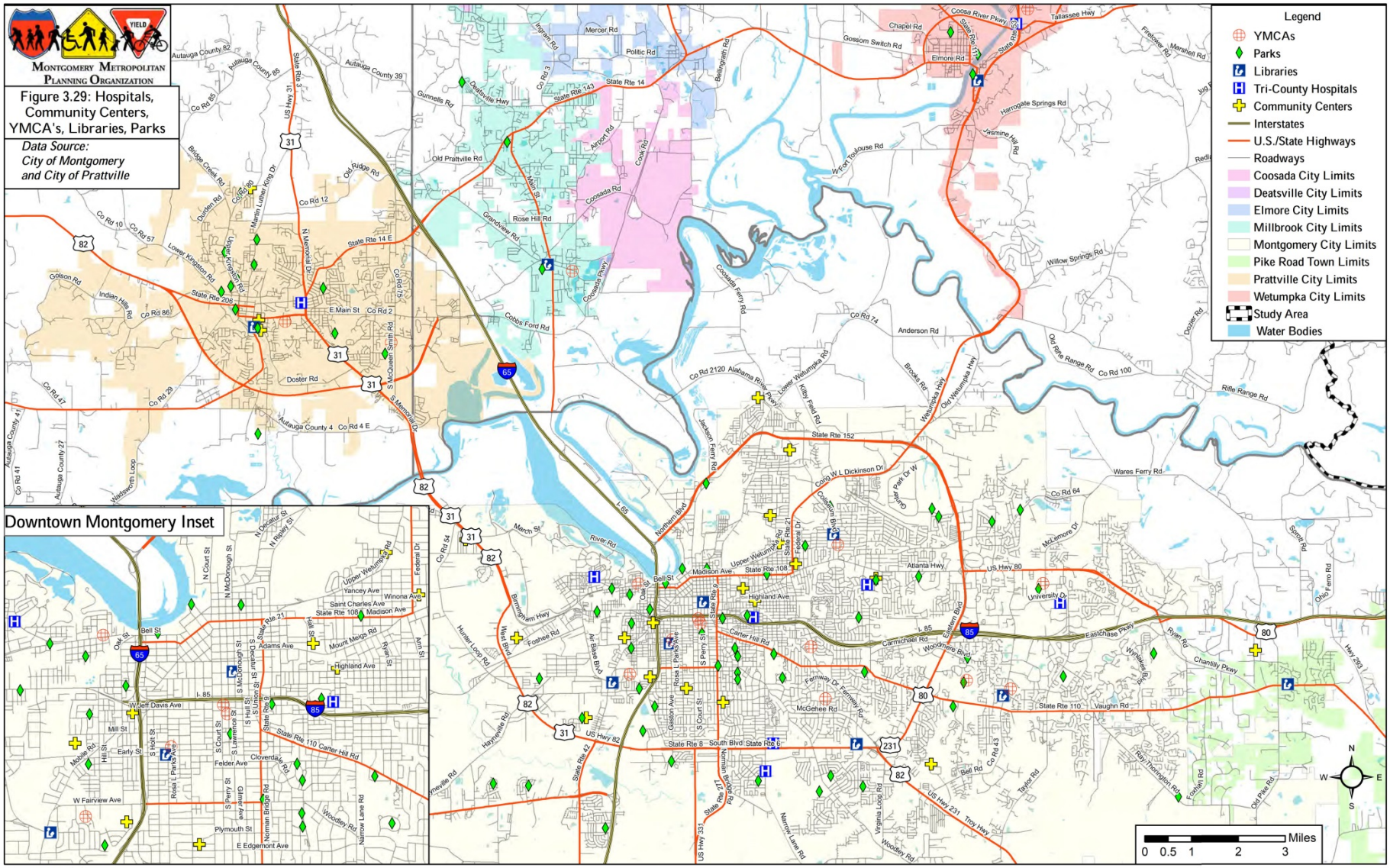
Table 3.30: Historic Districts by Location and Register

Name	Register	Map ID	County
City of Prattville Historic District	National	1	Autauga
Daniel Pratt Historic District	Local	2	Autauga
East Wetunpka Commercial Histiric District	National	3	Elmore
Tuskeena Street District	State	4	Elmore
Alabama State University Historic District	National/State	5	Montgomery
Baldwin District	Local	6	Montgomery
Capital Heights-Capital Parkway	Local	7	Montgomery
Capital Heights Madison	Local	8	Montgomery
Capital Heights-St. Charles	Local	9	Montgomery
Capital Heights-Winona	Local	10	Montgomery
Centennial Hill Historic District	State	11	Montgomery
City of St. Jude Historic District	National	12	Montgomery
Cloverdale-Idlewood	Local	13	Montgomery
Cloverdale Historic District	National	14	Montgomery
Cottage Hill Historic District	National/State/Local	15	Montgomery
Court Square-Dexter Avenue Historic District	National	16	Montgomery
Dowe Historic District	National	17	Montgomery
Garden District	National/Local	18	Montgomery
Highland Avenue	Local	19	Montgomery
Huntington College Campus Historic District	National	20	Montgomery
Lower Commerce Street Historic District	National/Local	21	Montgomery
Maxwell Air Force Base Senior Officer's Quarters	National	22	Montgomery
North Hull Street	Local	23	Montgomery
North Lawrence-Monroe Street Historic Districts	National	24	Montgomery
Old Cloverdale	Local	25	Montgomery
Ordeman-Shaw Historic District	National	26	Montgomery
Perry Street Historic District	National	27	Montgomery
Powder Magazine	Local	28	Montgomery
South Highland Court	Local	29	Montgomery
South Perry Street Historic District	National	30	Montgomery
Western Railway of Alabama Carshops/Engine Terminal	State	31	Montgomery

Source: National Register of Historic Places, Alabama Register of Landmarks and Heritage, City of Montgomery, and City of Prattville.



Source: MPO Staff



Source: MPO Staff

3.9 Environmental Mitigation and 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 GHS 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. 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."

Excerpt from Introduction to *Integrating Climate Change into the Transportation Planning Process*- FederalHighway Administration, Final Report, July 2008

3.10 Air Quality Conformity Process

The Clean Air Act (CAA), codified as Title 42 USC Section 7401, and implemented by the EPA under Title 40 CFR, Parts 51 and 93, establishes tolerance standards on ground-level and atmospheric pollutantsand provides for corrective mitigation measures when area monitor readings exceed allowable levels. Air quality in Alabama, as in other states, is adversely affected by pollutant emissions from automobile and truck exhaust systems, and this condition is exacerbated by congestion on urban roadways. This connection between automobile/truck emissions, traffic congestion, and increasing pollutant levels is wellestablished and acknowledged by EPA, FHWA, and other agencies.

Common pollutants include ground level ozone (O_3) and particulate matter 2.5 ($PM_{2.5}$), among others, andthe EPA standards, which determine tolerance violations are known as the National Ambient Air Quality Standards (NAAQS). Standards are typically established for ground-level ozone in terms of parts per billion (ppb) and for particulate matter, in tons per day. A violating pollutant is measured by a monitoring station in 1-hour and 8-hour increments for a given year to arrive at allowable averages.

Title 40 CFR Part 93 provides the rules and regulations for Air Quality Conformity, stating the procedures and requirements necessary by states and local governments to reach conformity. Titles 23 and 49 of USC are interpreted through the FHWA's 23 CFR 450 to ensure conformity compliance is carried through in local planning by the MPOs and other transportation agencies.

3.10.1 Transportation Conformity

Conformity, as commonly defined, is *a process which ensures federal funding and approval goes to transportation activities that are consistent with our air quality goals.* SAFETEA-LU links conformity requirements to continued funding of transportation projects. The USDOT cannot fund, authorize, or approve federal actions to support projects that do not conform to CAA requirements governing the current NAAQS. Air Quality Conformity requires that projects are included in a *conforming* and fiscally constrained transportation plan (LRTP) and a similarly constrained short range program, TIP.

States are required to establish State Implementation Plans (SIP), providing air quality goals for transportation plans and programs. The SIP, as set forth in 23 CFR 450.104, will generally state *that transportation activities will not cause new air quality violations, worsen existing conditions, or delay timely attainment of the air quality standards.*

SIP's are established for the various pollutants monitored in a given area, as required by CAA. Each pollutant is assigned an allowable emission ceiling, referred to as the emissions *budget*. This becomes *the*

highest level of emissions allowed under an LRTP or TIP, while demonstrating attainment of standards. It is against the budgets that readings from monitoring stations are measured to determine whether an area or county is non-conforming and thus must begin the mitigation process. Failing to meet conformity rules or exceeding emissions budgets can have varying outcomes. They may include the loss of federal funding, projects underway can be halted, federal permits can be denied, and programmed projects can be frozen in place, any of which can seriously and immediately impact a road network. For any and all of those reasons, it is essential that immediate steps are taken by the affected MPO to begin the Air Quality Conformity Determination process.

3.10.2 Conformity Conclusions and Attainment Status

The Montgomery MPO area is currently (as of the development and adoption of the 2045 LRTP) classified as an attainment area for all criteria pollutants (the pollutants for which EPA has developed NAAQS under the CAA)..

3.11 Transportation Demand Management

The transportation system consists of infrastructure supply (roadways, rail, air space, and navigable waters) and the means to utilize the system (vehicles, pedestrians, bicyclists, public transit, trains, airplanes, and water craft). One goal of the 2045 LRTP is to effect efficient utilization and achieve a balance of mobility options across all modes. When any element of the multimodal system is in great demand, over utilization may result. Commonly referred to as traffic congestion, crush load, or delayed flights, one of the most common solutions to alleviate transportation demand is to provide greater supply by adding capacity. However, the ability to add capacity is constrained by other 2045 LRTP goals, including keeping the program financially feasible and ensuring the plan is environmentally and community sensitive. Due to any number of constraints, it is not always practical or feasible to add capacity; therefore, one set of solutions that is always considered in the planning process is utilization of Transportation Demand Management (TDM) strategies.

TDM strategies focus on reducing the demand for any given element in the transportation system and are implemented in addition to or in lieu of infrastructure or service investments. TDM strategies are generally applied to reduce traffic congestion and combine both policy initiatives and infrastructure investments that promote trip reduction. Policy initiatives that encourage reduction of single occupant vehicle (SOV) trips often target commute trips and include changes to the standard 8 a.m. to 5 p.m. work schedule such as telecommuting, changing work hours, or working on a compressed work schedule. Infrastructure and service investments that can reduce trip production include the addition of high occupancy vehicle (HOV) lanes, park-and-ride facilities, and improved bus service. By investing in HOV lanes, transit service, and park and ride facilities, HOV travel is encouraged through carpooling, vanpooling, and transit use.

4.0 Transportation System Overview

The purpose of the 2045 LRTP is to ensure the transportation system network is suited to regional transportation needs and provides an efficient and effective, multimodal transportation system through 2045. The transportation system within the Montgomery region includes roadways, railways, aviation, water, bicycling, pedestrian, and transit local bus and private bus. In this section, an inventory and description of each element of the transportation system is presented.

4.1 Roadways

The Montgomery study area is bisected by two Interstates: I-65, which connects Montgomery northward to Birmingham and southward to Mobile, and I- 85, which connects Montgomery eastward to Atlanta, Georgia. Roadways designated as part of the National Highway System (NHS) include US 331, US 31, US 231/State Route (SR) 9, and SR 108 andSR 152. US 231/SR 53 and US 80/SR 8 are designated as NHS Strategic Highway Network (STRAHNET) routes. The study area also has three designated Surface Transportation Assistance Act (STAA) routes: US 82, from SR 206 in Prattville to US 231; US 231, from north of Wetumpka thru Montgomery to the Florida state line; and SR 152, from US 231 to I-65. Other major roads in the study area are SR 3, SR 6, SR 14, SR 63, SR 110, SR 111, SR 143, SR 170, and SR 271.

To determine the adequacy of a highway system, it is necessary to inventory roadways according to how they fulfill two purposes: movement of traffic (for people and goods movement) and access to property. By assessing the degree to which a particular roadway serves each of the two basic functions, a roadway functional classification can be determined. ALDOT, along with local transportation professionals working at MPO and FHWA, are responsible for classifying all roads in the public road system by their geographic location in rural, small urban, or urban areas according to their character of service. Functional classification was determined for each road in the network using the ALDOT/FHWA functional classification system in order to accurately identify service characteristics of each roadway. The MPO study area contains 2,249 centerline miles of roadways. All roads in the study area have been grouped into the following four functional classifications:

- Interstates - Defined as significant highways that feature limited access and continuous, high-speed movements for a wide variety of traffic types. I-85 and I-65 run approximately 56 centerline miles through the MPO study area, accounting for 6 percent of the system. Both I-65 and I-85 are 4 to 6-lane facilities with a posted speed of between 55-70 miles per hour (mph).
- Arterials - Classified as principal or minor, these roads connect activity centers and carry large volumes of traffic at moderate speeds. The arterial system in the MPO study area totals approximately 392 centerline miles, of which 121 miles are principal arterials and 271 miles are minor arterials. Arterials comprise 41 percent of the roadway system. The arterial system is significant because its share of roadway volume is more substantial than otherwise indicated by its share of total roadway miles.
- Collectors - Typically allow access to activity centers from residential areas. ALDOT classifies collectors as urban, major rural, or minor rural. Their purpose is to collect traffic from streets in residential and commercial areas and distribute it to the arterial system. The collector system in the MPO study area is 506 centerline miles, or 52 percent of the system.
- Local Roads - Feed the collector system from low volume residential and commercial areas. Usually local streets are found in subdivisions and rural areas. There are approximately 2,249 centerline miles classified as local roads in the MPO study area based on the MPO GIS local roadway centerline file.

The travel demand model is a tool that provides a means to evaluate the roadway network. The travel demand model is an abstraction of the actual network. Only roadways classified as collector or above are coded into the model network. Figure 4.1 illustrates the model network functional classification. Table 4.1 summarizes the 2015 base year model network distribution by functional classification.

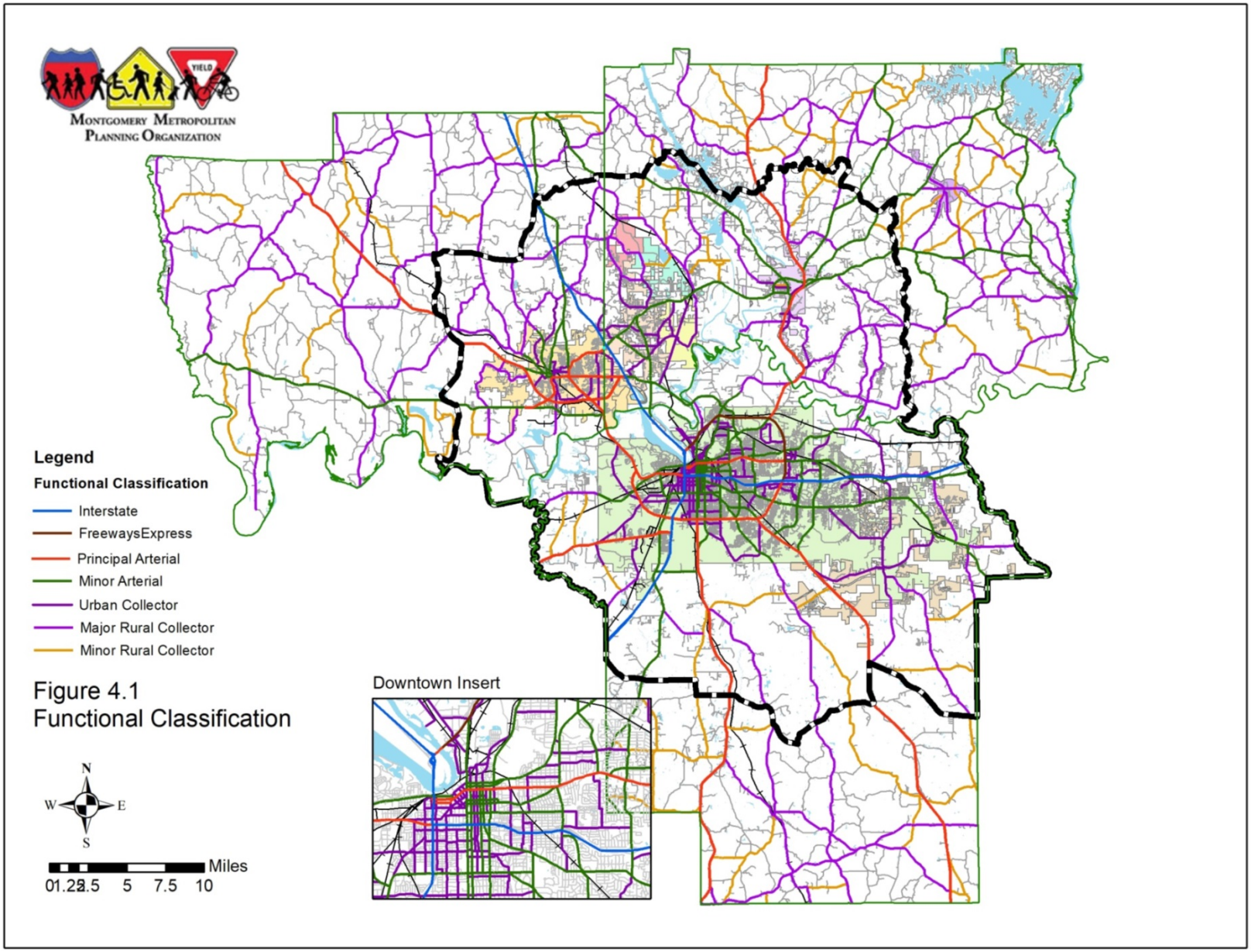


Figure 4.1
Functional Classification

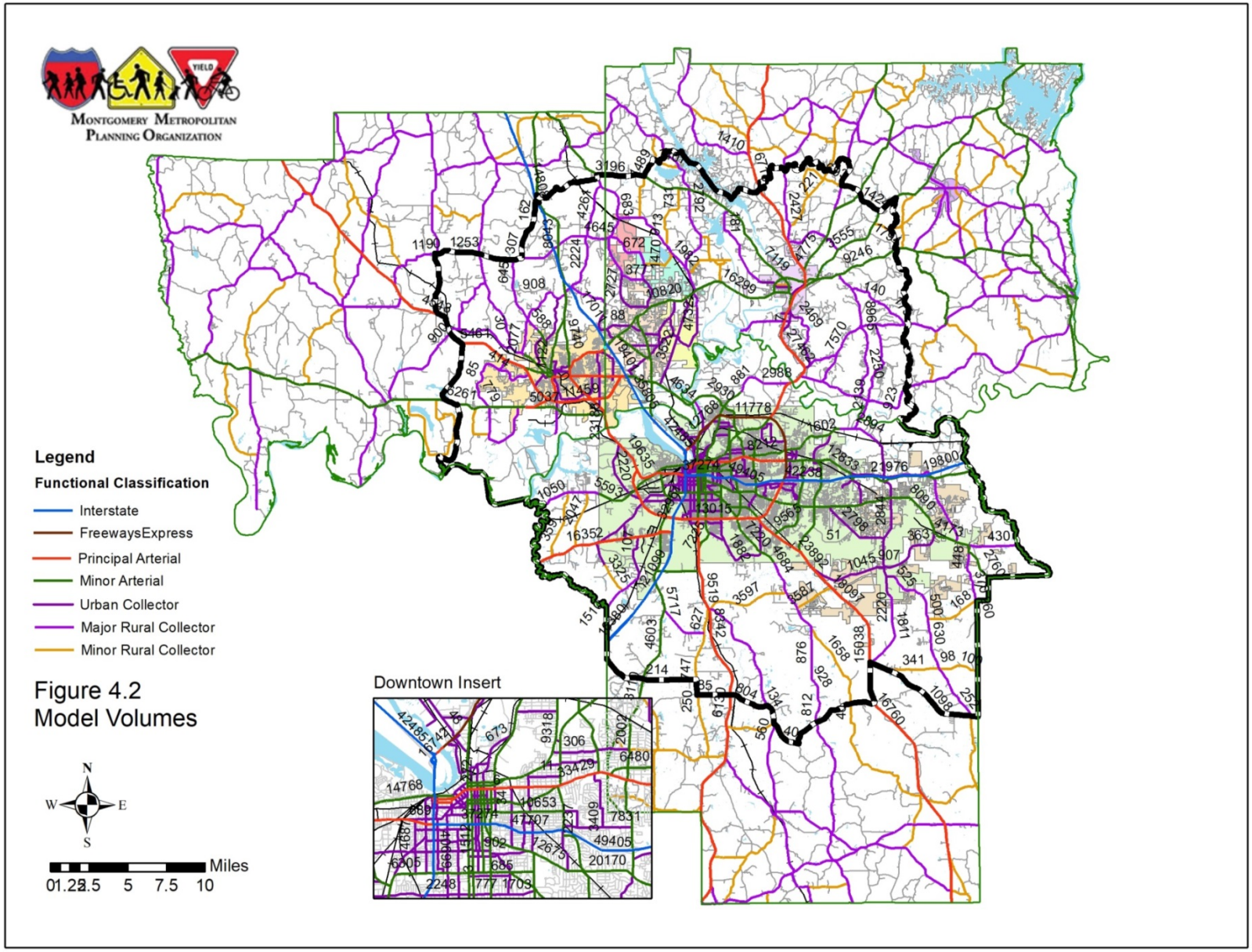


Figure 4.2
Model Volumes

Table 4.1: 2015 Model Network Descriptions

Functional Classification	Total Centerline Miles	Percent of Model Network
Interstate	58	6%
Freeways/Expressways Urban	15	1%
Principal Arterial	292	15%
Minor Arterial	470	23%
Collector	1,116	55%
Total	2,010	100%

Source: JRWA and FuturePlan

4.2 Network Utilization

ALDOT collects and prepares both hourly traffic volume counts and annual average daily traffic (AADT) for the entire state. AADT data is used to update, calibrate, and validate the travel demand model, and ensure the model can reasonably replicate actual roadway conditions within an acceptable range of variability as determined by ALDOT and FHWA. The 2015 base year travel demand model average daily volumes are shown in Figure 4.2. As is expected, the network roadways with the greatest volumes are the Interstates and principal arterials. The City of Montgomery has the most facilities with volumes exceeding 20,000 vehicles per day.

4.3 Bridges

Bridges are categorized separately from the roadway system because bridges are structural; special attention must be paid to bridge structural integrity and performance. ALDOT is responsible for the state bridge inventory and periodic bridge inspection, which is reported to the National Bridge Inventory (NBI). ALDOT inspects bridges every two years, and each bridge is assigned a sufficiency rating of between 0 (poor) and 100 (excellent). The sufficiency rating is based on the following:

- Structural adequacy and safety
- Serviceability and functional obsolescence
- Essentiality for public use

ALDOT also identifies functionally obsolete and structurally deficient bridges. Bridges can be categorized as functionally obsolete even when in good structural condition. Functionally obsolete bridges are structurally unable to accommodate current traffic. An example for why a bridge would be categorized as functionally obsolete is that it is too narrow for two large vehicles to cross simultaneously.

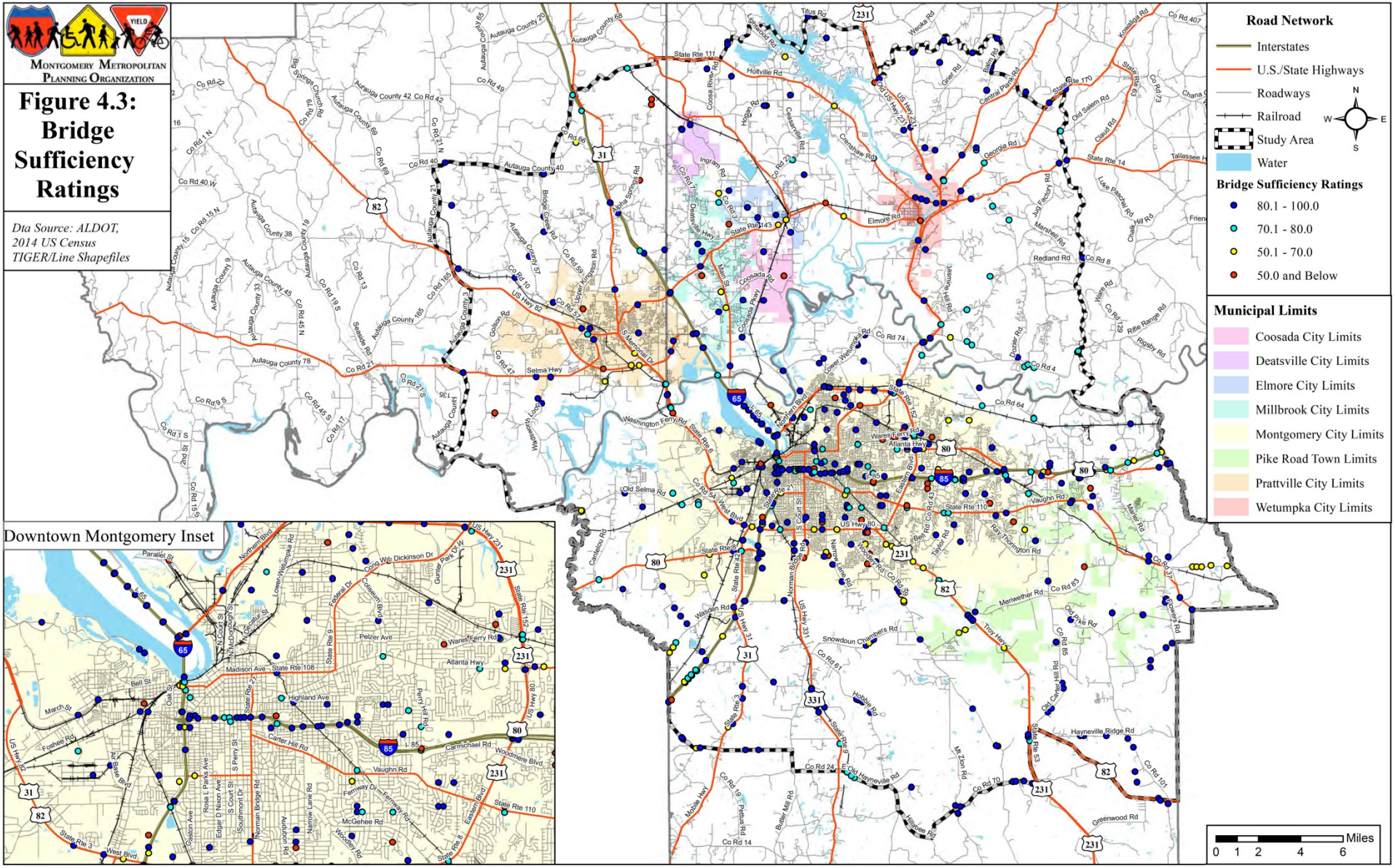
Eligibility for federal funding is determined by FHWA guidelines based on sufficiency ratings. The guidelines governing eligibility for bridge replacement or rehabilitation funding are as follows:

- Replacement, the Bridge sufficiency rating must be 50 or below, and it must be categorized as functionally obsolete and/or structurally deficient.
- Rehabilitation, the Bridge sufficiency rating must be between 50 and 80, and it must be categorized as functionally obsolete and/or structurally deficient.
- Bridges with a sufficiency rating above 80 are not eligible for federal bridge funds.

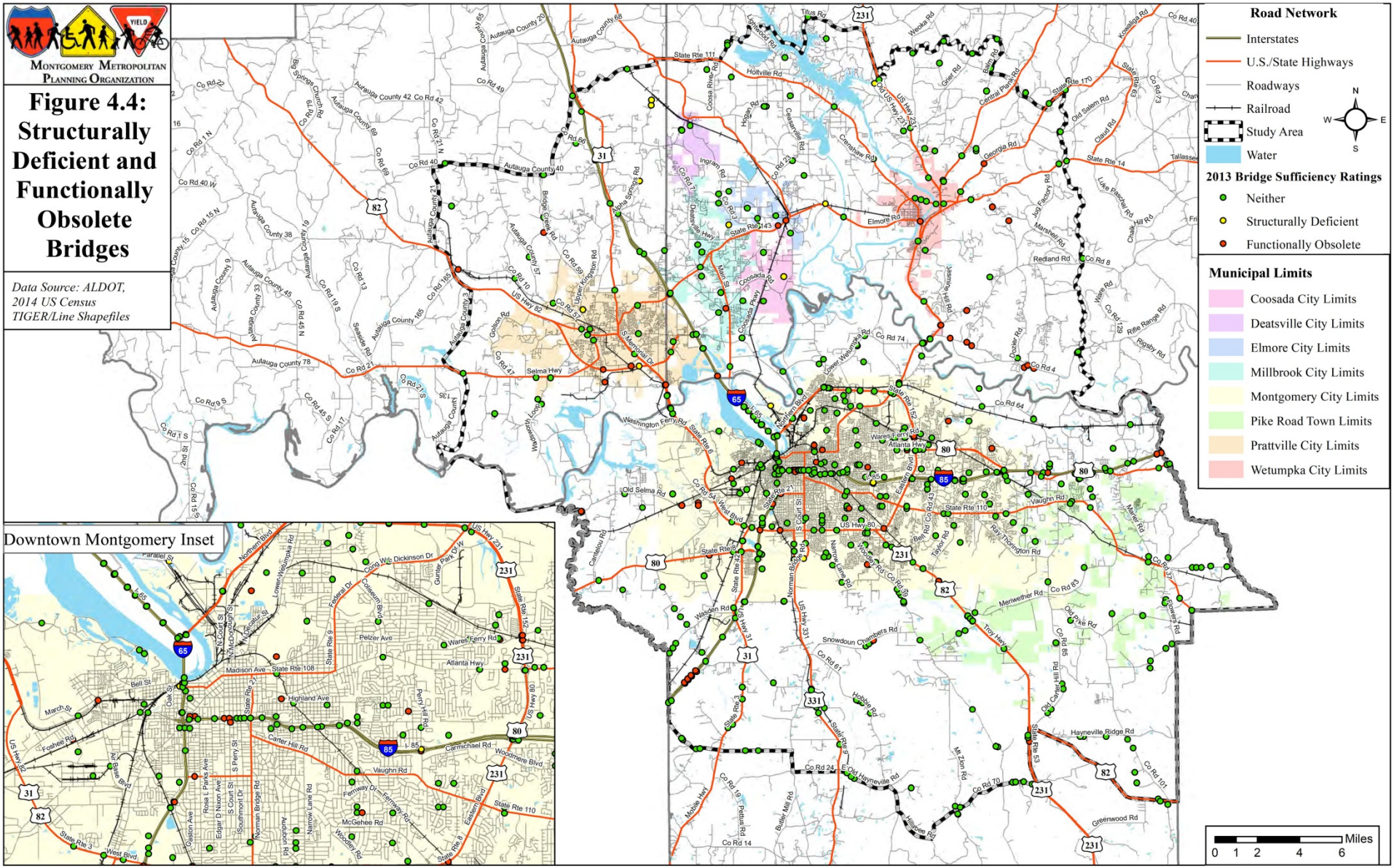
The current consensus is that once a bridge is over the age of 50, either rehabilitation or replacement is necessary. Figure 4.3 details the sufficiency rating of the bridges within the MPO study area, Figure 4.4 details the bridges that are classified as functionally obsolete or structurally deficient, and Figure 4.5 details the bridges that will be over the age of 50 in 2045.

Of the 646 Montgomery area bridges, 98 (15.2 percent) are rated functionally obsolete and 16 (2.5 percent) are rated structurally deficient. Four of 114 functionally obsolete and structurally deficient bridges received the lowest sufficiency rating and require replacement. Seventy-five bridges received a sufficiency rating between 50 and 80 and have been identified as needing rehabilitation. The remaining

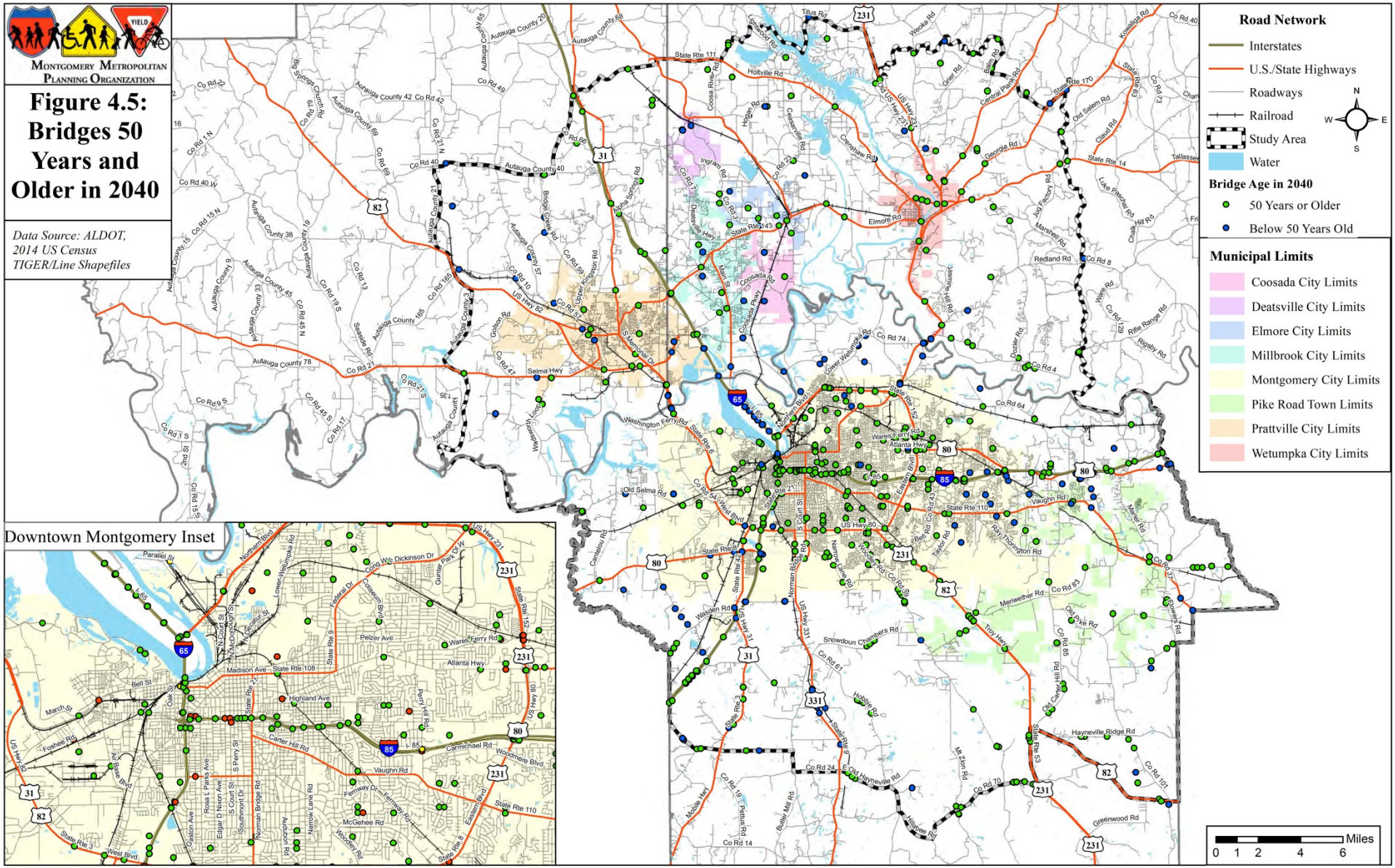
35 bridges received a sufficiency rating above 80 and are not eligible for federal replacement funds.



Source: MPO Staff



Source: MPO Staff



Source: MPO Staff

4.4 Transit

The MPO study area is served by local, rural, and intercity transit services. The M, formerly Montgomery Area Transit System or MATS, operates within the city limits of Montgomery. The Autauga County Rural Transportation Program operates within the rural portions of Autauga County and in Prattville, and they also deliver transit patrons to and from Montgomery County (primarily City of Montgomery). Intercity bus service is provided by Greyhound and Capital Trailways.

4.4.1 The M

Now known as The M, the former Montgomery Area Transit System (MATS) was purchased by the City of Montgomery in 1974, and contracted with American Transit Corporation and later Queen Management Group until 1998 to operate the system. In 1998, 17 fixed routes were temporarily replaced with a Demand and Response Transit (DART) system (call-in reservation system). The service changes were due to reductions in federal operating support for the system and seen as a cost-effective option. The Montgomery Area Paratransit (MAP) service was maintained during this period to continue service to persons with disabilities.

After a change of administration, City leaders realized that the newly implemented DART system was not effectively meeting the needs of the citizens of Montgomery. A trial run of three new fixed routes was implemented in March 2000, which led to an additional six fixed routes in March 2001 after the overwhelming success of the first three routes. The M is currently owned by the City of Montgomery and operated under a management contract with First Transit Group.

In 2011, The M replaced 8 of the SLF buses with Gillig Hybrid Electric buses. These buses have shown to increase fuel mileage, lower maintenance costs and release less emissions. These buses were purchased with ARRA (American Reovery and Reinvestment Act of 2009) and TIGGER (Transit Investments for Greenhouse Gas and Energy Reduction) Grant funds. In 2012, The M was awarded a State of Good Repair grant to replace older cut-away buses used in the operation of the paratransit service. In addition, a Bus Livability grant to purchase bus shelters was awarded.

The M operates fixed route and paratransit service within the City of Montgomery. The fixed route system includes 14 fixed routes, which operate Monday through Saturday from around 5 a.m. to 9:30 p.m., depending on the route. The frequency of service varies by route from 30 minute headways to 1 hour headways during peak service. The current fixed routes were initiated in March 2000. The M also operates a paratransit service for the disabled called Montgomery Area Paratransit (MAP). The base one-way fare for fixed route service is $2.00. The fare for senior citizens, disabled persons, and students is $1.00. The MAP fare is $4.00. Figure 4.6 shows the fixed route network.

The M is funded through farebox revenue, the City of Montgomery, and FTA's Section 5307 urbanized area funding program. The fiscal year 2023 available federal appropriations for the Montgomery urbanized area was $3,700,000 for operating assistance, $780,000 for preventive maintenance, $252,000 for capital, and $262,000 for ADA Paratransit. To be eligible for FTA Section 5307 funds, the City of Montgomery must provide a local match of 50 percent for operating funds and 20 percent for capital and paratransit funds. Table 4.2 gives a brief summary of The M's existing services, current ridership, and financial data.

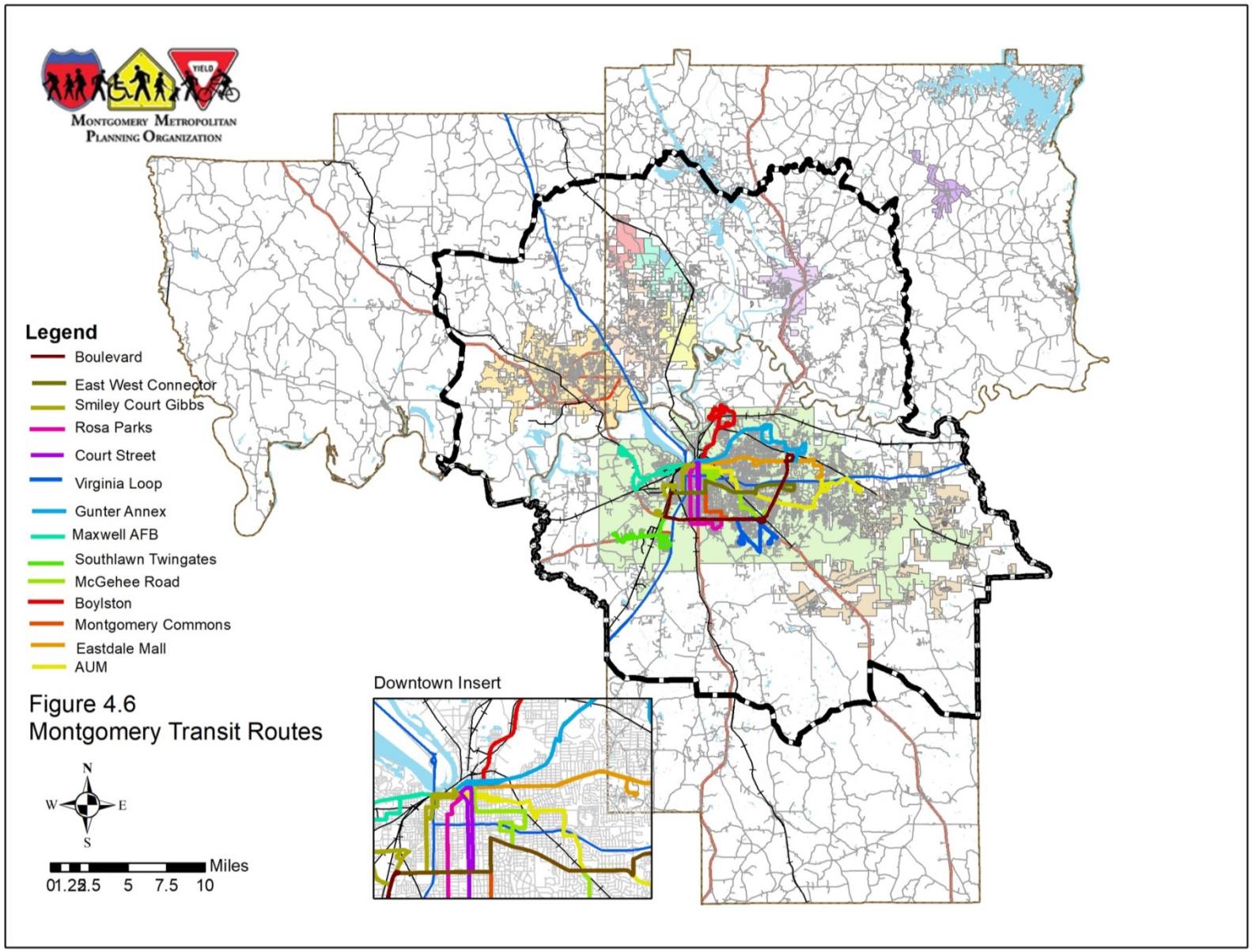


Figure 4.6
Montgomery Transit Routes

Table 4.2: Summary of Existing Service-The M and MAP

- **14** fixed routes with weekday service, and Saturday service on most routes. Typical weekday headways range from 30 minutes to 1 hour.
- Typical weekday service hours for most routes are 5:00 AM to 9:30 PM. Earliest weekday service (route #11) is 4:40 AM, latest is 9:30 PM.
- One demand-response service called Montgomery Area Paratransit (MAP) is available for disabled persons only. It is available anywhere within Montgomery city limits.
  - Curb-to-curb service is offered to persons with disabilities that are unable to use fixed bus route service.
- Standard one-way fares: $2.00 for fixed bus routes and $4.00 for MAP. Free transfers. $1.00 fare available to students (K-12), seniors, and riders with disabilities.
- Ridership data from National Transit Database (NTD) (Fiscal year 2019, most recent NTD statistics available):
  - Annual unlinked trips: 602,397 (579,203 fixed route; 23,194 MAP)
  - Average daily boardings: 2,205 weekday (Monday-Friday; 753 Saturday)
  - Annual passenger miles: 2,777,604 (2,536,909 fixed bus routes; 240,695 MAP)
  - Annual vehicle revenue miles: 1,473,551 (1,234,896 fixed; 238,655 MAP)
  - Annual vehicle revenue hours: 92,647 (75,256 fixed;17,391 MAP)
- Financial information (2014 NTD):
  - Operating expenses: $7,634,514 ($6,040,792 for fixed route; $1,593,722 for MAP)
  - Breakdown of operating sources: 12% farebox revenues and auxiliary funds; 53% local funds; 35% federal assistance
- Fleet characteristics (2019 NTD):
  - 25 vehicles operated in maximum service (19 for fixed bus route; 6 for MAP bus)

Data Source: National Transit Database, The M Website
Source: MPO Staff

Table 4.3 indicates that there has been a small increase in fixed-route ridership from 2013-2014, but not a significant increase in overall performance measurement unit costs. The same is true for the paratransit- demand response service, which shows a small increase in ridership for the same 2014-2014 period and not a significant increase in overall performance measure unit costs.

Table 4.3: The M 2014 and 2014 Operating Performance

Service, Ridership and Costs	Fixed Bus Route		Paratransit Bus - Demand Response	
	2018	2019	2018	2019
Operating Expenses	$5,763,964	$6,040,792	$1,519,835	$1,593,722
Revenue Miles	1,173,631	1,234,896	235,348	238,655
Revenue Hours	74,909	75,256	17,311	17,391
Passenger Trips	605,572	579,203	27,398	23,194
Performance Measures				
Cost per Mile	$4.91	$4.89	$6.46	$6.68
Cost per Passenger Trip	$9.52	$10.43	$55.47	$68.71
Passengers per Revenue Hour	8.1	7.7	1.6	1.3

Data Source: 2013 and 2014 National Transit Database Source: MPO Staff

The following is a summary of existing FY 14 needs identified in the Montgomery Urbanized Area *Transit Development Plan.* The proposed improvements are designed to meet a number of planning objectives. The system should also be able to reach a higher level of performance in the

future. The planning objectives include:

- Simpler route alignments and system design
- More direct travel
- Consistent frequency of service
- Higher passenger productivity and on-time performance
- Consideration of new markets or non-traditional riders

Below are observations within the *Transit Development Plan* based on the data collected and tasks completed:

- Refinements to the existing routes and schedules are needed to help meet the planning objectives. Not addressing these issues could result in a less effective system with major cost issues.
- Most of the demand for public transportation is still found in the older, established neighborhoodslocated south and west of downtown Montgomery.
- Although some redevelopment activity is taking place in midtown and downtown, most of the residential, business/commercial, and employment growth is taking place in the east and southeast sectors of the city.
- On-time performance is having a major impact on timed transfers and system reliability.

4.4.2 Autauga County Rural Transportation (ACRT) Program

In service for over 30 years, the Autauga County Rural Transportation (ACRT) system operates a demandresponse service within Autauga County, including the City of Prattville. The service operates Monday through Friday from 6 a.m. to 5 p.m. A 24-hour advanced reservation is required for service. The primary service market includes elderly, low-income workers, disabled persons, head start participants, school-aged children, and dialysis patients. The base one-way fare is $2.00 for trips within Prattville,
$2.50 between communities within Autauga County, and $5.00 between Autauga County and the City of Montgomery. ACRT is funded through farebox revenue, Autauga County Commission funds, City of Prattville, and FTA Section 5311 rural program funding. Table 4.4 details the 2012-2013 ACRT Programoperating performance. Data from ALDOT's Transit Reporting System indicates that ACRT service provided an average of 173 daily trips in FY 2012, or 45,000 total trips. The total number of trips provided in 2012 was 45,000. The total operating cost was $415,672. Total fare box revenues were
$130,671, accounting for 31 percent of operating funds.

Table 4.4: ACRT 2013 and 2019 Operating Performance

Service, Ridership and Costs	Demand Response	
	2018	2019
Operating Expenses	$869,315	$715,397
Revenue Miles	272,951	272,175
Revenue Hours	19,970	22,478
Passenger Trips	42,011	43,848
Performance Measures		
Cost per Mile	$3.18	$2.63
Cost per Revenue Hour	$45.53	$31.83
Cost per Passenger Trip	$20.69	$16.32

Data Sources: 2012 and 2013 ALDOT Transit Reporting

SystemSource: MPO Staff

4.4.3 Intercity Bus

Intercity bus services are operated by Greyhound, Capital Trailways, and MegaBus. Greyhound operates a 24-hour passenger terminal at 950 W. South Boulevard in southwest Montgomery. Major citiesaccessible via direct routes from the Montgomery terminal include Selma, Birmingham, and Mobile, Alabama; Atlanta and Columbus, Georgia; and Pensacola and Panama City, Florida.

Capital and Colonial Trailways have been providing safe and reliable motor coach charter and tour transportation in the Southeast for over 77 years. Serving destinations throughout the entire U.S., they are equipped to meet every transportation need. Capital Trailways can help with any bus charter, bus rental,

group charter, group tour, or; and any special event requiring tour planning. Capital Trailways currently has a fleet of 31 luxury motorcoaches, 33 motorcoaches and 2 mini coaches/ trolleys.

MegaBus is the first low-cost express bus service to offer city center-to-city center travel for as low as $1 via the Internet. Launched in April 2006, megabus.com serves more than 100 cities across North America. From Montgomery, MegaBus travels to Mobile, Atlanta, and New Orleans.

4.4.4 CommuteSmart Montgomery

CommuteSmart is a program that aims to reduce traffic and its negative environmental effects by coordinating car/vanpools between the metropolitan areas of the state of Alabama. Persons are matched with an existing car/vanpool via the CommuteSmart website (www.commutesmart.org). Car/vanpools travel to and from Montgomery every day. Currently, 345 persons from the Montgomery area are in the rideshare database, 10 persons vanpool from Montgomery to Birmingham and 60 persons vanpool from Birmingham to Montgomery. CommuteSmart is offered in Montgomery, Mobile, and Birmingham.

4.5 Bicycle Facilities

One stated LRTP goal is to "address all modes providing a framework for modal connectivity that enhances mobility options for the community." In order to meet this goal, pedestrian and bicycle facilities are identified within the LRTP. Pedestrian and bicycle facilities are used for transportation as well as recreation and serve as an integral element of a multimodal transportation network. Pedestrian and bicycle facilities are vital for providing links to transit, accommodating short trips between neighborhoods and community facilities, and providing circulation between land uses in denser activity centers. The connection of neighborhoods to activity centers such as employment centers, community facilities, and retail opportunities by way of pedestrian and bicycle facilities improves resident accessibility to these locations.

At a minimum, FHWA requires that "bicyclists and pedestrians shall be given due consideration in the comprehensive transportation plan," according to 23 USC 217. FHWA's guidance states that "due consideration" of bicycle and pedestrian needs should include, at a minimum, a presumption that bicyclists and pedestrians will be accommodated in the design of new and improved transportation facilities. Inclusion of bicycle and pedestrian facilities in transportation facilities should be routine, and the decision not to include them should be the exception rather than the rule. "***Bicycle and pedestrian facilities will be included on all transportation projects unless exceptional circumstances exists, as defined below:"***

- 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. Excessively disproportionate is defined as exceeding 20 percent of the cost of the larger transportation project.
- Where sparsity of population or other factors indicate an absence of existing and future need. For example, the Portland Pedestrian Guide requires "all construction of new public streets" toinclude sidewalk improvements on both sides, unless the street is a cul-de-sac with four or fewer dwellings, or the street has severe topographic or other constraints.

In order to comply with these requirements, the MPO LRTP must, at a minimum:

- Consider the context of the project setting. In other words, MPOs should consider whether the general project area includes features like neighborhoods, shopping, schools, transit, or other facilities likely associated with the needs of bicyclists or pedestrians;
- Consider any evidence of existing, informal bicycle-pedestrian activities. An example could be aworn, dirt path along an existing road;
- Consider any reference to bicycle or pedestrian needs in the planning process for the project ;
- Consider public, agency, or other comments requesting such facilities.

The Montgomery Area MPO transportation planning staff developed its *2012 Bicycle and Pedestrian Plan* to address the growing interest and use of bike and pedestrian modes. Emphasis on health andfitness benefits, combined with the advantage of walking and biking for short trip segments has resultedin more interest in these modes. As part of the *2012 Bicycle and Pedestrian Plan* development, an inventory of existing and planned bicycle facilities was completed. Planned bicycle facilities are either funded for construction or preliminary engineering. Existing and planned bicycle facilities in the River Region are:

- Bicycle lane on Hall Street from High Street to Glenn Palmer
- Bicycle lane on Ft. Toulouse Road from US-231 to Ft. Toulouse
- Bicycle lane on Brown Springs Road from east of Atlanta Highway to AUM Roundabout
- Bicycle lane on Old Ware Road/Jackson Road
- Bicycle lane on Park Crossing from Wilson YMCA to Taylor Road
- Shared lane markings on Old Farm Lane
- Montgomery Riverwalk from Cypress Inlet to Intermodal Tower and Pedestrian Bridge
- Montgomery Riverwalk Connector from Wright Brothers Park to the Intermodal Tower andPedestrian Bridge
- Shared-use path on Park Crossing from Taylor Road to Ray Thorington Road
- Shared-use path on Maxwell Boulevard from Maxwell Boulevard east to I-65
- *Share the Road* signs and plaques in Montgomery County along various roadways
- Pike Road Nature Trail on Meriwether Road, Wallahatchie Road, and Marler Road
- Pike Road Nature Trail on Old Pike Road, Flowers Road, Mathews Road, and SR-110
- *Rails to Trails* project in City of Montgomery from North Decatur Street to I-85 (shared-use

path)

- Town of Pike Road Trail System
- Bicycle lanes on Vaughn Road from Chantilly Parkway to the Bridlebrook Farms Entrance
- Bicycle facilities on Vaughn Road from Taylor Road to Chantilly Parkway

Figure 4.7 and 4.8 detail all existing and planned bicycle facilities in the Montgomery MPO study area.

4.6 Pedestrian Facilities

Using the midway point between the Capitol and Court Square as the point of origin, the Downtown Corecan be approximated as the area within a half mile radius. The Downtown Core contains a dense clusterof sidewalks along both sides of nearly every roadway. However, these sidewalks have fallen into asevere level of disrepair and must be rehabilitated.

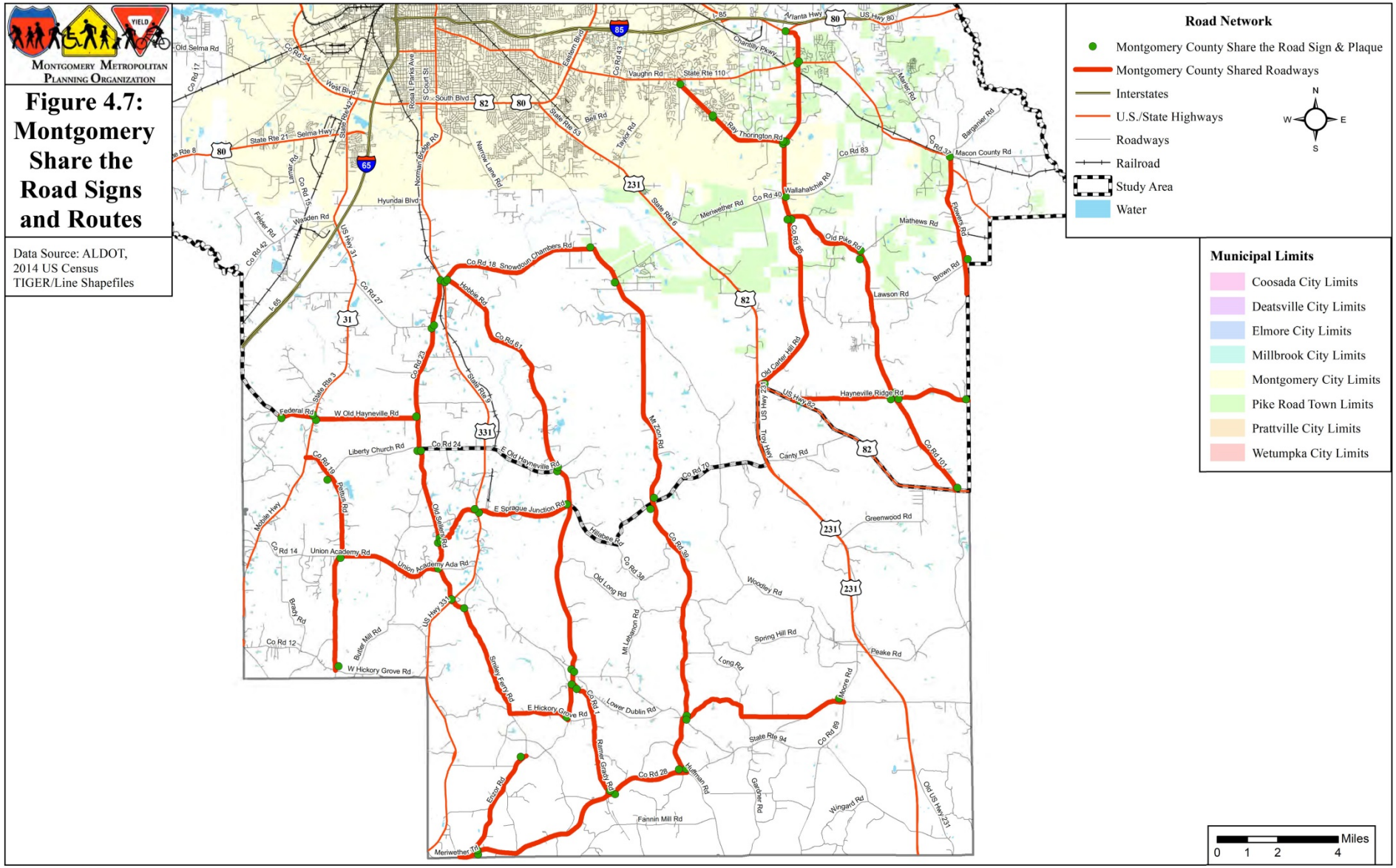
Extending this radius an additional half mile creates an approximate buffer for the Central Business District. As the network of sidewalks extends outward along the major connectors of High Street, Madison Avenue, and Adams Avenue, fewer connections are made. On the southern edge of the Central Business District, multiple streets with existing sidewalks cross I-85, entering the first ring of suburban development. Extending a mile beyond the limits of the Central Business District delineates the outer limits of the first ring of suburban development in Montgomery. The boundaries of this ring include the Ann Street exit of I-85, the northern edge of Cypress Park and Fairview Avenue. The neighborhoods that surround the Central Business District and comprise the first ring of suburban development in Montgomery include Capital Heights, Old Cloverdale, the Garden District, Highland Park, and Five Points. While many of these neighborhoods enjoy significant sidewalk coverage, other areas lack the connectivity provided by adequate pedestrian facilities. In many areas, sidewalks simply end. Additionally, many roadways that have sidewalks only have them on one side, forcing individuals to cross the roadway or surrender the advantage of the sidewalk.

While the neighborhoods closest to the Central Business District enjoy considerable sidewalk coverage, the second ring of development offers even fewer pedestrian amenities. And while the Central Business District demands rehabilitation, and the first ring suburbs demand improving coverage by providing both sides of the roadway, the second ring requires increased connectivity through the provision of sidewalks where none exist. Connectivity in the second ring neighborhoods such as McGehee Estates, Haardt Estates, and Dalraida remains difficult. With few sidewalks scattered across the city, the main objective inthis section must be connecting these various segments. Figure 4.9 details the Central Business District and each Suburban Development Ring. While connecting scattered segments will improve connectivity in the second ring, neighborhoods beyond the Boulevard must build an entire network from the beginning. In addition to functionally classified roadways, many neighborhoods and communities have internal pedestrian facilities, some along local streets and some within parks. One upcoming project heavily supported project is a pedestrian access bridge at Cloverdale-Idlewild's *Bottom Park* on DuPont Street.

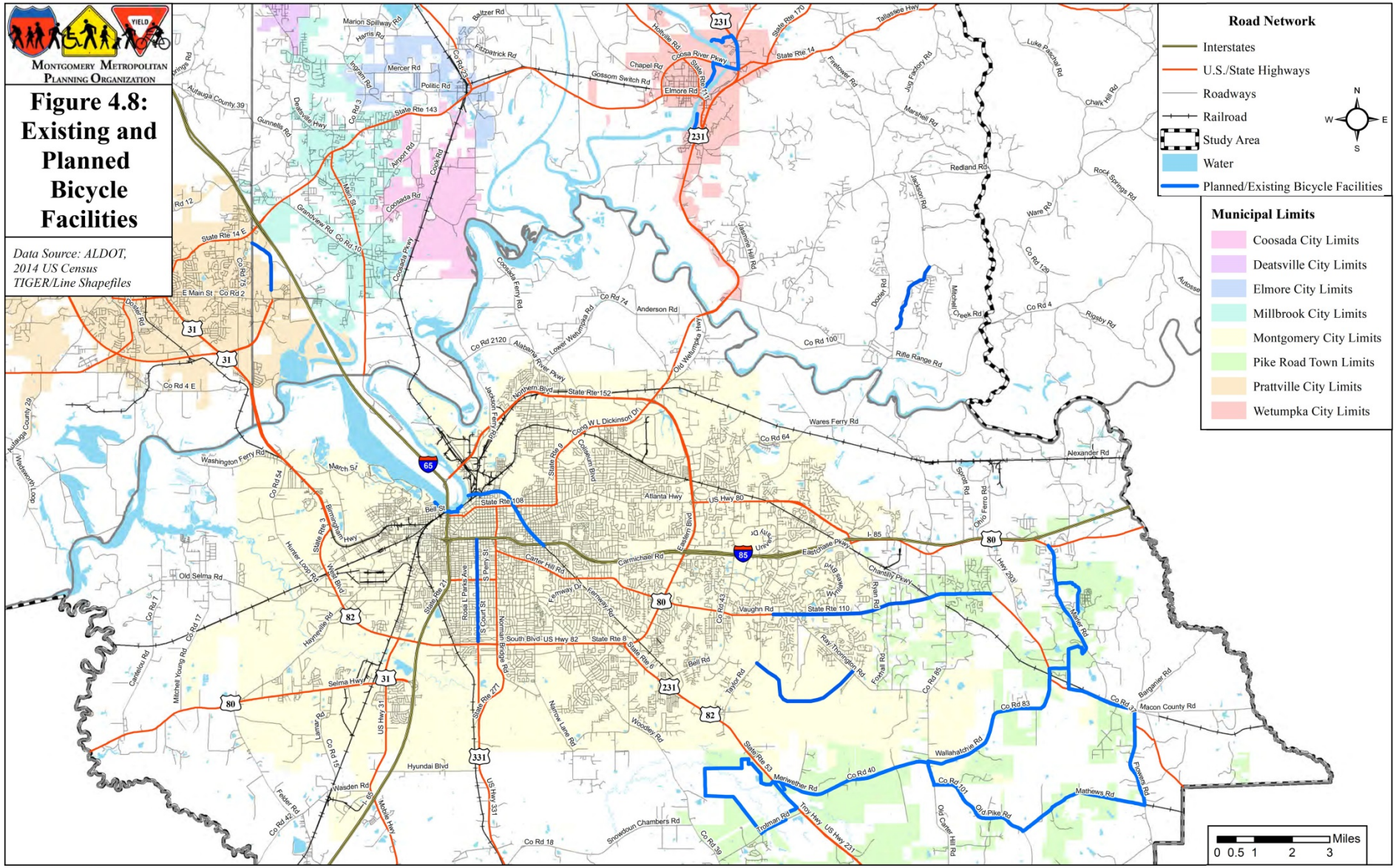
Montgomery has the highest number of sidewalks of any municipality. Of the seven additional municipalities, only four have sidewalks along functionally classified roadways. In all four, sidewalks concentrate pedestrian traffic around the downtown areas. Nine of the eleven roadways with sidewalks in Prattville are in downtown and all but one have sidewalks on both sides. Conversely, Elmore County roadways tend to have sidewalks on only one side, but still focus traffic toward the town center. While connectivity problems are pervasive in the study area of pervade all areas of the Metropolitan Planning area, each municipality enjoys strong foundations for successful pedestrian infrastructure.

A sidewalk inventory was completed on functionally classified streets to determine the location of sidewalks throughout the MPO study area. There are approximately 7.98 miles of sidewalks in

Autauga County, 9.55 miles of sidewalks in Elmore County, and 146.85 miles in Montgomery County. The sidewalk inventory of functionally classified roads was completed in fiscal year 2009. The inventory was completed by first analyzing aerial data from 2009, and then thru field work to confirm analysis. The inventory for the *2012 Bicycle and Pedestrian Plan*, analyzed the existing sidewalk network to determine gaps in pedestrian facilities. To ensure sidewalk network connectivity, all missing segments were added to the list of needed sidewalk projects. Figures 4.10 to 4.13 show the inventory results.



Source: MPO Staff



Source: MPO Staff

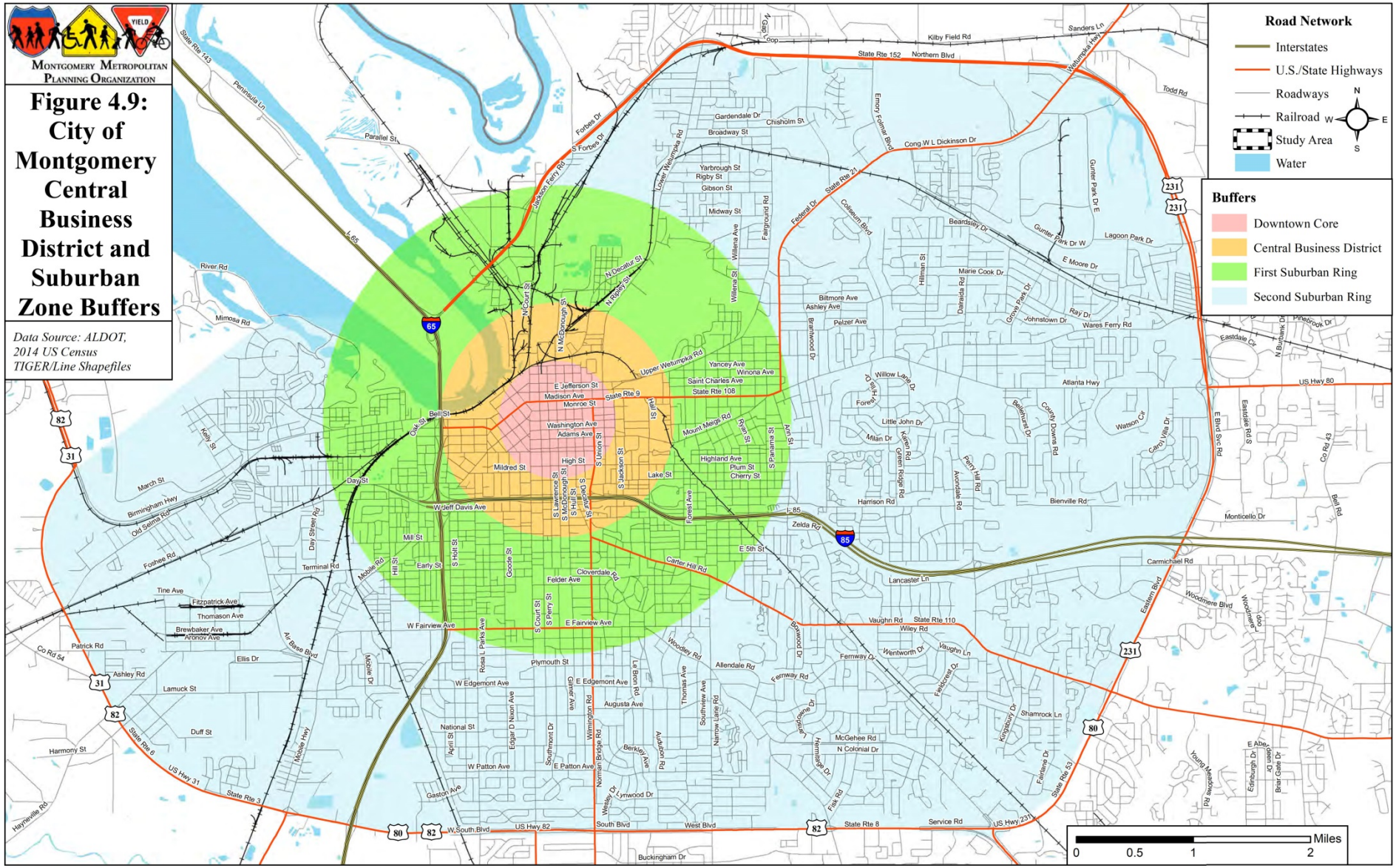
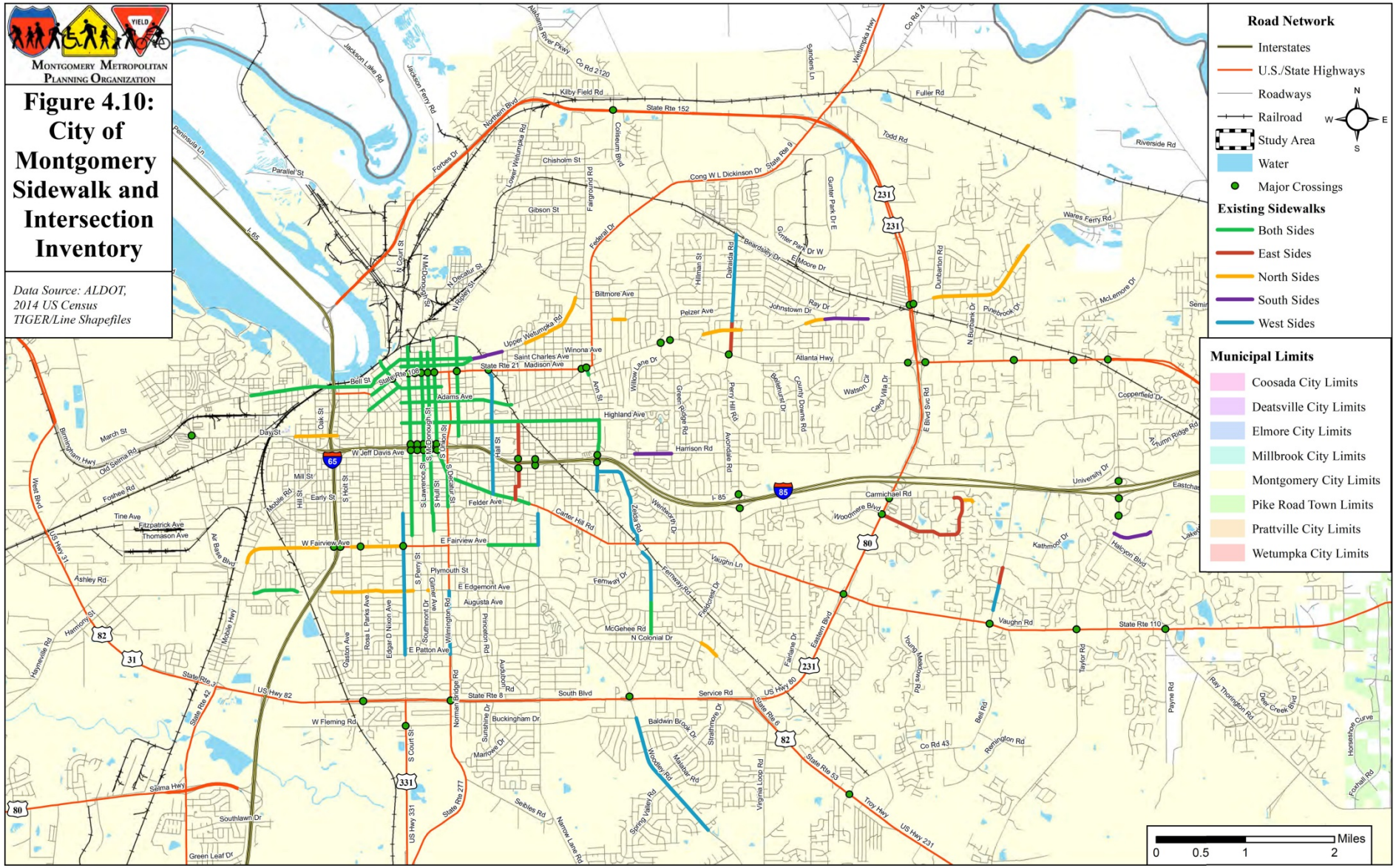


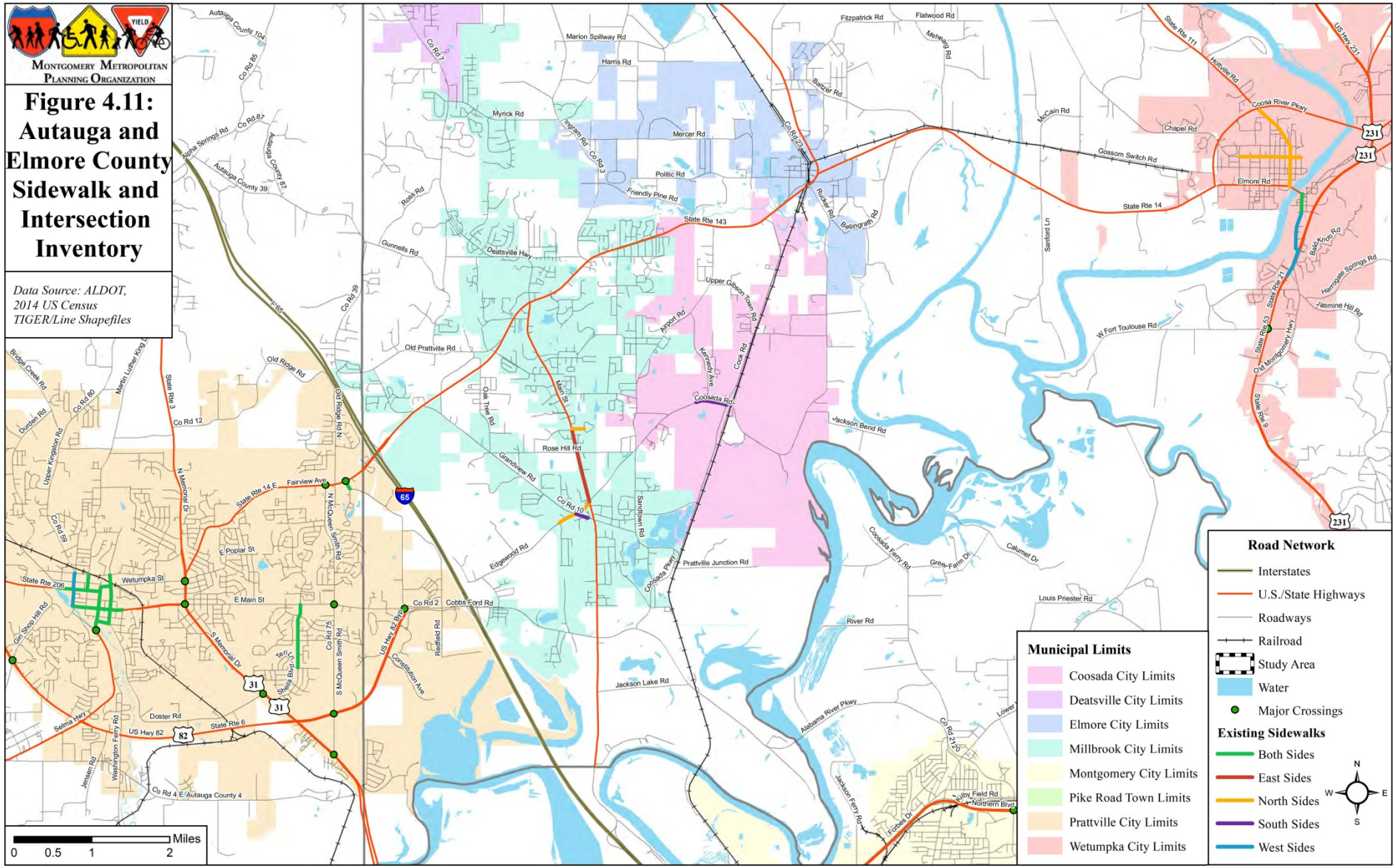
Figure 4.9: City of Montgomery Central Business District and Suburban Zone Buffers

Data Source: ALDOT, 2014 US Census TIGER/Line Shapefiles

Source: MPO Staff



Source: MPO Staff



Source: MPO Staff

4.7 Freight

The volume of freight moved by the U.S. transportation system has grown dramatically in recent decades and is projected to increase nearly 50 percent by 2025. As demand for freight service grows, concerns intensify about capacity shortfalls and congestion. Congestion is a serious problem for freight transportation. Reliable, predictable travel times are especially important in a global economy where many goods are needed in tightly scheduled manufacturing and distribution systems. Late arrivals can have significant economic costs for factories waiting for parts to assemble and for carriers who miss guaranteed delivery times. Public transportation planning has long focused on moving people around; however, understanding and planning for goods movement (freight) has been a part of metropolitan transportation planning requirements since ISTEA. Part of the public sector's challenge of planning for freight is that freight movement is largely generated by the private sector in a competitive rail and trucking industry. The Montgomery Regional Airport does have a small amount of air freight.

The Montgomery MPO Regional Freight Plan identifies a Freight Network for the MPO area, and improvements to facilities on the freight network are an integral part of the evaluation of projects for the LRTP and TIP. Figure 4.14 below illustrates the region's Freight Network.

4.7.1 Rail

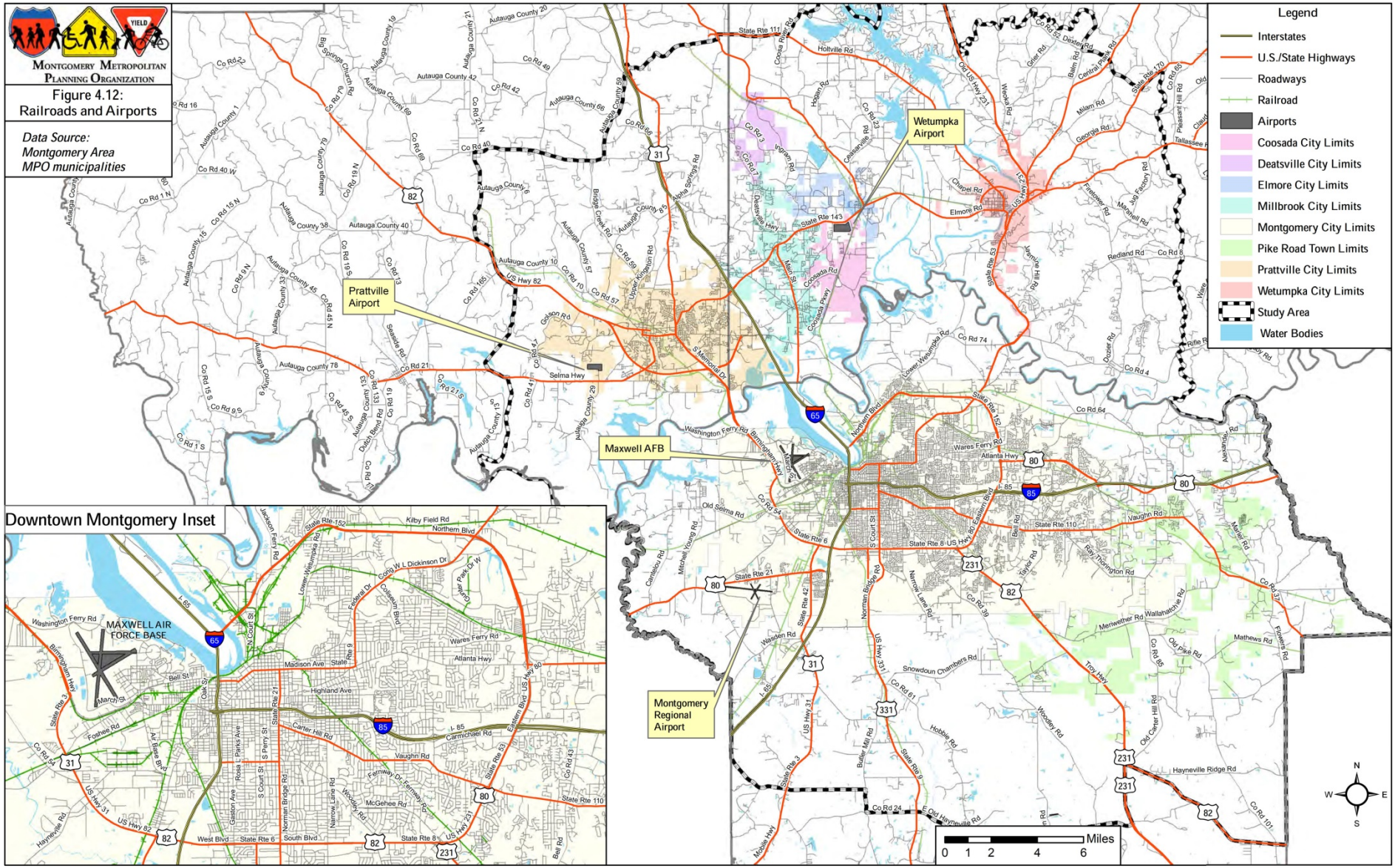
Two Class I rail freight operators have rail lines traversing the Montgomery study area: Norfolk Southern and CSX Transportation (CSXT). CSXT has the greatest rail presence within Autauga, Elmore, and Montgomery counties with three major lines: Montgomery-Flomaton (110 miles), Montgomery-West Point, Georgia (89 miles), and Parkwood-Montgomery (87 miles). CSXT has major rail yards in Montgomery, Mobile, and Birmingham, with the Montgomery terminal handling 390,646 rail cars in 2008. In addition to its three rails yards in Alabama, CSXT's intermodal facility in Mobile serves at least nine stations in the state. It operates over 1,500 miles of track and hauls more than 575,000 carloads of freight through the state each year. The major freight goods hauled are coal, corn, limestone, and pulp. CSX operates over 21,000 miles of track across 23 states and into Canada.

One Norfolk Southern branch line traverses through Autauga County from Maplesville to Autauga Creek (41 miles). The average yearly traffic volume on the line is 1.1 million gross tons per mile. Norfolk Southern indicates that traffic on the line is steadily declining. Norfolk Southern has trackage rights over CSXT on the Autauga Creek to Montgomery line. Norfolk Southern has rail stations in Prattville, Autauga Creek, and Montgomery. NS operates over 1,300 track miles and hauls more than 6.3 million tons of cargo each year to 40 stations in Alabama. Figure 4.15 details the rail lines in the MPO study area.

The City of Montgomery and the Alabama State Port Authority have pursued federal grant funding to construct an Inland Intermodal Facility on a site near the Montgomery Regional Airport to serve freight traffic to and from the Port of Mobile via existing freight rail. While this initiative has not yet been funded, it would help relieve traffic on I-65 between Montgomery and Mobile and also would produce substantial reductions in fuel consumption and greenhouse gas emissions.

4.7.2 Truck

All state routes in Alabama are designated truck routes for tractor trailer travel. The proximity of the Montgomery area to I-65 and I-85 provides significant interstate access for goods movement. After researching lists of local freight operators from the Montgomery Area Chamber of Commerce and Elmore County Economic Development Authority, a total of 35 freight truck companies were confirmed as being within the Montgomery MPO study area. However, it is assumed that the list does not capture all freight operators within the study area. Table 4.5 details the confirmed freight operators.



Source: MPO Staff

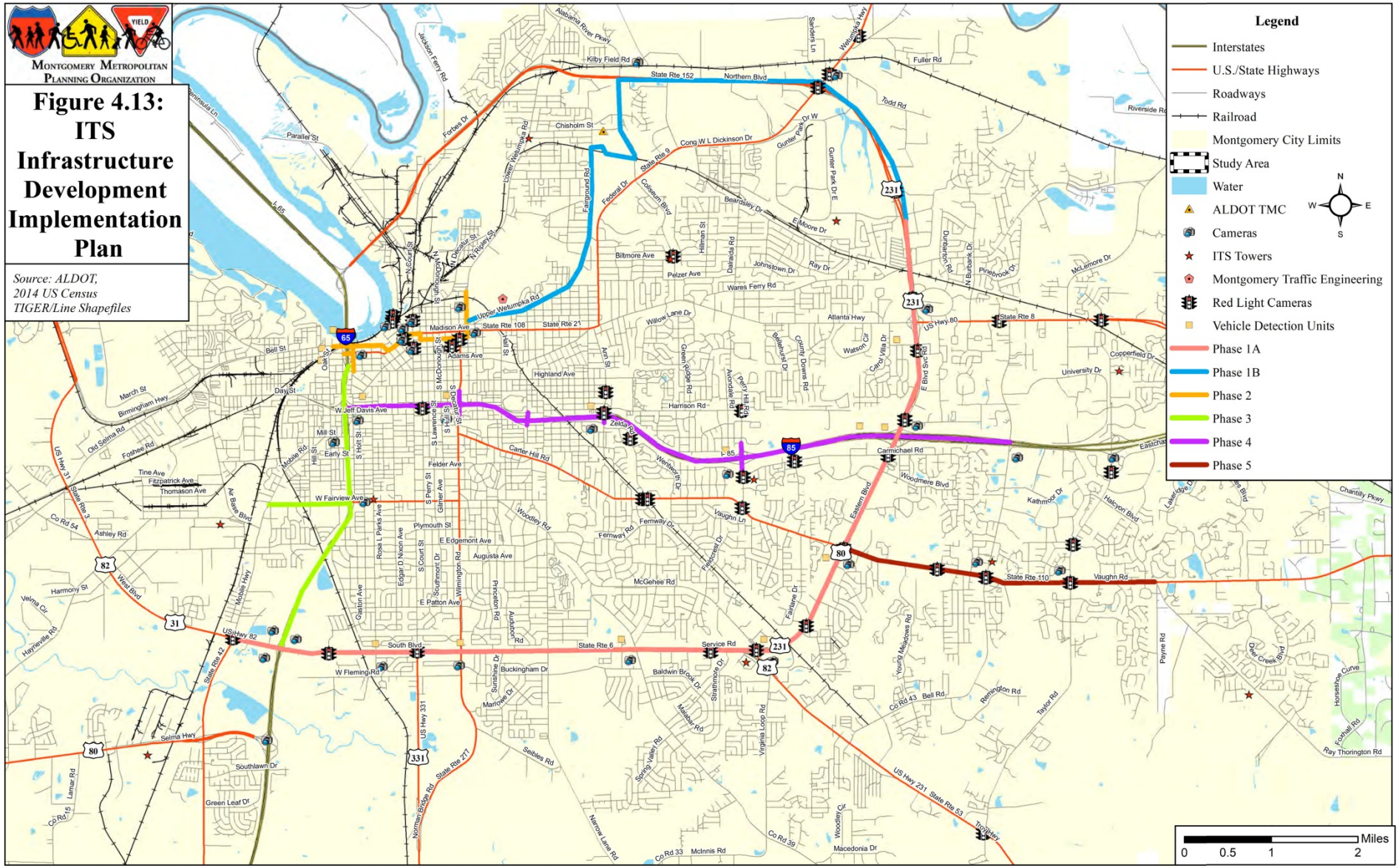


Figure 4.13: ITS Infrastructure Development Implementation Plan

Source: ALDOT, 2014 US Census TIGER/Line Shapefiles

Source: MPO Staff

Figure 4.14 Regional Freight Network

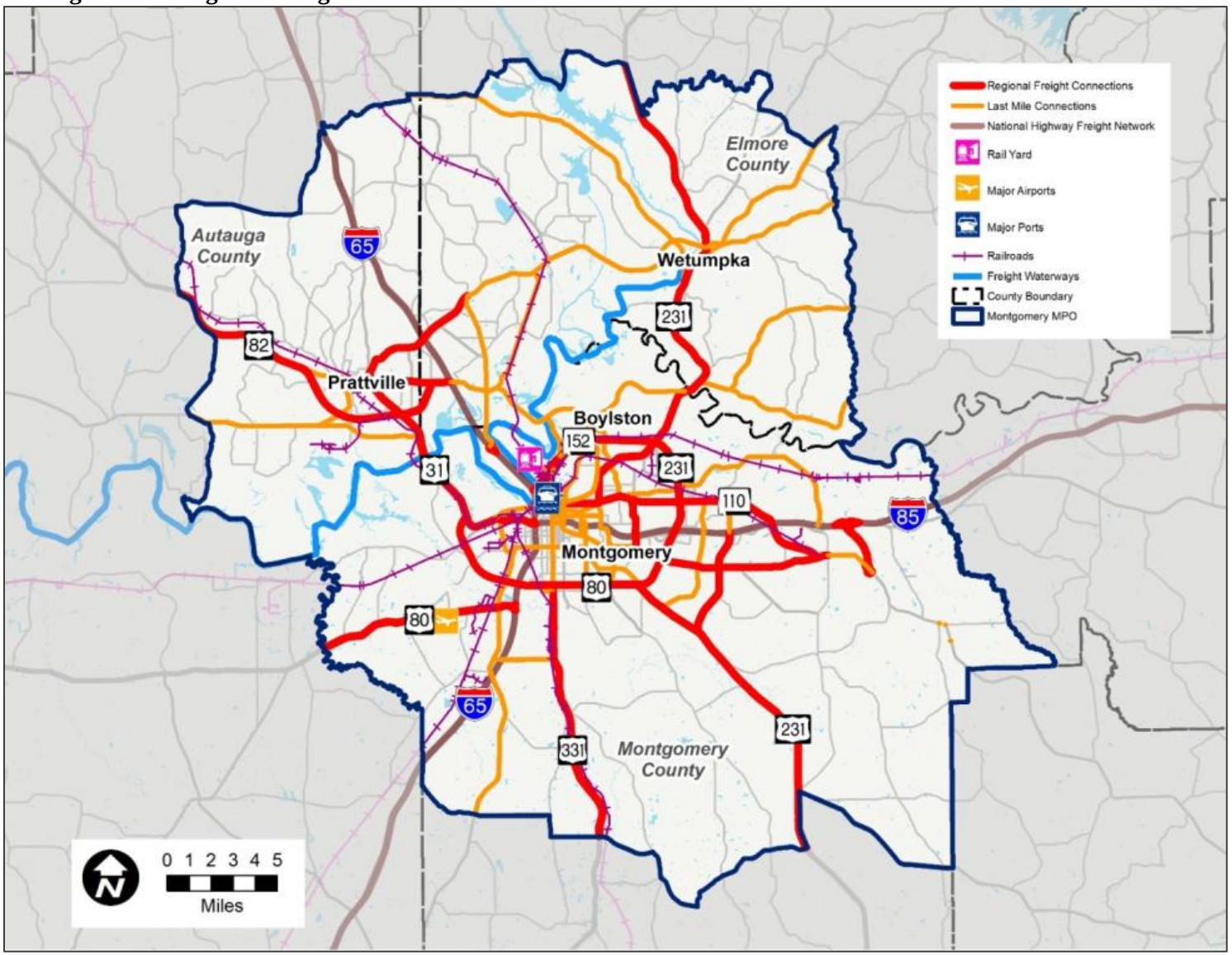


Table 4.5: 2015 Confirmed Freight Truck Operators within the Montgomery MPO Study Area

Company Name	County
AAA Cooper Transportation	Montgomery
ABF Freight System Inc.	Montgomery
Alabama Food Service	Autauga
AMX Inc. (Alabama Motor Express Inc.)	Montgomery
Barnes & Berry Trucking	Elmore
Brown Trucking	Montgomery
Charles Lawson Trucking	Montgomery
Con-Way Southern Express	Montgomery
Eagle Motor Freight Inc.	Montgomery
FedEx Freight, Inc	Montgomery
Florida Rock & Tank Lines	Montgomery
Forward Air Solutions (previously Service Express)	Montgomery
Foshee Trucking	Montgomery
Gulfstream Express	Montgomery
JEB Trucking	Autauga
Loftin Brothers Transportation	Montgomery
Milan Express Co Inc.	Montgomery
Montgomery Air Freight Inc. (BHM Express)	Montgomery
Old Dominion Freight Line	Montgomery
Osborne Transportation Inc	Montgomery
Panalpina Inc	Montgomery
Penn Tank Lines	Montgomery
Priest Trucking	Montgomery
R&L Carriers	Montgomery
Romero Trucking	Autauga
Saia Motor Freight Line	Montgomery
Southeastern Freight Lines	Montgomery
Southern Cal Transport (also operates as Southern Cartage)	Montgomery
Todd Sheridan Trucking	Autauga
University Corp Inc.	Montgomery
US Foodservice (USF Distribution)	Montgomery
Waggoners Trucking	Montgomery
Whitfield Food Inc. (Whitfield Lines Inc.)	Montgomery
Wilson Trucking	Montgomery
YRC Inc.(Yellow Roadway Corporation)	Montgomery

Data Source: Montgomery MPO, Montgomery Chamber of Commerce, and the Elmore County Economic Development Authority.
Source: MPO Staff

Within Alabama, truck traffic is the dominate method of freight movement. Because of Montgomery's central location between Columbus, Atlanta, Birmingham, and Mobile, a large portion of the freight truck movements pass through the Montgomery area, creating stress on the major interstate and US highways within the study area. As Hyundai Motor Manufacturing, Kia Motors, and their many suppliers increase production, truck traffic will increase significantly.

4.7.3 Aviation

The Montgomery Regional Airport (MGM) (Dannelly Field) is the only public airport with freight traffic within the Montgomery MPO study area. However, due to the lack of ground support equipment (tugs, forklifts, and conveyer belts) and hanger facilities, the amount of air freight is minimal compared to rail and truck. Locally, air freight is also minimal due to expense. The airport is approximately 6 miles southwest of Montgomery, adjacent to US 80 (Selma Highway).

Ground cargo carriers, such as UPS, FedEx, and DHL, do serve the airport. Air cargo is attractive to businesses which require faster import or export of their parts, goods, and services. The majority of businesses dependent on air cargo for its speed are Hyundai and car parts suppliers within 30 minutes of the airport.

Details regarding the Montgomery Regional Airport as of April 30, 2015 include:

- Runway 10/28 is 9,020 feet long and 150 feet wide with grooved asphalt and high intensity lighting. Runway is overseen by a control tower.
- Runway 3/21 is 4,010 feet long and 150 feet wide asphalt and has medium intensity lighting. Runway is overseen by a control tower.
- The elevation is 221 feet above sea level.
- 150 aircraft are based at the airport.
- There are nearly 184 aircraft operations per day.
- The airport recently completed a $40 million renovation and expansion and now covers 2000 acres and serves 13 counties.

In addition to the public Montgomery Regional Airport, the Maxwell Air Force Base Airport can handle 51 percent of Military and National Guard. Details regarding the MAFB Airport are as follows:

- Runway 15/3328 is 8,013 feet and 150 feet wide with asphalt and high intensity lighting.
- Runway 7/187 is 3,015 feet long and 60 feet wide.
- The elevation is 171 feet above sea level.

Airport locations in the Montgomery MPO study area were included in Figure 4.14.

4.7.4 Waterway

The Montgomery MPO area is traversed by the Alabama, Coosa, and Tallapoosa rivers. According to the US Army Corps of Engineers, the Alabama River's northernmost points for navigation are the Bibb Graves Bridge in Wetumpka (Coosa River) and the US 231 Bridge (Tallapoosa River). The Corps states that there is little or no freight movement on the Alabama River near the MPO area. The Corps maintains a nine-foot deep by 150 foot wide channel for barge traffic from the Port of Mobile at the Gulf of Mexico to the Claiborne Lock and Dam in Monroe County (Alabama River mile 72). The dry season flow is about 4,640 cubic feet per second augmented by water released from the Coosa River. There have been no dredging funds in the federal budget for the past five years, and the last dredging was in July 2015.

The Montgomery Inland Dock is a 65 foot by 60 foot open dock located at mile 289 on the Alabama River near SR 143, I-65, and I-85. The dock can handle nearly 600 tons, and is currently leased to a grain company.

Existing cargo port facilities include four locations near downtown Montgomery and one just west of the MPO study area in Burkville, AL. The Burkville dock at the GE Plastics Facility is owned by the Montgomery Industrial Development Board. Adequate road and rail services are near all five facilities, but three of the facilities are not in use (YR 1997). (CAWA Freight Mobility Study 4-9-07).

Freight movement via barge on the states waterways could be a viable mobility option because of the Mobile Container Terminal, AM/NS Calvert (formerly ThyssenKrupp steel), and auto industry. The expanded Panama Canal opened to traffic in September 2014, creating a faster route from Asia and increasing the number of containers of steel and other projects coming in and out of Mobile as trade increases globally. Waterway travel in Alabama is feasible north through the Tennessee-Tombigbee

Waterway all the way to the Great Lakes. An increase in freight movement via water would decrease highway traffic congestion, making roads safer, less congested, and more efficient, by taking trucks off the road. The State Port Authority and five Alabama Waterway Associations have formed the Coalition of Alabama Waterways Association to promote port and waterway projects. The Coosa-Alabama River Improvement Association (CARIA) was formed to promote improvements to the Alabama River.

4.8 Passenger Aviation

The Montgomery MPO area is served by a regional airport, Montgomery Regional Airport (Dannelly Field), and two general aviation airports: Prattville Airport (Grouby Field) and Wetumpka Airport. Montgomery also is home to Maxwell Air Force Base, but in most cases, passenger traffic is exclusively for military personnel, dependents, and civil service employees only. Airport locations in the Montgomery MPO study area were included on Figure 4.12.

4.8.1 Montgomery Regional Airport

Air passengers departing from or arriving to the study area utilize the Montgomery Regional Airport for air transport. However, a large percentage of the MPO study area population utilizes the Birmingham or the Atlanta International Airports due to better prices and more routes and carriers. Since 2015 the airport has expanded the Large Plane parking apron to handle the largest aircraft available in the world. The second parallel taxiway has also been completed which will increase flight traffic efficiency.

The Montgomery Regional Airport is governed by the Montgomery Airport Authority, and managed by an executive director and staff. Counties serviced by the airport include Autauga, Bullock, Butler, Chilton, Coosa, Crenshaw, Dallas, Elmore, Lowndes, Macon, Montgomery, Pike, Tallapoosa, and Wilcox. The airport is located at 4445 Selma Highway/US 80 in the City of Montgomery, approximately six miles southwest of downtown and is accessible from I-65 via US 80 (exit 167), and by The M bus route No. 6, which circulates into and out of the airport from US 80. Nearly 400,000 travelers fly in and out of the airport each year. Approximately 1 million people pass through the terminal and create nearly $1.32 billion in economic impact for the region. General aviation operations are about 20 percent while military (National Guard) is about 51 percent.

Delta Airlines is the main commercial passenger operator, along with USAir and American Eagle. Airport facilities include two runways, a terminal building, a parking area, a fixed base operator, ten corporate hangars, aircraft rescue and firefighting facility, rental car service facility, airport authority maintenance facility, fueling areas, and an air traffic control tower. The airport is served by seven automobile rental agencies, the Montgomery Transit Service (The M), shuttle, and taxi service. The facility also maintains and operates its own police and fire forces. Primary flight destinations include: Atlanta, Charlotte, Dallas-Fort Worth, and Memphis; other destinations available by transfer include Orlando, Chicago, Baltimore, New York, and Las Vegas.

4.8.2 Prattville Airport

The Prattville Grouby Field Airport (1A9) is a Class 5 general aviation airport located approximately three miles southwest of Prattville off of SR 14 and Grouby Airport Road. It is operated by the City of Prattville and Autauga County Commission. The facility operates one lighted, asphalt runway (9/27) which is 5,400 feet long and 100 feet wide. The elevation is 225 feet above sea level. The airport operates without a control tower. The facility provides several aircraft hangars, as well as maintenance and refueling equipment. The airport is predominately used for small, private, recreational planes but also handles some small, commercial and corporate jet aircraft. According to airnav.com, as of March 2015, 32 aircraft are based at the field, and there are on average 60 daily operations per day. The breakdown of operations is 70 percent transient general aviation, 29 percent local general aviation, and 1 percent military.

4.8.3 Wetumpka Airport

The Wetumpka Airport (08A) is a Class 5 general aviation airport approximately 6 miles west of the city of Wetumpka. It is located at the intersection of Highway 14, Airport Road, and Coosada Parkway in Elmore County. The airport is owned and operated by the City of Wetumpka. The airport operates one lighted, asphalt runway (9/27) which is 3,011 feet long and 80 feet wide, and one unlighted turf runway (18/36) which is 2,876 feet long and 130 feet wide. The airport operates without a control tower. The runways are located at an elevation of 197 feet above sea level. Services include maintenance and refueling equipment, flight training, and plane storage in open and closed hangars. The facility is mainly used for small, private, recreational planes.

According to airnav.com, as of March, 2015, 78 aircraft are based at the field with an average of 108 daily operations. The breakdown of operations is 82 percent transient general aviation and 18 percent local general aviation. The shorter length of the runways at Wetumpka, limits the types of aircraft that can land and may exclude certain aircraft such as corporate jets.

4.9 Waterway Accessibility

The Montgomery MPO area is served by the Alabama, Coosa, and Tallapoosa rivers. There are currently two recreational/entertainment paddlewheel dinner boats operating in the MPO area. One is located on the Coosa River in Wetumpka and the other, Harriott II, is located at the Riverfront in downtown Montgomery. There is also one small-watercraft rental business located at the Riverfront in downtown Montgomery. The Montgomery Marina has been in operation for many years and is located near the Downtown Riverfront. Additionally, the public may now travel completely, via river, from the MPO area to the Gulf of Mexico. Locks and dams may now be used by boaters for their journey to the coast courtesy of Alabama River Lakes and the US Army Corp of Engineers.

There are approximately 11 public boat ramps on the rivers and river lakes in the MPO area. Lake Jordan, inside the MPO boundary just north of Wetumpka, covers 6,800 acres inside 188 miles of shoreline, and provides many recreational and residential living opportunities. Lake Martin, is located within 15 minutes of the MPO boundary, covering 44,000 acres within 750 miles of shoreline and also offers many recreational and residential living amenities. Also offering these amenities within 15 minutes of the MPO area, Lake Mitchell covers 5,850 acres, has 147 miles of shoreline, and is 14 miles long. It was created in 1923 when Alabama Power Company dammed the Coosa River.

4.10 Intelligent Transportation System (ITS)

The City of Montgomery developed an Intelligent Transportation System (ITS) Plan to install a fiber-optic cables network and ITS components to more effectively manage traffic and emergency response. The City, in partnership with ALDOT and FHWA, complies with National ITS Architecture. A Montgomery Area ITS Architecture Plan was prepared for ALDOT by consultants in December 2003. ALDOT provides ITS funding that requires an 80/20 or 50/50 (federal/state/local) match for ITS projects. The state, federal, and local governments also provide project oversight. In FY 2006 a FTA capital grant was awarded in the amount of $47,500 for the development of an automatic vehicle locator system (AVL) for MATS and paratransit software. The system provides for increased efficiency with real time location information for passengers and operations staff to determine next bus arrival times for improved effectiveness, efficiency, safety, and security.

The first goal was to install a fiber-optic infrastructure and upgrade traffic control equipment for an operational closed loop system with communication between ALDOT and the City of Montgomery's Traffic Engineering Department. The key components of the ITS are to:

- Construct a fiber optic network (closed loop system with communication) or purchase and use a wireless technology network.
- Provide real time information on incidents and traffic congestion.
- Provide motorist information via dynamic message signs, internet service providers, TV stations, and

other communications methods.

- Adjust traffic signal timing along West, South, and East Boulevards and various other locations as needed to improve traffic flow.
- Manage incidents more efficiently and improve incident response time.
- Use incident and congestion information to more effectively provide and manage MATS transit service using Global Positioning System (GPS) units on MATS buses.

To date, the following ITS projects have been installed within the Montgomery study area, including:

- Pan-Tilt-Zoom (PTZ) cameras at the following intersections:
    - Ann St at Cherry St
    - Taylor Rd at Eastchase Ln
    - Arba St at Perry St
    - Perry Hill Rd at Harrison Rd
    - Court St at Tallapoosa St
    - Zelda Rd at Zelda Ct
    - Ann St at I-85
    - Vaughn Rd at Carter Hill Rd
    - Coliseum Blvd at Biltmore Ave
    - Carmichael Rd at Trinity Blvd
    - Taylor Rd at 231 South
    - Perry Hill Rd at Carmichael Rd
    - Taylor Rd at Eastwood Glen Dr
    - 231 N at North Boulevard, Todd Rd, and Brooks Rd
    - Bibb St at Commerce St
    - Dexter Plaza
    - Amphitheater
    - Riverfront
    - Atlanta Hwy at East Boulevard South, East Boulevard North, Sylvest Dr, and Taylor Rd
    - Monroe St at Union St
    - Dexter Ave at Bainbridge St
    - East Blvd at Executive Park Dr, Vaughn Rd, Carmichael Rd, Monticello Dr, and Roy Hodges Dr
    - West Blvd at Mobile Hwy
    - South Blvd at Davenport St., Court St, Narrow Lane Rd, Woodley Rd, Wallace Dr, and Troy Highway
    - Vaughn Rd at Perry Hill Rd, St James St West, Taylor Rd, Bell Rd, and Carter Hill Rd
- Fiber-optic cable installed and traffic signal controllers upgraded along Southern and Eastern Bypass from US 31 (Mobile Highway) to Plantation Way. (Phase 1A)
- Fiber-optic cable installed and traffic signal controllers upgraded along Eastern and Northern Bypass

from Plantation Way to Coliseum Boulevard (half way to Coliseum Blvd) and along Coliseum Boulevard to the ALDOT TMC and Montgomery Traffic Engineering. (Phase 1B)

- Fiber-optic cable installed from I-65 through Civic Center (future drop), through City Hall (future drop), to Montgomery Technical Coordinating Committee; installed closed circuit television (CCTV) and VDS at key interchanges. (Phase 2)
- ITS System on I-65 from South of SR-3 (US-31 to north of SR-6/US-82, Cobbs Ford Road in Prattville). (Phase 3)
- ITS System on I-85 from I-65 to east of SR-8 (US- 80/Selma Highway in Montgomery) (Phase 4)
- ITS System on Vaughn Road from Eastern Boulevard to Ray Thorington Road. (Phase 5)
- Control center populated hardware and software integrated, camera control and signal control software will be integrated; diversion route study completed; a fiber network management tool created.
- Transportation Management Center (TMC) at the ALDOT offices located at 1409 Coliseum Boulevard, Montgomery
- The City of Montgomery Communications Center (TMC) (adjacent to the Traffic Engineering Department) that provides the City of Montgomery's Traffic Engineering Department with the ability monitor real-time traffic and signal operations and gives them the ability to adjust signal timing.
- Traffic Management Center (TMC) at 25 Washington Street, 5th Floor provides the City of Montgomery Traffic Engineering Department with the ability to monitor real-time traffic and signal operations and gives them the ability to adjust signal timing if needed.
- Acteils (Copper to Ethernet Converter) unit installed from Bell Road to Eastmont Plaza on Atlanta Hwy, utilizing the existing copper cable for communications to the Traffic Control Software.

Figure 4.15 details the first five phases from the ITS Infrastructure Plan.

There are several longer-term proposed ITS infrastructure projects for the Montgomery study area. One such project is for the City of Montgomery's Fire and Rescue Department and Police Department EMS services. The proposed project will allow the EMS to utilize the future ITS infrastructure to monitor traffic for incidents and improve incident management/response time to more efficiently clear vehicle crashes and traffic-impeding incidents. Other future ITS plans include:

- Installation of dynamic message signs around the perimeter of the cities of Montgomery and Prattville to better inform incoming motorists of existing traffic conditions and incidents.
- Potential creation of a City of Prattville TMC, with installation of ITS Cameras and vehicle detection units.
- Linking all vehicle detection units with ITS to have a live feed back to the TMC's in the area.
- Linking the City of Montgomery downtown signal controllers with either radio or fiber optic cable.

5.0 CONGESTION MANAGEMENT, SAFETY, AND SECURITY

Overview

The FAST Act retained the requirement of previous federal transportation bills that Traffic Management Areas (TMAs) with populations over 200,000 have a Congestion Management Process (CMP). The goal of the CMP is to identify congested areas and direct funding towards projects and strategies that alleviate the congestion. The identification of congested areas in the CMP is based on established performance measures, which is also an emphasis of the Fast Act. The Montgomery MPO is required to prepare a CMP and integrate it within its Unified Planning Work Program (UPWP), Transportation Improvement Program (TIP), and Long Range Transportation Plan (LRTP). The Montgomery MPO's most recent CMP, completed in September 2014, is available on the MPO website.

CMP Integration into the LRTP

Given its inherent tie into the MPO planning process, the following elements of the CMP are consistent with and/or integrated into the LRTP:

- Study Network – The study network for the CMP and LRTP are the same. To effectively concentrate on congested roadways in the study area, roadways functionally classified as minor arterial and above are included in the CMP.
- Goals, Objectives, and Performance Measures – As noted in Section 2 of this report, the LRTP goals were utilized to determine the CMP's four goals and corresponding objectives, which are in turn used to establish priorities. The identified performance measures rely on data accessible to MPO staff and local agencies.
- Proposed Improvements – Thresholds for acceptable travel delay and V/C ratios were developed to categorize corridors and intersections as Priority 1, Priority 2, or Ongoing Projects based on thecurrent severity of congestion and delay. Appropriate mitigation strategies were developed for corridors and intersections designated as Priority 1.
- Another critical CMP element is establishing a program to monitor congestion throughout the region. The CMP recommends MPO staff coordinate with local project sponsors to assess travel conditions after the implementation of a congestion mitigation effort. While the MPO may provide data to support the monitoring process, the responsibility for measuring the overall effectiveness of implemented strategies falls to the local project sponsor. The results of these evaluations are presented to the decision makers nd public to guide development of the LRTP, TIP, and UPWP.

6.0 Needs Identification

The Montgomery Study Area 2045 LRTP has been developed through an intensive process combining technical analyses with community, stakeholder, and agency input and collectively balanced against the federal and local financial resources of the MPO area. This section presents a detailed analysis of the multi-modal transportation system network performance, including current deficiencies and needs. The following sub-sections include discussions by mode, including roadway, transit, bicycle, and pedestrian.

6.1 Roadways

The transportation system should provide choices to people and be safe, convenient, efficient, and accessible for all users. To achieve these goals, roadway projects contained in the 2045 LRTP provide multimodal accommodations. As a matter of standard practice, the transportation system should be designed, built, and maintained in a manner that accommodates not only automobiles, but also transit vehicles and non-motorized modes (bicycle and pedestrian facilities). Accommodating multi-modal travel allows for more efficient use of roadway facilities by providing greater capacity without adding roadway lanes. A true multimodal system is a network that provides transportation options for those who do not have the resources to travel alone in a single-occupant vehicle(SOV), or simply prefer alternate modes.

As presented in Section 3, the predominant travel mode within the Montgomery MPO study area is the SOV automobile, followed by carpooling, public transportation and a combination of taxicab, motorcycle, bicycle and walking. Barring unforeseen circumstances, roadways will continue to be the predominant mode of travel within the Montgomery MPO study area transportation system into the future.

Section 2 and the Model Development Report (Appendix A) of this document discuss the use and importance of the Montgomery MPO's travel demand model (the model) in developing of 2045 LRTP program of projects. The model is one of the fundamental analytical tools used by transportation planners and transportation planning engineers to identify existing roadway conditions and deficiencies, as well as to test specific system improvements. Two travel service criteria rating scales are typically presented to assess the quality of roadway performance: level-of-service (LOS) and volume-to-capacity (v/c) ratios. LOS is a letter designation ranging from A (excellent free flow operations with minimum delay) to F (long traffic delays and queues). Typically, v/c ratios (existing traffic levels compared to the maximum available throughput) correspond to LOS for roadway facilities. Table 6.1 presents an equivalency table for LOS and v/c ration . LOS D is as the nominal threshold for acceptable roadway performance.

Table 6.1: Level-of-Service and Volume/Capacity Ratios

Level of Service	Volume/Capacity Ratio
A-C	0-0.85
D	0.851-1.00
E	1.001-1.15
F	Greater than 1.15

Data Source: AASHTO.
Source: MPO Staff

6.1.1 2015 Base Year Roadway Conditions

For the purposes of the Montgomery Area 2045 LRTP, year 2015 is the *base year* for travel demand model analysis using 2015 TAZ structure, roadway characteristics, residential housing units, retail and non-retail employment and household income. In addition, local knowledge of the MPO transportation planning staff and local jurisdiction planning and engineering staff's was utilized to develop the base year socioeconomic data (SE data). As detailed in the Model Development Report and in Section 6, the roadway network structures were updated from the 2040 LRTP to incorporate changes since the previous LRTP update. Figures 6.1 and 6.2 present the 2015 congestion levels and loaded model volumes (with count data), respectively.

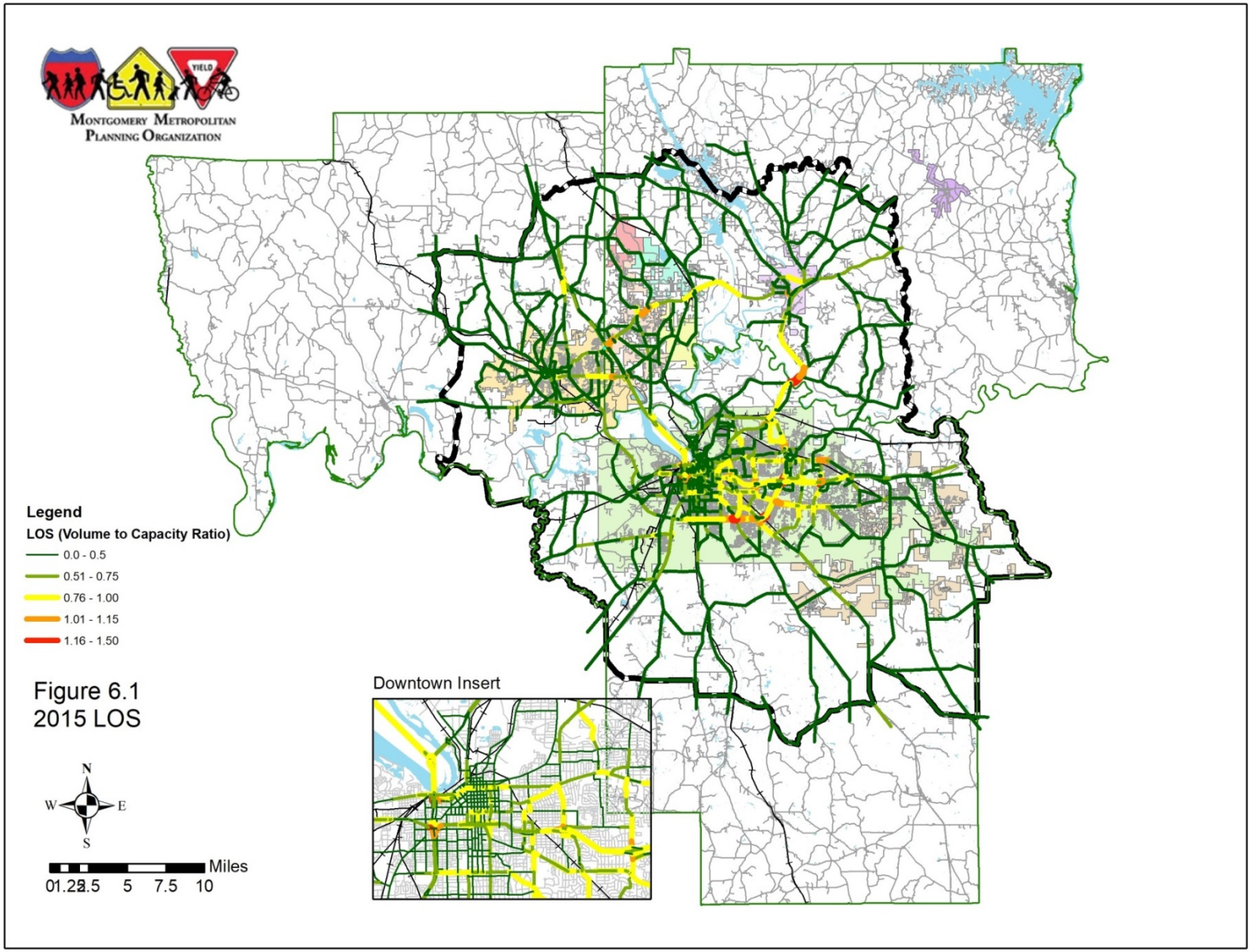


Figure 6.1
2015 LOS

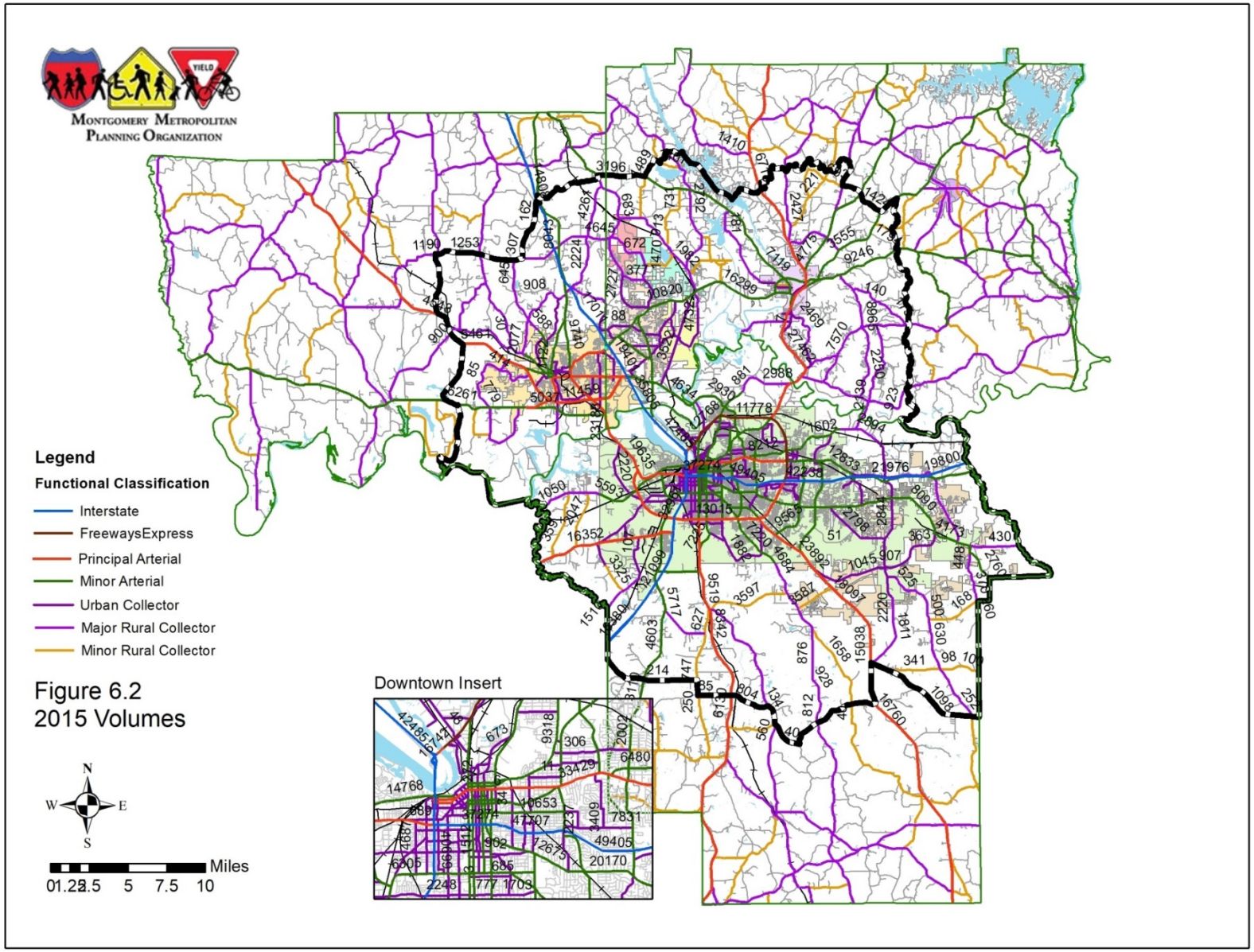


Figure 6.2
2015 Volumes

Based upon review of the 2015 base year model run, the areas with significant traffic congestion, with LOS D or worse conditions, include:

- SR-14 between Prattville and the Town of Elmore
- US-231 (Wetumpka Highway) crossing the Tallapoosa River to Jasmine Hill Road
- Segments of South Boulevard and East Boulevard
- Perry Hill Road from Harrison Road to Vaughn Road
- Vaughn Road from Perry Hill Road to East Blvd
- Taylor Road from I-85 to EastChase Parkway
- US-231/Troy Highway approaching South Boulevard
- I-85 from Union Street to Perry Hill Road
- McGhee Road from Carter Hill Road to Governors Drive
- Ann Street from Atlanta Highway to I-85
- Carter Hill Road from Vaughn Road to McGehee Road
- Narrow Lane Road from Carter Hill Road to Woodley Road
- Woodley Road Narrow Lane Road and McGhee Road
- Day Street from Air Base Boulevard to I-85
- US-82 Bypass in Prattville from SR-14 to US-31/Memorial Drive
- Alabama River Parkway from Main Street to North Boulevard

A primary indicator of highway performance is average congested speeds. Table 6.2 presents the overall average congested travel speeds for the MontgomeryArea study area in base year 2015.

Table 6.2: Average Congested Speed (in mph)

	2015	2045 E+C	2045 Vision Plan	2045 Financially Constrained Plan
Average Speed	30.9	29.7	30.1	29.8

Source: Travel model

6.1.2 2045 Forecast Year Roadway Conditions, Performance, and Analysis

Using the methodology presented in the *Model Development Report*, 2045 SE data was developed by the MPO staff with local area jurisdiction input for the same TAZs utilized in the 2015 baseyear model. The 2045 SE data was developed using countywide growth projections developed by the University of Alabama Center for Business and Economic Research (CBER) and adjusted by MPO staff, as well as with local knowledge provided by local area jurisdictions for a final SE data set.

The initial 2045 model run uses the 2045 SE data and the E+C network. For the Montgomery 2045 LRTP, the E+C projects are those for which right-of-way acquisition or construction is funded. Table 6.3 and Figure 6.3 present the projects in the E+C network.

Figure 6.4 presents the forecast Level of Service (LOS) for 2045 with only the E+C projects included in the highway network. Congestion is generally focused along the SR-14 corridor in Autauga and Elmore, on parts of US 31, on US 231, and in southeast Montgomery.

Figure 6.5 presents the forecast traffic volumes in 2045 based on the E+C network. Figure 6.6 highlights highway segments that are forecast to exceed capacity (LOS E or LOS F) in 2045 on the E+C network.

Figure 6.7 presents all of the highway improvement needs that were evaluated and ranked as part of the plan.

Table 6.3: Existing Plus Committed (E+C) Roadway Network

Project #	Road	From	To	Description	County
EC1	SR 108 Outer Loop	SR-110	I-85	New Freeway Segment	Montgomery
EC2	I-85	Ann Street	Taylor Road	Add Auxiliary Lanes	Montgomery
EC3	SR-6/US 82	SR-14	SR-3/US 31	Widen to Four Lane Divided	Autauga
EC4	SR 110 Vaughn Rd	Chantilly Pkwy	Outer Loop	Widen to Four Lanes Divided	Montgomery
EC5	SR-14	US 31	Jasmine Trail	Additional Lanes	Autauga
EC6	Vaughn Road	Wynnlakes Blvd	Glynnwood Trail	Widen to 4 Lanes Divided	Montgomery
EC7	SR-14	Ingram Road	Coosada Pkwy	Additional Lane	Elmore
EC8	Redland Road	Rifle Range Road	US 231	Additional Lanes	Elmore
EC9	East Fairview Ave	Court Street	Cloverdale Road	Convert from 4 Lanes to 3 Lanes	Montgomery
EC22	I-85	Taylor Road	Outer Loop	Widen from 4 Lanes to 6 Lanes	Montgomery

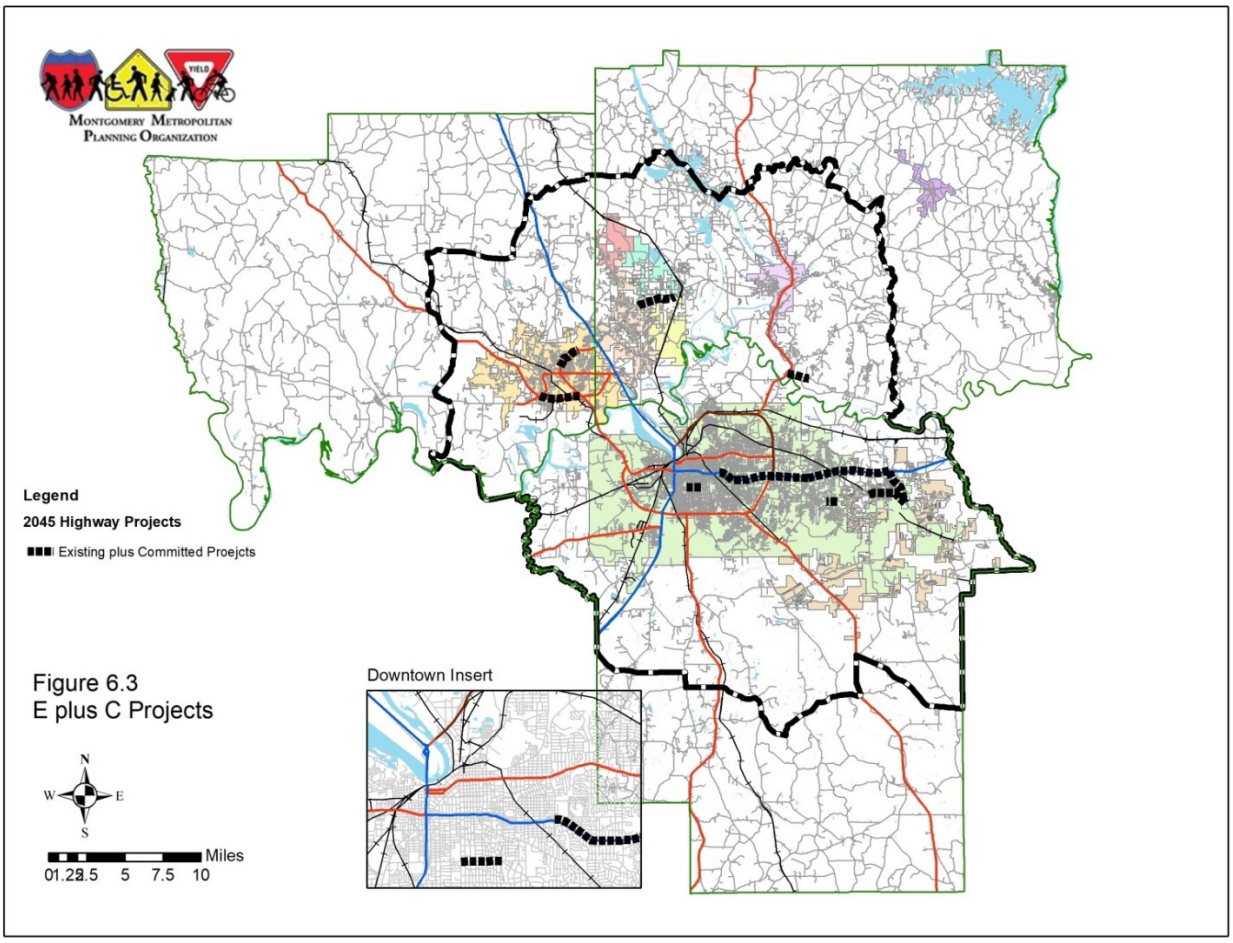


Figure 6.3
E plus C Projects

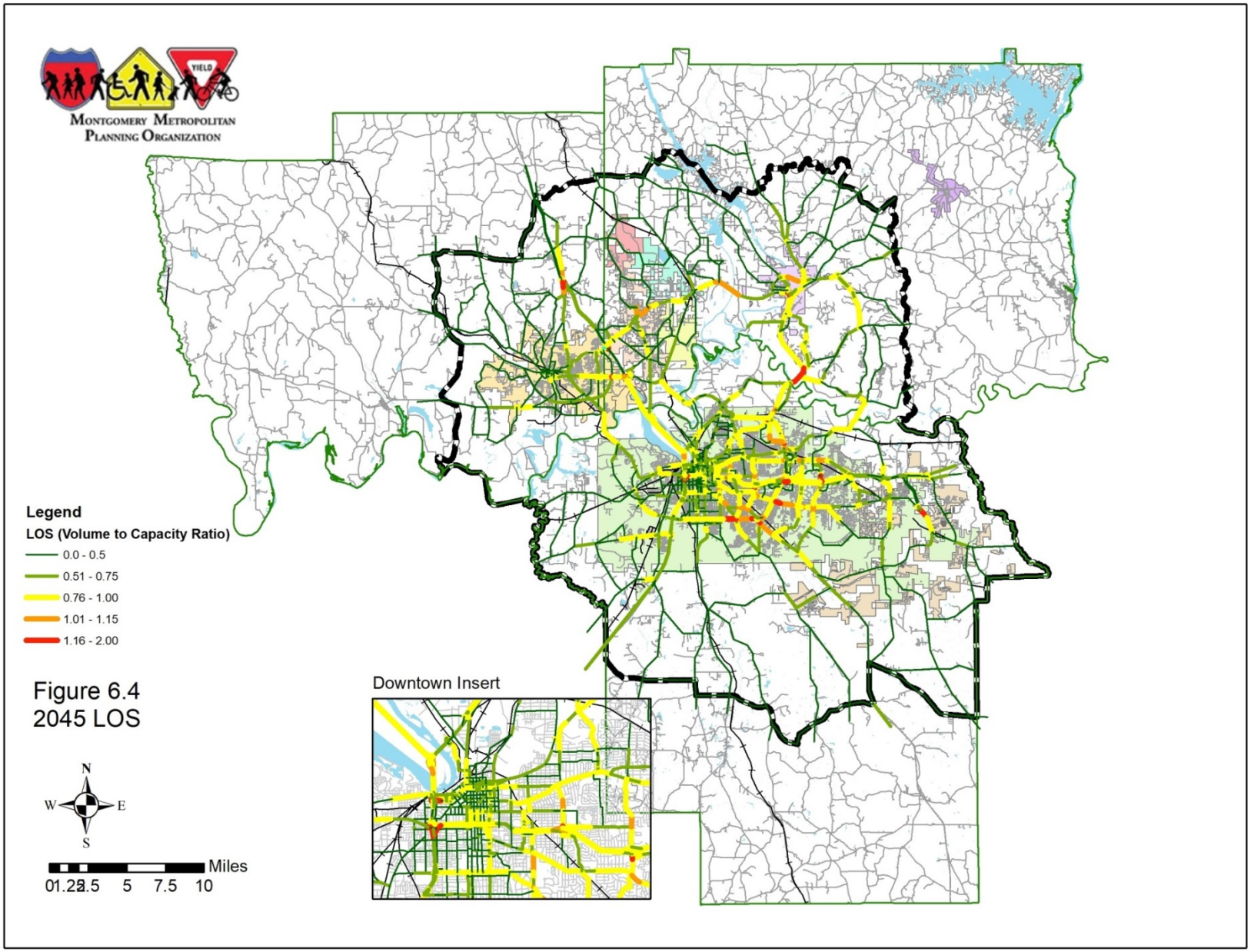


Figure 6.4
2045 LOS

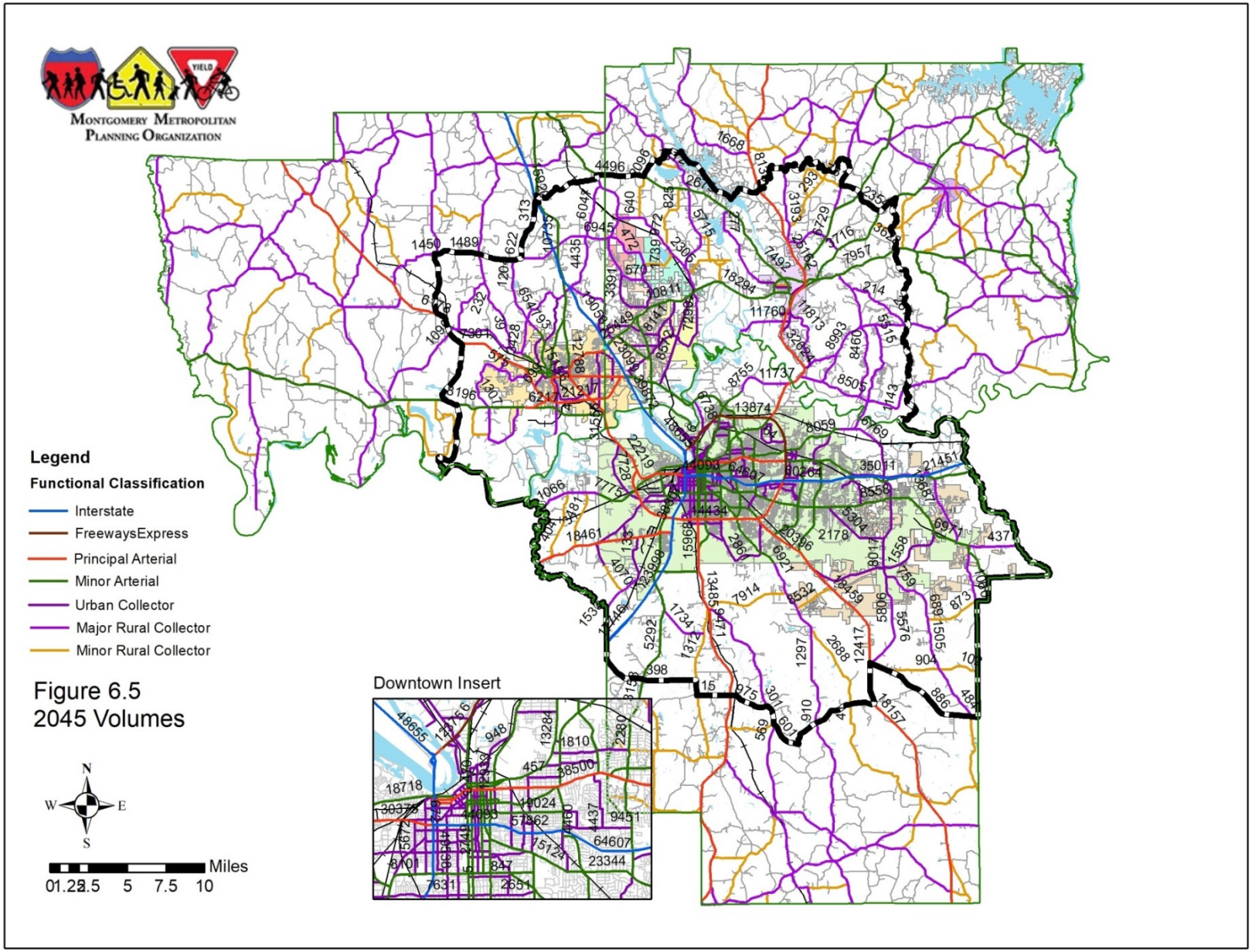


Figure 6.5
2045 Volumes

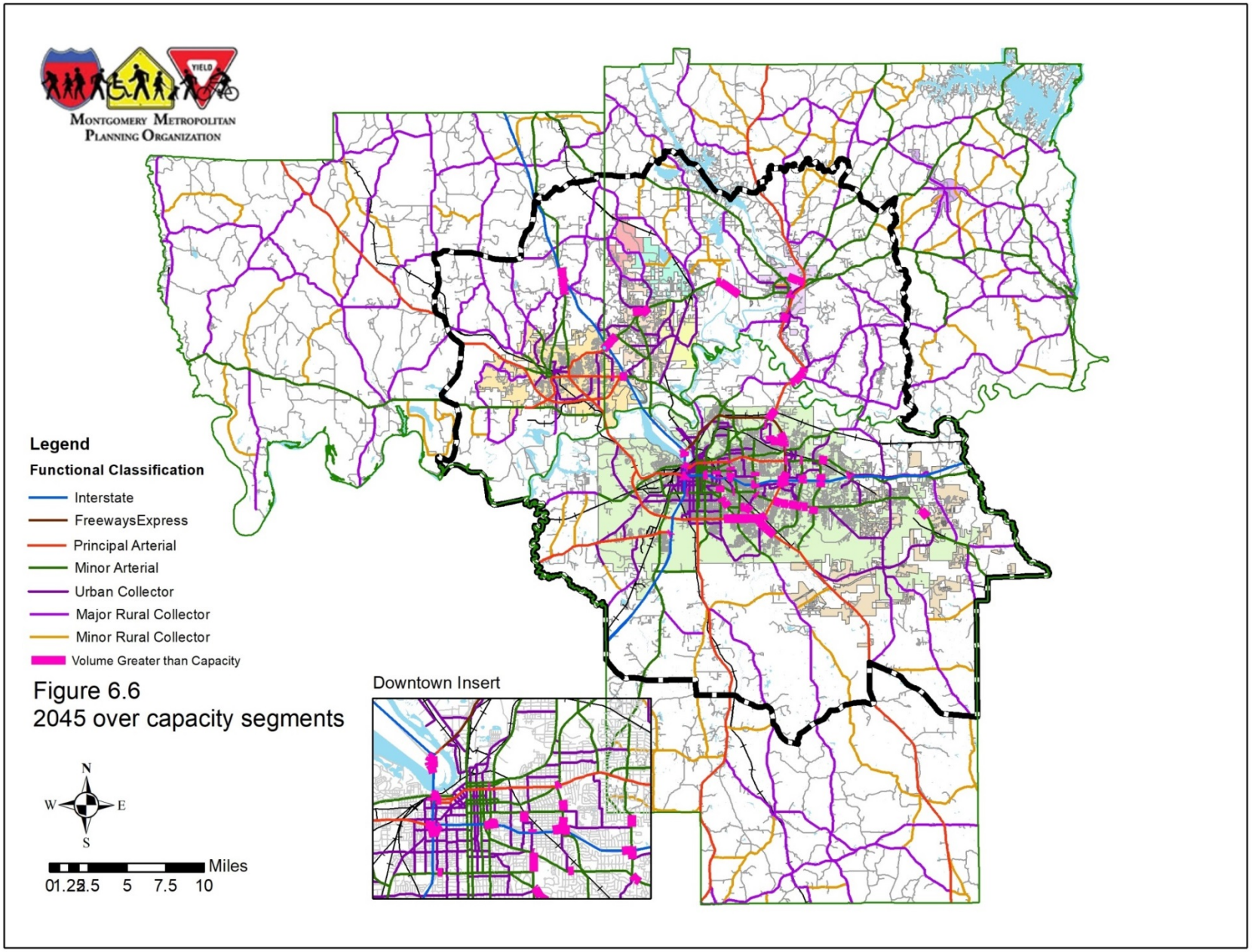


Figure 6.6
2045 over capacity segments

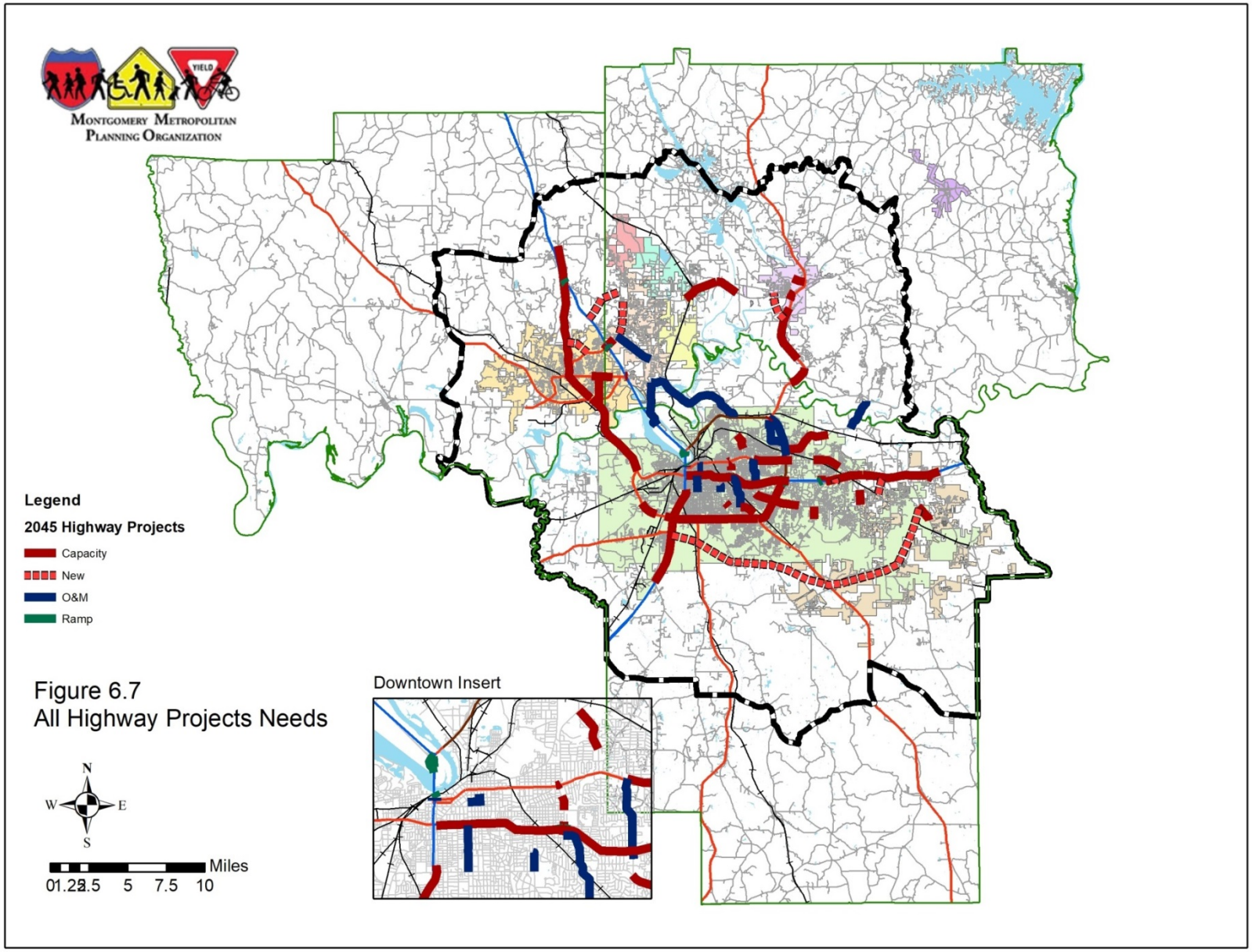


Figure 6.7
All Highway Projects Needs

Upon review of the 2045 E+C travel demand model run, the following major roadway segments were identified as those with *high congestion*, or above the threshold (v/c > 1.0, or LOS E or F):

- West Boulevard from Hayneville Road to South Boulevard to East Boulevard, East Boulevard toNorth Boulevard from US-231/Wetumpka Highway
- Vaughn Road from Perry Hill Road to Bell Road
- Dozier Road from Wares Ferry Road to Rifle Range Road
- US-231/Troy Hwy from South Boulevard Bell Road
- I-85 from I-65 to Taylor Road
- I-65 from US31 to Fairview Avenue
- McGehee Road from Carter Hill Road to Governors Drive
- Ann Street from Atlanta Highway to Atlanta Highway
- Carter Hill Road from Vaughn Road to McGehee Road
- Atlanta Highway from McLemore Drive to Seminole Drive
- Cobbs Ford Road from I-65 to Sheila Boulevard
- SR-14 in Prattville from US-31/Memorial Drive to I-65
- US-231 (Wetumpka Hwy) from CR 74 to SR-14 in Wetumpka
- Alabama River Parkway from SR-143 from North Boulevard
- SR-143 from I-65 to Alabama River Parkway

A review of the 2045 E+C model run shows a decrease in average speeds for all but one ofthe seven functional classification groups, as presented in Table 6.4. Based upon this comparison (and assuming no additional investment but the E+C projects), the largest decreases in travel speeds between 2015 and 2045 will occur on the areas freeways, expressways, arterials and urban collectors, with lesser impacts upon rural collectors.

Table 6.4: Change in Average Congested Speed Daily **Vehicle Miles Travelled (**DVMT**),** Daily**Vehicle Hours Travelled (**DVHT**) from 2015 Base Year to 2045 E+C Network**

Analysis Period	Performance Statistic				
	Average Speed	**DVMT**	**DVHT**	**Vehicle Trips**	**Person Trips**
2015 Base Year	30.9	9,117,590	218,827	1,225,698	1,758,010
2045 E+C	29.7	12,132,001	331,586	1,647,213	2,384,282
Percent Change	-3.8%	+33.1%	+51.5%	34.4%	35.6%

6.1.3 Additional Scenario Runs and Results

Additional travel demand model scenario tests were run on the following requested transportation roadway projects in order to justify or not justify perceived needs. Figure 6.8 shows the locations of the facilities tested in the scenario model runs. Each scenario project was evaluated based on the criteria used for scoring all potential projects. While some projects do have significant traffic benefit, none ranked high enough for inclusion in the financially constrained plan.

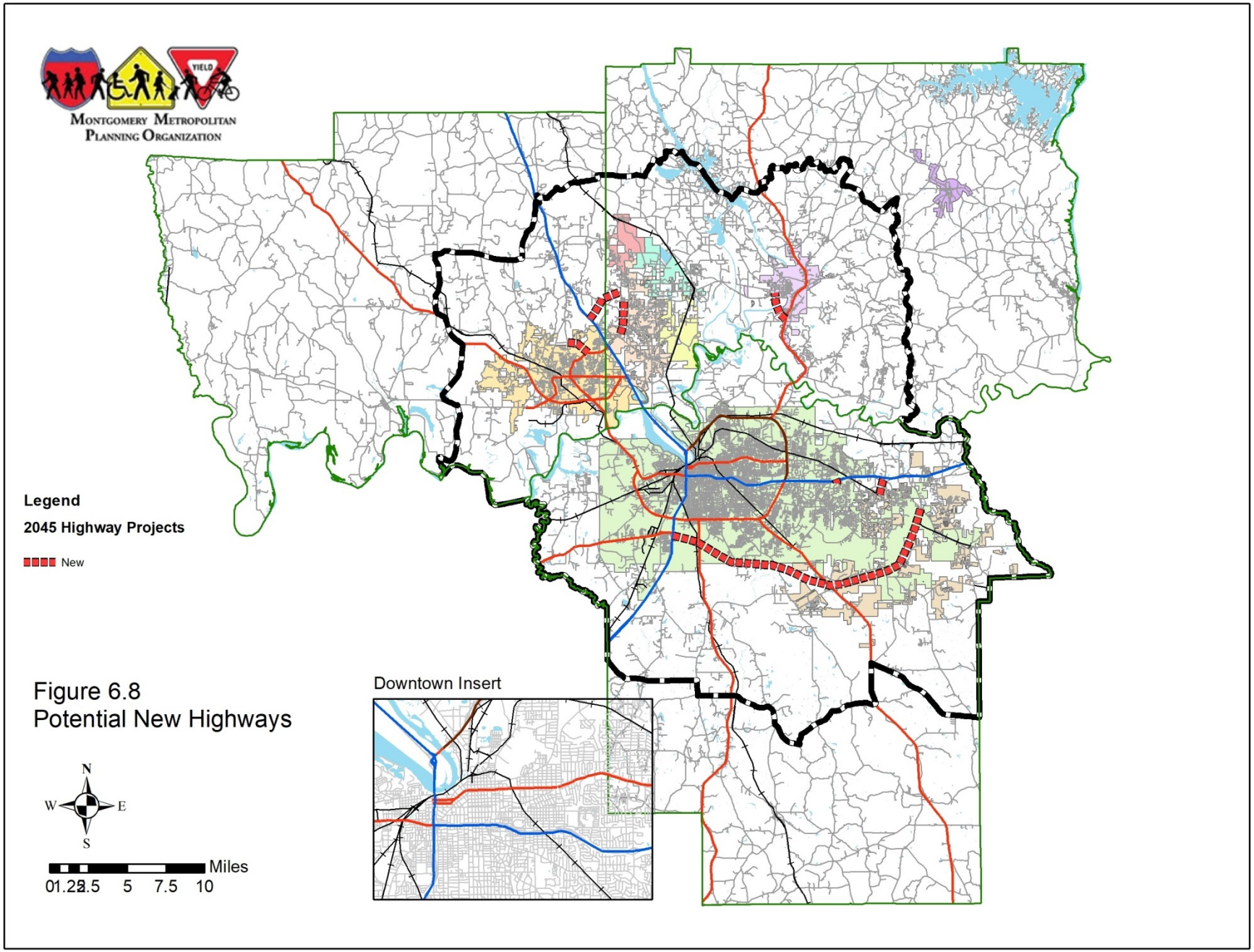


Figure 6.8
Potential New Highways

Project 1: New Roadway Connecting Deatsville Highway (CR-7) to SR-14

A scenario was proposed by the City of Millbrook and Elmore County for the construction of a new roadway from SR-14 in the vicinity of Kinsley Lane to County Road 7 (Deatsville Highway) in the vicinity of Ross Road. The purpose of the roadway is to alleviate congestion on SR-14 between I-65 and SR-143 and at the intersection of SR-14 and SR-143.

Project 2: New Roadway Connecting Deatsville Highway (CR 7) to I-65

A scenario was also tested to evaluate the connection of Deatsville Highway to I-65 between Exits 181 and 186. This scenario is envisioned to reduce traffic on SR 14 and alleviate congestion along SR 14 eastof I-65.

Based on the travel demand model results, the project provides some relief to the interchanges along I-65 at Exit 181 and 186. However, the total traffic that will likely use this new roadway is between 6,141 justeast of the proposed interchange to 4,091 just west of Deatsville Highway. While this level of reduction will change traffic patterns in the immediate area, it will not offer significant reduction in traffic on SR 14to justify the new roadway and construction of an interstate interchange.

Project 3: New Roadway Connecting SR-14/Coosa River Parkway to Ft. Toulouse Road

The City of Wetumpka proposed a scenario for a new roadway from SR-14/Coosa River Parkway to Fort Toulouse Road. City leadership envisioned this roadway would provide much needed relief in the near future and best serve the rapidly developing portions of the city between the Creek Indian Casino and proposed Crater exhibit. Additionally, it would move through traffic from the Wetumpka business district.

Project 4: Wares Ferry Road Interchange on I-85 and Wares Ferry Road Connector Road

A scenario was proposed by Montgomery County for the construction of a new I-85 interchange at Wares Ferry Road along with a new roadway from Wares Ferry Road through undeveloped land to Chantilly Parkway. This scenario is envisioned to reduce traffic on Chantilly Parkway from the I-85 interchange to Vaughn Road and decrease traffic congestion on the I-85 North exit ramp.

Project 5: I-85 Northbound Exit Ramp to Eastchase

A scenario was developed to examine an I-85 Northbound off-ramp to enter the development near Eastchase Mall. This additional off-ramp is intended to reduce traffic volume on the existing exit ramp from Northbound I-85 at Taylor Road, where there is a significant weaving movement required to use the exit ramp and merge to the left to make a left turn into the Eastchase development, and on the existing exit ramp from Northbound I-85 at Chantilly Parkway, where there is significant delay due to traffic entering the Eastchase development.

Project 6: I-85 Northbound Exit Ramp to Eastchase, Wares Ferry Road Interchange on I-85, and Wares Ferry Road Connector Road

The final scenario is a combination of two previous scenarios, Project 4 (Wares Ferry Road Interchange on I-85 and Wares Ferry Road Connector Road) and Project 5 (I-85 Northbound Exit Ramp to Eastchase). This scenario is envisioned to reduce traffic at both the Chantilly interchange and the Taylor Road interchange along with associated reductions on Chantilly Parkway and Taylor Road respectively.

6.1.4 Capacity Needs and Maintenance and Operation Needs

Continued growth and development generates continued challenges to the transportation system. The biggest challenge on the transportation system is congestion, which is linked to steady growth and development. Transportation professionals are tasked with identifying solutions to meet those challenges.As stated before, the primary tool used by transportation professionals to analyze the transportation system and meet future needs is the travel demand model.

Based on model results for the 2015 base year and 2045 forecast year and as presentedpreviously in Table 6.4, there is an overall worsening of LOS for the Montgomery area's functionally classified roadway network between the 2015 base year and the 2045 E+C forecast conditions.

The 2040 LRTP program of projects served as a starting point for the development of the 2045 LRTP *Needs Plan*. From that starting point a series of steps was utilized to determine a preliminary list of capacity needs and maintenance and operation needs. MPO/TCC/CAC members reviewed the 2040 LRTP program of projects. For the capacity projects, TCC members were asked to categorize the projectsas a continued need, to reconfigure the project as a maintenance and operations project, or to categorize itas no longer a need. For maintenance and operation needs, TCC members were asked to categorize the projects as a continued need or no longer a need. MPO staff requested MPO/TCC/CAC members to provide a list of additional capacity needs and maintenance and operation needs that would utilize Surface Transportation Program Other Area (STPOA) funds including relevant information on the need, traffic volumes, and other substantiating information.

Table 6.5 lists the 2040 LRTP Financially Constrained Capacity Projects. Table 6.6 lists the 2040 LRTP Financially Constrained and Visionary/Needs Maintenance and Operations Projects.

Table 6.5: 2045 Long Range Plan – All Identified Projects

Road Name	Location and Termini	Project Type	Financially Constrained (FC) or Vision
Adams Avenue	Decatur St to South Court St	O&M	FC
Atlanta Highway	Perry Hill Rd to Eastdale Mall	Capacity	FC
McQueen Smith Road	SR 3/US 31 to Cobbs Ford Rd	Capacity	FC
Perry Hill Rd	Harrison Rd to Atlanta Hwy	O&M	FC
Redland Rd	US 231 to Rifle Range Rd	Capacity	FC
Ryan Road	Vaughn Rd to Chantilly Pkwy	Capacity	FC
S. Court Street	Fairview to Arba St	O&M	FC
US-80	Waugh intersection to Marler Rd	Capacity	FC
Washington Avenue	Decatur St to Lawrence St	O&M	FC
Zelda Road	Ann St to Carter Hill Rd	O&M	FC
Atlanta Highway	Ann Street to Federal Dr	Capacity	FC
Carter Hill Road	Mulberry St to Narrow Lane/Narrow Lane to Fairview	O&M	FC
Eastern Boulevard	N of Shirley Ln to Wetumpka Highway	O&M	FC
Fairview Ave (was SR-14) Prattville	Old Farm Lane to east side of I-65	Capacity	FC
Perry Hill Rd	Carmichael Rd to Sunset Dr	O&M	FC
Eastern Boulevard	US 231 to I-85	Capacity	FC
South Boulevard	US 231 S to Rosa Parks Ave	Capacity	FC
Ann Street	I-85 to Poplar St	Capacity	FC
Atlanta Highway	Boyd Cooper Pkwy to I-85 northside ramps	Capacity	FC
I-65 Ramp Improvements	Ramps at SR 14 southside	Capacity	FC
I-85 Ramp Improvements	Taylor road I-85 WB on ramp	Capacity	FC
I-85 Ramp Improvements	Atlanta Highway to I-85 WB on ramp	Capacity	FC
US-231 (Wetumpka Hwy)	CR 74 to Jasmine Hill Road	Capacity	FC
Vaughn Road	Perry Hill Road to Eastern Blvd	Capacity	FC
Cobbs Ford Road	Between I-65 ramps	Capacity	FC
I-65 Ramp Improvements	Ramps at Clay St NB entry	Capacity	FC
I-85 Ramp Improvements	East Boulevard on ramps	Capacity	FC
Lagoon Park Dr from	East Blvd to to SR-9	O&M	FC
Main St and West Bridge St	South Boundary St to North Bridge St	Capacity	FC
McGehee Road	Carter Hill Road to Governors Drive	Capacity	FC
SR-14	east side of I-65 to Kelley Blvd	Capacity	FC
Taylor Road	I-85 to East Dr	Capacity	FC
Vaughn Road	Eastern Blvd to Bell Road	Capacity	FC
Coliseum Boulevard	Federal Drive to Biltmore Ave	Capacity	FC
US-31	US 82 to West Blvd	Capacity	FC
US-31	CR 40 to SR 14	Capacity	FC
Carter Hill Road	Vaughn Road to McGehee Road	O&M	FC
Dickerson/Holt Streets	Between Clay and Herron Streets	O&M	FC

SR-143	I-65 to Alabama River Parkway	O&M	FC
Alabama River Parkway	SR-143 from North Boulevard	O&M	FC
Dozier Road	Wares Ferry Road to Rifle Range Road	O&M	FC
Grandview Road	SR 14 to SR 143	O&M	FC
Wetumpka Bypass	SR-14/Coosa River Pkwy to Fort Toulouse Rd	Capacity	Vision
Wares Ferry Connector Road	Chantilly Pkwy to I-85/Wares Ferry Rd	Capacity	Vision
Eastchase Interchange on I-85	I-85, between Taylor Rd and Atlanta Hwy	Capacity	Vision
Ann Street	Highland Ave to Greenville St	Capacity	Vision
Atlanta Highway	McLemore Drive to Seminole Drive	Capacity	Vision
I-65 Ramp Improvements	Ramps at US 31 southside (Autauga Co)	Capacity	Vision
I-85 Ramp Improvements	Ann Street on ramps and WB off ramp	Capacity	Vision
Taylor Road	Chadburn Crossing to Vaughn Road	Capacity	Vision
Wetumpka Hwy	between ramps to/from North and East Blvd	Capacity	Vision
Woodley	McGehee Road to Allendale Rd	Capacity	Vision
Elmore County/Millbrook Connector	CR 7 (Deatsville Hwy) to new interchange, I-65 between Exits 181 186	Capacity	Vision
US-231	River Oaks Dr (South of Wetumpka) to Near CR 200 (Blue Ridge Rd)	Capacity	Vision
Wares Ferry Road	East Blvd to McLemore Rd	Capacity	Vision
Cobbs Ford Road	Old Farm Lane to Sheila Boulevard	Capacity	Vision
I-65 Ramp Improvements	Ramps at North Blvd southside	Capacity	Vision
I-65 Ramp Improvements	Ramps at US 80 SB exiting	Capacity	Vision
SR 110	Outer Loop to Milly Branch Rd	Capacity	Vision
West Boulevard	Hayneville road to Southeast of Estate Ave	Capacity	Vision
SR-14	Ingram to Cook Rd (Coosada Pkwy)	Capacity	Vision
SR-14	west of Lucky Town Rd to McCain Rd	Capacity	Vision
SR-14	Wetumpka Sports Complex to US 231	Capacity	Vision
SR 14	Fitzpatrick to McCain	Capacity	Vision
Millbrook Connector	Deatsville Hwy (CR 7) at Ross Road to SR 14 at Kinsley Lane	Capacity	Vision
South Boulevard	Rosa Parks Ave to US 31	Capacity	Vision
I-85	Jenkins Creek to 0.7 miles east of SR 126	Capacity	Vision
I-85	0 .4 miles East of SR 271 to Jenkins Creek	Capacity	Vision
I-65	US31 to North of Fairview Avenue	Capacity	Vision
I-85	Downtown Interchange through US 231 Interchange	Capacity	Vision
Prattville Northern Bypass	Fairview Ave @ Sweetwater Apts to US 31	Capacity	Vision

Table 6.6: Financially Constrained and Visionary 2045 Maintenance and Operations Projects

Roadway	Location	Constrained or Visionary/Need
S Perry Street	Fairview Ave to I-85	Constrained
Fairview Avenue	South Court St to I-65	Constrained
E Main Street	SR 3/US 31 to Virginial St	Constrained
Various Streets	Downtown Prattville	Constrained
Closed Circuit Cameras	Various Intersection	Constrained
Street Light Conversions	State Routes within the City of Montgomery	Constrained
US 31	6th St (Prattville) north to I-65	Constrained
AL 14/Fairview Avenue	US 31 to Jasmine Trail	Constrained
S Main Street	E Bridge St to US-231	Constrained
Hill Street	E Bridge St North to Orline St	Constrained
Orline Street	Hill St East to Fish St	Constrained
CR-85 (Pike Road)	Wallahatchie Rd (CR-84) to US-80	Constrained
Narrow Lane Road	Hannon Slough	Constrained
Woodley Road	Whites Slough	Constrained
Congressman WL Dickinson	South ROW of CSX RR to Atlanta Hwy	Constrained
E Fairview Avenue	S Court St to Cloverdale Rd	Constrained
Carter Hill Road	Zelda Rd to McGehee Rd	Constrained
Bridge Painting	Various Bridges in City of Montgomery	Constrained
Handicap Ramps	Various Streets in Montgomery CBD	Constrained
Perry Hill Road	Atlanta Hwy (Property Acquisition)	Constrained
Perry Hill Road	Atlanta Hwy	Constrained
Various Streets	City of Prattville	Constrained
Court Street and East Bridge Street	S Main St to Hill St	Constrained
Company Street	Hill St to Orline St	Constrained
Orline Street	Company St to Hill St and Hill St from Orline St to Company	Constrained
Marler Road	US-80 to Olkfuski Rd	Constrained
Ingram Road	Middle Creek Tributary	Constrained
Ingram Road	Middle Creek	Constrained
Rifle Range Road	Dozier Rd to Toll Bridge Rd	Constrained
Firetower Road	Redland Rd	Constrained
Coosada Parkway	Coosada Rd	Constrained
Coosada Parkway	Alabama River Pkwy	Constrained
Hogan Road	SR-143 to SR-111	Constrained
Possom Trot Road	Coosa River Rd to lightwood	Constrained
Airport Road	Kennedy Ave to SR-14	Constrained
Coosada Road/Rucker Road	Blackwells Drive to SR-14	Constrained
Kennedy Avenue	Coosada Rd to Airport Rd	Constrained
Grier Road	Weoka Rd to Dexter Rd	Constrained
Street Light Conversions	Montgomery CBD	Constrained
Fairview Avenue	S Court St to Narrow Lane Rd	Constrained
Perry Street	Noble St to High St	Constrained
Perry Street	Jefferson St to Pollard St	Constrained
Federal Drive	S of Railroad to Atlanta Hwy	Constrained
Dalraida Drive	Atlanta Hwy to Gunter AFB	Constrained
Lower Wetumpka Road	Tolvert St to Nothern Blvd	Constrained
Day Street	Bridge replacement	Constrained
Day Street	Maxwell AFB	Constrained
Ingram Road	SR-14 to Deatsville Hwy	Visionary/Need

Maxwell AFB Gate	US 31 to Jasmine Trail	Visionary/Need
Bell Road	Vaughn Rd to Southern End I-85 bridge	Visionary/Need
Bell Road	North End of I-85 to US-80/Atlanta Hwy	Visionary/Need
Eastdale Road	Atlanta Hwy to Shirley Blvd	Visionary/Need
Monticello Drive	Eastern Blvd to Shirley Blvd	Visionary/Need
East Shirley Lane	Eastern Blvd to Greystone	Visionary/Need
Old Selma Road	US-31 to West Blvd	Visionary/Need
Mobile Highway	US-80 to Fairview Ave	Visionary/Need
Ray Thorington Road	Vaughn Rd to Park Crossing	Visionary/Need
Vaughn Rd	Zelda Rd to Perry Hill Rd	Visionary/Need
Narrow Lane Rd	Southern Blvd to McInnis Rd	Visionary/Need
Woodley Rd	Southern Blvd to Virginia Loop Rd	Visionary/Need
Ripley St	Madison Ave to Railroad Bridge	Visionary/Need
Fairground Rd/Vandiver	Crestview to Lower Wetumpka Rd	Visionary/Need
EastChase Pkwy	Taylor Rd to Chantilly Pkwy	Visionary/Need
BerryHill Rd	Taylor Rd to EastChase Pkwy	Visionary/Need
Upper Wetumpka Rd	Railroad Bridge to Crestview	Visionary/Need
Vaughn Rd	Eastern Blvd to Taylor Rd	Visionary/Need
Coliseum Blvd	WL Dickinson Dr to Northern Blvd	Visionary/Need
Harrison Rd	Lincoln Rd to Perry Hill Rd	Visionary/Need
Eastdale Circle		Visionary/Need
Ray Thorington Rd	Park Crossing to Pike Rd	Visionary/Need
Capital Parkway	Highland Ave to Madison Ave	Visionary/Need
Lower Wetumpka Rd	Northern Blvd to City limits	Visionary/Need
Green Ridge Rd	Willow Lane Drive to Harrison Rd	Visionary/Need
Willow Lane Dr	Green Ridge Rd to Forest Hills Dr	Visionary/Need
Forest Hills Dr	Willow Lane Drive to Atlanta Hwy	Visionary/Need
Carmichael Rd	Perry Hill Rd to Eastern Blvd	Visionary/Need
Lagoon Park Dr	Eastern Blvd to Gunter Industrial Park	Visionary/Need
Carmichael Rd	Eastern Blvd to Woodmere Blvd	Visionary/Need
Vaughn Rd	Perry Hill Rd to Eastern Blvd	Visionary/Need
Mt Meigs Rd	Ann St to Capital Parkway	Visionary/Need
Coliseum Blvd	Atlanta Hwy to Pelzer	Visionary/Need
Burbank Dr	Atlanta Hwy to Wares Ferry Rd	Visionary/Need
Day St	Maxwell AFB	Visionary/Need
Woodley Rd	Fairview Ave to McGehee Rd	Visionary/Need
Rosa Parks	Jeff Davis to Mildred Ave	Visionary/Need
Rosa Parks	Collinwood to South Blvd	Visionary/Need
Trinity Blvd	White Acres to Carmichael Rd	Visionary/Need
Washington Ave	Lee St to McDonough	Visionary/Need
Old Hayneville Rd	Air Base Blvd to West blvd	Visionary/Need
High St	Court St to Hall St	Visionary/Need
Court St	Washington Ave to I-85	Visionary/Need
Court St	Jefferson St to Southern Blvd	Visionary/Need
Highland Ave	Hall St to Lincoln St	Visionary/Need
McGehee Rd	Woodley Rd to Southern Blvd	Visionary/Need
Woodmere Blvd	Carmicheal Rd to Carmicheal Loop	Visionary/Need
Carter Hill Rd	Vaughn Rd to McGehee Rd	Visionary/Need
Fleming Road	Narrow Lane Rd to End	Visionary/Need
Virginia Loop	US-231 to Woodley Rd	Visionary/Need
McInnis Rd	Woodley Rd to Narrow Lane Rd	Visionary/Need
Court St	I-85 to Fairview Ave	Visionary/Need
Decatur St	High St to Sadler	Visionary/Need
Day St	US-31/Old Selma Rd to Hill St	Visionary/Need

Day St	US-31 to West Blvd	Visionary/Need
Bell Road	Troy Highway to Vaughn Road	Visionary/Need
Bell Road	Vaughn Road to Atlanta Highway	Visionary/Need
Atlanta Hwy	Ann St to Perry Hill Rd	Visionary/Need
Madison Ave	Ripley St to Atlanta Highway	Visionary/Need

Source: MPO Staff

6.2 Transit Needs

As presented in Section 4 of the LRTP, local public transit service within the Montgomery MPO area is provided by two main agencies, The M (formerly the Montgomery Area Transit System, or MATS) and the Autauga County Rural Transportation (ACRT) with private intercity service provided by Greyhound and Capital Trailways. This section focuses on additional transit needs.

6.2.1 Local and Express/Vanpool Transit Service

In addition to improving Montgomery's existing transit services, it is critical to continue to explore new technologies and types of service. To assess the potential for implementing new forms of transit, including express bus and vanpool strategies, model and non-modal analyses were performed. Figures 6.9 to 6.15 detail model-based trip maps in relation to the existing fixed transit system. This detailed analysis was conducted as part of the 2040 LRTP.

Express bus transit routes and vanpools perform a different function than fixed route transit and, therefore, the need for such services must be assessed using a different methodology. Express/vanpool services operate more as a shuttle, transporting passengers from a remote location to a centralized area, while making few or no stops. This service typically generates from a moderate density residential area destined for a high density employment center. This type of service can be implemented for the purpose of providing mobility as well as reducing congestion on heavily traveled corridors.

To assess potential opportunities for express bus/vanpool service, relationships between areas with large populations and high density employment centers were analyzed. The residential areas that were identified as large population sheds or those that use congested corridors to travel to Downtown Montgomery included the areas surrounding Wetumpka, Prattville, Millbrook, and Pike Road. The origins and destinations for potential express bus/vanpool are shown in Figure 6.15.

Origin-destination data was used to estimate the total trips between these areas and the employment centers also shown in Figure 6.15. These include the following areas:

- Downtown/Central Business District
- East Midtown - bounded by Eastern Boulevard to the east, Atlanta Highway to the north andeast, and I-85 to the south
- Car Plant/Industrial Area – segments on either side of I-65 near the southeast portion of the MPOarea
- Airport – area surrounding the airport, mostly north of US 80

Table 6.7 shows the results of this origin-destination assessment, which looked at trips made between the identified origin (residential) zones and the designated destinations (employment) zones. This table shows the total number of trips between these regions on a daily basis.

Table 6.7: Daily Trips between Residential Areas and Employment Destinations Year 2040 Projected Traffic

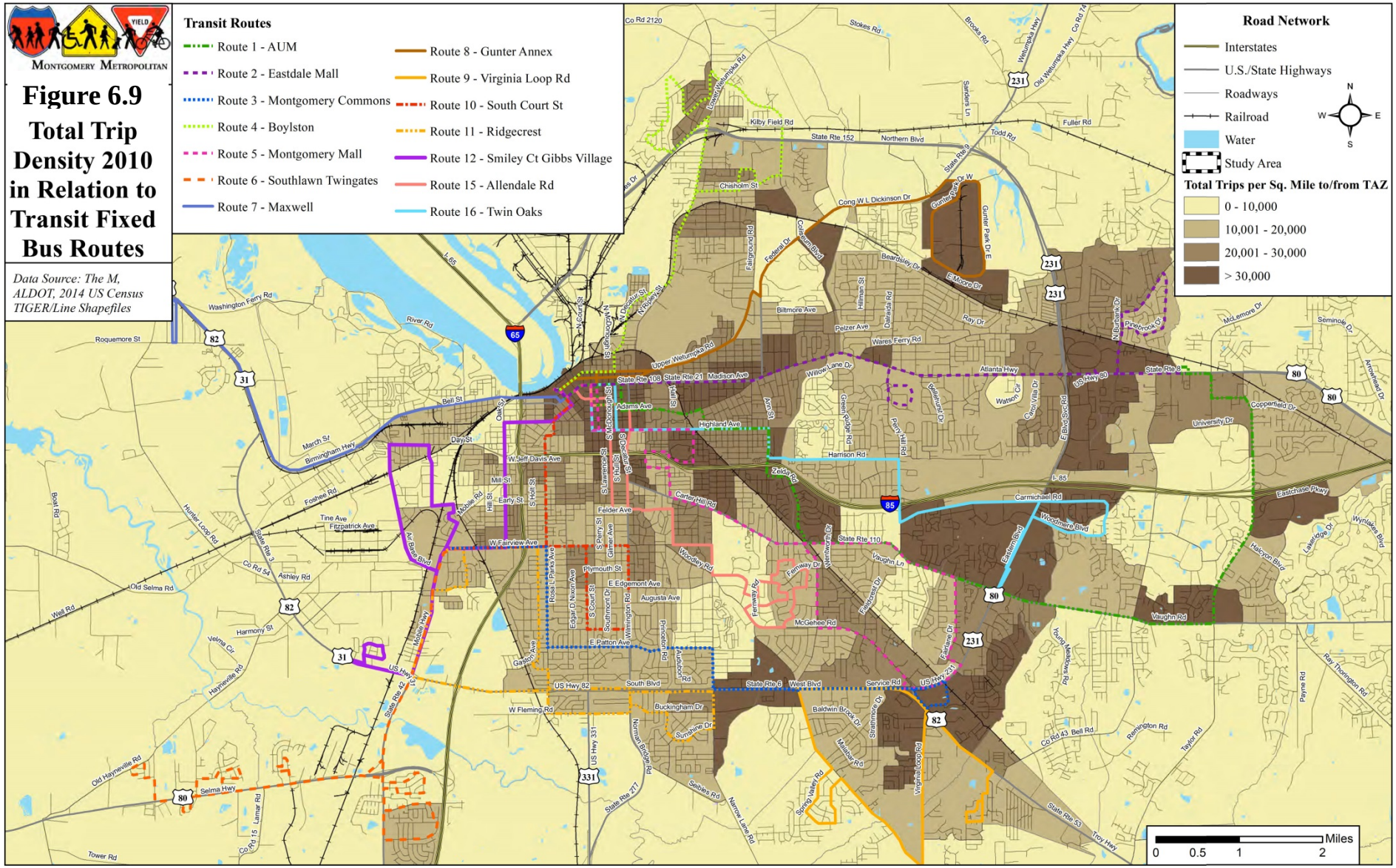
	Destination			
Origin	**Downtown**	**East Montgomery**	**Airport**	**Industrial Area on I-65**
Pike Road	6,749	10,659	766	884
Wetumpka	3,315	2765	303	272
Prattville	12,873	3,838	3,959	2,468

Source: MPO Staff

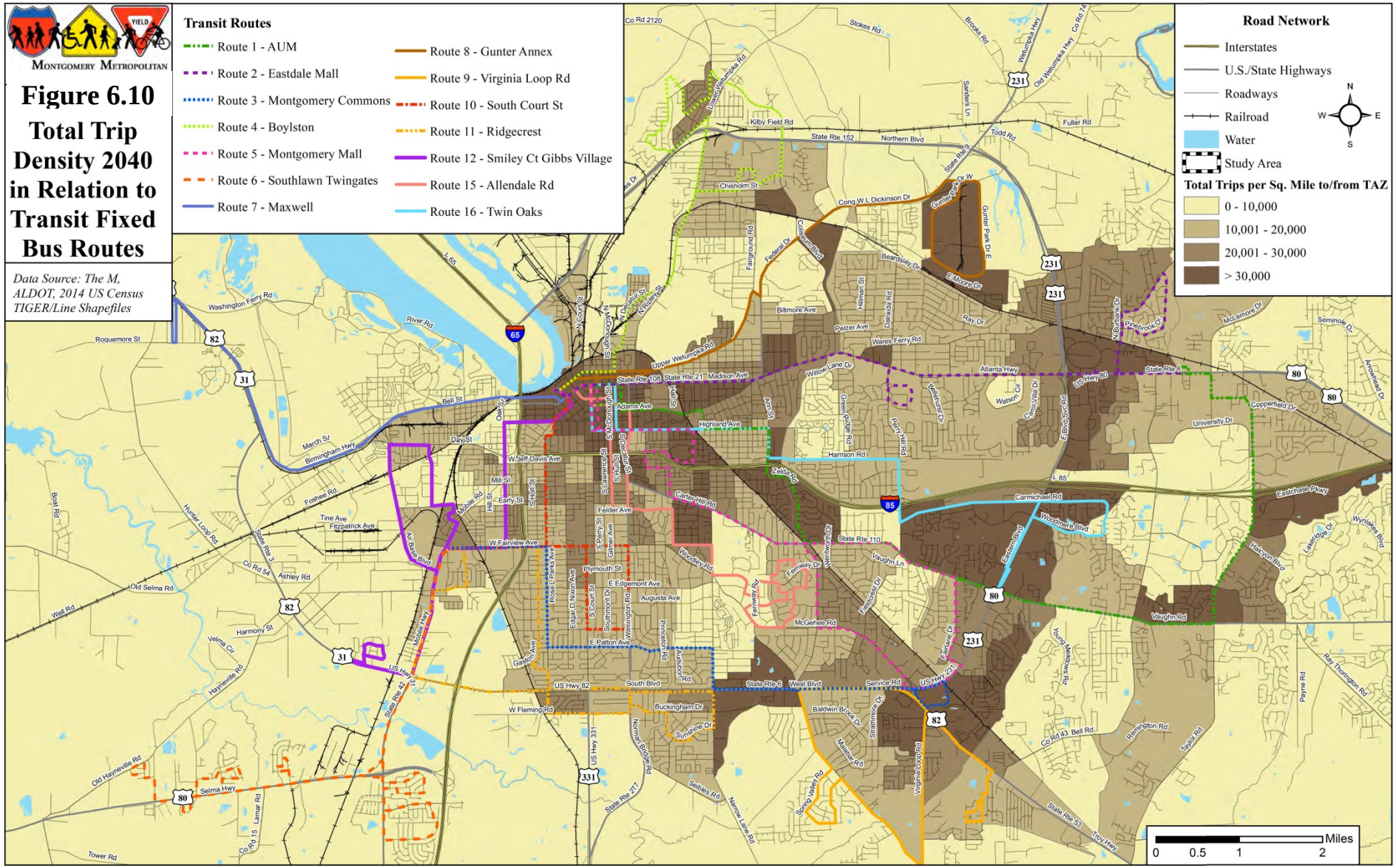
Express bus and vanpool services differ in both the demand required to sustain such a service and operational characteristics. The MPO will need to assess in more detail which transit option would best meet the needs of the area based on current demand and trip-making patterns. Some areas have implemented these services sequentially, where vanpool services are initially implemented and, once ridership builds to a level to deem it necessary, express bus services are implemented. It should be noted that the market for this type of service is enhanced if there is any sort of operational benefit that provide priority for transit vehicles, such as signal priority or queue jumping.

Based upon the express bus/vanpool and local transit service analyses, several findings have been identified:

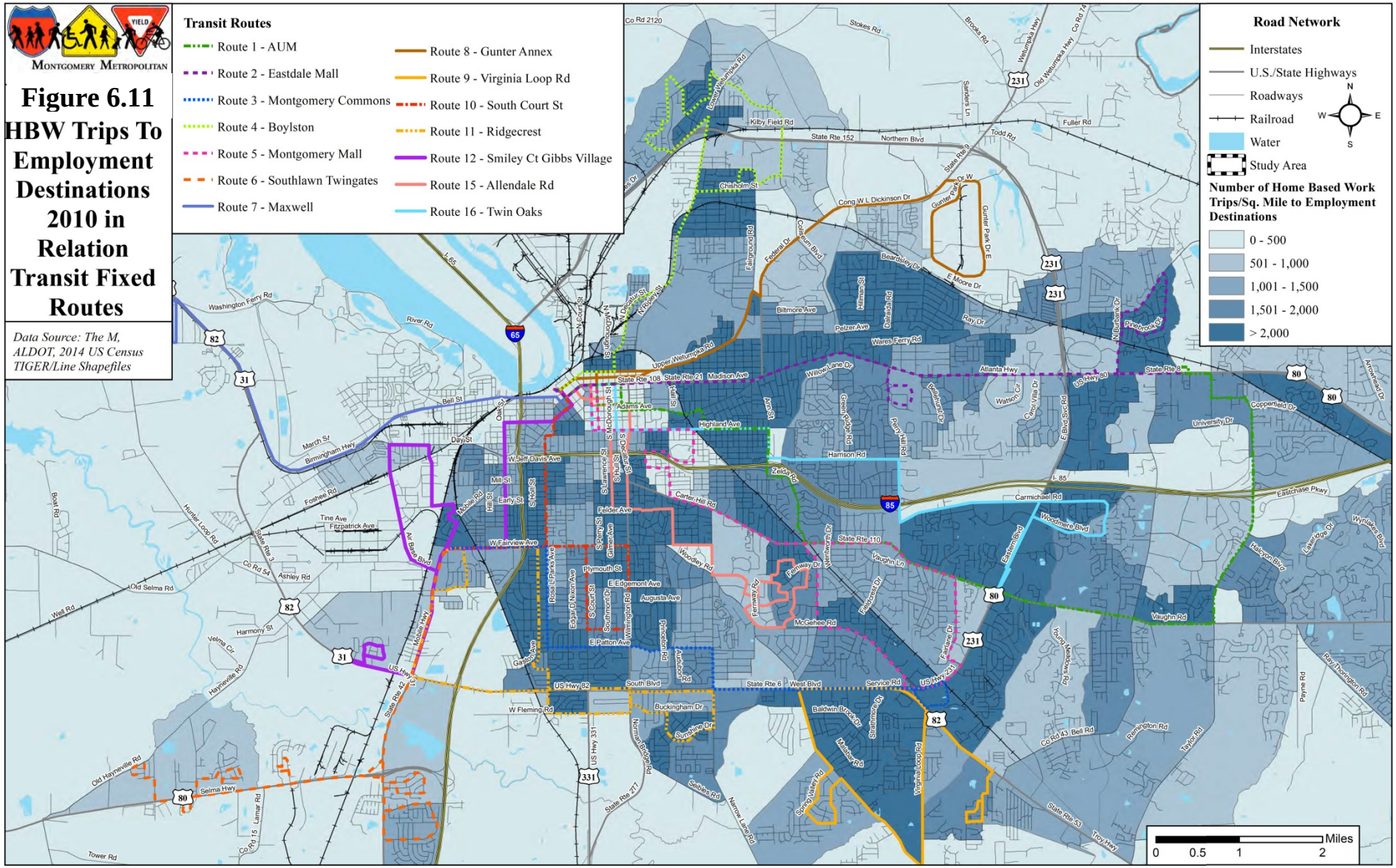
- Several existing routes, as identified previously, would benefit from enhanced service, including additional buses and reduced headways.
- Opportunities exist for expanding the fixed route network to the high growth residential and retailemployment area surrounding I-85 from west of Eastern Boulevard/US 231 to Atlanta Highwayas well as to the industrial area surrounding the airport/US 80/Selma Highway and car manufacturing facility off of I-65.
- Opportunity for express bus service exists from Prattville to downtown Montgomery, particularly along corridors expected to operate primarily at LOS F including the Prattville and Millbrook areas via I-65 and areas of East Montgomery via I-85.



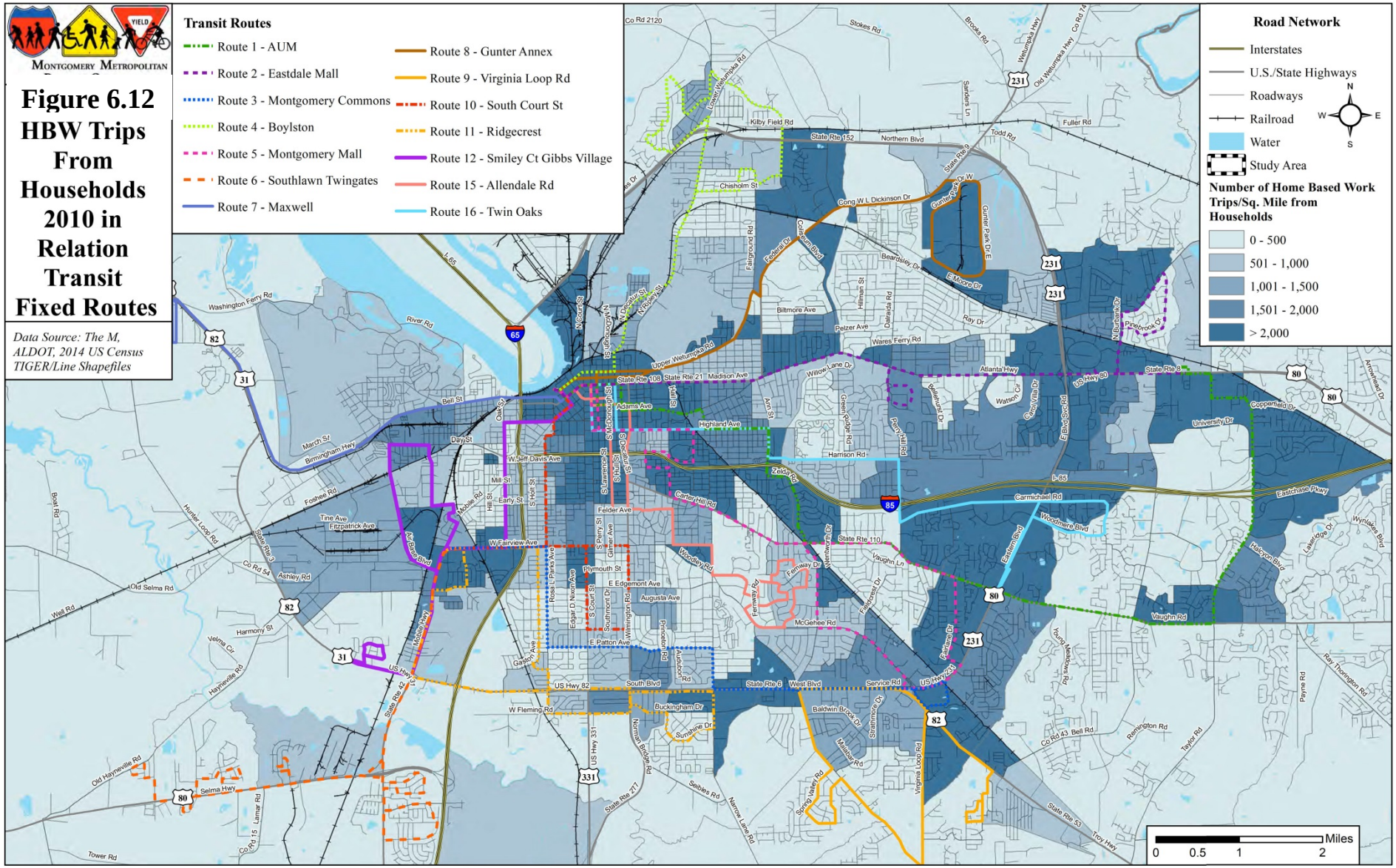
Source: MPO Staff



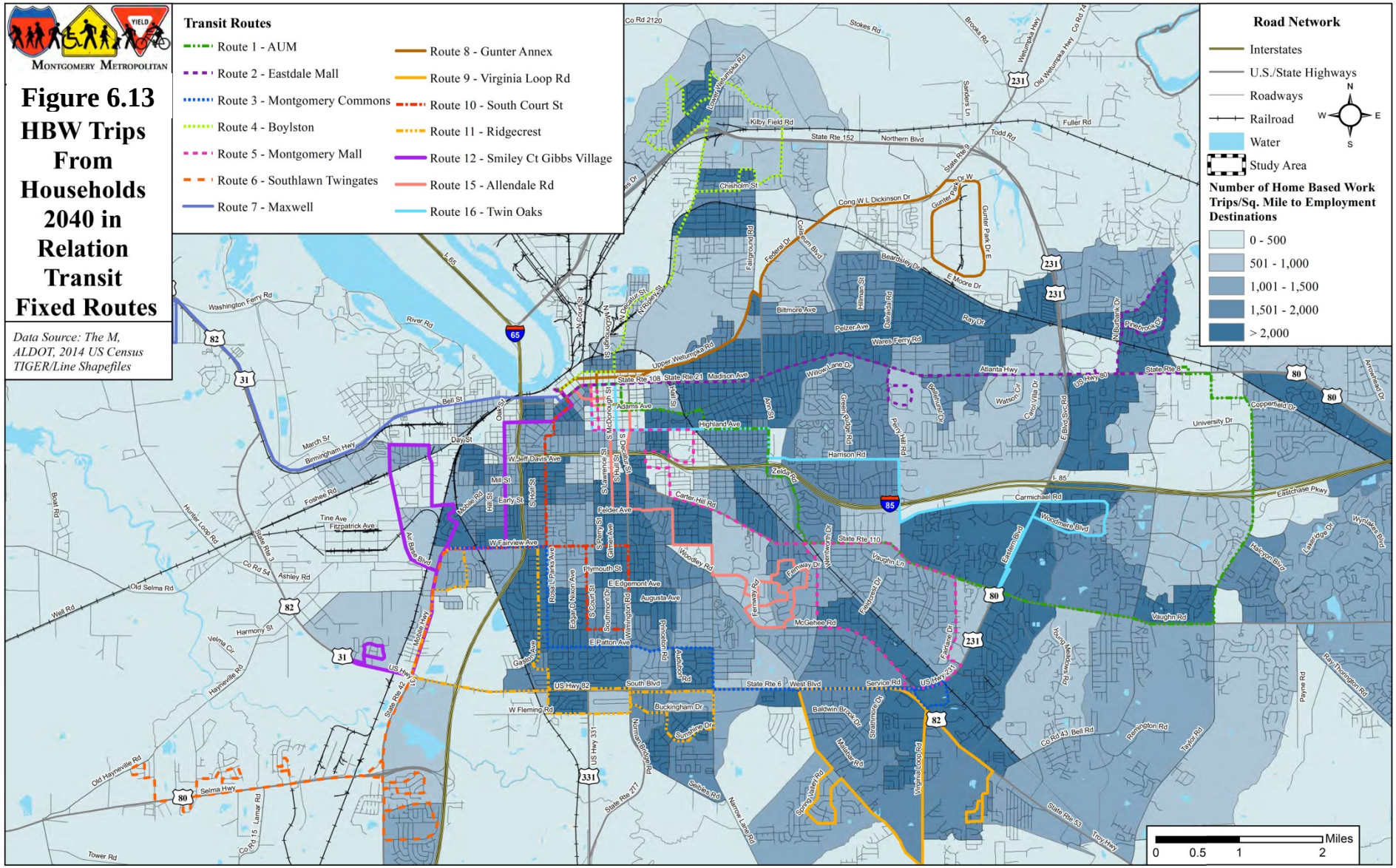
Source: MPO Staff



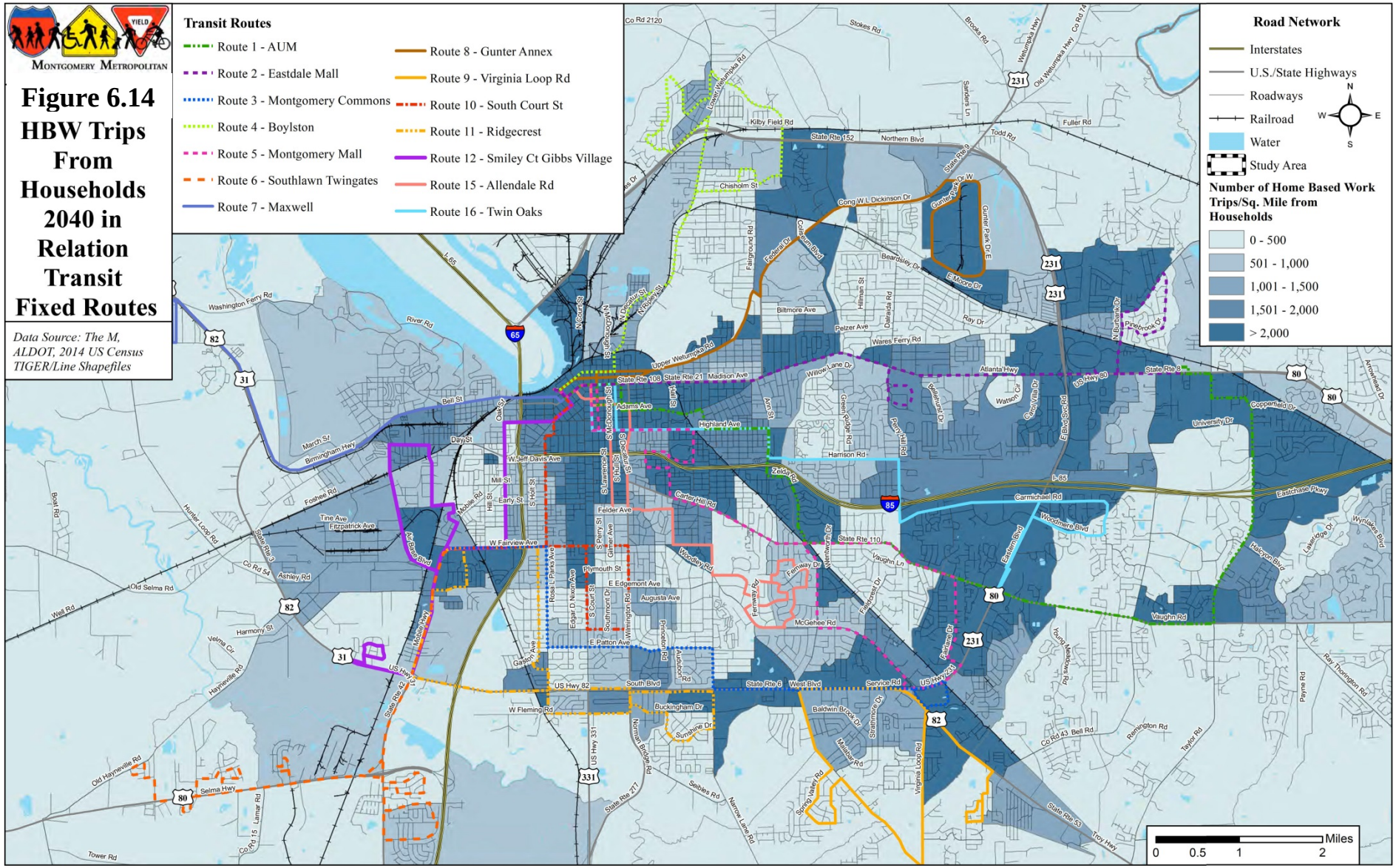
Source: MPO Staff



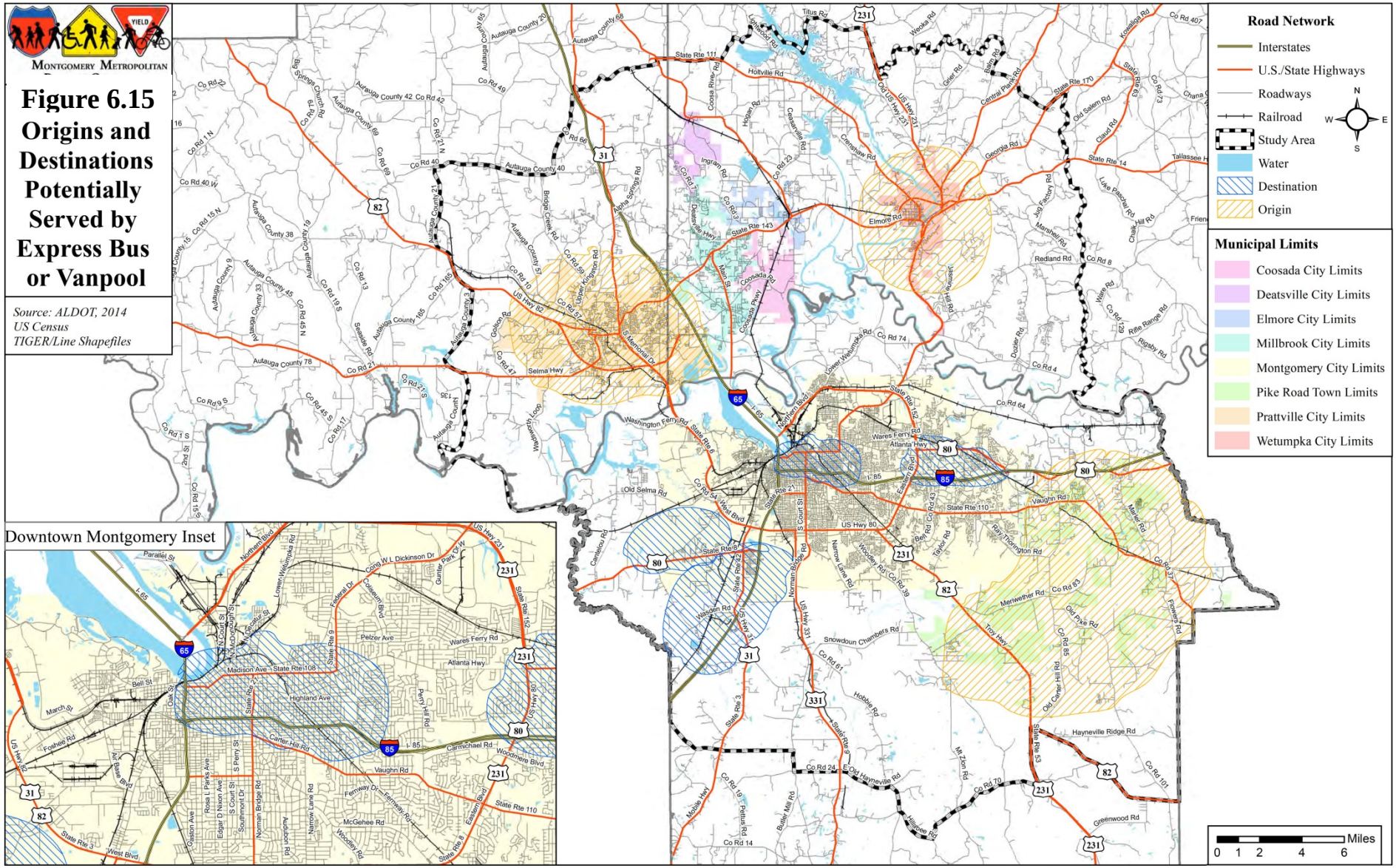
Source: MPO Staff



Source: MPO Staff



Source: MPO Staff



Source: MPO Staff

6.2.2 Potential Passenger Rail

The City of Montgomery once was home to the first electric passenger rail transit streetcar in the nation from 1886-1936. The name of the system was called the Montgomery Street Railway System (commonlyknown as *The Lightning Route*), owned and operated by Alabama Power Company. Initially operating a network of four passenger streetcar rail lines in 1886, it ended in 1936 with a total of 20 passenger streetcar rail lines throughout. The streetcar lines went as far north along Lower Wetumpka Road to Vandiver Boulevard, southeast to the intersection of Narrow Lane Road and Woodley, west along what is now Maxwell Boulevard stopping at the entrance to Maxwell Air Force Base and east along Highland Avenue to stop at Panama Street. All streetcar lines originated in downtown Montgomery at historic Union Station, and dispersed on a radial system in all directions of the city limits at that time.

The City of Montgomery has plans to study the possibility of returning to streetcar passenger rail transit and will perform an alternatives analysis for new or small starts funding when funds can be obtained. Further alternatives analysis will also be done to study a CSX commercial freight rail line that runs from downtown Montgomery to Gunter Industrial Park, then along an abandoned rail line that parallels Atlanta Highway/US-80 to Chantilly Parkway to determine the feasibility of converting the old freight rail for the purpose of commuter passenger rail.

The Alabama Department of Economic and Community Affairs (ADECA) was awarded a grant from the Federal Railroad Administration (FRA) to study the feasibility of high-speed passenger rail returning to Alabama along a 274-mile corridor from Birmingham to Mobile via Montgomery. As recently as 1995 a passenger rail service called the Gulf Breeze was operated by Amtrak on this. The operation was funded in part by the State of Alabama.

6.3 Bicycle and Pedestrian Facilities

The *2012 Bicycle and Pedestrian Plan* detailed 32 routes and 36 connectors based upon bicycle suitabilityand feedback from citizens and the Bicycle and Pedestrian Subcommittee (BPS). After the plan's adoption, two amendments were completed in 2013 and 2014. An additional 26 connectors were added tothe River Region Bicycle Network for the Montgomery study area to accommodate the Tour de River Region and requests from municipalities and citizens.

The first step in creating the River Region Bicycle Network, the Bicycle Suitability Analysis, identified the functionally classified roadways safest for bicyclists. The Suitability Index scores roadways according to three factors: traffic volume, travel speeds, and the functional classification of the Roadway. Table 6.8 details each suitability factor.

Table 6.8: Bicycle Suitability Rating Descriptions

Bicycle Suitability Factors	Score	
Traffic Volume	Less than 2,500 vehicles per day per lane (vpdpl)	4
	Between 2,500 and 5,000 (vpdpl)	2
	More than 5,000 (vpdpl)	0
Travel Speeds	Less than or equal to 30 mph	4
	Between 30 and 40 mph	2
	Greater than 40 mph	0
Functional Class	Local Streets and Collectors	4
	Minor Arterials	2
	Other (Major Arterials and Highways)	0

Source: MPO Staff

The average of the three suitability factor scores was used to find a suitability rating, indicating the level of difficulty for a roadway. The ranges are as follows:

- Best conditions for bicycling range from 3 to 4.0
- Medium conditions for bicycling range from 2 to 2.9
- Difficult conditions for bicycling range from 1 to 1.9
- Very difficult conditions for bicycling range <1

These ratings were taken into consideration when developing the proposed bicycle routes and connectors. When possible, roadways with a *very difficult* rating were avoided. If the roadway is the only option available, a shared-use path was recommended to minimize conflict between vehicles and bicyclists.

Figures 6.16 to 6.18 detail the bicycle routes and connectors. Sidewalk facilities were identified as an important part of the transportation system by the public. The sidewalk network facilitates access to various parts of the community – schools, social service offices, public transit stops, and other trip attractors. According to the University of North Carolina Highway Safety Research Center, a high correlation exists between communities that meet the needs of pedestrians and an increased level of pedestrian travel. In communities that do not provide adequate pedestrian facilities, fewer people walk and those who do are more at risk of pedestrian injuries and fatalities.

Pedestrian projects in most areas span three main categories: engineering (condition of the sidewalks, signals, signing, marking, design of curb ramps, etc.), education (pedestrian safety, walk to school programs), and enforcement (enforcement of motorist compliance with crosswalk rules, requiring pedestrian facilities in new residential areas). A comprehensive sidewalk inventory of both existing and needed facilities was completed for the MPO study area on all functionally classified roads except for

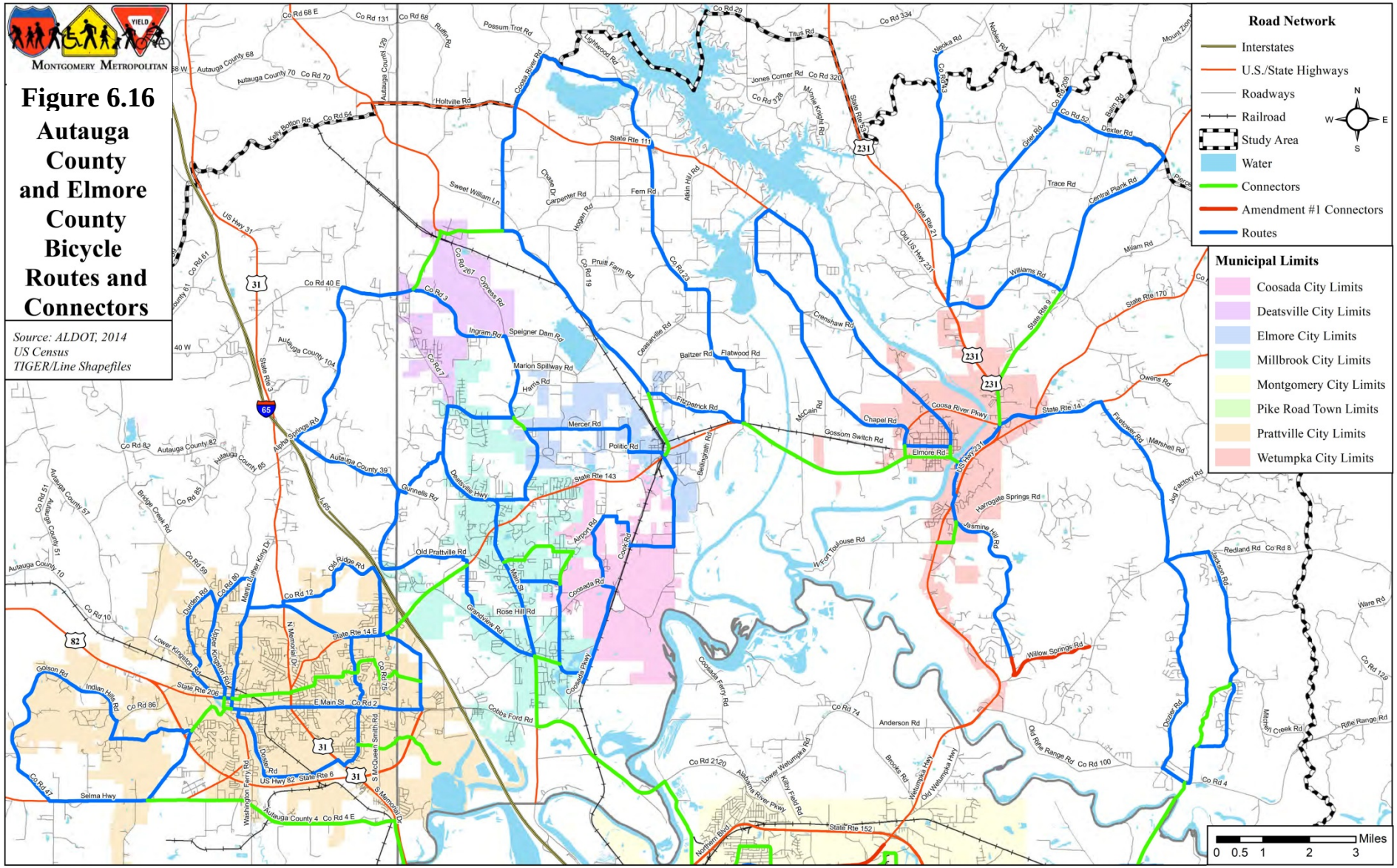
interstates and those roads with traffic volumes deemed too dangerous for pedestrian traffic. This inventory displayed that downtowns located within the study area are walkable with sidewalks often on both sides of the street; however, as streets progressed away from the central business districts, sidewalks often stopped or continued only on one side of the street.

The *2012 Bicycle and Pedestrian Plan* utilized the sidewalk inventory, an analysis of trip generators, public input, and an intersection inventory to identify pedestrian needs. A total of 391.3 miles of sidewalk was identified between the sidewalk inventory process and the public involvement process. Of this total, 55.9 miles were identified as needing rehabilitation and 335.4 miles as new sidewalk construction. The majority of the sidewalks identified are in the City of Montgomery because of both employment and residential density. Table 6.9 details the needed sidewalk projects by county. All City of Prattville projects are included in the Autauga County project listing. Additionally, 10.98 miles of sidewalk projects were added in Amendment #1. The pedestrian projects were prioritized based upon the sidewalk inventory and public input, as well as traditional issues like safety and connectivity. Figures 6.19 to 6.21 detail the proposed sidewalk projects for priorities 1, 2, and 3.

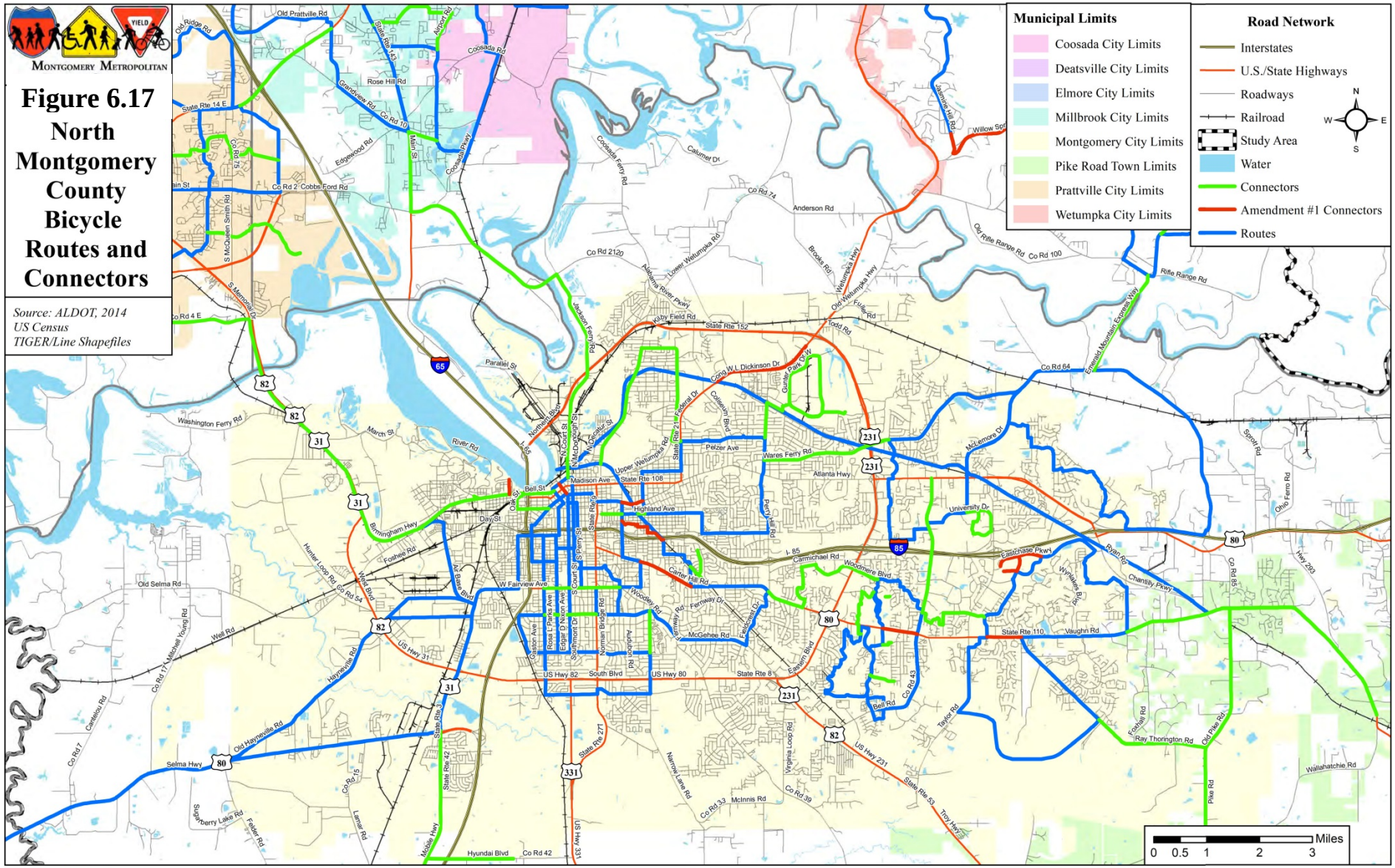
Table 6.9: Miles of Needed Sidewalk Projects by County

County	Total Miles Rehabilitation	Total Miles New Construction
Autauga	0	48.97
Elmore	0	36.07
Montgomery	55.93	250.32
Total	55.93	335.36

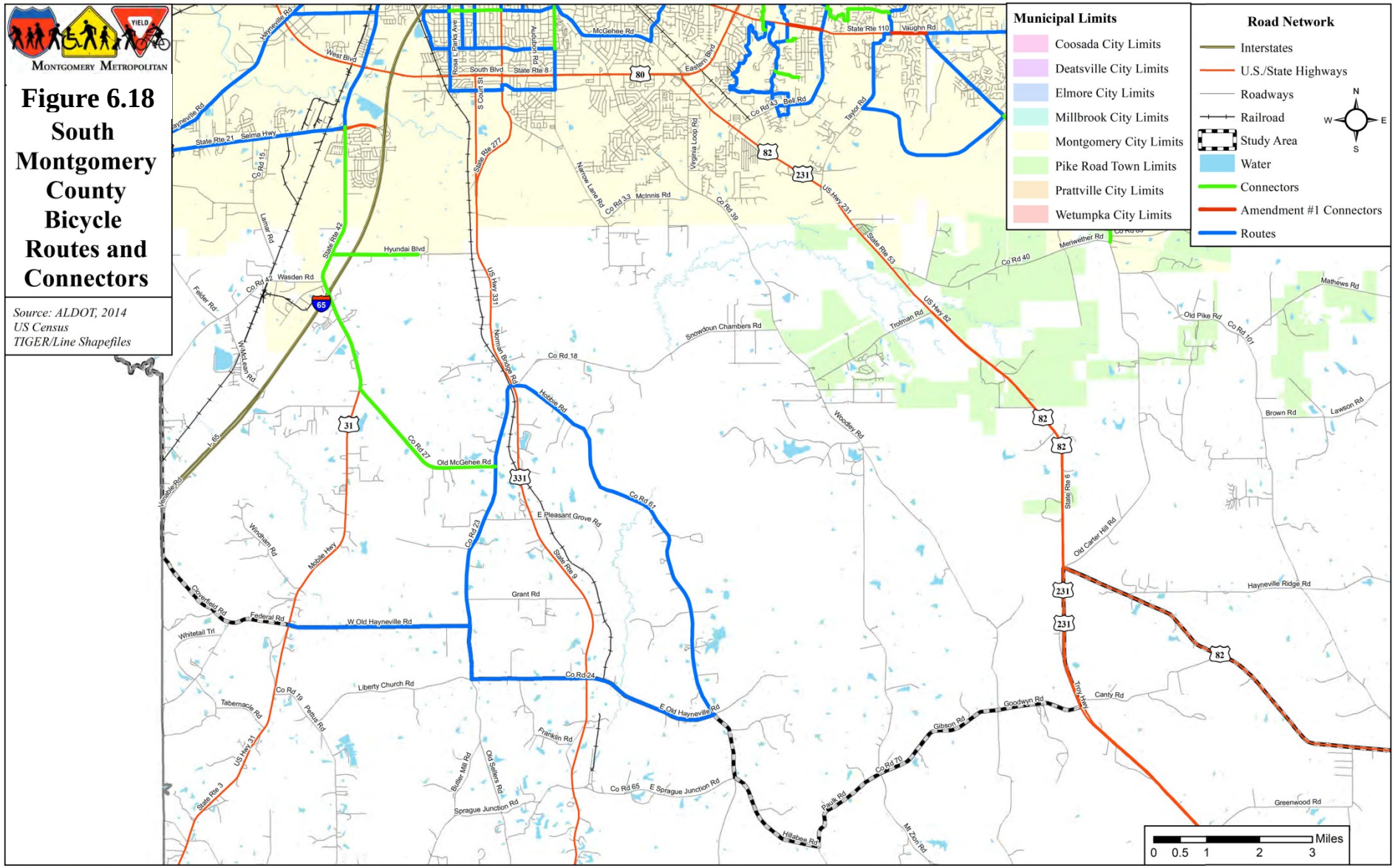
Source: MPO Staff



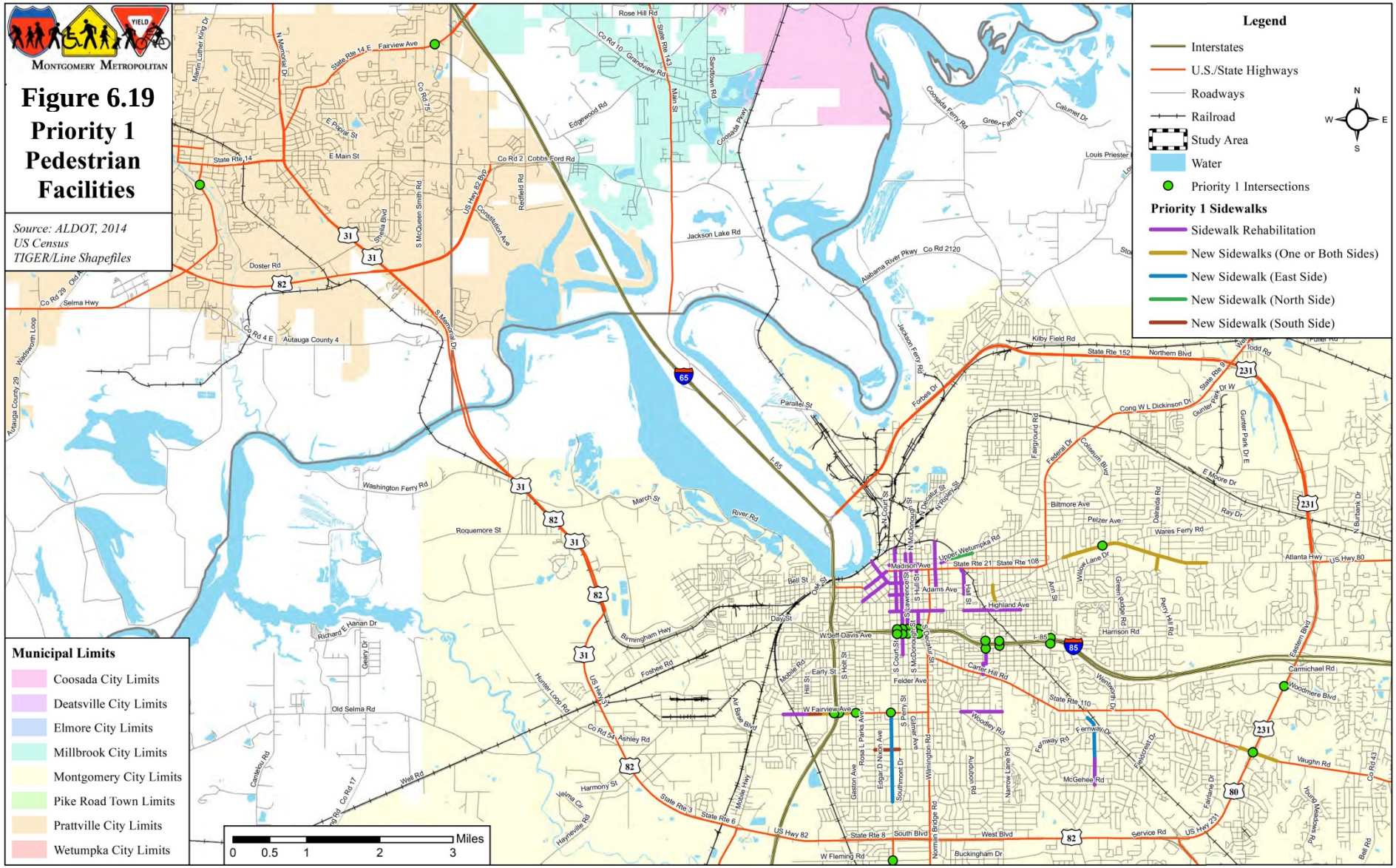
Source: MPO Staff



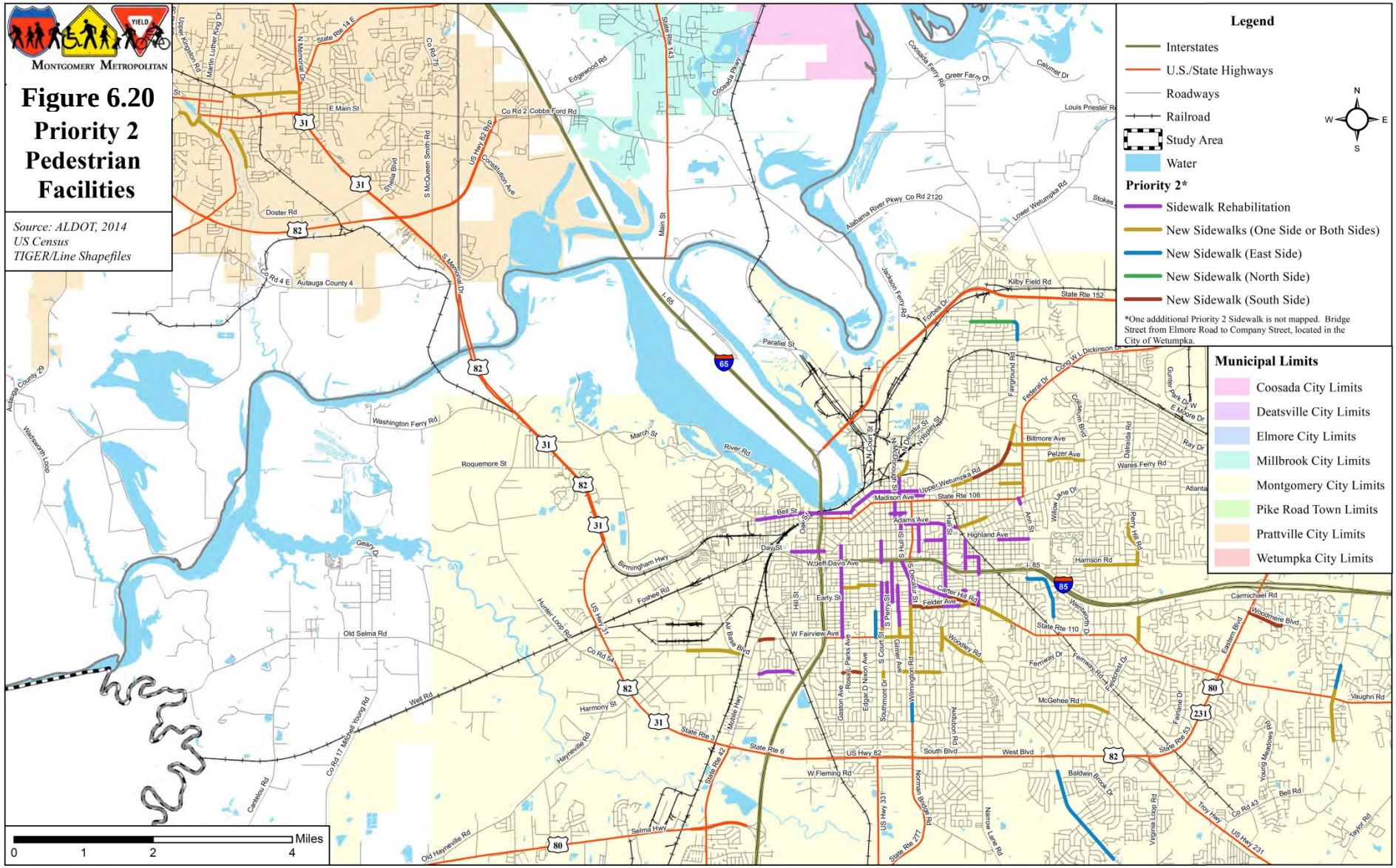
Source: MPO Staff



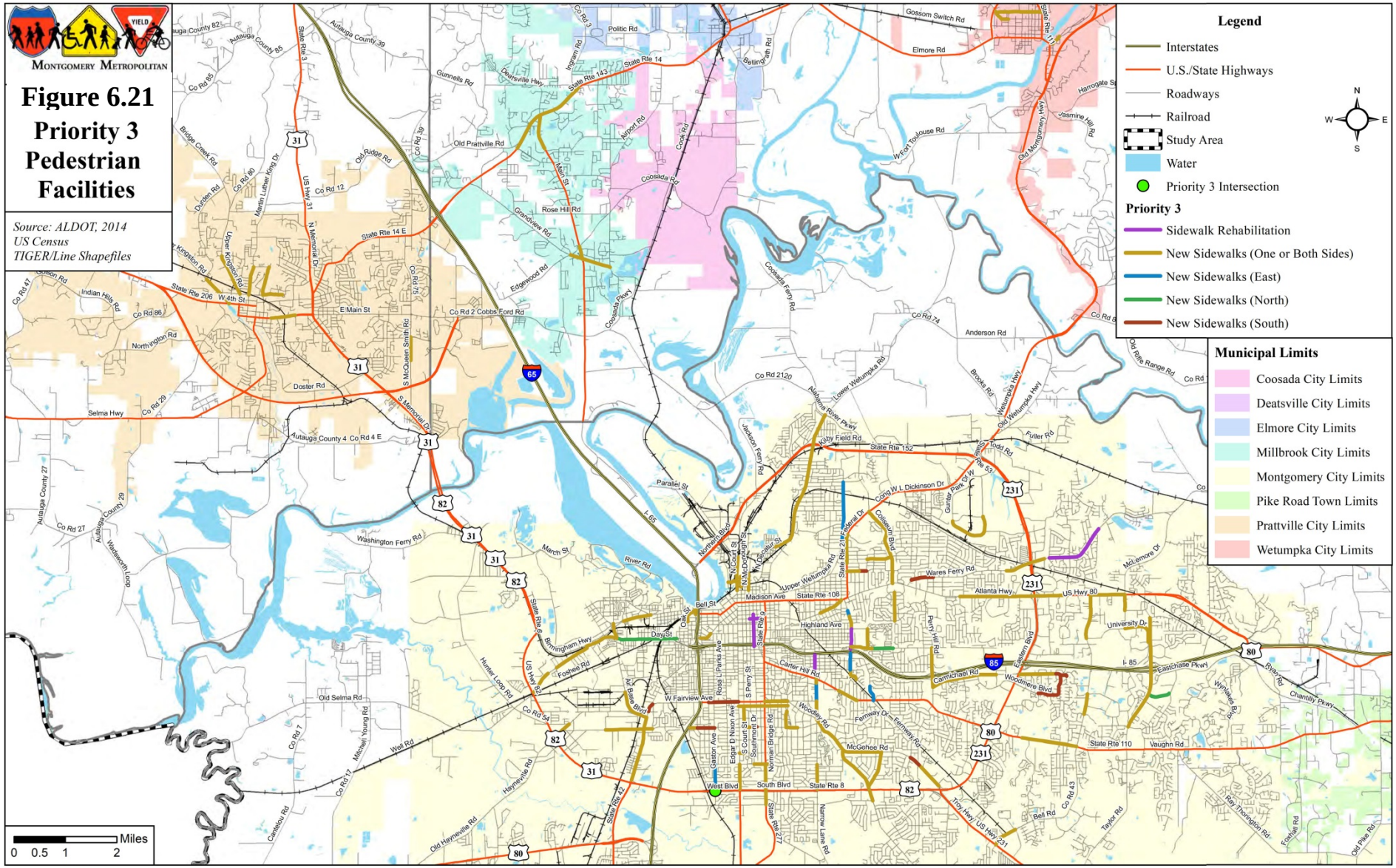
Source: MPO Staff



Source: MPO Staff



Source: MPO Staff



Source: MPO Staff

6.4 Freight Needs

Not surprisingly, the two interstates (I-65 and I-85) are the most significant freight roadways in the study area. I-65 connects the area to the major cities of Mobile, Birmingham and Nashville, while I-85 provideshigh speed access and connectivity between Montgomery, Auburn-Opelika, and Atlanta. Aside from through trips, truck freight traffic in the Montgomery area typically serves the region's commercial and industrial uses. The most critical truck corridors on the surface street network are US 231, Eastern Boulevard, Atlanta Highway, US 82, and US 331.

While the MPO has very little control of non-roadway related freight modes, it is still important to recognize the impact of other modes with respect to freight movement. As such, the MPO will continue tocoordinate with ALDOT and, as necessary, private sector interests, such as railroads and trucking companies, to monitor freight movement throughout the region.

The Montgomery MPO Regional Freight Plan identifies a regional freight network and strategies for improving freight movement in the region.

7.0 Project Identification and Evaluation

7.1 Needs Assessment

A safe and efficient transportation system is key to a vital community that supports established neighborhoods and provides an attractive location for businesses. An important initial step in plan development is assessing the current transportation system to identify existing and future deficiencies and needs for all modes. This information then serves as the basis for development of improvement recommendations.

Combined with background socioeconomic and land use data, the travel demand model utilizes data on current and projected future traffic volumes and roadway characteristics and capacities to forecast current and future conditions across the entire roadway network. Through this process, locations with deficient operations can be readily identified for further analysis. The travel demand model results served as the foundation for roadway improvements, with consideration given to individual congested segments as well as how the entire system operates. However, quantitative data alone cannot provide a sufficiently complete picture of existing and future conditions and needs, so qualitative assessments are also used. These range from field surveys conducted by experienced transportation professionals to comment forms completed by the public at meetings. Importantly, the stakeholders' and public's daily experiences using the transportation network can confirm what the data indicates. They ensure that problem areas do not get overlooked and that the community's vision and goals remain at the forefront in the planning process.

Similarly, recommendations included within regional, local, and subarea planning efforts are important resources for project needs identification. Due to the long horizon period of many planning studies (often as much as 30 years), only a small fraction of recommended projects are typically completed within the relatively short update interval (every 5 years) of a plan. As such, many recommended but as yet incomplete projects remain viable improvements and are carried forward into subsequent plans.

Current land use and future land use vision are also important to the plan development process. Land use is particularly relevant because of its direct relation to current and future population and employment figures—important data inputs to the travel demand model. The role of the transportation network is to provide access to land, thereby sustaining existing land uses and enabling new development. Land uses, in turn, generate vehicle, pedestrian, bicycle, and transit trips. Therefore, land use and transportation must be considered together in order to effectively manage traffic along roadways and maintain accessibility.

7.2 Project Identification Methodology

A wide variety of information on the deficiencies and needs of each transportation mode was utilized to develop potential project solutions. Projects were screened for inclusion in the LRTP based on their ability to address the previously defined system needs and achieve LRTP goals. Projects for the 2045 LRTP were identified through a number of means based on the improvement type. This includes:

- Assessment of existing and projected conditions based on travel demand model results, traffic counts, and other quantitative data sources
- Consideration of past and future demographics and land use trends
- Evaluation of projects from the 2040 LRTP against existing and projected conditions
- Review of programmed improvements in ALDOT work programs (e.g., resurfacing and Section 130)
- Recommendations set forth in other studies/plans, such as the CMP and Bicycle and Pedestrian Plan
- Input from the public, stakeholders, and MPO committees (TCC and CAC)

- Field surveys by transportation professionals

Comparative Evaluation and Prioritization of Projects

Existing and projected needs across the entire transportation system network were identified and a preliminary list of improvement projects developed to address the deficiencies. A comparative evaluation of projects was then undertaken as the basis for project prioritization. The following paragraphs describe the factors considered in developing the list of projects for each project type.

Capacity improvements were evaluated based on a three-step process. First, the severity of congestion projected along the project segments was assessed based on the number of trips exceeding the capacity of the roadway per lane. Then, proposed capacity improvements were evaluated against three primary sets of measures related to mobility benefits, the FAST Act priorities, and sustainability measures. Lastly, potential projects were evaluated for constructability using factors such as potential impacts to wetlands, existence of community facilities, parks, schools, and topographical considerations. As a result of this evaluation, projects could be prioritized and, if warranted, redefined. For example, a project initially considered for capacity improvements could instead be changed to corridor level intersection improvements and/or access management if widening was determined unfeasible.

Much like capacity improvements, intersection improvements and access management corridors were evaluated based on their ability to relieve existing and projected congestion, whether they serve freight corridors, employment centers, or low-income areas. Some congested corridors are identified for access management and/or intersection improvements instead of widening due to constraints from topographical issues or potential community impacts, which are barriers to capacity improvements. Furthermore, because funding for capacity improvements is becoming increasingly scarce, developing a plan that emphasizes lower cost operational improvements that provide a high return on investment is a primary objective.

Federal regulations require that bridges be maintained in safe condition before federal transportation funds can be used for other transportation projects. ALDOT inspects all bridges every two years on a continuous schedule, assigning scores according to their condition. The schedule for bridge improvements is determined by ALDOT in coordination with local governments. Other factors that can help prioritize bridge improvements include overall roadway volumes, freight traffic counts, and accessibility to activity centers.

Section 130 program funds are eligible for projects at all public crossings including roadways, bike trails, and pedestrian paths. Railroad crossing improvements are prioritized by ALDOT in coordination with local governments.

Pavement conditions are monitored through local work programs, and resurfacing projects are prioritized through coordination between ALDOT and local governments. Roadways most critical for mobility and/or connectivity are given priority.

Transit operations are regularly monitored as part of the annual reporting to FTA required of those receiving federal transit funds. In addition, specialized studies are undertaken at times to provide a more focused assessment of current transit operations and needs. Land use and demographics information is also useful in identifying residential and commercial areas with sufficient density and trip attraction to support transit services. Transit priorities for the 2045 LRTP relied primarily on input from transit system management, Transportation planning department staff, and public/stakeholder input. Priorities will continually be updated as new transit development plans are completed every 5 years.

The general need for bicycle/pedestrian improvements was well documented through the development of the 2012 Montgomery MPO Bicycle and Pedestrian Plan, as well as by subsequent amendments. The recommendations for projects were pursued in two ways. First, projects under consideration (whether Capacity or Maintenance and Operations projects) will be evaluated during the preliminary engineering phase to incorporate bicycle and pedestrian facilities were applicable. Second, the Transportation Alternatives Program (TAP) is utilized to implement priority bicycle and pedestrian facilities in

coordination with each municipality and county.

8.0 LRTP Work Program

As a result of the long range transportation planning process, specific projects were defined for the 2045 LRTP update. The recommended projects provide multimodal solutions to address the area's future transportation needs. As is a requirement for developing an LRTP, the plan includes a financiallyconstrained list of projects. This list represents the most critical projects that can be funded with the amount of funding projected for the 25-year study horizon.

This analysis provides a breakdown of anticipated funding from federal, state, and local sources and applies them to a set of different project types. For planning purposes, ALDOT groups improvements intotwo distinct categories - roadway capacity and maintenance and operations (MO) projects. MO projects include intersection and operational improvements, railroad crossing improvements, bridge replacementor repair, resurfacing, bicycle and pedestrian improvements, and transit operations.

8.1 Funding Sources and Allocations

The work program for the LRTP update will require funding from federal, state, and local sources. As noted within, many of the improvements noted within are along federal and state highways and, as a result, will be reliant on federal funds for implementation. In order to determine available resources, historic funding data from ALDOT was examined in addition to ALDOT's expectation of future funding.

8.1.1 Funding Sources

Per the FHWA website, the FAST Act legislation provides for four primary categories of funding for transportation improvements:

- National Highway Performance Program (NHPP) - Funds improvements to the National Highway System (NHS) and the Interstate Highway System as well as other roads important to the nation's economy, defense, and mobility.
- Surface Transportation Program (STP) – Funds may be used for improvements on any Federal- aid highway, bridge projects on any public road, facilities for non-motorized transportation, transit capital projects and public bus terminals and facilities. Within the ALDOT funding system, the major funding allocations within the program are Other Area (STPOA) funds and State managed (STPAA) funds. While STPOA funds are at the discretion of the MPO for projectfunding, STPAA funds are at the discretion of ALDOT for utilization.
- Highway Safety Improvement Program (HSIP) – Funds may be used highway safety on all publicroads with a goal of improving overall performance of the roadway network.
- Congestion Mitigation and Air Quality (CMAQ) Improvement Program – Dedicated to projectsthat serve to reduce emissions and promote air quality in areas that do not meet the National Ambient Air Quality Standards for ozone, carbon monoxide, and particulate matter. The Montgomery MPO area does not qualify for CMAQ funds because the area meets these standards.
- Alabama Transportation Rehabilitation and Improvement Program (ATRIP) – ATRIP is an ALDOT administered program that funds up to 80 percent of the construction of important roadway projects. As a requirement of the program, local jurisdictions are required to bear thecosts of environmental assessment, design, and right-of-way acquisition costs.

8.1.2 Funding Projections

Table 8.1 details the projected funding amounts for federal sources for the Montgomery area provided by ALDOT.

Table 8.1: Funding Levels by Program

Funding Program	Federal Funds	Local Match	Total Funds
Capacity	142,860,683	35,715,171	178,575,854
Operations and Maintenance (O&M)	208,711,602	52,177,901	260,889,503
MPO Dedicated Funds	143,401,962	35,850,491	179,252,453
Total	494,974,247	123,743,562	618,717,809

Source: ALDOT

When comparing historical funding to that projected for the Montgomery area for the next 25 years, thereare some notable observations. These include:

- The Montgomery MPO is projected to receive a total of approximately $495 million, or $22.5 million annually, of federal funding through the year 2045. Local matching funds of $5.6 million are required annually, for a total funding level of $28.1 million.
- Funding available for MO projects is projected to be approximately $208.7 million through 2045, years, or $260.8 million with local match. Annually, MO funding is estimated at $11.9 million.

In developing the work program for the improvements provided in the sections that follow, data from was utilized from the Transportation Economic and Land Use System (TELUS) to assess the ALDOT work program. TELUS is a program adopted by ALDOT to assist in the preparation, maintenance, and dissemination of their annual transportation improvement programs. It should be noted that TELUS is closely linked to the Comprehensive Project Management System (CPMS) that is updated on a continual basis by ALDOT. Therefore, the exact cost estimates provided in this work program will likely change from the projected costs and programming information prior to implementation. Nonetheless, for planningpurposes the ALDOT work program within TELUS provides an acceptable foundation for programming assumptions for the LRTP work program.

8.2 Roadway Capacity Projects

A total of 56 capacity projects are identified and evaluated for inclusion in the 2045 LRTP work program. Table 8.2 Cost estimates are being prepared for these projects. Currently, an estimate of the number of miles of capacity projects that can be built with available funds has been used to estimate the number of projects that will fit within the financially constrained program. The mileage-based capacity constraint assumes an average cost per mile of $8.5 million, and indicates that about 42 miles of capacity expansion projects can be funded through 2045.

8.2.1 Financially Constrained Capacity Projects

Based on available funding, and subject to further input and direction from the MPO Policy Committee, this draft document suggests that 27 capacity improvement projects can be included within the financially constrained work program. Projects were evaluated based on traffic benefits and multimodal benefits, and the top scoring projects are recommened for the financially-constrained plan. The recommended projects are listed in Table 8.2 and mapped in Figure 8.1.

Table 8.3 shows the ranking criteria and scores for each project; projects are listed in order of score.Significant projects within the financially constrained project list include:

- Widening of Cobbs Ford Road in Prattville;
- US 82 in Prattville from SR 14 to US 31;
- Widening Vaughn Road from Perry Hill Rd to Bell Rd;
- Widening Atlanta Highway from Ann St to Federal Highway; and
- Interstate Ramp Improvements on I-65 and I-85 at several congested interchanges.

8.2.2 Financially Constrained Maintenance and Operations (MO) Projects

Table 8.2 includes 15 high-priority O&M projects that have been identified for corridors where widening is not practical and traffic issues can be addressed with minor improvements and intersection upgrades. The remaining financially constrained MO projects that were identified in the 2040 LRTP were listed previously in Table 6.6.

8.2.3 Visionary/Needs Projects

Beyond the financially-constrained program, there are 28 capacity improvements for which funding is not projected to be available although a need has been identified.

A list of visionary/needs capacity and improvements is shown in Table 8.4 below.

Table 8.2

2045 DRAFT Financially Constrained Highway Projects

Project #	Road Name	Location and Termini	Scope of Project	Project Type	Miles	Cumulative Capacity Miles	Cumulative O&M Miles	Financially Constrained or Vision	
1	Adams Avenue	Decatur St to South Court St	Modify from one-way to two-way operation	O&M	0.4	0	0.4	FC	
2	Atlanta Highway	Perry Hill Rd to Eastdale Mall	Widen 4 to 6 Lanes	Capacity	2.5	2.5	0.4	FC	
3	McQueen Smith Road	SR 3/US 31 to Cobbs Ford Rd	Widen 2 to 4 Lanes	Capacity	1.9	4.4	0.4	FC	
4	Perry Hill Rd	Harrison Rd to Atlanta Hwy	Extend turn lanes through select intersections	O&M	1.2	4.4	1.6	FC	
5	Redland Rd	US 231 to Rifle Range Rd	Widen 2 to 4 Lanes	Capacity	1.5	5.9	1.6	FC	
6	Ryan Road	Vaughn Rd to Chantilly Pkwy	Widen 2 to 4 Lanes or Operational	Capacity	1.0	6.9	1.6	FC	
7	S. Court Street	Fairview to Arba St	Modify from one-way to two-way operation	O&M	1.1	6.9	2.7	FC	
8	US-80	Waugh intersection to Marler Rd	Widen 2 to 4 Lanes/restripe (part 2 LN EB now)	Capacity	0.3	7.2	2.7	FC	**Current LRTP Projects**
9	Washington Avenue	Decatur St to Lawrence St	Modify from one-way to two-way operation	O&M	0.3	7.2	3	FC	
10	Zelda Road	Ann St to Carter Hill Rd	Add median/CTL	O&M	1.1	7.2	4.1	FC	
33	Atlanta Highway	Ann Street to Federal Dr	Widen 4 to 6 Lanes or Operational	Capacity	0.2	7.4	4.1	FC	
35	Carter Hill Road	Mulberry Street to Narrow Lane/Narrow Lane to Fairview	Restripe RTLs into RTTLs	O&M	0.5	7.4	4.6	FC	
41	Eastern Boulevard	N of Shirley Ln to Wetumpka Highway	Extend turn lanes through select intersections	O&M	2.8	7.4	7.4	FC	
42	Fairview Ave (was SR-14) in Prattville	Old Farm Lane to east side of I-65	Widen 4 to 6 Lanes	Capacity	0.4	7.8	7.4	FC	
57	Perry Hill Rd	Carmichael Rd to Sunset Dr	Extend lanes through select intersections	O&M	1.1	7.8	8.5	FC	
12	Eastern Boulevard	US 231 to I-85	Widen 4 to 6 Lanes (231 to Calmar Dr)*	Capacity	3.2	11	8.5	FC	
19	South Boulevard	US 231 S to Rosa Parks Ave	Widen 4 to 6 Lanes/restripe*	Capacity	4.4	15.4	8.5	FC	
30	Ann Street	I-85 to Poplar St	Widen 4 to 6 Lanes	Capacity	0.3	15.7	8.5	FC	
34	Atlanta Highway	Boyd Cooper Pkwy to I-85 northside ramps	Widen 4 to 6 Lanes or Operational	Capacity	0.2	15.9	8.5	FC	
47	I-65 Ramp Improvements	Ramps at SR 14 southside	Widen ramps from 1 to 2 Lanes	Capacity	0.4	16.3	8.5	FC	
52	I-85 Ramp Improvements	Taylor road I-85 WB on ramp	Widen ramps from 1 to 2 Lanes	Capacity	0.3	16.6	8.5	FC	
53	I-85 Ramp Improvements	Atlanta Highway to I-85 WB on ramp	Widen ramps from 1 to 2 Lanes	Capacity	0.3	16.9	8.5	FC	
65	US-231 (Wetumpka Hwy)	CR 74 to Jasmine Hill Road	Widen 4 to 6 Lanes incl bridges	Capacity	1.4	18.3	8.5	FC	
66	Vaughn Road	Perry Hill Road to Eastern Blvd	Add median/CTL*	Capacity	1.3	19.6	8.5	FC	
38	Cobbs Ford Road	Between I-65 ramps	Operational/Widen 4 to 6 Lanes	Capacity	0.2	19.8	8.5	FC	
46	I-65 Ramp Improvements	Ramps at Clay St NB entry	Widen ramps from 1 to 2 Lanes	Capacity	0.2	20	8.5	FC	
51	I-85 Ramp Improvements	East Boulevard on ramps	Widen ramps from 1 to 2 Lanes	Capacity	1.3	21.3	8.5	FC	
54	Lagoon Park Dr from	East Blvd to Gunter Park Dr E; Gunter Park Dr from Lagoon Park Dr to Midpark Rd; Gunter Park Dr from Gunter Park Dr W to SR-9	Operational improvements	O&M	2.3	21.3	10.8	FC	
55	Main Street and West Bridge Streets	South Boundary St to North Bridge St	Widen 2 to 4 Lanes incl Bibb Graves Bridge	Capacity	0.6	21.9	10.8	FC	
56	McGehee Road	Carter Hill Road to Governors Drive	Widen 2 to 4 Lanes or Operational	Capacity	1.1	23	10.8	FC	
59	SR-14	east side of I-65 to Kelley Blvd	Widen 4 to 6 Lanes	Capacity	0.5	23.5	10.8	FC	
64	Taylor Road	I-85 to East Dr	Widen 4 to 6 Lanes/restripe	Capacity	0.4	23.9	10.8	FC	
67	Vaughn Road	Eastern Blvd to Bell Road	Widen 4 to 6 Lanes*	Capacity	1.7	25.6	10.8	FC	
11	Coliseum Boulevard	Federal Drive to Biltmore Ave	Widen 2 to 4 Lanes	Capacity	1.1	26.7	10.8	FC	

Table 8.2 Continued

2045 DRAFT Financially Constrained Highway Projects								
Project #	Road Name	Location and Termini	Scope of Project	Project Type	Miles	Cumulative Capacity Miles	Cumulative O&M Miles	Financially Constrained or Vision
23	US-31	US 82 to West Blvd	Widen 4 to 6 Lanes or Operational	Capacity	5.9	32.6	10.8	FC
24	US-31	CR 40 to SR 14	Widen 2 to 4 Lanes	Capacity	8.2	**40.8**	10.8	FC
36	Carter Hill Road	Vaughn Road to McGehee Road	Operational improvements	O&M	1.1	40.8	11.9	FC
39	Dickerson/Holt Streets	Between Clay and Herron Streets	Restripe LTLs into LTTLs	O&M	0.2	40.8	12.1	FC
62	SR-143	I-65 to Alabama River Parkway	Passing lanes or added lane to ramp(s)	O&M	3.0	40.8	15.1	FC
29	Alabama River Parkway	SR-143 from North Boulevard	Consider future passing lanes	O&M	6.8	40.8	21.9	FC
40	Dozier Road	Wares Ferry Road to Rifle Range Road	Consider future passing lanes	O&M	2.2	40.8	24.1	FC
14	Grandview Road	SR 14 to SR 143	Operational improvements	O&M	2.7	40.8	26.8	FC

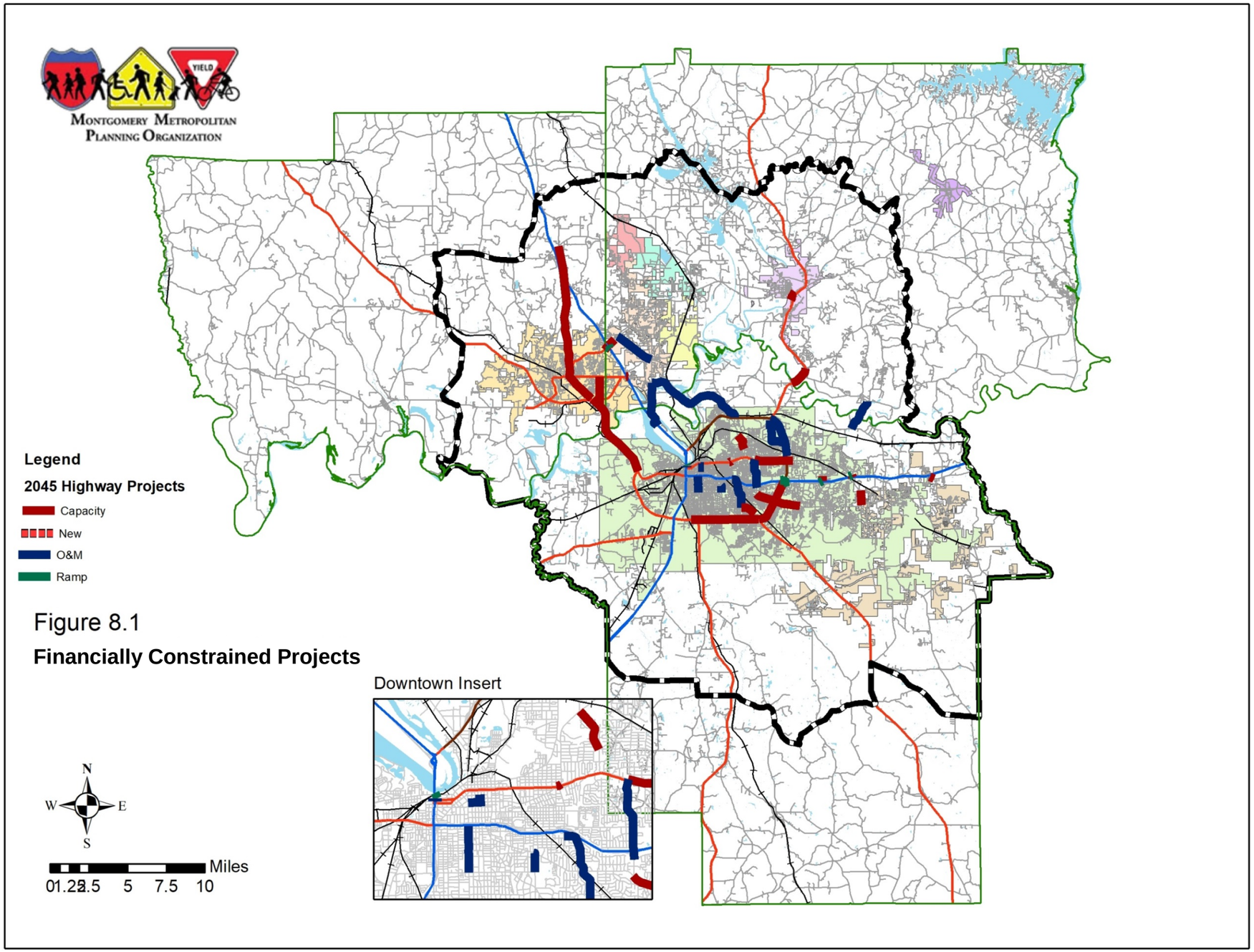


Figure 8.1

Financially Constrained Projects

Table 8.3

2045 Project Ranking			Project Evaluation Data[1]						Project Evaluation Scores						
Project #	Road Name	Miles	V/C Ratio 2045	Congested Speed Reduction 2045	Commuter Percent	Freight Corridor	Bike/Ped Corridor	Transit Corridor	V/C Ratio 2045	Congested Speed 2045	Commute Route	Freight Corridor	Bike/Ped Corridor	Transit Corridor	Total Score
1	Adams Avenue	0.4	0.63	-6%	22%	No	No	Yes	0	0	0	0	0	1	1
2	Atlanta Highway	2.5	0.99	-47%	37%	Regional	Yes	Yes	1	1	1	2	1	1	7
3	McQueen Smith Road	1.9	0.24	0%	28%	No	No	No	0	0	0	0	0	0	0
4	Perry Hill Rd	1.2	1.09	-52%	36%	Regional	Yes	No	2	1	1	2	1	0	7
5	Redland Rd	1.5	0.86	-27%	25%	No	No	No	1	0	0	0	0	0	1
6	Ryan Road	1.0	0.51	-2%	33%	No	Yes	No	0	0	0	0	1	0	1
7	S. Court Street	1.1	0.52	-3%	29%	Connector	Yes	Yes	0	0	0	1	1	1	3
8	US-80	0.3	0.90	-32%	29%	No	No	No	1	1	0	0	0	0	2
9	Washington Avenue	0.3	0.42	-1%	18%	No	Yes	No	0	0	0	0	1	0	1
10	Zelda Road	1.1	0.91	-34%	48%	No	Yes	No	1	1	1	0	1	0	4
33	Atlanta Highway	0.2	1.55	-76%	39%	Regional	No	Yes	3	2	1	2	0	1	9
35	Carter Hill Road	0.5	1.27	-64%	38%	Connector	Yes	Yes	3	2	1	1	1	1	9
41	Eastern Boulevard	2.8	1.35	-68%	44%	Regional	No	Yes	3	2	1	2	0	1	9
42	Fairview Ave (was SR-14) in Prattville	0.4	1.39	-69%	39%	Regional	Yes	No	3	2	1	2	1	0	9
57	Perry Hill Rd	1.1	1.25	-70%	39%	Regional	Yes	No	3	2	1	2	1	0	9
12	Eastern Boulevard	3.2	1.37	-68%	32%	Regional	No	Yes	3	2	0	2	0	1	8
19	South Boulevard	4.4	1.26	-63%	28%	Regional	No	Yes	3	2	0	2	0	1	8
30	Ann Street	0.3	1.36	-68%	39%	Connector	Yes	No	3	2	1	1	1	0	8
34	Atlanta Highway	0.2	1.35	-68%	41%	Regional	No	No	3	2	1	2	0	0	8
47	I-65 Ramp Improvements	0.4	1.37	-68%	38%	Regional	No	No	3	2	1	2	0	0	8
52	I-85 Ramp Improvements	0.3	1.40	-70%	45%	Regional	No	No	3	2	1	2	0	0	8
53	I-85 Ramp Improvements	0.3	1.62	-78%	45%	Regional	No	No	3	2	1	2	0	0	8
65	US-231 (Wetumpka Hwy)	1.4	1.71	-81%	36%	Regional	No	No	3	2	1	2	0	0	8
66	Vaughn Road	1.3	1.01	-46%	44%	Regional	Yes	Yes	2	1	1	2	1	1	8
38	Cobbs Ford Road	0.2	1.49	-74%	47%	Connector	No	No	3	2	1	1	0	0	7
46	I-65 Ramp Improvements	0.2	1.38	-69%	32%	Regional	No	No	3	2	0	2	0	0	7
51	I-85 Ramp Improvements	1.3	1.24	-61%	47%	Regional	No	No	2	2	1	2	0	0	7
54	Lagoon Park Dr from	2.3	1.28	-64%	30%	No	Yes	Yes	3	2	0	0	1	1	7
55	Main Street and West Bridge Streets	0.6	1.75	-82%	41%	No	Yes	No	3	2	1	0	1	0	7
56	McGehee Road	1.1	1.12	-54%	43%	Connector	Yes	Yes	2	1	1	1	1	1	7
59	SR-14	0.5	1.26	-63%	34%	Connector	Yes	No	3	2	0	1	1	0	7
64	Taylor Road	0.4	1.16	-57%	30%	Regional	Yes	Yes	2	1	0	2	1	1	7
67	Vaughn Road	1.7	1.19	-59%	34%	Regional	Yes	Yes	2	1	0	2	1	1	7
11	Coliseum Boulevard	1.1	1.00	-45%	41%	Connector	Yes	No	2	1	1	1	1	0	6
23	US-31	5.9	0.94	-38%	35%	Regional	Yes	Yes	1	1	0	2	1	1	6
24	US-31	8.2	1.24	-62%	33%	Regional	No	No	2	2	0	2	0	0	6
36	Carter Hill Road	1.1	0.99	-43%	43%	Connector	Yes	Yes	1	1	1	0	1	1	5
39	Dickerson/Holt Streets	0.2	1.44	-72%	26%	No	No	No	3	2	0	0	0	0	5
62	SR-143	3.0	0.98	-42%	31%	Connector	Yes	No	1	1	0	1	1	0	4
29	Alabama River Parkway	6.8	0.78	-17%	37%	Connector	Yes	No	0	0	1	1	1	0	3

Table 8.3 continued

2045 Project Ranking			Project Evaluation Data[1]						Project Evaluation Scores						
Project #	Road Name	Miles	V/C Ratio 2045	Congested Speed Reduction 2045	Commuter Percent	Freight Corridor	Bike/Ped Corridor	Transit Corridor	V/C Ratio 2045	Congested Speed 2045	Commute Route	Freight Corridor	Bike/Ped Corridor	Transit Corridor	Total Score
40	Dozier Road	2.2	0.91	-33%	31%	No	Yes	No	1	1	0	0	1	0	3
14	Grandview Road	2.7	0.41	-1%	31%	No	Yes	No	0	0	0	0	1	0	1
26	Wetumpka Bypass	1.9	1.75	-82%	41%	No	No	No	3	2	1	0	0	0	6
27	Wares Ferry Connector Road	1.3	1.62	-78%	45%	No	No	No	3	2	1	0	0	0	6
28	Eastchase Interchange on I-85	0.3	1.60	-77%	45%	No	No	No	3	2	1	0	0	0	6
31	Ann Street	0.4	1.13	-55%	40%	Connector	Yes	No	2	1	1	1	1	0	6
32	Atlanta Highway	2.5	1.17	-57%	34%	Regional	Yes	No	2	1	0	2	1	0	6
44	I-65 Ramp Improvements	0.6	1.22	-60%	25%	Regional	No	No	2	2	0	2	0	0	6
50	I-85 Ramp Improvements	0.9	1.19	-53%	38%	Regional	No	No	2	1	1	2	0	0	6
63	Taylor Road	0.9	1.05	-50%	23%	Regional	No	Yes	2	1	0	2	0	1	6
69	Wetumpka Hwy	0.2	1.19	-59%	38%	Regional	No	No	2	1	1	2	0	0	6
70	Woodley	0.4	1.10	-53%	38%	Connector	Yes	No	2	1	1	1	1	0	6
13	Elmore County/Millbrook Connector	2.8	1.26	-63%	34%	No	No	No	3	2	0	0	0	0	5
22	US-231	3.8	0.98	-50%	36%	Regional	No	No	1	1	1	2	0	0	5
25	Wares Ferry Road	3.3	0.85	-23%	38%	Connector	Yes	Yes	1	0	1	1	1	1	5
37	Cobbs Ford Road	1.4	0.96	-41%	43%	Connector	Yes	No	1	1	1	1	1	0	5
45	I-65 Ramp Improvements	0.8	1.09	-52%	27%	Regional	No	No	2	1	0	2	0	0	5
48	I-65 Ramp Improvements	0.3	0.97	-42%	50%	Regional	No	No	1	1	1	2	0	0	5
58	SR 110	1.3	1.26	-62%	32%	No	No	No	3	2	0	0	0	0	5
68	West Boulevard	1.3	0.91	-33%	31%	Regional	No	Yes	1	1	0	2	0	1	5
21	SR-14	2.5	0.93	-36%	46%	Connector	No	No	1	1	1	1	0	0	4
60	SR-14	2.3	0.89	-36%	43%	Connector	No	No	1	1	1	1	0	0	4
61	SR-14	0.8	1.01	-46%	24%	Connector	No	No	2	1	0	1	0	0	4
71	SR 14	1.5	0.58	-4%	41%	Connector	Yes	No	0	0	2	1	1	0	4
17	Millbrook Connector	2.2	1.05	-49%	28%	No	No	No	2	1	0	0	0	0	3
20	South Boulevard	1.7	0.83	-10%	29%	Regional	No	Yes	0	0	0	2	0	1	3
15	I-85	5.0	0.78	-17%	9%	Regional	No	No	0	0	0	2	0	0	2
16	I-85	2.5	0.70	-11%	17%	Regional	No	No	0	0	0	2	0	0	2
43	I-65	6.5	0.56	-3%	14%	Regional	No	No	0	0	0	2	0	0	2
49	I-85	7.0	0.77	-16%	24%	Regional	No	No	0	0	0	2	0	0	2
18	Prattville Northern Bypass	1.5	0.79	-18%	39%	No	No	No	0	0	1	0	0	0	1

**Projects could potentially be delayed or eliminated with completion of Outer Loop*

Table 8.4

2045 DRAFT Visionary Projects

Project #	Road Name	Location and Termini	Scope of Project	Project Type	Miles	Cumulative Capacity Miles	Cumulative O&M Miles	Financially Constrained or Vision
26	Wetumpka Bypass	SR-14/Coosa River Pkwy to Fort Toulouse Rd	New 2 lane roadway and bridge	Capacity	1.9	42.7	26.8	Vision
27	Wares Ferry Connector Road	Chantilly Pkwy to I-85/Wares Ferry Rd	New 2 lane roadway and new I-85 interchange	Capacity	1.3	44	26.8	Vision
28	Eastchase Interchange on I-85	I-85, between Taylor Rd and Atlanta Hwy	New 2 lane roadway and new I-85 interchange	Capacity	0.3	44.3	26.8	Vision
31	Ann Street	Highland Ave to Greenville St	Widen 2 to 4 Lanes	Capacity	0.4	44.7	26.8	Vision
32	Atlanta Highway	McLemore Drive to Seminole Drive	Widen 4 to 6 Lanes or Operational	Capacity	2.5	47.2	26.8	Vision
44	I-65 Ramp Improvements	Ramps at US 31 southside (Autauga Co)	Widen ramps from 1 to 2 Lanes	Capacity	0.6	47.8	26.8	Vision
50	I-85 Ramp Improvements	Ann Street on ramps and WB off ramp	Widen ramps from 1 to 2 Lanes	Capacity	0.9	48.7	26.8	Vision
63	Taylor Road	Chadburn Crossing to Vaughn Road	Widen 4 to 6 Lanes/restripe*	Capacity	0.9	49.6	26.8	Vision
69	Wetumpka Hwy	between ramps to/from North and East Blvd	Widen 4 to 6 Lanes	Capacity	0.2	49.8	26.8	Vision
70	Woodley	McGehee Road to Allendale Rd	Widen 2 to 4 Lanes or Operational	Capacity	0.4	50.2	26.8	Vision
13	Elmore County/Millbrook Connector	CR 7 (Deatsville Hwy) to new interchange, I-65 between Exits 181 186	New 2 lane roadway and new I-65 interchange	Capacity	2.8	53	26.8	Vision
22	US-231	River Oaks Dr (South of Wetumpka) to Near CR 200 (Blue Ridge Rd)	Widen 4 to 6 Lanes or Operational	Capacity	3.8	56.8	26.8	Vision
25	Wares Ferry Road	East Blvd to McLemore Rd	Widen 2 to 4 Lanes or Operational	Capacity	3.3	60.1	26.8	Vision
37	Cobbs Ford Road	Old Farm Lane to Sheila Boulevard	Operational/Widen 4 to 6 Lanes	Capacity	1.4	61.5	26.8	Vision
45	I-65 Ramp Improvements	Ramps at North Blvd southside	Widen ramps from 1 to 2 Lanes	Capacity	0.8	62.3	26.8	Vision
48	I-65 Ramp Improvements	Ramps at US 80 SB exiting	Widen ramps from 1 to 2 Lanes	Capacity	0.3	62.6	26.8	Vision
58	SR 110	Outer Loop to Milly Branch Rd	Widen 2 to 4 Lanes or Operational	Capacity	1.3	63.9	26.8	Vision
68	West Boulevard	Hayneville road to Southeast of Estate Ave	Widen 2 to 4 Lanes	Capacity	1.3	65.2	26.8	Vision
21	SR-14	Ingram to Cook Rd (Coosada Pkwy)	Widen 2 to 4 Lanes	Capacity	2.5	67.7	26.8	Vision
60	SR-14	west of Lucky Town Rd to McCain Rd	Widen 2 to 4 Lanes incl bridge	Capacity	2.3	70	26.8	Vision
61	SR-14	Wetumpka Sports Complex to US 231	Widen 2 to 4 Lanes incl bridge	Capacity	0.8	70.8	26.8	Vision
71	SR 14	Fitzpatrick to McCain	Widen 2 to 4 Lanes incl bridge	Capacity	1.5	72.3	26.8	Vision
17	Millbrook Connector	Deatsville Hwy (CR 7) at Ross Road to SR 14 at Kinsley Lane	New 2 lane roadway	Capacity	2.2	74.5	26.8	Vision
20	South Boulevard	Rosa Parks Ave to US 31	Widen 4 to 6 Lanes/restripe*	Capacity	1.7	76.2	26.8	Vision
15	I-85	Jenkins Creek to 0.7 miles east of SR 126	Widen 4 to 6 Lanes	Capacity	5.0	81.2	26.8	Vision
16	I-85	0 .4 miles East of SR 271 to Jenkins Creek	Widen 4 to 6 Lanes	Capacity	2.5	83.7	26.8	Vision
43	I-65	US31 to North of Fairview Avenue	Widen 4 to 6 Lanes (continuity)	Capacity	6.5	90.2	26.8	Vision
49	I-85	Downtown Interchange through US 231 Interchange	Widen 6 to 8 Lanes	Capacity	7.0	97.2	26.8	Vision
18	Prattville Northern Bypass	Fairview Ave @ Sweetwater Apts to US 31	New 2 lane roadway	Capacity	1.5	98.7	26.8	Vision

**Projects could potentially be delayed or eliminated with completion of Outer Loop*

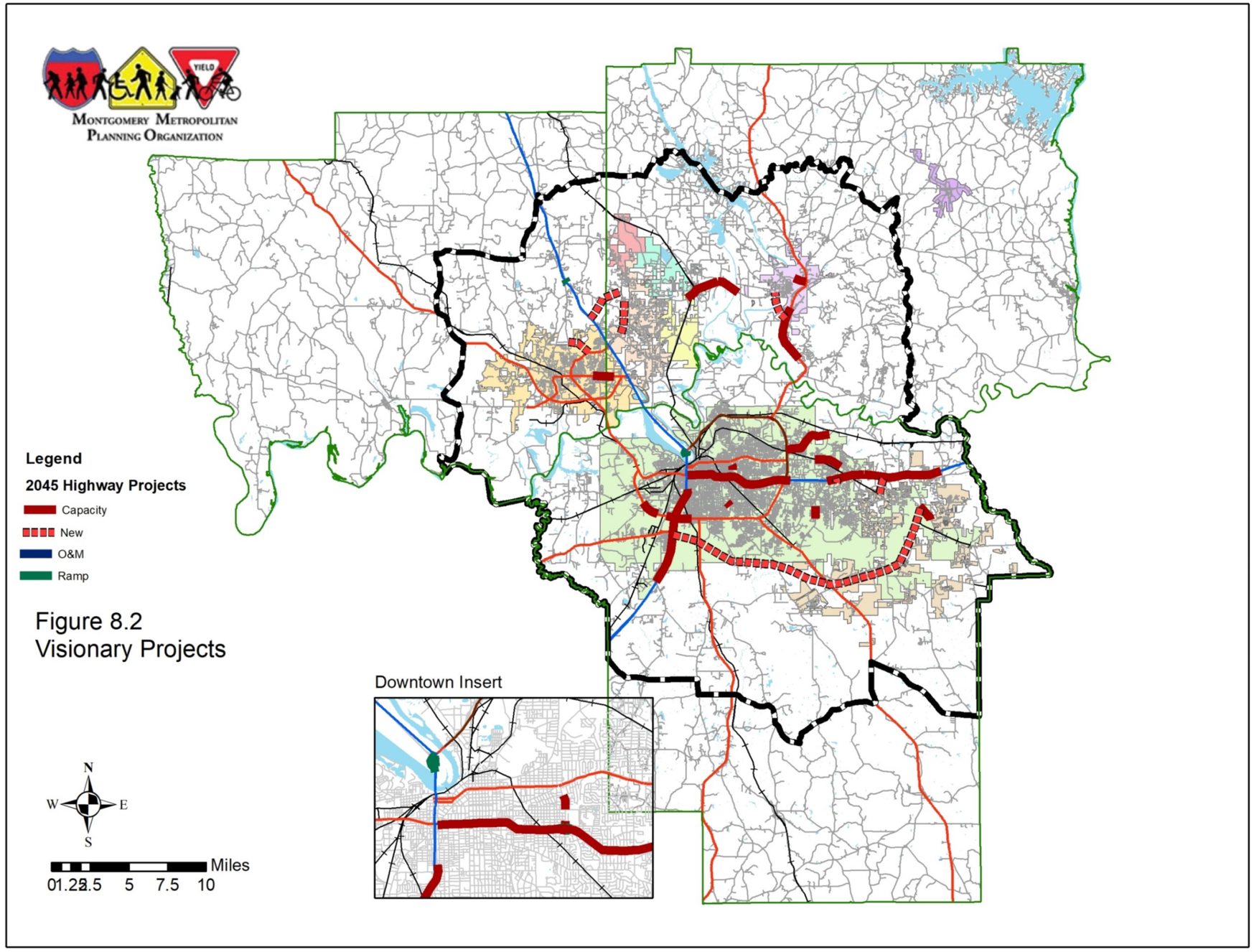


Figure 8.2
Visionary Projects

8.3 Maintenance and Operations Roadway Projects

In total, there are 64 O&M projects with an estimated cost of approximately $260.9 million included within the fiscally-constrained LRTP work program. As shown in Table 8.1, this is the level of funding the Montgomery MPO is projected to receive over the next 23 years.

Fifteen O&M projects are listed in Table 8.2 as projects that address specific operational, traffic flow, or safety issues that will not be addressed with additional lanes, and have an estimated cost of $67 million. The remaining 49 O&M projects are listed in Table 6.6, with an estimated cost of $193.9 million.

8.4 Montgomery Outer Loop Projects

The Montgomery MPO has been working with ALDOT on the development of the Montgomery Outer Loop. The project is a set of roadway improvements and/or new roadways to facilitate mobility and accommodate development on the outskirts of the Montgomery metropolitan area. Of the improvements associated with the Outer Loop, only a lighting project is within the financially-constrained LRTP work program at an estimated cost of an estimated $4.7 million. The remainder of these improvements, at an

estimated cost of $544.2 million, is projected to be constructed by 2039 or beyond. A complete set of the Outer Loop projects, along with their projected costs and completion dates, are provided below. It should be emphasized that these are projected dates and estimated costs *presented as information only*.

Table 8.6: Montgomery Outer Loop Projects

Improvement	Completion Dates	Estimated Costs
New Roadway from SR-6 (US-231) to CR-85 (Carters Hill Road)	2039-2049	$80,478,638
New Roadway from CR-85 (Carters Hill Road) to SR-110	2039-2059	$131,057,932
Lighting from south of SR-110 to south of I-85	2019	$4,719,972
New Roadway from I-65 to west of SR-9 (US-331), including an interchange at SR-3 (US-31)	2039-2044	$58,768,596
New Roadway (SR-108) from SR-8 (US-80) to west of CR-103 (Felder Road), including an interchange at SR-8 (US-80)	2039-2042	$37,051,980
New Roadway (SR-108) from west of CR-103 (Felder Road) to I-65, including an interchange at CR-103 (Felder Road)	2039	$57,451,243
New Roadway (SR-108) from west of CR-39 (Woodley Road) to SR-6 (US-231), including an interchange at CR-39 (Woodley Road)	2039-2041	$42,531,799
New Roadway (SR-108) from west of SR-9 (US-331) to west of CR-39 (Woodley Road, including an interchange at SR-9 (US-331)	2039	$97,440,909
SR 108 interchange, ramps and bridges at I-65	2039-2043	$39,446,500

Source: MPO Staff

8.5 Freight-Related Improvements

While there is no specific work program dedicated to freight improvements, the facilitation of freight mobility was a major consideration during the identification and prioritization of improvements developed within this LRTP given its importance in securing a stable economic environment for the Montgomery region. The following improvements are among those in the financially-constrained work program that will serve to enhance freight mobility throughout the region:

- Capacity improvements on Eastern Blvd and South Blvd;
- Capacity improvements to US 31 from West Blvd to I-65 north of Prattville;

- Capacity improvements to Atlanta Highway from Perry Hill Road to East Blvd (US-231);
- Resurfacing and bridge replacement projects along various segments of I-65; and
- Intersection Improvements on SR-8 (US-231, Eastern Boulevard) at the I-85 interchange.

8.6 Bicycle and Pedestrian Improvements

Sections 4.5 and 4.6 identify existing and planned pedestrian and bicycle facilities in the Montgomery Study area. Projects may be implemented concurrently with planned roadway improvements or as standalone projects utilizing Transportation Alternative Program (TAP) funds. The Montgomery MPO is projected to receive a total of approximately $9.9 million, or $430,458 annually, of federal funding through the year 2045. The annual Montgomery MPO TAP process was described in Section 3.6.2. Projects will be prioritized annually based upon the applications received and the project's merit.

8.7 Public Transportation

The Montgomery MPO is projected to receive a total of approximately $126 million, or $5,684,144 annually, of federal funding through the year 2045. The Montgomery Area Transit system has several visionary improvements over the next 25 years. These improvements will be done when fundingbecomes available via competitive grants or by the City of Montgomery general fund. These improvements are listed below with target years and cost provided.

Table 8.7: Transit Funds

Annual Allocations			
	Montgomery Area Transit System	**Autauga County Rural Transit**	**Total**
Operations	$3,962,000	$500,000	$3,462,000
Capital	$1,091,000	$62,000	$1,153,000
Admin		$69,144	$69,144
Total	**$5,053,000**	**$631,144**	**$5,684,144**
25-Year Funding Projections			
	Montgomery Area Transit System	**Autauga County Rural Transit**	**Total**
Operations	$99,050,000	$12,500,000	$111,550,000
Capital	$27,275,000	$744,000	$28,019,000
Admin		$1,728,600	$1,728,600
Total	**$126,325,000**	**$14,972,600**	**$141,297,600**

Source: MPO Staff

Table 8.8: Transit Projects

Years :	Recommended Action:	Cost:
2027, 2037	Bus Replacement(10 year vehicles)	$4,200,000/yr
2022,2026,2030,2034,2038,2042	Bus Replacement	$250,000/yr
2023,2027,2041	Bus replacement	$500,000/yr
2024,2028,2032,2036,2040,2044	Bus Replacement	$950,000/yr
2021	Rehab of Administrative/Maintenance Facility	$3,000,000
2022	Bus Replacement	$300,000
2023	Replace Gillig Hybids	$5,500,000

Source: MPO Staff